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Room rate parity: A 2010 study of U.S. booking channels

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ROOM RATE PARITY: A 2010 STUDY OF U.S. BOOKING CHANNELS

by

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ABSTRACT

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by

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Hotel guests are facing a variety of different hotel rates when booking online. The transparency of the Internet is driving hotel prices towards rate parity. This study investigates room rate parity, room and hotel availability, price consistency, and rate guarantee. The study examines 240 property-date combinations, focusing on ten metropolitan areas, using a sample of 120 hotels for two booking dates, and analyzing three hotels per four hotel segments. The results suggest that Orbitz, an indirect distribution channel, is the best choice when booking rooms in budget and midscale market segments. Furthermore, Expedia offers the best room prices for luxury properties. Room availability is still an issue for third-party distribution channels, while a phone call is still the best channel to ensure room availability.

Keywords: rate parity, distribution channels

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CHAPTER I

INTRODUCTION

Hotel guests are facing a variety of different hotel rates when booking rooms online. The goal of this study is to clarify the issue of online hotel pricing and identify booking channels that offer the best prices to potential guests. The issue is of continual interest and previous studies show various results. Moreover, this study aims to provide a current account of distribution channels' pricing of hotel rooms. As the Internet has become the most important medium over which the hotels are booked, there is a need for new research that keeps customers up-to-date with information that minimizes their search time in their effort to find the lowest price for products and services. With these goals in mind, this study sets to examine rate parity in hotels in the U.S. and the room availability and rate guarantee across various online distribution channels.

Similar to Demirciftci (2007), the primary objective is to evaluate rate parity within and across direct channels (hotel website) and indirect channels (Expedia.com, Orbitz.com and Travelocity.com). Hotel room rate parity is observed in online booking channels and seeks to understand why and when differences occur in pricing. It provides a current account of what is happening across online booking channels during the observed period of the study, and as such attempts to expand on the existing literature on room rate parity. Another contribution comes from the use of a larger dataset than any previous studies. Rate parity was examined on Thursday April 15th, 2010 for each property for two dates, Wednesday June 2nd and Saturday June 5th, 2010.

The nature of this research is exploratory. Since this research derives its data by means of direct observation, it is empirical in nature. Presently, hoteliers have been trying to offer consistency across booking channels, i.e. to reach rate parity, in an effort to lure

guests to their properties by eliminating room price as a consideration. Research objectives can be identified and formulated as questions, which are answered by this study. The following are specific objectives of my current research:

1. Does room rate parity exist in online booking channels, and at what level?

2. What are the differences and similarities between selected online booking channels in terms of pricing?

3. What booking channel consistently offers the lowest room rates?

4. What booking channel consistently offers the highest room rates?

5. What are the implications of my findings for an average buyer?

6. Is it possible to give general guidelines and advice for securing hotel rooms online?

7. What are the limitations of this study and what can be done to provide better results?

Definitions of Key Terms

BAR: Best rate available to the general public that does not require pre-payment and does not impose cancellation or change penalties and/or fees, other than those imposed as a result of a hotel property's normal cancellation policy (Galileo 360 Compass, n.d.).

Direct channel: a method of selling and distributing products direct to customers. Direct channels include direct sales, mail order, and the Internet (Bnet.com, n.d.).

EBC: The excess booking cost is the premium a consumer would pay for a booking if he or she used a particular channel exclusively, compared to finding the lowest-cost booking across the five channels (Thompson & Failmezger, 2005).

GDS: Worldwide computerized reservation network used as a single point of access for reserving airline seats, hotel rooms, rental cars, and other travel related items by travel agents, online reservation sites, and large corporations (Businessdictionary.com, n.d.)

Parity: It is a concept of equality; in this case room rate parity refers to equality in prices assigned to room rentals (Parker, 2010).

RM/YM: Predicting real time customer demand and optimizing the price and availability of products to match that demand (Cullen & Helsel, 2006).

Organization of the Thesis

The thesis is organized into six chapters. The first chapter includes the purpose and objectives, and definition of key terms. Chapter 2 provides the literature review. Methods are presented in Chapter 3. Chapter 4 provides the analysis and results. Chapter 5 deals with the study's limitations, incorporates the discussion of results and recommendations for further research.

CHAPTER II

LITERATURE REVIEW

Rate Guarantee

The times are changing and online third-party distributors are facing stiff competition in offering the lowest hotel room prices. Hotel companies have introduced best-rate guarantee to compete for customers, in order to avoid the rate and brand erosion and start controlling the online distribution (Starkov & Price, 2003b). The classic model states that hotel provides a net rate free of commission, which the intermediary then marks up (Carroll & O'Connor, 2005). Therefore, by accepting a low markup, the intermediary can sell a room for a lower price (O'Connor & Murphy, 2008). Customers are aware they can find varying prices for the same product or service, especially in an online medium such as the Internet. It is common for customers to check the online third-party distributors and compare it with rates on the hotel's website (Rohlfs & Kimes, 2007). However, hotels are heavily marketing the concept of best rate guarantee to discourage the would-be customers from searching the lowest prices on third-party distributors and directly book a room on the hotel's website.

Best available rate (BAR), also known as best rate guarantee is a pricing tool used by many hotels today. BAR sets price by forecasting demand, and promises to offer lower or matching prices on hotel's direct distribution channel. This is yet another concept first used by the airline industry, and later adopted by hotel industry. BAR pricing is an "attempt to reduce confusion and to guarantee that the guest is quoted the lowest available rate for each night of a multiple-night stay" (Rohlfs & Kimes, 2007, p. 2). Bar is basically the lowest unrestricted rate. It is used both by hotels and other distribution

channels. According to *Galileo 360 Compass* website, the lowest unrestricted rate is a rate available to the general public that does not require pre-payment and does not impose cancellation or change penalties and/or fees, other than those imposed as a result of a hotel property's normal cancellation policy.

At the moment, a best rate guarantee is one of the most important competitive strategies in the hotel industry. It is common for hotels to go against their pricing policies when they offer the best rate guarantee, with a goal of bringing confidence to would-be customers when booking a room over hotel's direct distribution channels. Hotels are beginning to control the distribution of their rooms by implementing best rate guarantee and price consistency across booking channels (Rohlfs & Kimes, 2007). In order to offer the best rates, hotels should lower their rates or seize control over the distribution channels. However, it is sometimes just a claim of guaranteeing the best rate, rather than a fact (Demirciftci, 2007).

Low price policies seem to be successful as a tool that encourages customers to visit hotels' own website. However, it is not yet universal for hotels' websites to offer the best deals (Thompson & Failmezger, 2005). Rate consistency has also become an important concept. Offering consistent rates over the distribution channels will increase brand loyalty and decrease the customer's willingness to search for better prices online. Therefore, hotels need to manage their distribution channels more effectively in order to increase the customer confidence in their pricing strategies. By offering the lowest rate guarantee, the hoteliers are trying to drive the business to the hotel's website. Many hotel chains offer the lowest rate guarantee to attract customers. A study by Law, Chan, and Goh (2007) found that hotels that did not offer to guarantee rates provided some price

searching options along with general information on reservations. Unlike previous studies that found hotel websites to offer the lowest prices, a study by Thompson and Failmezger (2005) revealed that Travelocity was the lowest-cost channel.

