Comparing chains versus independent hotels based on international sales: an exploratory study

Giorgio Ribaudo, Salvatore Moccia, Maria Orero-Blat & Daniel Palacios-Marqués

To cite this article: Giorgio Ribaudo, Salvatore Moccia, Maria Orero-Blat & Daniel Palacios-Marqués (2020) Comparing chains versus independent hotels based on international sales: an exploratory study, Economic Research-Ekonomska Istraživanja, 33:1, 2286-2304, DOI: 10.1080/1331677X.2019.1710719

To link to this article: https://doi.org/10.1080/1331677X.2019.1710719

© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

Published online: 02 Apr 2020.

Submit your article to this journal

Article views: 1647

View related articles

View Crossmark data
Comparing chains versus independent hotels based on international sales: an exploratory study

Giorgio Ribaudo\textsuperscript{a,b}, Salvatore Moccia\textsuperscript{c}, Maria Orero-Blat\textsuperscript{d} and Daniel Palacios-Marqués\textsuperscript{d}

\textsuperscript{a}University of Bologna, Rimini, Italy; \textsuperscript{b}Horwath HTL, Rome, Italy; \textsuperscript{c}Universidad Internacional de La Rioja, Logroño, La Rioja, Spain; \textsuperscript{d}Universitat Politècnica de València, Valencia, Spain

ABSTRACT
The globalization of tourism has recently increased the importance of foreign demand for most European destinations. Hotel chains have been long investigated from several perspectives. However, no research has verified the alleged ability of chains to attract foreign demand, while this information is highly sought after by hotel investors and owners when evaluating affiliation opportunities. The present study covers Italy. It is based on a survey of 148 branded hotels for 21 destinations and 22 brands. Adopting a new metric to compare the ability of hotels to sell abroad (Foreign market Per Available Room; FmPAR), it has been found that chain-affiliated hotels perform better than independent hotels in attracting foreign demand. This is particularly true for international chains compared to domestic ones. On the other hand, the effect is stronger in three-star hotels than in four and five-star ones, in destinations where chain penetration is low.

ARTICLE HISTORY
Received 28 August 2019
Accepted 16 December 2019

KEYWORDS
Hotel chains; international demand; sales performance; brand strategy

JEL CODES
Z32; Z33; O19

1. Introduction
Since the mid-1980s, branding hotels has become a key practice for arranging a hotel development deal (O’Neill & Xiao, 2006). The brand is one of the key assets of multinational companies in tourism. Indeed, in one of the most accredited marketing and management manuals, Keller (2002) states that brands can be important intangible company assets with a demonstrable financial value. The interest in the debate about brand affiliation versus independent operation does not appear to be declining. Recently researchers have started to examine the alleged influence of brands on top and bottom-line performance and an overall asset’s value (O’Neill & Carlbäckb, 2011). In the words of O’Neill and Carlbäckb (2011), the precursors of the stream of research investigating the value of chains as factual contribution to hotels performance, the question regarding brand affiliation versus independent operation has been discussed and debated in the hotel industry for a long time, but the interest in the
issue does not appear to wane. According to Coviello et al. (2002), brands provide channel members benefits such as pre-established demand, lower selling costs, image and relationship enhancement of retailers with consumers, higher margins, and better inventory management. A key contribution of a brand is its ability to make the offer stand out of the crowd and be easily recognized by the market by increasing awareness of the offer on targeted markets, thus increasing sales (Coviello et al., 2002). More than ever, and especially after the spread of the use of third-party web platforms, direct sales generation is currently reputed as a key driver of competitiveness and profitability for hotels (O’Neill & Mattila, 2006). According to the study of Dimitrić, Tomas Žiković, and Arbula Blecich (2019), profitability is also improved by high liquidity reserves, effective working capital and a built reputation.

Among the various channels through which chain affiliation can impact performance via an effect on demand, this paper tries to shed light on the study of the actual impact of brands on international demand for hotels, a topic that has been underinvestigated in literature. In highly competitive environments, such as the current hospitality industry, access to international demand might have an intrinsic value as part of a diversification strategy: it makes economic cycles less impacting on hotel P&L by reducing business risk and enhancing financial stability (Lee et al., 2017).

Based on the mentioned premises, we conducted an exploratory analysis to study the alleged ability of chain-affiliated hotels to perform better on international markets than independent (unbranded) hotels by analysing their arrivals from foreign markets. The study covered Italy and was based on a five-year census and on a survey of 148 branded hotels corresponding to 21 destinations and 22 brands. The presented analysis showed that chain-affiliated hotels perform better than independent hotels, and this is particularly true for international brands compared to Italian domestic brands. Moreover, the effect seems stronger for three-star hotels and in those destinations where chain penetration and foreign incoming attractiveness are lower, as is the case in a number of second tier Italian destinations.

Beyond providing evidence on what has been postulated in the hospitality literature so far, this paper has contributed to enhance the literature on hotel chains’ performance in two other dimensions. First, the Italian market is studied, which has been ignored so far due to the lack of data, despite being a top destination on a global scale. Investigating a country with a poor penetration rate of chain hotels (4.5% in 2017)¹ is important to understand if the patterns found for the USA, UK, and China, where penetration rates are much higher, still hold in contexts with different characteristics. Second, a new metric for benchmarking hotels’ ability to sell abroad is introduced in the research. It is the Foreign market Per Available Room (FmPAR), which will allow further research in the field of international demand for hotels.

