

Health Tourism and Economic-Financial Performances: Benchmarking Analysis of Italian Companies

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Abstract

The idea of this research starts with the growing worldwide importance of health tourism. However, few authors have focused on the microeconomic aspect of the phenomenon and therefore on the characteristics of companies. This represents a crucial point, considering that this phenomenon is on the rise and probably in the future, many healthcare companies will focus their business on this issue. So, the aim of this paper is to investigate the economic-financial performances of Italian companies that are related to health tourism.

Keywords: health tourism, performance, benchmarking, finance, healthcare companies

INTRODUCTION

Health tourism is a sector in great development that is able to generate new opportunities above all for patients, who, thanks to globalization, can easily achieve specialist treatments even in countries other than that of residence. The central point is precisely this: thanks to the reduction of distances, patients can access to specialist care, which in the past years was unthinkable, due to the high costs. This generates a higher competition.

Another important aspect is represented by the whole supply chain that health tourism generates. In fact, if a country is capable of attracting health tourists, all the complementary activities will have benefits (such as restaurant and hotel activities) and indirectly also the same country. Combining the health and tourism offer is economically and qualitatively suitable for all the subjects involved, both for users and for the societies that participate in the creation of the value chain of the tourism health offer, in fact: patients are often accompanied by family members or friends; interventions that do not require long stays allow you to take advantage of a post-operative period of rest in the hotel with a consumption in the country.

According to Deloitte, the only health tourism from Russia in Italy is worth 1.4 billion a year. The Medical Tourism Association estimates a turnover of 100 billion and currently involves 11 million patients who travel the world for medical treatment.

Nevertheless, the aim of this research is not related to complementary activities, but only to the peculiarity of enterprises, inquiring there are common features.

LITERATURE REVIEW

There are very few contributions to the literature regarding the performance of healthcare tourism businesses. However, there is some interesting contribution to benchmarking.

Benchmarking began in 1979 when Camp developed and applied this approach on behalf of the Xerox Corporation. Through a comparison with the products and processes of the market leaders and thanks to the adoption of its own basic strategy, Robert Camp manages to obtain an improvement in performance compared to the competitor. The two relevant and commonly used definitions of benchmarks are: "Benchmarking consists in the search for market best practices that lead to excellent performance" by Camp, "The benchmarking is the continuous process of measuring products, services and processes by comparing them with the best competitors or with companies recognized as market leaders" by Kearns, CEO of Xerox Corporation from 1982 to 1990. Xerox Corporation was, therefore, the first company that institutionalizes benchmarking as a management tool. The information collected from a benchmarking activity must be used by the company and serve as a reference point to increase its business, to improve its strategies and performance, to identify its strengths and weaknesses.

Jain and Yadav (2006) in their paper "Driving improvement opportunities in the food processing industry through benchmarking" investigate the use of the benchmark in the food industry, reaching the conclusion that the objective of increasing business efficacy is achievable through the implementation of the

benchmarking process, observing opportunities for improvement.

About the size of the companies to be analyzed by benchmarking, Hwang and Lockwood (2006), in their "Understanding the challenges of implementing best practices in hospitality and tourism SMEs," believe that there are no impediments to the use of this process even for small and medium-sized enterprises. This research also focuses on the adaptability of the tool for sectors such as tourism and hospitality. The idea about the size of the companies is confirmed by St. Pierre and Delisle (2006) in their scientific article, "An expert diagnosis system for the benchmarking of SMEs performance."

Finally, Attakuma and Jagadeesh (2003) in their paper "A review of literature on benchmarking," argue that the benchmark encourages companies to think better strategies, thus recognizing this process as an essential tool for the continuous improvement of the quality of companies.

With regard to the different types of benchmarking, a first differentiation is conducted by Lucianelli and Tanese (2002), which identify two ways of doing benchmarking: quantitative (or data benchmarking) and qualitative (or process benchmarking).

We then have internal and external benchmarking. Cook (1996) defines the external benchmarking as "the comparison made between the main competitors with the aim of entering into the merits of the success factors, which allow obtaining better results." The main purpose is to be able to learn those factors that determine the competitive advantage of the best competitors, not only direct but also indirect.

The model of benchmarking that we need has some characteristics of quantitative benchmarking and external benchmarking, which is the same used in Intrisano, Micheli, Calce, Di Nallo (2017).

Once the model has been identified, we analyze the most used economic and financial variables in the healthcare field.