A study by Gazzoli, Kim, and Palakhruti (2007) investigates the difference between US and international hotels in terms of rate guarantee. Their results suggest that the US hotels are much more efficient in providing the lowest rates, rate parity and availability across online distribution channels (Gazzoli, Kim, & Palakhruti, 2007). Their international counterparts were not so successful in comparison. However, rate consistency is still an issue among US hotels. “International properties showed a completely opposite picture with an overall best rate guarantee of 65% of all cases. Hilton International’s best rate guarantee was only 50% and Hyatt International was only 60%. The worst performer was Starwood with only 47%. On the other hand, Ramada International showed the best results with 88% of best rates being provided on their brand site. Surprisingly, Marriott International properties achieved 87% against 86% of Marriott U.S.” (Gazzoli et al., 2007, p. 387). According to Gazzoli et al., only 43% of hotels surveyed advertised the “best web rate guarantee” promise on their sites and only 27% of all cases delivered their promise. In the USA, the best rate guarantee was offered in 68% of the cases, compared to 20% in the UK. Overall, international properties performed very poorly with 65% best rate against 94% of US hotels (Gazzoli et al., 2007).

Room Availability

Room availability is a term used for seeing whether particular distribution channels show hotel rooms as available to purchase. Room availability across direct and indirect channels has also been an issue about which scholars have been divided. Many studies

show contradictory results. For example, Expedia seems to be the worst third-party site in terms of showing available hotel rooms (Thompson & Failmezger, 2005). On the other hand, Gazzoli et al. (2007) compared consistency in room availability between US and international properties. US hotels had 93%, while international hotels presented 79% of consistency in room availability.

Having a room that is available across all channels is vital, since it brings sales. Calling a hotel seems to be the best way of finding a room, in 95.6% of cases (Thompson & Failmezger, 2005). Company's own website appears to be a reliable source of room availability with 94.2% of the time. Expedia was the poorest on reporting available rooms only 29.2% of the time (Thompson & Failmezger, 2005), whether it shows the rooms as unavailable or simply not having the specific hotel in its database. In the luxury segment, the highest room availability was provided by company's website and calling the hotel over a phone. For upscale hotels, company website showed the best availability followed by Travelocity and a phone call to a hotel. According to Thompson & Failmezger (2005), calling hotels directly was the best option in mid-market segment, with no other channels being close. For budget segment, company's websites offered the best availability followed by calling a hotel.

Parity

Parity is a concept of equality; in this case room rate parity refers to equality in prices assigned to room rentals. With the advent of Internet, the rate transparency became a standard, driving the room prices towards parity. Today, the rates are advertized on the Internet, and companies compete by offering lower rates. In the past, the customers did not have as much information on pricing. Among a few ways of accessing this

information was to physically go to a hotel, visit a travel agent, or call hotel reservations. Rate parity is a hot topic nowadays. It is becoming normal to find prices very similar across numerous channels, excluding phone reservations, studies suggest (Thompson & Failmezger, 2005). According to *E-distribution* website, many hotels fail to protect their prices when doing contracts with third-party channels (Gorgue, 2008), such as those in this study. Furthermore, it is often the case that those intermediaries do not respect the contracts they made.

According to *Hotel Online* website, although we see a move toward uniform rate parity online, it is very hard to attain. The economy is changing so fast it is hard to control dynamic pricing along with changing management strategies. However, the market is contradicting that strategy. During the current recession, businesses are struggling to attract customers. Customers are becoming in charge of dictating the price!

Rate parity is said to exist when the same rate for a hotel exists across all of its distribution channels (Demirciftci, Cobanoglu, Beldona, & Cummings, 2010). Rate parity is a well documented concept (Demirciftci, 2007; Demirciftci et al., 2010; Gazzoli et al., 2007; Kimes, 1994; 2002). Choi and Kimes (2002) suggest that the lack of rate parity can have a strong impact on the brand's image, not only the perceived fairness of pricing by the hotels. The Internet has severely impacted the hotels' ability to sustain parity (Nyheim, McFadden, & Connolly, 2004). Rate parity is becoming very important because the rates are transparent, where would-be guests can easily find multiple rates across various channels (Choi & Kimes, 2002). Hotels should monitor their pricing practices consistently on the Internet since online purchasers do not want to be offered

different prices for the same products, such as the same hotel rooms on various Internet sites (O'Connor, 2003).

Rate parity should prevail across both direct and indirect channels. A significant degree of disparity has been found in rates across channels (Thompson & Failmezger, 2005). While the study provided significant insights into price dispersion in the lodging industry, its findings were limited to data collected over only one data point, one reservation rate for only one reservation date, which looked exclusively at direct channels of distribution. The study by Demirciftci (2007) looked into indirect distribution channels, as well as direct distribution channels of four and five diamond hotels. Companies are investing heavily in their branded Web sites to drive more direct bookings. According to Carroll and Connor (2005), chains are working closely with their properties to better manage distribution and intermediary agreements. "They are also negotiating directly at a corporate level with the online travel agencies to establish more acceptable terms and conditions, such as rate levels/rate parity, display positioning and search engine marketing practices" (Carroll & Connor, 2005, p.8).

Revenue Management

The research on revenue management (RM)/yield management (YM) is extensive, and so are the ways of defining it. Whereas RM is generally associated with accommodations revenue (Burgess & Bryant, 2001), it is technical and very broad in scope and encompasses all areas of hotel revenue. The most up-to-date definition is by Cullen and Helsel (2006) who call it the art and science of predicting real time customer demand at the micro level and optimizing the price and availability of products to match that demand. RM includes two main concepts which are demand-based variable pricing

and optimal inventory control (Choi & Mattila, 2005). The hotels act accordingly and charge different rates to various customers based on the reservation dates and the length of stay. Hotels also base their room prices by anticipating demand. When demand is high, rooms are sold at a premium. On the contrary, when demand is low, hotels offer discounted rates (Choi & Mattila, 2005). According to Cross (1997), RM programs have created significant additional hotel revenue by applying the basic revenue management practices.

The History of Revenue Management in Hotels

The history of RM begins with the airline industry. Introduced by airline executives to the lodging industry (Cullen & Helsel, 2006), RM has been used by hotels for many years. However, it is a modified version to fit the needs of the lodging industry (Haley & Inge, 2004), which embraced its use (Cullen & Helsel, 2006; Haley & Inge, 2004; Sanghavi, 2005). The emergence of RM companies that focus on the hospitality industry occurred in the late 1980s, followed by consulting companies (Walczak, 2000). According to Cullen and Helsel (2006), the evolution of RM went from hotel revenue to hotel profits in the early 1990s. The first users of RM in the hotel industry were Marriot, Hilton, Starwood and Intercontinental (Haley & Inge, 2004). Similar to airline industry, the lodging industry began to use various distribution channels to reach new markets (Carroll, 2006). Hotels prefer to use direct distribution channels to maximize their profits, which also strengthens customer relationships. This in return results in customer loyalty and repeat business, by acquiring more information about guests and their desires (Cullen & Helsel, 2006). However, hotels started using third party operators to fill empty rooms.

This dependency on such distribution channels increased as customers began to expect discounted prices for all hotel rooms.

The revenue management research by hospitality scholars has been extensive, second only to the airline industry. According to Chiang, Chen, and Xu (2007), the following authors significantly contributed to the application of revenue management in the hotel industry: Hadjinicola and Panayi (1997), Zheng and Caneen (1997), Kimes et al. (1998), Baker and Collier (1999), Choi and Cho (2000), Huyton and Thomas (2000), Jones (2000), Kimes (2000a), Main (2000), McMahon-Beattie and Donaghy (2000), Noone and Andrews (2000), Elkins (2001), Weatherford and Kimes (2001), Kimes and McGuire (2001), Kimes and Wagner (2001), Baker et al. (2002), Barth (2002), Choi and Kimes (2002), Goldman et al. (2002), Toh and Dekay (2002), Baker and Collier (2003), Orkin (2003), Rannou and Melli (2003), Varini et al. (2003), Weatherford and Kimes (2003), Anjos et al. (2004), Chen and Freimer (2004), Kimes (2004b), Liu (2004), Mainzer (2004), Okumus (2004), Schwartz and Cohen (2004), Vinod (2004), Choi and Mattila (2005), Jain and Bowman (2005), Lai and Ng (2005), Koide and Ishii (2005), Choi and Mattila (2006). According to Chiang et al. (2007), the hotel industry is a traditional RM industry and its revenue management practices concentrate mainly on providing special rate packages for periods of low occupancy and use of overbooking policy to compensate for cancellation, no-shows.