2. Literature review and research hypothesis formulation

2.1. Literature review

A hotel can be defined as a ‘chain hotel’ when a professional organization owns, leases, manages, or franchises it and several other hotels, by means of centralized functions and under a central governance system, within its own strategic
management guidelines and operational inputs (Litteljohn, 2003; Ribaudo & Domeniconi, 2014). Often, a minimum size (three or five) is introduced for a hotel chain to be considered as such (Ingram, 1996), based on the concern that the economies of scale deriving from centralized services materialize starting from this minimum dimension (Rushmore, 2002; Ribaudo & Domeniconi, 2014).

Thus, according to management manuals and applied research (Rushmore, 2002), a chain hotel can be operated under one of the following business models:

1. **Owned** by a company that operates other hotels by means of the same or a different business model;
2. Operated under a **lease contract** by a company that operates other hotels by means of the same or a different business model;
3. Operated under a **management contract** by a third-party company that also operates other hotels by means of the same or a different business model;
4. **Franchised** under a brand belonging to a company that acts as a hotel franchisor, also operating other hotels by means of the same or a different business model.

Literature categorizes ownership and lease as equity-based models, while management contract and franchising are considered asset-light models (Chen & Dimou, 2005; Park & Jang, 2019). Principally, the two main advantages of the chain model have been identified in terms of *internal efficiency* and *revenue growth*. They both represent part of the competitive advantage of such a model compared to independent operations.

On the one hand, on the efficiency dimension, centralizing cost centers such as administration, marketing, quality control, and sales not only supports consistency in service delivery but also generates economies of scale. Chains are able to offer a consistent value proposition with guaranteed quality and access to different amenities (Richard & Cleveland, 2016), plus standard services to satisfy customers from different cultural backgrounds (Gao, Li, Liu, & Fang, 2018). On the other hand, the sales dimension is also relevant: hotel chains drive revenues growth through innovative financial structuring and *total revenue management* (Richard, 2017). According to Carvell, Canina, and Sturman (2016), brand affiliation helps to offset competition by reducing the effects of marketing actions of competitors. Furthermore, it increases the effectiveness of marketing communication activity, resulting in greater profit (Keller, 2002).

The intensity of sales and marketing activities for hotels are generally recognized to be a key determinant of commercial success and profitability. Taylor (1995) argued that Statler’s old axiom ‘location, location, location’ for hotels’ competitiveness could now be replaced by ‘flag, flag, flag’ as the *three* most important factors for successful hospitality operations. Nevertheless, according to O’Neill and Mattila (2010), the question lies in understanding *how* a brand builds and retains loyalty.

According to Holverson and Revaz (2006), independent hotels, above all small and independent hotels as a sector, suffer from inherent weaknesses. Dominated by family businesses, they exhibit limited growth due to non-economic motives, limited marketing, issues of quality assurance, pricing policies, and lack of financial resources. In
addition, competitiveness issues arise in under-utilized assets, declining profit margins and higher sensitivity to occupancy and seasonal fluctuations than larger hotels (Connell, Page, & Meyer, 2015). Buhalts and Main (1997) identified the main disadvantages of SME (independent) hotels as insufficient management and marketing skills within the distribution channel.

Holverson and Revaz (2006) also argued that hotel chains’ strategy of segmenting the consumer market through brands has increased the ability to reach unique segments, indicating that affiliation is itself a market strategy for an independent hotel to access a range of potential additional sales channels profiled for a certain segment. According to recent research lines such as Oviedo-Garcia, Vega-Vazquez, Castellanos-Verdugo, and Orgaz-Aguera (2019), and Lecossier, Pallot, Crubleau, and Richir (2019), innovation-oriented strategies are needed in order to improve brand management and attract more aggregated demand. However, Italians associate innovation with high-risk due to market asymmetries and some enterprises could be reluctant to implement them (Bollazzi, Risalvato, & Venezia, 2019). Nevertheless, chain hotels appear weakly affected by negative power distance on hotel rating, rather than independent ones (Gao et al., 2018). Since the appearance of third-party hotel distribution platforms such as the globally-recognized Expedia, Booking, Travelocity, Priceline, etc., branding a hotel (here also intended as a third-party management against a direct management option) is, though, only one among several strategic alternatives. Thus, the costs of being affiliated to a hotel chain, in terms of both fees and operational implications, is increasingly often compared with the costs associated with online distribution. Moreover, these online marketing activities make hotel branding easy to recognize (Ayodeji & Kumar, 2019). Globalization and the appearance of highly promising markets (such as the Indian, Chinese, and Russian markets) make being visible abroad more relevant. This is particularly true for top Western Europe destinations such as Spain, Italy and France, which highly rely on international demand for their tourism growth. Most recently, the debate moved to questioning the competitive advantage of international S&M tools adopted by global hotel chains and their comparability to ‘off the shelves’ solutions brought by the Web. The comparison among alternatives should then consider not only the costs (for commissions or for affiliation) but also the amount of market effectively brought by these channels. For the case of hotel chains, the point becomes which is and how big is the additional market brought by the brand for which a hotel must pay in addition (the affiliation fee), which it would not receive by simply operating as a well-managed independent hotel.