Cimasi (2004) focuses on the quantitative economic-financial measures to be adopted a the benchmark surveys of the health sector, indicating that these measures must be representative of the financial structure. In particular, the author, on the basis of the survey conducted by the Medical Group Management Association's (MGMA), identifies the following variables:

Receivables from customers

Total activity

Current assets

Current liabilities

Debts

Working capital

On the other hand, we have the publication of Suarez, Lesnesky and Denison (2011) which analyze how hospitals use financial indicators to monitor risk, promote corporate sustainability and improve organizational skills. It is clearly specified that financial indicators are not the only indicators of success. However, in our case, this work is used in order to outline the literature prevalent in the choice of economic-financial variables to be used in the benchmarking model. The authors show a preference for financial ratios rather than absolute values, that do not allow a comparison. The financial ratios identified by the three authors relate to four fundamental areas: liquidity, profitability, leverage and operational management.

Specifically, we have:

Operating margin (%)

Current ratio

Leverage

Turnover per customer

Janati, Valizadeh and Asghari-Jafarabadi (2014) analyze financial indicators of Iranian hospitals . Using the Delphi method, which provides questionnaires to industry experts, the authors identify six accounting areas: profitability (ROA, operating margin), liquidity (current ratio, quick ratio), financial structure (leverage, cash flow/debt), revenues (growth rates, non-operating revenues), costs (energy costs / total costs, wages / total expenses), asset efficiency (turn over ratio, average age of machinery).

Coyne and Singh (2008) focus their attention on the variables useful for predicting the state of crisis of healthcare structures. Seven variables are selected:

Leverage

Debt service coverage

Time for credit extension
 (Cash + equivalent instruments) / (operational expenses / 365)
 Operating cash flow / total debt
 Operating cash flow / total revenues
 Percentage change in operating cash flow

Schumann (2008) focuses her research work on the variables to be taken into consideration to analyze trends in the hospital sector. In addition to non-accounting measures, the author identifies the following key accounting variables:

Operating margin (%)
 Current ratio
 (Cash + equivalent instruments) / (operational expenses / 365)
 Days of extension to customers
 Delay days to suppliers
 Staff expenses / total expenses
 Revenues from hospitalizations
 Revenue for surgeries

Pink, Daniel, Mc Gills Hall and McKillop (2007) shows a summary of the most used financial indicators in the healthcare sector. Variables are first cataloged in four areas (profitability, liquidity, financial structure and efficiency) and subsequently sorted by frequency of use. In particular, for the profitability area, the most used measure is the operating margin (%), followed by the total margin and the ROA, expressed as the ratio between net profit and total assets, for the liquidity area we have the current ratio, for the financial structure area the leverage and debt service coverage and for the efficiency area the total asset turnover.

DATA AND METHODOLOGY

The starting database is represented by Amadeus - Bureau Van Dijk which contains the economic-financial data of all European companies. Our sample is initially represented by 9976 companies registered on the amadeus database with the nace code 86.10 (hospital services). The reference year is 2017.

With regard to the variables to be used in our benchmarking model, it is necessary to refer to the prevalent literature presented in the previous paragraphs. Based on this evidence and on the availability in the Amadeus database, the following variables are selected:

Financial area: current ratio, leverage, an extension to customers
 Efficiency area: ebit margin (%), ROA, cash flow / total operating revenues.

In order to use benchmark analysis, which provides only two variables for a single area (financial and efficiency), we have conducted a correlation analysis.

For this phase of the process, the Pearson correlation coefficient is used, which provides an analytical measure of the degree of linear correlation existing between two variables. This index varies in a range between -1 and +1, depending on the degree of relationship. If the value is near to zero, there is not a correlation.

Correlation analysis financial area

| | Current ratio | Extension to costumers | Leverage |
|------------------------|---------------|------------------------|----------|
| Current ratio | - | -0.03 | 0.19 |
| Extension to costumers | -0.03 | - | -0.06 |
| Leverage | 0.19 | -0.06 | - |

As can be seen, the pair of variables that show a lower absolute value and therefore more representative of the finance area is Current Ratio - credit days, which has values very close to 0.

Correlation analysis efficiency area

| | CF/Revenue | Ebit margin | Roa |
|-------------|------------|-------------|------|
| CF/Revenue | - | 0.81 | 0.6 |
| Ebit margin | 0.81 | - | 0.64 |
| Roa | 0.6 | 0.64 | - |

The most representative pair of variables is Cash Flow / Operating Revenues – Roa.

The benchmark methodology used involves the identification of three different types of benchmarks: financial, efficiency, total. Each benchmark has three ratings: best, average, worst. For the definition of the judgment, we refer to the tertiles of the sample. For example, if the value is included in the first tertile, the judgment will be best. The financial benchmark (as well as the efficiency benchmark) derives from the combination of two representative variables as follow:

Best benchmark: Best variable 1 - best variable 2; best variable 1 - average variable 2; average variable 1 – best variable 2;

Average benchmark: Average variable 1 - average variable 2; best variable 1 - worst variable 2; worst variable 1 - best variable 2;

Worst benchmark: Average variable 1 - worst variable 2; worst variable 1 - average variable 2; worst variable 1 – worst variable 2

The total benchmark is the combination of the financial benchmark and efficiency benchmark, following the previous rules.