Revenue Management Principles

Revenue Management (RM) not only increases hotels' profits, but it also directly affects and monitors the interactions between areas throughout the hotel. Contributing to the bottom-line, RM became an important part of a hotel that influences all processes and

procedures in the lodging industry (Salerno, 2006). Unlike the airline industry, the use of RM in hotel industry is fragmented. The biggest users of RM are hotel chains and general trend is towards implementing RM in the private properties. The wide use of RM resulted in revenue manager job positions becoming a standard in hotels. According to Cullen and Helsel (2006), RM consists of several fundamentals which include forecasting, unconstrained demand assessment, distribution strategies such as channel management, inventory management and displacement analysis. RM applications are comprised of highly developed RM techniques such as quoting rates based on full length of stay patterns versus quoting rates based on a guest's arrival date only (Cullen & Helsel, 2006).

Displacement analysis is also a popular RM technique. It compares the value of group and the value of transient business. According to *travelclick.net*, the group value is determined according to the food and beverage spending, meeting room rental and any additional outlet spending and cost of these spending. There are some principles used to gain the desired results from the RM practices. Before starting to mention the guidelines, revenue managers should analyze the seven uncertainties (Cross, 1997). These uncertainties include: "perishable products and opportunities, seasonal and other demand peaks, the product's value in different market segments, product waste, competition between individual and bulk purchasers, discounting to meet competition, rapidly changing market circumstances" (Cross, 1997, p.34).

Online Pricing

With the advent of Internet, the business environment has changed significantly. Online sellers have created a competitive environment that draws prices down. Internet selling is based on the premise which significantly changes the cost structure and lowers

search and switching costs. Economic impacts on the companies are significantly lower transaction and production costs (Yelkur & DaCosta, 2001). Furthermore, economies of scale are greater in a virtual then in the physical world. Another advantage is that companies can gather massive amounts of data that can be utilized for marketing and especially forecasting. Extensive price differentiation is made because of market segmentation capabilities (Yelkur & DaCosta, 2001). The consumer adoption of the Internet has made a change in how hotel rooms are distributed (O'Conner, 2003).

Revenues from online reservations have grown sharply through the years. The Internet has significantly lowered the search cost (Jiang, 2002), as searching for the lowest price is time consuming. However, having an online business requires higher marketing, technological and organizational investment, a substantial business cost. According to Brown and Goolsbee (2002), online price comparison was found to produce price reduction across various markets such as retail insurance industry and computer retail. This also affectes hotel prices on the internet. As prices on the online distribution channels are moving towards parity, the prices on the direct channels still show much variety.

According to O'Connor (2003), price is the key to selling online. It is the key motivator when buying online. Furthermore, people expect to find the lowest price on the Internet. Customers are aware that web-based distribution costs are significantly lower then those of other channels. Consumers associate online booking with good value, which is low price (O'Connor, 2003). Pricing was always an issue for different distribution channels. Unlike other types of searching, Internet is quicker, less costly and more convenient (Kung, Monroe, & Cox, 2002). Person's ability and person's motivation are

two aspects of price search, according to Bettman and Park (1980). Both aspects of price search seem to be increasing. More and more people use the Internet, and price search is becoming an easy task with websites like Kayak.com that aid customers in searching multiple websites.

Online consumers may not prefer to spend so much time instead of saving money (Koch & Cebula, 2002). Brynjolfsson and Smith (2000) stated that search engines decreased buyer search costs at least thirty fold. However, savings motivates travelers to buy online. According to a study made by Yesawich, Pepperdine and Brown (2000), the most valuable feature of online travel web site was to allow the customers to monitor the cheapest rates for airfare, hotels and car rental companies. Online travelers expected that the rates offered by the electronic distribution channels would be less expensive than the prices offered by the other distribution channels (O'Connor, 2002). Such expectations are being reinforced by the budget-airline sector, which offers substantial discounts for on-line bookings (O'Connor, 2003).

In the beginning, hotels offered the same price for their products (Shoemaker, 2003). They later adopted yield management techniques adopted from the airline industry. The latest phase is a mix between yield management and customer relationship management (Noone, Kimes, & Renaghan, 2003). Shoemaker (2003) proposes a next phase, in which focus is the value delivered to the customer. "Fair" pricing leads to customer loyalty, and firms are likely to gain returning customers just based on offering lowest prices.

Electronic distribution has changed the channels customers use in their favor, providing more information on rooms, availability and prices (Carroll & Siguaw, 2003). Hotels build relationships with various distribution channels. Today, online distributors

are leading segment that customers use. Online third-party distributors such as Travelocity.com, Expedia and Orbitz have changed a way customers choose and book hotels (Carroll & Siguaw, 2003). This has, in turn, made hotel chains use their own website to promote their products and offer the best price deals. Economic incentives are a reason for such shifts in distribution.

Recent Relevant Research

There are numerous studies dealing with the issue of hotel room pricing on the Internet. However, only a few of them deal with analyzing the room rates in online distribution channels. The first to investigate this problem was O'Conner (2003) in his article "On-Line Pricing: An Analysis of Hotel-company Practices". The reason for the study was a change in customers' use of distribution systems due to the emergence of Internet third-party sites and "consumer adoption of the Internet as a reliable and secure commerce medium that has prompted a change in the way in which hotel rooms are being distributed" (O'Connor, 2003, p. 88). O'Connor (2003) was the first to analyze hotel room pricing over several distribution channels: Hotel-company website, Expedia, Travelocity.com, Travelweb, WorldRes, and Voice (CRS). The results were surprising. While major hotel brands used all of the mentioned channels, the hotel-company website was the most commonly used in 97% of cases. Furthermore, the hotel-company website offered the widest range of rates to customers (4.27 rates). Expedia offered the lowest price, on average $152. Market-sector analysis showed the percentage of cases where a channel offered the lowest rates, where the hotel-company website offered the lowest rates for economy and mid-price hotels and Expedia offered the lowest rates for luxury properties.

Following O'Connor's (2003) approach, contrasting results were found in a study by Tso and Law (2005) entitled "Analyzing the online pricing practices of hotels in Hong Kong". "The empirical results indicated that the website of a local travel agent offered the lowest rates on all distribution channels and for all hotel categories" (p. 301). This study used seven distribution channels and looked at more hotel-rate instances then O'Connor. There were a few instances where Travelocity.com offered better prices then other distribution channels. In most cases, it had comparable prices with the local travel agent WingOn travel. This study clearly showed that room rate parity is geographically-bound.

At the same time, the most notable study on the online hotel room pricing was published in Cornell Hospitality Quarterly: "Why Customers Shop Around: A Comparison of Hotel Room Rates and Availability across Booking Channels" (Thompson & Failmezger, 2005). This study used the 18 largest metropolitan areas in the United States, more then any study before. Furthermore, five most popular channels were used at that time: property flag's own website, Expedia, Orbitz, Travelocity, and a telephone call made directly to the property. The authors examined 137 property-date combinations in four different hotel segments. It found that chains have made considerable progress in fulfilling a stated goal of offering lowest rates and room availability on their own websites; Travelocity frequently offered the lowest rate and telephoning the hotel was, again, the most accurate channel for ascertaining room availability. The chains' websites were reasonably good at ensuring room availability, while third-party providers, notably, Expedia, often showed rooms as unavailable at a given rate, when, in fact, the room was available through other channels.