Moving closer to research studies from a strategy perspective, hotel branding has been investigated firstly through economic theories, particularly transaction costs economics and agency theory (Chen & Dimou, 2005; Peters & Frehse, 2005), corporate knowledge, and organizational capability theories (O’Neill & Mattila, 2010; Pham, Tuckova, & Jabbour, 2019; Whitha, Walters, & Davies, 2007) and their application in expansion strategies and entry modes of international hotel chains (Contractor & Kundu, 1998; Driha & Ramón, 2011; Quer, Claver, & Andreu, 2007; Yazdi, 2019). A second stream of literature has covered hotel chains’ impact on local economies (Ivanov & Ivanova, 2016, Booyens, 2016) and managerial implications for hotel
chains deriving from international expansion (Guo-Fitoussi, Bounfour, & Rekik, 2019; Israeli, 2002; O’Neill & Xiao, 2006). The third area of investigation deals explicitly with the comparison ‘chain vs. independent’, trying to investigate the ability of chain hotels to outperform independent hotels within different stages of the lifecycle (Enz & Canina, 2011) using several perspectives and variables (Carvell et al., 2016; Kapiki, 2014; Pine & Phillips, 2005). With large hotel corporations growing in number and size, above all in Europe and Asia, the industry is seeking evidence that chain affiliation can positively affect profitability (Deng, Veiga, & Wiper, 2019).

Overall, the results put forth in the literature on the performance supremacy of chain-affiliated hotels over independent ones are controversial. They vary according to the economic cycle of the country’s tourism market (O’Neill & Carlbäckb, 2011; Shin, 2019), to the size and year of operations of the hotel (Enz & Canina, 2011). O’Neill and Carlbäckb (2011) demonstrated that during a full economic cycle there are several patterns observed with no clear continuous advantage of one group over another. One of their key results is that branded hotels achieve significantly higher NOI than independent hotels during periods of economic recession, while no significant differences result during periods of economic growth. Furthermore, the branding value of hotel chains is higher than independent ones (Chen, 2019).

Within the UK market, Enz and Canina (2011) reported no significant differences between franchise properties and independent properties within the very first years of operations. They also found that the type of hotel (full service vs. limited service) was relevant among both chain and independent hotels for explaining differences in performance. A clear pattern, with one group prevailing on the other, was then not evident.

Within the USA market, Langlois (2003) concluded that chain hotels have proven to be historically less volatile in the long-term due to more stable ADR, while the OR was as volatile as for independent hotels. Within the Greek market, Kapiki (2014) demonstrated that independent hotels were more profitable compared to chain hotels based on efficiency and profitability. One could argue that wide samples, such as those used by O’Neill and Carlbäckb (2011) for the USA and for China, can drive to correct interpretation of patterns and phenomena in the world of chain affiliation and performance. However, it should be considered that each market could be different since the hospitality industry has a different history, a different sector structure, and, especially for the case under consideration, different chains’ penetration rates, thus limiting the applicability of results to the wider global scale (Carvell et al., 2016). In other words, a pattern that indicates a certain difference among chain and independent hotels found to be relevant in the USA or UK might not be as relevant for Spain or Italy, given both the difference in tourism competitiveness of these destinations and the different sector structure, life-cycle, and market mix. The degree of maturity of destinations is indeed important for explaining performance and competitive positions (Teare & Boer, 1991).

2.2. Research hypotheses

A strong ability to sell to international markets could be recognized as responsible for the performance superiority of chain hotels. Nevertheless, to the best of our knowledge, no study has provided explicit empirical support for this claim; besides, only
one study (O’Neill & Wang, 2008) has embraced the point of view of questioning chains’ contributions with the eyes of hoteliers. As these authors confirmed, ‘[…] strategic partnership formed by franchisor and the franchisee is critical to the long-term success of a franchise. However, the literature has primarily taken the viewpoint of franchisors, but failed to explore the perspective of the potential franchisees’. This paper is a further attempt in this direction as it deals with all potential business models.

According to the studies of Dunning and McQueen (1981), and O’Neill and Carlbäckb (2011), we based our analysis on the dummy discriminant variable ‘chain versus independent’ to investigate whether superior performance in international sales is attached to chains. Within this study, consequently, the status of a hotel ‘being’ or ‘not being’ part of a chain (both brand chains and white labels) is the primary pairing criterion.

Since tourism statistics are built around the destinations, and tourists are moved by the need to stay in a destination, the assessment of the brand effect on performance requires us to control for the effect of destinations, which were used as a second pairing criterion. There is then a clear evidence indicating that the pairing approach, based on destinations, is consistent with previous works in the field of hospitality (Carvell et al., 2016; Mathews, 2002; Smith & Dainty, 1991).

All this considered, the research questions are defined as follows:

1. Does branding contribute to international sales for a hotel, so that the affiliation will be associated to an increase in the share of international demand? Are categories (scales) relevant for this contribution?
2. Is the country of origin of the brand relevant for explaining international sales?

Following these research questions, the study is meant to test the following hypotheses:

H1: ‘Chain-affiliated hotels perform better on foreign markets than independent hotels do’: the alleged difference between affiliated and independent hotels will explain the ‘higher attractiveness’ on foreign markets of a chain hotel versus an independent hotel;

H2: ‘International chains’ hotels perform better on foreign markets than domestic chains’ hotels do’: the alleged difference between international and domestic chains will explain the country of origin effect on sales.