The first phase provides the determination of the number of companies, with the Nace code 86.10, which have best, average and worst judgments, all based on the tertiles of the total European sample Nace 86.10 of 2017 (n. 3612 companies). The number of companies is lower than the initial sample because not all the companies registred have all the variables that we use in the model.

After that, we create a new sample that is composed of Italian companies that operate in health tourism. With regard to these companies, they were identified following consultation of the health tourism portals. Specifically, we haven. 58 companies, but only n. 25 of them are registered in the Amadeus database.

So, the second phase provides the identification of judgment of this new sample, based on tertiles of Nace 86.10, in order to evaluate differences eventually.

The third, and last, phase provides a comparison between Italian health tourism companies and Italian companies with Nace code 86.10 (n. 322 companies)

RESULTS

Relating to the first phase, results are the following:

Financial benchmark – NACE 86.10

| | 2017 |
|---------|--------|
| Best | 31.59% |
| Average | 35.83% |
| Worst | 32.59% |

Efficiency benchmark – NACE 86.10

| | 2017 |
|---------|--------|
| Best | 42.52% |
| Average | 19.71% |
| Worst | 37.76% |

Total benchmark - NACE 86.10

| | 2017 |
|---------|--------|
| Best | 38.34% |
| Average | 25.36% |
| Worst | 36.04% |

Considering that the total benchmark is influenced by the other two benchmarks, we can see than the financial benchmark show balanced results, while inefficiency benchmark, there is a prevalence of best rating.

This first phase says nothing about health tourism but is propaedeutics for the second phase.

In the second phase, we elaborate on the judgement of the further sample (Italian companies of health tourism) using the same tertiles of the first phase, in order to highlight differences.

Financial benchmark – Italian companies of health tourism

| | |
|---------|--------|
| | 2017 |
| Best | 4.35% |
| Average | 21.74% |
| Worst | 73.91% |

Efficiency benchmark – Italian companies of health tourism

| | |
|---------|--------|
| | 2017 |
| Best | 34.78% |
| Average | 47.83% |
| Worst | 17.39% |

Total benchmark – Italian companies of health tourism

| | |
|---------|--------|
| | 2017 |
| Best | 8.70% |
| Average | 39.13% |
| Worst | 52.17% |

As we can see, there is some critical problem about financial benchmark; in fact, only 4,35% of companies have the best rating, while 73,91% shows the worst judgment. Results of efficiency benchmark highlight a good state of Italian companies of health tourism.

Considering that in a financial benchmark, there are variables like credit days that could be affected by national conditions we carry on the third phase, in which Italian companies of health tourism are compared to Italian companies with Nace 86.10, and not to all European companies with Nace 86.10. We elaborate judgment of Italian companies of health tourism, based on tertiles of sample Italian companies with Nace 86.10.

Results of the third phase:

Financial benchmarking

| | |
|---------|--------|
| | 2017 |
| Best | 4.35% |
| Average | 34.78% |
| Worst | 60.87% |

Efficiency benchmarking

| | |
|---------|--------|
| | 2017 |
| Best | 34.78% |
| Average | 30.43% |
| Worst | 34.78% |

Total benchmark

| | |
|---------|--------|
| | 2017 |
| Best | 17.39% |
| Average | 26.09% |
| Worst | 56.52% |

As expected, the judgement of financial benchmarking is better than the second phase. Because we remove the influence of the country. The percentage of best financial benchmark companies remains stable, but the percentage of average increases. This takes effect also on the total benchmark. On the other hand, about the efficiency benchmark, results show a worse condition.

CONCLUSIONS

From the literature review, we find that there are not benchmarking models specially designed for the health sector. The same also for financial variables. Some authors talk about ratios in order to prevent a crisis in the health sector. However, there are no contributions regarding health tourism companies and economic-financial performances. About Italian companies of health tourism, in our results, we find that they have consistent judgment if we analyze efficiency areas and some critical issues if we focus on the financial area. This problem could be linked to Italian conditions. In fact, most of the credits of the Italian healthcare private structures refer to the Italian state and it is known that the Italian state is slow in payments. In order to verify this problem, we have carried on a complementary analysis, trying to isolate the problem. We conclude that when we compare Italian companies with European companies, this problem is real, so the results of these comparisons are incomplete. Anyway, the final considerations are: Italian companies of health tourism have appreciable performance in the efficiency area while financial benchmarking analysis show critical issue.

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