Further research on the issue was carried out by Murphy, Schegg, and Qiu (2006) on rate consistency across Swiss distribution channels. This research mainly concentrated on direct channels, but did not neglect indirect third-party distribution channels. According to Murphy et al. (2006), the results of two surveys of over 100 Swiss hotels illustrate pricing inconsistencies in low- and high-season periods across four communication media under the properties' direct control: telephone, email, static website price lists, and reservation request forms on the website. "Across both surveys, prices were lower via online media (email, static website price lists, and reservation request forms) than via the telephone" (Murphy et al., 2006, p. 105). According to Murphy et al. (2006) price variations of over 200% (for the same room at the same date) across a hotel's direct online and offline channels serve as a wake-up call for hoteliers to review their pricing and procedures for communicating this pricing.

Law et al. (2007) further increased the body of knowledge on this subject. Their empirical findings suggest that the local travel agents web sites and local reservation agents offered the lowest online room rates, and that indirect distribution channels offered lower room rates than direct distribution channels. Eight distribution channels and 45 hotels in Hong Kong were examined for online room rates in a 13-month period from 2005 to 2006. However, a major drawback to the generalizability of this study is the geographic limitation of hotel selection, the Hong Kong area.

Gazzoli et al. (2008) sample 2,800 room rates from the Internet. "Descriptive statistics indicated that US properties are doing a much better job than their international partners in regards to "best rate guarantee," "rate parity," and room availability across

online channels" (Gazzoli et al., p. 375). However, Gazzoli et al. (2008) state that rate consistency still remains a problem within US properties.

Another recent research done on the subject is Demirciftci et al. (2010). In their study the authors investigate whether hotels in the U.S. utilize the basics of revenue management and offer consistent rates among all distribution channels, according to Demirciftci (2007). The results show that the room rates on hotels' direct distribution channels are not significantly different than room rates that are on indirect distribution channels, for four and five diamond hotels. According to the study, only 31% of the hotels in the U.S. set their prices according to market trends, while only 16% of the hotels in this study avoid using third parties as the booking date approached. Most of the hotels' rates were consistent across indirect distribution channels.

The purpose of this study is to examine actual rate parity of hotels across direct and indirect channels of distribution. Results suggest that there are no significant differences between rates from direct or indirect channels. Notable improvements in hotel rate parity from past studies were identified in this study. However, this study negates the claim of "lowest rates guaranteed" as propagated by several hotel chains, which they have stated in order to increase direct distribution through their own websites.

CHAPTER III

METHODOLOGY

It would be impossible to perform an analysis of all the rates being offered by all the hotels. The rates are constantly changing, as hoteliers project occupancy rates and open or close rate classes according to RM principles. This exploratory study is primarily based on a collection of hotel room prices in selected direct and indirect channels. Following the approach of O'Connor (2003), this research: (i) identifies the distribution channels and hotels, (ii) collects data from the selected channels, and (iii) analyzes the empirical results. Furthermore, this study analyzes price consistency, rate parity, room availability, and best rate guarantee. The study is descriptive in nature and it combines data collection and in-depth analysis. Prior studies have been investigated and considered in choosing the distribution channels (Demirciftci, 2007; O'Connor, 2002, 2003; Thompson & Failmezger, 2005; Tso & Law, 2005).

The selected third-party websites are reported to be the most used by *Hospitality Net* website from March 2010 and are as following: Expedia.com, Orbitz.com and Travelocity.com. Also included were hotels' own websites and a phone call to a property, as representative of direct channels controlled by the hotel owners. When considering the sample size, a bigger sample than Thompson's and Failmezger's (2005) CHR study was encompassed. According to the *Federal Communications Commission'*s website, 10 largest metropolitan areas in the United States of America were selected for this research. For each market, three properties from the following property categories were randomly chosen: luxury, upscale, mid-range, and budget. Two random dates that were selected that were between 30 and 60 days ahead, for which the attempt was to book a room using

each of the four booking channels previously mentioned. Reservations were never completed by the researcher.

Altogether, this study examines 240 market and property combinations. All four channels use the Internet: the property flag's own website, Expedia, Orbitz, and Travelocity. The order of channels used was completely randomized for each property-date combination. The goal was to find the lowest rate in every instance. Rates were recorded for all the booking channels within a time span of six hours, to reduce the possibilities of rate changes. The data collection was performed on Thursday April 15th, 2010. Data was collected by reserving a double room for single occupant for specified dates (Wednesday June 2nd and Saturday June 5th, 2010) on randomly selected properties using each of the distribution channels discussed above. Where the product requested was available on the system, only the lowest rate available was recorded for analysis. To help insure consistency, "only those rates that could be booked by a "normal" customer were analyzed and those not available to the general public (e.g. corporate rates, senior rates, military rates or AAA rates) were ignored" (O'Connor 2003, p. 91).

Furthermore, few property-date combinations were omitted because all the selected channels showed a room as unavailable, so the next random hotel was selected instead. According to Gazzoli, Kim, and Palakurthi (2007), any rate with variations of more than four dollars across distribution channels can be considered an inconsistent rate. This study will follow that logic when determining rate consistency.

Since most of the studies indicated that calling a hotel directly to get room rates yielded the highest hotel prices, the sample of 50 room prices was gathered via phone

calls. The sample, although small, was indicative of findings by other studies. Therefore, a smaller portion of the analyses will concentrate on this distribution channel.

Another issue had to be eliminated prior to the main data collection. Since most people stay in a hotel over the weekend (Friday and Saturday), booking a Saturday only could produce a higher rate than booking the weekend. To account for this possibility, a sample of 50 room prices was gathered. The results showed that the difference in price was insignificant, a mere 2.3%. Therefore, this possibility was ruled out for the purpose of this study.

CHAPTER IV

ANALYSIS AND RESULTS

Data Analysis

The data were coded and analyzed by Stata 11th edition general-purpose statistical software package. The first section of the analysis begins with booking channels' profiles and demographic data of the selected hotels. The second section consists of computation of the lowest cost room counts by property type and booking channel for each date. It is followed by the computation of the highest cost room counts by property type and booking channel for each date. The third section consists of the analysis of summary statistics for the excess booking cost (EBC) by property type and booking channel for each date. It consists of an analysis of the average and standard deviation of hotel rates found in every booking channel and for every hotel segment. The fourth section of the data analysis consists of paired t-tests for date and booking channel type pairs and paired t-tests for June 2nd and June 5th dates. It also shows an analysis of variance and a chi-square test for each booking date. The fifth section of analysis investigates room rate parity and best rate guarantee for each hotel segment and booking channel. The sixth section of data analysis deals with room availability and hotel availability across booking channels and by hotel segments.

Booking Channels' Profiles

Table 1

Selected Distribution Channels' Profiles

Type	Channels	Nature of Channels	Brief Description
Indirect	Travelocity	Commissionable model through GDS	It is supported by SABRE, and offers a wide range of services like travel reservation, destination information, And virtual tou
	Expedia	Commissionable model through GDS	Microsoft's electronic travel agency, which provides a full range of travel services.
	Orbitz	Commissionable model through GDS	Airline industry's response to the rise of online travel agencies
Direct	Hotel's website	Direct distribution Channel	This is the company website that is owned and managed directly by the hotel company
	Phone	Direct distribution Channel	Owned and managed by the hotel company

Hotel Profiles

Table 2 summarizes the sampled hotels hotel segment, brand, and frequency. 120 hotels from 10 metropolitan areas were used in this study. 12 hotels from each metropolitan area were split intro 4 hotel segments. All the hotels are chain hotels. 61% are downtown hotels, 20% are airport hotels, and 19% are suburban hotels. 30% of all hotels are 5 star properties, 14.1% are 4 star properties, 15.9% are 3 star properties, 27% are 2 star properties, and 3% were 1 are property.