In line with the exploratory nature of this study, and due to data limitations (especially for independent hotels), the testing of H_1 and H_2 were performed through simple descriptive analysis (t-tests). This leads to ignore other variables assumed as relevant for international sales such as the business model (Sohn, Tang, & Jang, 2013) and the country of origin (Lee, Oh, & Hsu, 2017). As for the size of a hotel (Mathews, 2000), it might affect its ability to intercept foreign markets in absolute terms, although O’Neill, Hanson, and Mattila (2008) found no link between the size of independent hotels and their increased ability to gain higher room revenues. A hotel managing a higher sales and marketing budget, derived from its bigger size and consequent better financial standing, might have higher chances to be visible on
foreign markets and sell more on these markets as a consequence. But higher budget would lead to an increase in the volume of domestic demand also, so that there would be no reason to expect an increase (or change) in the proportion between foreign and domestic demand (Ma, Novoselov, Zhou, & Zhou, 2019). The impact of size on the foreign market share is less clear than it is on demand in absolute terms. In line with this intuition, we tried a linear regression analysis of the foreign market share of sampled hotels on their respective size, and no clear trend was found between the two parameters ($R^2 = 0.0276, p > 0.05$).

It is evident that a fully-fledged regression model of the determinants of performance in international markets, investigating the effect of chain affiliation by controlling for the other possible determinants, seems an important avenue for future research. The descriptive analysis contained in this paper, based on means comparisons and justified by its exploratory nature and available data, must be intended as a first step in this direction.

3. Methodology

3.1. Data collection

Our analysis focused on Italy, the second chosen tourism destination in Europe for foreign visitors (Eurostat, 2018), and the fourth in the world (WTO, 2018). During the last 10 years, demand from international markets to Italy has recorded continuous growth. In 2017, international demand accounted for over 48% of total arrivals in hotels, a relevant share compared to foreign direct competitors in Europe. At the same time, Italy exhibits a low level of hotel chain penetration (4.5% in 2017) compared to other countries, in particular Spain (33%), with the differences between these two countries being mainly due to their history of hospitality management, which has fostered the flourishing of domestic small (Italian) and large (Spanish) hotel chains. However, Italy and Spain report by far the highest number of international and domestic brands (respectively 227 and 290 in 2017) which appear reasonable in the light of their respective hotel portfolios, among the biggest in Europe (Horwath HTL, 2018).

The source of the analyzed data was twofold. On the one hand, information on hotel demand (international arrivals) and supply (hotel number of rooms) for the overall hotel population in selected destinations and scales was collected through Italian official statistics (ISTAT). On the other hand, for hotel chains, the research was designed over two major sources: the hotel chains census, carried out for the period 2012–2017 (Ribaudo & Franzese, 2017, 2018), and the survey of chain hotels, conducted in 2016 by the authors. The latter survey was conducted to assess the share of international demand in affiliated hotels, both domestic and international. Data available on specialized databases, such as STR Global or Hotstas, do not cover the geographic origin of markets and were, therefore, not supportive for the scope of this research. Instead of a questionnaire, a MS Excel template was proposed to each participating chain to fill, where a record was dedicated to each participating hotel. Given the relevant size of the targeted panel, we decided not to address the survey to a single property but to involve only one responsible person per chain. The aim of
this decision was to facilitate the response and obtain more reliable and comparable data, thus improving data accuracy.

The survey covered two years: 2013 and 2014. Respondents were first asked to provide the number of their total foreign arrivals per hotel in the sample for 2013, which were used as a pilot study and to determine the optimal sampling size. They were then asked to provide complete data on international arrivals for 2014, in absolute and percentage value. The 2014 calendar was investigated for special events or contingencies that could have affected international flows to Italy in that period, but nothing relevant was found to be able to create significant distortions on international arrivals.

Due to the peculiar kind of data requested and the strict data disclosure policy of hotel chains, we planned to target a convenience sample. In the year of the survey, hotel chains were spread over more than 550 destinations in Italy. It was then impossible, as well as not necessary, to plan a survey intended to investigate all destinations and all chains (205 brands). The survey perimeter was thus limited to those destinations summing up to 60% of the overall hotel population, resulting in a list of 55 cities for 157 brands belonging to 43 chains.

An exercise of data cleaning was run prior to analysis, which reduced the number of observations to 148 (35.2% of the overall population of chain hotels in the 21 destinations), mainly due to destinations being inadequately represented or to data being incoherent, wrongly reported, or incomplete. We obtained responses from 22 brands for all their respective hotels in 21 destinations of the 55 surveyed, for a total of 159 hotels (sample observations) out of the 420 existing (population) in those destinations.

The sample represented 26% of the population of chain hotels and 28% of chain rooms in surveyed destinations and represented the distribution among scales. Most of the surveyed destinations (13 out of 21) featured in the top 50 visited destinations in Italy in 2014 and 2015, while they accounted for 49.5% of all tourist demand recorded in this ranking. We limited the analysis of demand flows to three-, four-, and five-star categories. As a whole, the analysis covered 38 combinations deriving from 21 ‘i’ destinations with three ‘a’ categories for those for which we received at least one response. Table 1 summarizes our sample, while Table 2 reports the list of hotels and the number of rooms.

Although the sample (148 hotels) might appear small compared to the number of clusters (38), it must be considered that certain clusters are limited in the population of chain hotels, a circumstance that is common for any country, when secondary locations are also covered aside from capital cities. Thus, the same would be true for the UK, France, and Spain if one tried to cover 20 destinations in addition to London, Paris, and Madrid, respectively. The overall sample representativeness was

<table>
<thead>
<tr>
<th>Table 1. Descriptive statistics indicating chain hotel population, focus on surveyed destinations and responding sample.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Descriptive statistics pop. and sample</strong></td>
</tr>
<tr>
<td>Chain Hotels (all scales) – Italy</td>
</tr>
<tr>
<td>Chain Hotels (3-4-5 scales) – Italy</td>
</tr>
<tr>
<td>Chain Hotels (3-4-5 scales) – Surveyed</td>
</tr>
<tr>
<td>Chain Hotels (3-4-5 scales) – Response</td>
</tr>
<tr>
<td>No. of observations (after data cleaning)</td>
</tr>
</tbody>
</table>

*Source:* Authors own research and survey evidence.
fair, but sample hotels’ representativeness in percentage terms varied a lot among destinations and categories (Table 3).

### 3.2. Indicator implementation

The key indicator used as a performance metric in this paper is the Foreign market Per Available Room (FmPAR) index, which was obtained by dividing the overall yearly international arrivals (Fm – Foreign market) by the number of rooms offered on the market (AR – Available rooms):

\[
FmPAR = \frac{Fm}{AR}
\]

The FmPAR can be calculated at the single or aggregate levels. For this reason, we will distinguish between the following FmPAR measures:

- \(FmPAR_h\): the FmPAR of a single sampled hotel, calculated with reference to its international arrivals.
- \(FmPAR_{ch}\): the aggregate FmPAR for all sampled chain hotels in the destination, calculated with reference to their international arrivals. This index can also be computed for international chains (subscript \(intch\)) and domestic chains (subscript \(domch\)) separately.
- \(FmPAR_{pl}\): the FmPAR at aggregate destination level calculated with reference to the entire hotel population.

This index was computed for given hotel scales and destinations whose subscripts are omitted for simplicity.

<table>
<thead>
<tr>
<th>Brands in the sample</th>
<th>Brand’s origin</th>
<th>Sampled hotels</th>
<th>Sampled rooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH Hotels</td>
<td>Spain</td>
<td>27</td>
<td>4986</td>
</tr>
<tr>
<td>Mercure by Accor</td>
<td>France</td>
<td>21</td>
<td>2174</td>
</tr>
<tr>
<td>UNA Hotels &amp; Resorts</td>
<td>Italy</td>
<td>19</td>
<td>1862</td>
</tr>
<tr>
<td>Best Western</td>
<td>USA</td>
<td>12</td>
<td>840</td>
</tr>
<tr>
<td>Novotel by Accor</td>
<td>France</td>
<td>11</td>
<td>1958</td>
</tr>
<tr>
<td>Rimini Residence</td>
<td>Italy</td>
<td>10</td>
<td>347</td>
</tr>
<tr>
<td>Ibis by Accor</td>
<td>France</td>
<td>8</td>
<td>1519</td>
</tr>
<tr>
<td>JSH</td>
<td>Italy</td>
<td>8</td>
<td>948</td>
</tr>
<tr>
<td>Mgallery By Sofitel</td>
<td>France</td>
<td>8</td>
<td>765</td>
</tr>
<tr>
<td>NH Collection</td>
<td>Spain</td>
<td>6</td>
<td>907</td>
</tr>
<tr>
<td>Ibis Style by Accor</td>
<td>France</td>
<td>4</td>
<td>459</td>
</tr>
<tr>
<td>Best Western Plus</td>
<td>USA</td>
<td>2</td>
<td>201</td>
</tr>
<tr>
<td>Best Western Premiere</td>
<td>USA</td>
<td>2</td>
<td>187</td>
</tr>
<tr>
<td>Ramada</td>
<td>USA</td>
<td>2</td>
<td>318</td>
</tr>
<tr>
<td>Unaway</td>
<td>Italy</td>
<td>2</td>
<td>363</td>
</tr>
<tr>
<td>Adagio Aparthotels</td>
<td>France</td>
<td>1</td>
<td>107</td>
</tr>
<tr>
<td>Aman Resorts</td>
<td>Singapore</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>Clarion Collection</td>
<td>USA</td>
<td>1</td>
<td>69</td>
</tr>
<tr>
<td>Jumeirah</td>
<td>UAE</td>
<td>1</td>
<td>116</td>
</tr>
<tr>
<td>NHOW</td>
<td>Spain</td>
<td>1</td>
<td>246</td>
</tr>
<tr>
<td>Sofitel</td>
<td>France</td>
<td>1</td>
<td>81</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>148</td>
<td>18,477</td>
</tr>
</tbody>
</table>

Source: Authors own research and survey evidence.
The index can assume values ranging from 0, meaning (a) the hotel(s) recorded no international arrivals, to circa 730, meaning (b) the hotel(s) recorded full occupancy with a DOF of 2, generated by all international arrivals. Both (a) and (b) extremes are academic cases and cannot reflect any real hotel circumstance in Italy, since there will always be a domestic and an international demand component for any hotel, and it is extremely uncommon to record a yearly occupancy rate of 100%.

Due to the lack of data on independent hotels, $FmPAR_{ih}$ (i.e., the index for independent hotels) must be indirectly estimated. We proceeded by subtracting from the population (destination/scale) values the number of foreign arrivals and available rooms of the surveyed chain hotels. 

$$FmPAR_{ih} = \frac{Fm_{ph} - Fm_{ch}}{AR_{ph} - AR_{ch}}$$  \hspace{1cm} (2)$$

This procedure has severe limitations because including non-surveyed chain hotels in $FmPAR_{ih}$ generates an upward bias. Nevertheless, the bias tends to reduce the differences between the estimated indexes for chains and independent hotels, so that if we find support for $H_1$, we can confidently conclude that the effect is real. Of course, the bias tends to vanish as the chain hotel sample representativeness increases.