Table 2

Number of Hotels Sampled By Hotel Segment, Brand, and Frequency

Hotel Segment	Brand	# of hotels
Luxury	Fairmont	2
	Four Seasons	8
	Intercontinental	3
	Ritz-Carlton	6
	St. Regis	2
	Sofitel	3
Upscale	Doubletree	2
	Hilton	5
	Hyatt	4
	Marriott	9
	Omni	2
	Radisson	2
	Sheraton	4
	Westin	3
Midscale	Best Western	4
	Clarion	2
	Comfort Inn	2
	Hampton Inn	3
	Holiday Inn	5
	Quality Inn	2
	Ramada	3
	Sleep Inn	2
Economy	Budget Inn	2
	Days Inn	3
	Econo Lodge	5
	Motel 6	3
	Rodeway Inn	5
	Super 8	5
	Travelodge	5
Other		14
Total		120

Minimum and Maximum Rates by Distribution Channels and Hotel Segments

Table 3 shows the lowest cost room counts by property type and booking channel for June 2nd 2010. For the luxury hotel segment, Travelocity is the top performer and showed the lowest price in 28% of times, compared to Orbitz 26%, hotel's website 25%, and Expedia 21%. For the upscale hotel segment, Orbitz is the top performer showing the lowest price in 30.8% of times, compared to Expedia 25.9%, Travelocity 22.2%, and hotels' websites 20.9%. For the midscale properties, Orbitz offers the lowest prices in 47.7% of times, while Expedia did that in 20.4%, hotels' websites in 18.2%, and Travelocity 13.6%. For the economy hotel segment, Orbitz is yet again the top performer offering the lowest price in 50% of times, compared with Travelocity 21.7%, Expedia 15.2%, and hotels' websites 13%. Overall, Orbitz offers the lowest prices across all property types 35% of times, and Travelocity is in second place with 22.8%, and Expedia 21.4%, and the worst performer was hotel's website with 20.6%.

Table 3

Lowest Cost Room Counts By Property Type and Booking Channel For June 2nd 2010

	Travelocity	Expedia	Orbitz	Hotel's website
Luxury	28	21	26	25
Upscale	18	21	25	17
Midscale	6	9	21	8
Economy	10	7	23	6
All property types	62	58	95	56

Table 4 shows the lowest room counts by property type and booking channel for June 5th 2010. For the luxury segment, Travelocity and hotels' websites offer the lowest prices in 27.7% of times, while Orbitz in 26.5% and Expedia in 18%. For the upscale segment, Orbitz was the top performer. Orbitz offers the lowest price in 32.9% of times, while Travelocity and Expedia are in 23%, and hotels' websites are in 19.7%. For the midscale segment, Orbitz again outperforms the rest by offering the lowest price in 42.3% of times, while Expedia in 21.1%, hotels' websites in 19.2%, and Travelocity 17.3%. Finally, for the economy hotel segment, Orbitz is yet again the lowest price provider with 53.4%, Travelocity with 18.6%, Expedia 16.2%, and hotels' websites 11.6%. Overall, Orbitz outperformed all its competitors by offering the lowest price in 36.2% of times. Travelocity was second with 22.8%. Hotels' websites are third with 20.8%. Expedia is last with 20%.

Table 4

Lowest cost room counts by property type and booking channel for June 5th 2010

	Travelocity	Expedia	Orbitz	Hotel's website
Luxury	23	15	22	23
Upscale	18	18	25	15
Midscale	9	11	22	10
Economy	8	7	23	5
All property types	58	51	92	53

Table 5 shows the highest cost room counts by property type and booking channel for June 2nd 2010. For the luxury hotel segment, hotels' websites offers the highest room prices in 27.3% of times, Orbitz in 26.3%, and Travelocity and Expedia both in 23.1% of times. For the upscale segment, Expedia offers the highest prices 28.4% of times, Travelocity and hotels' websites in 25.9%, and Orbitz in 19.7% of times. For the midscale segment, Travelocity offeres the highest prices in 36.3% of times, Expedia in 33.3%, and Orbitz and hotels' website in 15.1%. For the economy segment, the highest prices offered were by Travelocity in 38.8%, Expedia in 31.4%, hotels' websites in 18.5%, and Orbitz in 11.1%. Overall, the highest prices offered across all property types were by Expedia in 29.7% of times, followed by Travelocity 28.3%, hotel's website 22.6%, and finally Orbitz in 19.2% of times.

Table 5

Highest cost room counts by property type and booking channel for June 2nd 2010

	Travelocity	Expedia	Orbitz	Hotel's website
Luxury	22	22	25	26
Upscale	21	23	16	21
Midscale	24	22	10	10
Economy	17	21	6	10
All property types	84	88	57	67

Table 6 shows the highest cost room counts by property type and booking channel for June 5th 2010. For the luxury segment, all online booking channels shows 25% chance of offering the highest room rate. For the upscale segment, Travelocity and hotels' websites offer the highest room prices in 27.1% of times, Expedia in 25.9%, and Orbitz in 19.7%. For the midscale segment, Travelocity and Expedia show the highest prices in 33.3% of times, while Orbitz and hotels' websites show it only 15.7% of times. For the economy segment, Expedia offers the highest rate 37.2% of times, Travelocity 33.3 %, hotels' websites 19.6%, and Orbitz 9.8% of time. Overall, Expedia offers the highest prices for all property types 29.3% of time, Travelocity 29%, hotels' websites 22.6%, and Orbitz 19% of times.

Table 6

Highest Cost Room Counts By Property Type and Booking Channel For June 5th 2010

	Travelocity	Expedia	Orbitz	Hotel's website
Luxury	24	24	24	24
Upscale	22	21	16	22
Midscale	24	24	12	12
Economy	17	19	5	10
All property types	87	88	57	68

Table 7

Summary Statistics For Hotel Room Price Across Booking Channels and Property Types For June 2nd 2010

Booking channel	Category	Observations	M	SD	Minimum Price	Maximum Price
Travelocity	Luxury	26	275.62	136.33	127.00	745.00
Travelocity	Upscale	29	168.31	65.87	71.00	379.00
Travelocity	Midscale	27	93.19	34.27	48.00	179.00
Travelocity	Economy	24	72.46	20.86	42.00	130.00
Expedia	Luxury	23	286.96	149.77	135.00	745.00
Expedia	Upscale	29	167.41	65.38	89.00	379.00
Expedia	Midscale	28	91.89	34.69	48.00	179.00
Expedia	Economy	25	74.40	20.65	42.00	130.00
Orbitz	Luxury	26	280.50	139.58	135.00	745.00
Orbitz	Upscale	29	167.62	64.31	89.00	379.00
Orbitz	Midscale	29	90.34	34.25	47.00	179.00
Orbitz	Economy	30	70.63	20.52	42.00	129.00
Hotel's website	Luxury	26	278.40	139.90	135.15	745.00
Hotel's website	Upscale	29	171.12	69.98	89.00	379.00
Hotel's website	Midscale	29	90.82	33.45	47.99	179.10
Hotel's website	Economy	30	71.58	20.66	42.39	129.99

Table 7 shows summary statistics for hotel room price across booking channels and property types for June 2nd 2010. It shows that Travelocity has the lowest mean price of $275.62 for the luxury properties, with standard deviation of $136.33, and the lowest minimum price of all distribution channels ($127). All the distribution channels have the same maximum price of $745. Expedia has the lowest mean price for the upscale hotel segment ($167.41), with standard deviation of $65.38. Travelocity offers the lowest

minimum price for the upscale segment ($71), while all the booking channels shows $379 to be the highest maximum price. For the midscale segment, the lowest mean price is by Orbitz ($90.34), with a standard deviation of $34.25. Orbitz has the lowest minimum price of $47, while hotels' websites have the highest maximum price of $179.1. For the budget segment, Orbitz have the lowest mean of $70.63, with a standard deviation of $20.52. The lowest minimal price of $42 is reported by Travelocity, Expedia, and Orbitz. The highest maximum price of $130 is reported by Expedia and Travelocity.