Consequently, we tested $H_1$ as:

$$FmPAR_{ch} > FmPAR_{ih}$$  \hspace{1cm} (3)$$

As for $H_2$, this is equivalent to:

$$FmPAR_{ch_{int}} > FmPAR_{ch_{dom}}$$  \hspace{1cm} (4)$$


Table 3. Sample representativeness in terms of hotels by destination and category.

<table>
<thead>
<tr>
<th>Destinations</th>
<th>3 stars</th>
<th>4 stars</th>
<th>5 stars</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARI</td>
<td>40.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BERGAMO</td>
<td>50.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOLOGNA</td>
<td>16.7%</td>
<td>44.4%</td>
<td></td>
</tr>
<tr>
<td>BRESCIA</td>
<td>50.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CATANIA</td>
<td>100.0%</td>
<td>50.0%</td>
<td></td>
</tr>
<tr>
<td>FLORENCE</td>
<td>7.7%</td>
<td>25.0%</td>
<td>13.3%</td>
</tr>
<tr>
<td>GENOA</td>
<td>33.3%</td>
<td>42.9%</td>
<td></td>
</tr>
<tr>
<td>LECCE</td>
<td></td>
<td>25.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>MILAN</td>
<td>23.5%</td>
<td>27.7%</td>
<td></td>
</tr>
<tr>
<td>NAPLES</td>
<td></td>
<td>41.7%</td>
<td></td>
</tr>
<tr>
<td>PALERMO</td>
<td>33.3%</td>
<td>12.5%</td>
<td></td>
</tr>
<tr>
<td>PARMA</td>
<td></td>
<td>12.5%</td>
<td></td>
</tr>
<tr>
<td>PESCARA</td>
<td>100.0%</td>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>RIMINI</td>
<td>66.7%</td>
<td>50.0%</td>
<td></td>
</tr>
<tr>
<td>ROME</td>
<td>15.4%</td>
<td>14.7%</td>
<td>20.0%</td>
</tr>
<tr>
<td>SIENA</td>
<td></td>
<td></td>
<td>100.0%</td>
</tr>
<tr>
<td>SYRACUSE</td>
<td>100.0%</td>
<td>66.7%</td>
<td></td>
</tr>
<tr>
<td>TURIN</td>
<td>28.6%</td>
<td>43.8%</td>
<td></td>
</tr>
<tr>
<td>VENICE</td>
<td>10.0%</td>
<td>25.7%</td>
<td>11.1%</td>
</tr>
<tr>
<td>VERONA</td>
<td>40.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cases with representativeness higher than 50% are shown in bold. 
Source: Authors own research and survey evidence.
3.3. Statistics

Due to the intuitive different attractiveness of destinations, $FmPAR_{ph}$ in different destinations was expected to assume different values. Indeed, it derives from the ratio between international demand volumes (which differ highly between destinations) and the hotel supply system (which differs highly as well in terms of available rooms from destination to destination). While this paper does not intend to focus on destinations, nor does it try to explain the reason for variations across destinations, this analysis was instrumental to provide a tentative explanation for some of the results reported in the following sections.

For statistics purposes, we firstly run Levene test for testing homogeneity of variance within chain hotels data. In addition, a Shapiro Wilk test was used to test for normality assumption. As expected, given to the unbalanced design of the study, homoscedasticity was not respected. Moreover, data presented a log-normal distribution. That is why the chosen model for exploring the value of chain hotels data compared to independent hotels for each destination and category was a Generalized Linear Mixed Model (GLMM) with a penalized quasilikelihood (PQL). This flexible technique can deal with non-normal data, unbalanced design and crossed random effects (Jaeger, 2008; McCulloch, 1997). In the model, chain hotels ($FmPAR_{ch}$) were considered as the dependent variable, independent hotels ($FmPAR_{ih}$) and categories (three levels: three, four and five stars) were considered as fixed factors, while destination (21 levels, one for each city) was considered as a crossed random factor.

Once the dependence of chain hotels data on categories was verified, a bilateral Student T-test for heteroscedastic series was run between $FmPAR_{ch}$ and $FmPAR_{ih}$ for each category, in order to test whether one was superior to the other. A bilateral Student T-test for heteroscedastic series was also employed to test the difference between $FmPAR_{chint}$ and $FmPAR_{chdom}$.

4. Results

4.1. Average $FmPAR$ at the destination level

The values of $FmPAR_{ph}$ for each of the surveyed destination and category are reported in Table 4.

We can observe that there is volatility of $FmPAR_{ph}$ across categories in each destination, with four-star hotels usually having a higher $FmPAR_{ph}$ than three-star hotels (the only exception being Rome). Internationally renowned cities like Venice, Rome, and Florence report high $FmPAR_{ph}$ irrespective of categories. Meanwhile, we also observe smaller towns with high $FmPAR_{ph}$ such as Verona (for three-star hotels) or Bergamo and Siena (for four-star hotels).