Table 8

Summary Statistics For Hotel Room Price Across Booking Channels and Property Types For June 5th 2010

Booking channel	Category	Observations	M	SD	Minimum Price	Maximum Price
Travelocity	Luxury	30	336.20	140.95	150.00	745.00
Travelocity	Upscale	29	200.07	82.03	82.00	419.00
Travelocity	Midscale	28	110.86	48.65	48.00	279.00
Travelocity	Economy	24	67.37	18.85	42.00	110.00
Expedia	Luxury	26	324.19	128.09	150.00	745.00
Expedia	Upscale	30	204.07	82.75	82.00	419.00
Expedia	Midscale	29	107.45	47.30	48.00	279.00
Expedia	Economy	25	69.40	17.46	42.00	110.00
Orbitz	Luxury	30	342.57	146.93	175.00	749.00
Orbitz	Upscale	29	200.55	81.57	81.00	419.00
Orbitz	Midscale	30	105.90	46.80	47.00	278.00
Orbitz	Economy	30	65.50	17.34	42.00	109.00
Hotel's website	Luxury	30	338.74	139.32	150.00	745.00
Hotel's website	Upscale	29	200.63	81.13	81.75	419.00
Hotel's website	Midscale	30	106.50	47.55	47.99	278.95
Hotel's website	Economy	30	65.99	17.98	42.39	109.99

Table 8 shows summary statistics for hotel room price across booking channels and property types for June 2nd 2010. It shows that Expedia has the lowest mean of $324.19

for the luxury hotel segment, with standard deviation of $128.09. Orbitz has the highest minimum price of $175 and the highest maximum price of $749. For the upscale hotel segment, Travelocity has the lowest mean price of $200.07 with standard deviation of $82.03. Orbitz has the lowest minimum price of $81, while all the booking channels have the highest maximum price of $419. Orbitz shows the lowest mean price of $105.90 for the midscale hotel segment, with a standard deviation of $46.80. Orbitz also has the lowest minimum ($47) and lowest maximum price ($278). For the economy segment, Orbitz has the lowest mean of $17.34. The highest minimum is by hotel's website, while the lowest maximum ($42.39) is by Orbitz ($109).

Excess Booking Cost

According to Thompson & Failmezger (2005), the excess booking cost (EBC) is the premium a consumer would pay for a booking if he or she used a particular channel exclusively, compared to finding the lowest-cost booking across the five channels. Descriptive statistics for June 5th 2010 are summarized in Table 9. The analysis showed that if you book luxury hotels on Travelocity, you will pay 1.92% premium. The standard deviation here states that the premium fluctuates by 5.50% off the normal distribution (66% of instances). The lowest maximum EBC for the luxury segments is 19.23% by Travelocity. For the upscale segment, Expedia has the lowest mean of 2.21% and the lowest maximum EBC of 25.35%. For the midscale segment, Orbitz has the lowest mean of 2.66% and the lowest maximum EBC of 25%. For the economy segment, Travelocity has the lowest mean of 2.72% and the lowest maximum EBC of 18.64%.

Table 9

Summary Statistics For The Excess Booking Cost (EBC) By Property Type and Booking Channel For June 5th 2010

Booking channel	Property type	Observations	M	SD	Maximum EBC
Travelocity	Luxury	26	1.92	5.50	19.23%
Travelocity	Upscale	29	2.50	6.54	28.78%
Travelocity	Midscale	27	5.15	9.58	33.96%
Travelocity	Economy	24	2.72	4.41	18.64%
Expedia	Luxury	23	5.29	7.78	19.57%
Expedia	Upscale	29	2.21	5.74	25.35%
Expedia	Midscale	28	3.65	8.51	35.28%
Expedia	Economy	25	4.89	8.03	31.11%
Orbitz	Luxury	26	3.71	11.31	53.21%
Orbitz	Upscale	29	2.65	7.52	28.78%
Orbitz	Midscale	29	2.66	6.93	25.00%
Orbitz	Economy	30	3.17	6.54	21.74%
Hotel's website	Luxury	26	2.80	10.66	53.21%
Hotel's website	Upscale	29	4.06	9.96	33.91%
Hotel's website	Midscale	29	3.79	7.99	33.96%
Hotel's website	Economy	30	4.82	9.45	36.30%

Descriptive statistics for June 2nd 2010 are summarized in Table 10. If one was to book a luxury hotel on Travelocity, he/she would pay 0.60% premium on average (the lowest for luxury segment). The highest EBC for booking a luxury hotel on Travelocity is 11.24%. Travelocity also has the lowest mean EBC for the upscale segment and the lowest maximum EBC of 19.03%. For the midscale segment, Orbitz has the lowest mean of 3.18% and together with Expedia had the lowest maximum EBC. For the economy hotel segment, Orbitz has the lowest mean of 2.31% and the lowest maximum EBC of 18.12%. Descriptive statistics for June 5th are summarized in Table 10.

Table 10

Summary Statistics For The Excess Booking Cost (EBC) By Property Type and Booking Channel For June 2nd 2010

Booking channel	Property type	Observations	M	SD	Maximum EBC
Travelocity	Luxury	30	0.60	2.35	11.24%
Travelocity	Upscale	28	1.60	4.58	19.03%
Travelocity	Midscale	28	6.67	10.45	33.61%
Travelocity	Economy	24	2.33	4.91	22.45%
Expedia	Luxury	26	1.13	2.70	11.24%
Expedia	Upscale	30	1.82	5.74	25.23%
Expedia	Midscale	29	3.43	7.06	25.00%
Expedia	Economy	25	5.01	9.11	40.48%
Orbitz	Luxury	30	2.95	8.75	33.49%
Orbitz	Upscale	29	1.96	5.88	25.23%
Orbitz	Midscale	30	3.18	7.22	25.00%
Orbitz	Economy	30	2.31	4.61	18.12%
Hotel's website	Luxury	30	1.77	6.40	33.49%
Hotel's website	Upscale	29	2.16	7.65	33.71%
Hotel's website	Midscale	30	3.67	7.78	33.61%
Hotel's website	Economy	30	2.89	5.21	22.54%

Hypotheses tests

Table 11 shows the results shows paired t-tests for date and booking channel type pairs. The p-values show that there is no difference between prices on booking channels for the two dates, i.e. p-values are not 0.05 or under.

Table 11

Paired T-tests For Date and Booking Channel Type Pairs

Date	Booking Channel	M	SD	Difference	t	df	p-value
Wed. June 2nd	Travelocity	185.66	135.34	9.28	0.53	219	0.5964
	Expedia	176.38	124.65				
Sat. June 5th	Travelocity	153.79	110.26	2.47	0.16	209	0.8722
	Expedia	151.31	113.22				
Wed. June 2nd	Travelocity	185.66	135.34	7.22	0.40	228	0.6894
	Orbitz	178.44	138.00				
Sat. June 5th	Travelocity	153.79	110.26	5.60	0.37	218	0.7075
	Orbitz	148.18	110.97				
Wed. June 2nd	Travelocity	185.66	135.34	7.89	0.44	228	0.6709
	Hotel's website	177.77	134.72				
Sat. June 5th	Travelocity	153.79	110.26	4.82	0.32	218	0.7470
	Hotel's website	148.96	111.21				
Wed. June 2nd	Expedia	176.38	124.65	-2.06	-0.11	227	0.9059
	Orbitz	178.44	138.00				
Sat. June 5th	Expedia	151.31	113.22	3.13	0.20	217	0.8366
	Orbitz	148.18	110.97				
Wed. June 2nd	Expedia	176.38	124.65	-1.39	-0.08	227	0.9355
	Hotel's website	177.77	134.72				
Sat. June 5th	Expedia	151.31	113.22	2.34	0.15	217	0.8711
	Hotel's website	148.96	111.21				
Wed. June 2nd	Orbitz	178.44	138.00	0.67	0.04	236	0.9697
	Hotel's website	177.77	134.72				
Sat. June 5th	Orbitz	148.18	110.97	-0.78	-0.05	226	0.9677
	Hotel's website	148.96	111.21				

Note: Both dates are in 2010.

Table 12 shows paired t-tests for June 2nd and June 5th 2010 dates. The t-test show a significant p-value of 0.0004, meaning there is difference between prices on booking channels between June 2nd and June 5th.

Table 12

Paired T-tests For June 2nd and June 5th Dates

	M	SD	Difference	T	Df	p-value
Wed. June. 2nd	179.52	111.04	-29.03	-3.54	896	0.0004
Sat. Jun. 5th	150.52	133.01				

The following analyses of variance additionally suggest that there is no difference between room rates between channels on a single date. Table 13 shows the results of variance analysis for June 2nd 2010. The high chi-squared supports that relationship.

Table 13

Analysis of Variance For June 2nd 2010

Source	SS	df	MS	F	Prob > F
Between groups	5776.65	3	1925.55	0.11	0.9553
Within groups	8097955.10	455	17797.70		
Total	8103731.75	458	17693.74		

Note: Bartlett's test for equal variances: chi2(3) = 1.3024, *Prob>chi2 = 0.729*

Table 14 shows the results of variance analysis for June 5th 2010. The high chi-squared supports that relationship.

Table 14

Analysis of Variance For June 5th 2010

Source	SS	df	MS	F	Prob > F
Between groups	2098.32	3	699.44	0.06	0.9824
Within groups	5399033.76	435	12411.57		
Total	5401132.08	438	12331.35		

Note: Bartlett's test for equal variances: chi2(3) = 0.0813, *Prob>chi2 = 0.994*

Room and Hotel Availability

Table 15 shows the room availability for each booking channel. Room availability is the highest when attempting to book a room by calling the hotel. Amazingly, Travelocity and hotels' websites show that a potential guest would have 98.75% chances of booking a room if using one of those two channels. Expedia s the worst performer with 95.41% room availability.

Table 15

Room Availability (N = 240)

Booking channel	Percentage
Hotel-company web site	97.08
Expedia	93.75
Travelocity.com	97.08
Orbitz	97.08
Voice (CRS)	99.16

Table 16 shows hotel availability on each booking channel. Amazingly, Travelocity has 93.30% of the sampled hotels in its database. Expedia is on the second place, while Orbitz, phone reservations, and hotels' websites show all the sampled hotels on their websites.

Table 16

Hotel Availability (N = 240)

Booking channel	Percentage
Hotel-company web site	100.00
Expedia	95.83
Travelocity.com	95.41
Orbitz	100.00
Voice (CRS)	100.00

Room and hotel availability are very important for hotels. When hotel rooms are available, but channels fail to report the availability, it ultimately translates to lost sales. That is why it is crucial for hotels to be represented across channels, and to report their room availability correctly and in timely manner.

Tables 17-20 show the percentages when hotel or room for each date failed to be listed by property type and booking channel. Expedia has the worst room availability. Travelocity performs the poorest at listing the hotel on their booking channel, closely followed by Expedia. They virtually matched each other at hotel availability.

Table 17

Percentage of Times a Room Was Listed As Not Available By Property Type and Booking Channel For June 2nd 2010

	Travelocity	Expedia	Orbitz	Hotel's website
Luxury	0	9	0	0
Upscale	3	0	3	3
Midscale	0	4	0	0
Economy	0	8	0	0
All property types	1	5	1	1

Table 18

Percentage of Times a Room Was Listed As Not Available By Property Type and Booking Channel For June 5th 2010

	Travelocity	Expedia	Orbitz	Hotel's website
Luxury	13	19	13	13
Upscale	4	3	3	3
Midscale	4	7	3	3
Economy	0	8	0	0
All property types	5	9	5	5

Table 19

Percentage of Times a Hotel Failed To Be Listed By Property Type and Booking Channel For June 2nd 2010

	Travelocity	Expedia	Orbitz
Luxury	0	9	0
Upscale	0	0	0
Midscale	7	0	0
Economy	4	12	0
All property types	3	5	0

Table 20

Percentage of Times a Hotel Failed To Be Listed By Property Type and Booking Channel For June 5th 2010

	Travelocity	Expedia	Orbitz
Luxury	0	8	0
Upscale	0	0	0
Midscale	7	0	0
Economy	25	12	0
All property types	7	5	0

Parity

The most important finding in this study is the level of parity among distribution channels, specifically when hotels' websites are compared with individual indirect channels. The following table 21 summarizes the level of parity for June 2nd 2010. Table 22 summarizes the level of parity for June 5th 2010. As the table shows, great achievements have been accomplished in the level of parity among the channels. The study done by Gazzoli et al. (2007) suggests that 66% level of parity exists among US hotels. The parity was computed by comparing US hotels with its international counterparts from the same brand and hotel segment. This study utilized Gazzoli et al.'s (2007) method that parity exists if the prices are similar within +/-$4.

Table 21

Parity Between Direct and Indirect Distribution Channels On June 2nd

Booking channel	Category	%
Travelocity	Luxury	90
Travelocity	Upscale	83
Travelocity	Midscale	79
Travelocity	Economy	79
Expedia	Luxury	85
Expedia	Upscale	87
Expedia	Midscale	72
Expedia	Economy	76
Orbitz	Luxury	87
Orbitz	Upscale	86
Orbitz	Midscale	80
Orbitz	Economy	87

Table 22

Parity Between Direct and Indirect Distribution Channels on June 5th

Booking channel	Category	%
Travelocity	Luxury	85
Travelocity	Upscale	80
Travelocity	Midscale	81
Travelocity	Economy	75
Expedia	Luxury	70
Expedia	Upscale	79
Expedia	Midscale	79
Expedia	Economy	76
Orbitz	Luxury	88
Orbitz	Upscale	86
Orbitz	Midscale	83
Orbitz	Economy	83

CHAPTER V

DISCUSSION, LIMITATIONS AND RECOMMENDATIONS

Discussion

Minimum and maximum analysis yielded interesting results. Overall, Orbitz offers the lowest prices in most instances, while Expedia offers the highest prices in most instances. More specifically, Orbitz offers consistently the lowest minimum prices for economy, midscale and upscale properties. On the other hand, Expedia offers the highest maximum prices for budget properties. While hotels' websites are right behind Orbitz in offering the lowest minimum prices, Travelocity is right behind Expedia in offering the highest maximum prices. The reason for Orbitz's success may lay in effective use of GDS and yield management practice and expertise from the airline industry. Recall, Orbitz was founded by mayor airline companies to battle online distribution channels and "take the game to their field". On the other hand, Expedia seems to be underperforming. However, Expedia is one of the first websites that offered product and services bundling, which is still their main advantage for which this indirect channel got popular.