4.2. $FmPAR$: Chains versus independent hotels

Table 5 reports the values of $FmPAR_{ch}$ for each destination and category, compared to $FmPAR_{ih}$, computed as in Equation (2).
GLMM output showed that chain hotels data followed the same pattern than independent hotels (GLMM estimate ± standard error for FmPAR$_{ch}$ in function of FmPAR$_{ih}$: 0.007 ± 0.001, $p < 0.001$), that confirming the reliability of collected data. FmPAR$_{ch}$ also significantly varied among categories (three stars: $-0.58 ± 0.16$; four stars: $-0.96 ± 0.12$; five stars: $-0.62 ± 0.13$; overall $p < 0.001$) with values of three stars + four stars < five stars. Indeed, FmPAR$_{ch}$ values were of $135 ± 20$, $129 ± 10$ and $349 ± 75$ for three, four and five stars respectively (mean ± standard error) FmPAR$_{ih}$ values were of $81 ± 15$, $86 ± 12$ and $130 ± 7$, for three, four and five stars respectively. At each category, FmPAR$_{ch}$ resulted higher than FmPAR$_{ih}$ ($T$-test, $p < 0.01$, Figure 1).

4.3. FmPAR: Domestic versus international chains

According to H$_2$, affinity to a given nationality should explain FmPAR values. It was found that, effectively, international chains have a significantly higher FmPAR than domestic ones ($T$-test, $p < 0.01$) as shown in Figure 2.

5. Discussion

The overall picture presents a clear pattern. Among the 38 observed cases, 29 resulted in a higher FmPAR for chain hotels, thus indicating that sales to foreign markets are not equally distributed among chain and independent hotels for a destination. Moreover, by statistically comparing the sample to our (upper bound) proxy for independent hotels, we found support for H$_1$. In addition, when considering FmPAR for domestic and international chains, domestic chains reported a modest mean value of

<table>
<thead>
<tr>
<th>Destinations</th>
<th>3 stars</th>
<th>4 stars</th>
<th>5 stars</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARI</td>
<td>31.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BERGAMO</td>
<td>113.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOLOGNA</td>
<td>72.3</td>
<td>84.8</td>
<td></td>
</tr>
<tr>
<td>BRESCIA</td>
<td>65.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CATANIA</td>
<td>54.5</td>
<td>92.4</td>
<td></td>
</tr>
<tr>
<td>FLORENCE</td>
<td>133.9</td>
<td>170.2</td>
<td>138.8</td>
</tr>
<tr>
<td>GENOA</td>
<td>78.4</td>
<td>91.9</td>
<td></td>
</tr>
<tr>
<td>LECCE</td>
<td>25.4</td>
<td></td>
<td>99.4</td>
</tr>
<tr>
<td>MILAN</td>
<td>102.1</td>
<td>118.8</td>
<td></td>
</tr>
<tr>
<td>NAPLES</td>
<td>46.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PADUA</td>
<td>90.9</td>
<td>123.4</td>
<td></td>
</tr>
<tr>
<td>PALERMO</td>
<td>74.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PARMA</td>
<td>55.7</td>
<td>67.7</td>
<td></td>
</tr>
<tr>
<td>PESCARA</td>
<td>20.2</td>
<td>23.7</td>
<td></td>
</tr>
<tr>
<td>RIMINI</td>
<td>12.2</td>
<td>29.7</td>
<td></td>
</tr>
<tr>
<td>ROME</td>
<td>141.1</td>
<td>136.0</td>
<td>143.7</td>
</tr>
<tr>
<td>SIENA</td>
<td></td>
<td>108.6</td>
<td></td>
</tr>
<tr>
<td>SYRACUSE</td>
<td>34.5</td>
<td>41.8</td>
<td></td>
</tr>
<tr>
<td>TURIN</td>
<td>29.7</td>
<td>36.4</td>
<td></td>
</tr>
<tr>
<td>VENICE</td>
<td>180.8</td>
<td>215.3</td>
<td>149.8</td>
</tr>
<tr>
<td>VERONA</td>
<td>135.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>81.5</td>
<td>84.9</td>
<td>132.9</td>
</tr>
<tr>
<td>Median</td>
<td>75.3</td>
<td>79.8</td>
<td>141.2</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>51.5</td>
<td>51.6</td>
<td>22.8</td>
</tr>
</tbody>
</table>

Source: Authors own research and survey evidence.
88, compared to 152 for international chains. Thus, this evidence highlights the ability of international brands to be globally more visible than Italian domestic chains.

The supremacy of chain hotels is not always so clear, though. While observed as a general effect, the affiliation to a chain does not guarantee higher sales on international markets per se and at any condition. The origin of the brand, as we have already underlined, together with category of the hotel and the peculiar situation of destination competitiveness, might play a role in the practical outcome of affiliation.

When analyzing the details in Table 5, we observe that H1 is supported in 10 cases out of 12 (83.3%) for three-star hotels, while the percentage goes down to 70% (14 cases out of 20) for four-star hotels and 75% (3 cases out of 4) for five-star hotels. This suggests that the brand effect is stronger for those hotel categories in which the attractiveness toward foreign guests tends to be limited (it turns out that the FmPAR average across destinations is higher for four-star independent hotels).

Similarly, in destinations where hotels rely heavily on international demand, the difference between chain and independent hotels is weaker, although still evident. If we consider the first five destinations in our sample in terms of foreign arrivals percentages (Venice, Florence, Rome, Bergamo, and Siena), H1 is not supported, or (as occurs in most cases) the difference in favor of chain hotels is small (the only exception being three-star hotels in Venice). On the contrary, there are several cases, such as Brescia, Parma, Turin, Naples, Syracuse, and Palermo, where chain hotels outperform independent hotels to a significant extent. It could be argued that chain hotels are preferred by international travelers, especially in second tier destinations where the penetration of chains is still generally weaker than the average of major international tourism destinations.8

Overall, it seems that the ‘chain effect’ is stronger in those situations (categories and destinations) in which the ability to attract foreign guests is relatively limited.
The exploratory nature of our work does not allow us to determine the reason behind these moderating factors. However, we can speculate that foreign travelers in unfamiliar destinations or lower-level establishments might suffer from a higher degree of asymmetric information, so that they deal with a higher perceived risk and thus search for the standardized promise of a brand.