The t-tests clearly suggest that there are no significant differences among booking channels on the two dates, but showed significant price differences between the selected two booking dates. Analysis of variance, i.e. chi-squared test, only reaffirmed the t-tests' results.

Descriptive statistics on mean prices showed that Expedia is the low cost provider for the luxury hotel segment, supported by the lowest minimum price and lowest maximum price. Orbitz is the leader in providing the best prices for midscale and economy

segments, also supported by lowest minimum price and lowest maximum price. Those results apply for both dates analyzed.

Excess booking cost analysis also produced interesting results. The maximal EBC when attempting to book a room in a luxury hotel over the hotel's website is 53.21%. This definitely puts doubts on hotels' best-rate promises. Interestingly enough, the lowest EBC recorded was when booking a room for a luxury hotel over Expedia and Travelocity. Even more surprising, if one attempts to reserve a luxury hotel room over Travelocity, the likelihood that he/she will pay a premium is 0.60%, the lowest mean EBC among all hotel segment-booking date-booking channel combinations.

Expedia offered the lowest room availability, 93.75%. Surprisingly, Thompson and Failmezger's (2005) findings stood the test of time. Furthermore, phone call to the property appears to be the best way to check for availability, reaffirming the findings from previous studies. On the other hand, Travelocity failed to list hotels most often, followed closely by Expedia. Interestingly enough, Orbitz never missed an opportunity to show hotel or a room as available. So it seems that Orbitz is taking over and becoming leading third-party distributor in overall price consistency, rate parity, room and hotel availability, and best-rate guarantee, at least when compared to other booking channels analyzed.

Suma sumarum, Expedia is the best choice when booking luxury hotel rooms. On the other hand, Orbitz is the "best pick" when it comes to midscale and budget properties. The results are varying for upscale properties, and no booking channel is dominant, according to analyses. While Orbitz is the leader for the two market segments mentioned, its prices are not significantly lower then other booking channels' prices. Expedia offers

significantly lower prices for luxury properties then its competitors. Hotels websites, in this study, are never the best performer. However, the significant discovery is that they are the best second pick for almost any category, date, and hotel segment. Thus, one can always rely to find low prices on hotels' websites. It can be said that hotels offer low rate guarantee, but not the best-rate guarantee.

Hotels still have a lot of work to do to under-price Orbitz, which this study found to be the best website in terms of offering lowest prices overall. However, when hotels' websites were compared to the average of the indirect booking channels, they outperformed the indirect channels. So it can be said that the smartest choice, in general, is to go on the hotels' websites to save on search costs and maximize the possibility of room and hotel availability. Throughout the paper little has been said about another direct channel, a phone call to the property. This channel outperformed other channels in room availability. However, room rates are substantially higher on average.

This study shows a big advance in overall room rate parity. Four tests suggested it. First t-tests suggested there is no difference in prices among different channels. The second test suggested that there is difference in prices between the two dates. The third test's chi-squared confirmed what the t-tests found out. The last test used a different approach, it compared a hotel's website (a direct channel) with indirect channels and looked for a +/- four dollars variations in prices. The results showed that the highest rate parity exists between Travelocity and hotels' websites in luxury segment (90%), while the lowest room rate parity was between Expedia and hotels' websites for midscale properties (72%).

Analyses also indicated some trends in pricing. While the sample of specific hotel chains is too small to generalize, it is still indicative of the following: budget properties have smaller percentage variations then luxury properties across all channels. Some chains are better then other chains in offering best rate guarantee. While the majority of chains offered competitive prices to lowest price channels, some outlier were significantly different which might have changed the overall statistics. Further studies that would concentrate on specific hotel chains and generate a larger sample could investigate which hotel brands.

Managerial Implications

The discussion so far mainly concentrated on implications for customers. The findings in this study may also prove helpful to hotels' managers. Knowing that customers can find the lowest prices for specific hotel segments on certain indirect channels, managers can utilize that knowledge by improving their pricing techniques and marketing efforts where they see fit. Market is segmented by the choice of distribution channels would-be guests decide to use. Knowing where your customers are is an advantage every manager should not miss to capitalize on. Managers might find it helpful to refer to the tables in this paper, as they can find the specifics pertaining to their hotel and market type. Knowing where the highest and lowest prices, excess booking costs, and the mean prices are is definitely information managers should keep on mind.

Furthermore, seeing that room rate parity is continuously increasing, managers should put extra effort to differentiate their hotels from others, in terms of room prices, services, and appeal. As the statistics of rate parity suggest, hotels are doing a good job at keeping prices in line with indirect distribution channels. However, there is still a lot of room for

improvements. As previously mentioned, hotel and room availability should be maximized to minimize the loss of potential profit. The data support the fact that, in general, hotels' websites are the second best channel for booking a room, which raises a question. Are hotels maximizing their profits by not being the best-rate guarantors? Hotels try to sell their rooms at premiums, and seem to know what they are doing when it comes to pricing their inventory. The technology and services currently available make it possible for hotels to offer the lowest prices. So why is it not happening? Researching managers' decision making and their knowledge of the subject might be the answer to this question. Future research section of the paper deals with additional possibilities for scholars in this area of research.

Limitations

The limitations of this study are handful. To start off, a bigger sample would lead to more accurate results and would be more representative of a US hotel population. However, due to the six hour data collection limit, a bigger sample could not be obtained. Spending more time on data collection would probably impact the data because of frequent price changes on online booking channels. Choosing to analyze more metropolitan areas might have produces different results. Choosing to analyze two dates was appropriate, but booking rooms for multiple-night stays might have given the researcher a different perspective. It would probably decrease room availability.

Since this is a snapshot study, the results are appropriate at present, but will probably not stand the test of time. Furthermore, customers might not shop by hotel but rather by price, according to the hotel segment they chose to stay in. However, this study used 3 hotels per hotel segment to get more accurate results. The sample somewhat covered the

hotel industry, although the number of chains might not be representative of the entire population.

Recommendations

Hotels should be careful when selling rooms to indirect distribution channels. As the study showed, specific booking channels are more appropriate for certain hotel segments. Hoteliers should keep that in mind when deciding on pricing strategies and use of RM. Chains should be more careful in advertizing best-rate guarantee, as the study suggested that other booking channels are more efficient at providing the lowest prices, especially Orbitz. Hotels should strive at offering the lowest rates. By updating prices regularly on their websites, they may achieve this goal. Hotels should also consider the aid of new services available, such as *ezyield.com*. Such service can help hotels with advanced channel management technologies for yielding rates and inventory. Furthermore, *ezyield.com* can help hotels to minimize their operational costs, update rates and availability with ease and accuracy, simplify reservation delivery, and create rate parity.

Ultimately, to achieve better customer satisfaction and brand loyalty, hotels should price their rooms consistently across all booking channels. If that is unattainable, they should make sure that price consistency if found in direct channels under their immediate control. “When prices are consistent, other value-added features come into play in the decision process” (Thompson & Failmezger, 2005, p. 15). Lastly, hoteliers should maximize room and hotel availability on all distribution channels, to reduce the chances of lost sales.

Future Research

Future research efforts should include qualitative research of best-rate guarantee, room and hotel availability, rate consistency, and room rate parity. Surveys and interviews should be conducted with hotels' customers and hotel managers. This would give us an idea of how "factual" is aligned with "perceived" and "believed". It would give us important information which could be used to develop new techniques to better pricing strategies and increase customer satisfaction at the same time. Also, more detailed and objective research is needed in quantitatively researching this field. As mentioned earlier, using bigger samples, observing prices on more days, multiple-night stays, and checking room prices as the reservation date approaches, are some ways of improving research on these issues.

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