Finally, $\text{FmPAR}$ turned out to be volatile among the 149 sampled hotels ($M = 137$, $SD = 115$) but much less volatile among sampled hotels of the same destination, confirming the importance of destination specificities for both chain and independent hotels.

6. Conclusions and managerial implications

Based on the case of Italy, this research resulted in some managerial implications for hotel investors, hotel owners, and managers. In general, affiliation to a brand brings...
more international demand when it is compared to independent operations. This is especially true if the brand is an international one. At the same time, there is evidence that this effect is even stronger (i.e., the brand is more valuable) for three-star hotels and in those destinations in which chain penetration and foreign attractiveness are lower, for example in several second-tier Italian destinations. Since most of the brands participating in the survey are strongly present in other countries of the world, the results could be cautiously generalized to other markets and other competitive environments.

If brand support is sought for exploring new opportunities attached to global markets, then a franchising contract with a well-recognized international brand might be the right choice (Roy, Sharma, Kar, Zavadskas, & Saparauskas, 2019). Clearly, decisions on branding and affiliation are never taken in the light of international exposure only, but are rather made after considering several other expected advantages (McCarthy & Raleigh, 2003). In other cases, domestic chains might be considered for their adaptability to local business conditions, especially because they are still prone to lease (a business model that is now much less common among global chains). Indeed, domestic chains might decide to add a foreign brand to the sign of their hotel to gain higher exposure to international customers. Indeed, this is a growing trend as demonstrated by the increase of ‘white label’ operators in the Italian and European markets.

With reference to international sales, a discerning managerial approach to branding should consider the current and future weight of foreign demand on total demand for the hotel (i.e., the targeted foreign market share) (Kline & Brown, 2019). For this purpose, benchmarking competitors through FmPAR would support the setting of sales goals in international markets. Incidentally, the research construct drove the authors to build FmPAR as a new measure of the ability of a hotel to attract foreign demand, based on the success gained by similar metrics in the industry (RevPAR, TRevPAR, GOPPAR, etc.).

FmPAR can be used to benchmark hotels of different size, among the same or different destinations, to compare their degree of international exposure and to monitor international sales performance over time. Its definition is straightforward, and the data required are the operating days in a period and the international arrivals recorded in the same period.

In addition to those already mentioned, a limitation of this research is the limitedness of the sample in the five-star category. For future research, it would be interesting to explore this category with a more representative sample. Also, the research was not able to test the impact of the occupancy rate (unknown, given the reluctance of operators to disclose such information) on FmPAR, while it is clear that the FmPAR is the result of the ability of hotels to sell rooms in general, in addition to its ability to sell to the international market.

Notes

2. In 2017, the share of international hotel demand in terms of arrivals was 51.4% for Spain, 48.5% for Italy, and 30.6% for France.
3. 2015 data covering international arrivals to hotels would have been impacted by the EXPO 2015, a massive international exhibition held in Milan, while most chains were not able to provide data for 2016 since they were yet unconsolidated at the time of the survey.

4. Given that the perimeter for the analysis was set around a population of 21 destinations, we estimated the sample size setting at 95% confidence interval (t Student) for a normal distribution. The normality distribution was tested through the Shapiro-Wilk test; as the data were not normally distributed, they were log-transformed. Secondly, their coefficient of variation (based on a 2013 pilot study) was calculated and a precision of 10% was fixed. The minimum sample size to be taken in the next survey results was $n = 57$. The actual convenience sample size collected for elaborating on the year 2014 was $n = 148$, which largely overpassed the minimal required sample size and ensured a precision of 6% on the final estimates, intended to be satisfactory for the scope of this research.

5. “Circa” is due to hotels having on average two beds per room, thus the maximum number of arrivals per year per available room, if operating on a 365-day basis, is 730 (365-2). Hotels might also have more than two beds per room or operate less than 365 days per year. The Italian hotels’ average number of beds per room is 2.06 based on official government statistics in 2013 and 2014.

6. The Double Occupancy Factor (DOF) is the average number of guests occupying one room. Its value is 2 when, for example, all beds of a double-room are occupied.

7. Assuming that the average $FmPAR$ for the population of chain hotels coincides with the sample average, we can estimate $FmPAR_{ih}$ as $FmPAR_{ih} = (FmPAR_{ph} - FmPAR_{ch} \cdot w) / (1-w)$, where $w = AR_{ch}/AR_{ph}$. This formulation comes from the identity $FmPAR_{ph} = w FmPAR_{ch} + (1-w) FmPAR_{ih}$ whose proof is straightforward. Qualitatively, this approach leads to the same results as those reported in the paper, which are omitted to save space. Further details are available upon request.

8. The correlation between chain penetration (in terms of rooms) and foreign arrivals is 0.3 in our data.

Acknowledgements

We wish to express our deepest appreciation to the editors and the anonymous reviewers.

Disclosure statement

No potential conflict of interest was reported by the authors.

References


