


Hotel Room Rate Discounting During Recessionary Times: Effects by Hotel Class

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Abstract

Previous research regarding the costs and benefits of hotel room rate discounting during recessionary times has produced mixed results and recommendations. However, it has become clear that virtually all hotels offer discounted room rates during economic recessions, regardless of the conclusions of research studies, and that includes the recession that began in 2020. Media reports have indicated that certain *rogue hotels* are quick to offer discounted room rates during the early months of recessions, and therefore, operators of other hotels in their competitive set feel compelled to follow the lead, perhaps regretfully. This study found that while virtually all hotels offered discounted room rates during the recession of 2008 and 2009, there was variability in discounting during the early months of the recession. As a result, we sought to explore recessionary variability of room rate discounting, and to provide an empirical, nuanced perspective regarding the effectiveness of such discounting. Notably, we found the effectiveness of recessionary discounting varied depending on the class of hotel, with higher class establishments experiencing different outcomes from discounting than hotels categorized as relatively lower class properties.

Keywords

hotel management; operations; room rates; discounting

Introduction

Although it has become clear from recent economic recessions that virtually all hotel operators discount their room rates during recessionary times, and some operators are relatively quick to discount their room rates, there has been a debate over whether hotel operators should in fact discount their room rates, and whether discounting room rates yields improved revenue performance during economic recessions (Wroten, 2019). The economic recession of 2008 to 2009 provides a suitable setting for researchers to examine the effects of discounting on revenue because that recession has clearly reached its conclusion allowing it to be fully studied, and there exists sufficient literature about it to conduct a literature review, and particularly regarding the effects of discounting hotel rates on revenues. For example, an industry report conducted by PKF Hospitality Research (2011) revealed that hotels in the United States experienced an average decline of 19.6% in revenue per available room (RevPAR) from 2008 to 2009.

Singh and Schmidgall (2002) showed that hotel operating ratios, including RevPAR, occupancy (OCC) percentage, and average daily rate (ADR), are critical and valuable benchmarks for hotel managers, owners, and investors.

Because the U.S. lodging industry has been classified as a highly saturated market (Jeong & Oh, 1998), it should be noted that competitors' decisions to drop or raise room rates are a key input for pricing decisions, even though it is not always clear why competitors drop or raise their rates, or why others follow. Besides, the significant decline in financial performance of hotels during recent economic recessions has sparked a debate over whether hotel operators should maximize OCC or ADR (Wroten, 2019). Some industry practitioners contend that discounting room rates is inevitable during challenging economic times, which could be a strategy to garner market share, that is, OCC. There are a variety of factors that shape pricing decisions, such as costs, value, and elasticity (Stibel, 2007). While the extant literature has focused on how operating ratios affect hotels' financial performance, research that makes the link between these ratios and financial performance, particularly during

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recessions, is limited due to the limited availability of operating and financial performance data at a property level.

Accordingly, research is needed to determine whether, in a recessionary environment, it is more beneficial for hotel managers to relatively quickly drop rates (i.e., *rogue hotels*) or hold firm on rates as long as possible, particularly in terms of the effect on RevPAR, and that research is needed across a broad spectrum of hotel types and locations. Although some empirical research has shown that lowering ADR results in relatively low RevPAR, the results captured average effects (Enz et al., 2004, 2009). Given that each hotel operator within a competitive set of hotels may take action at different times in terms of discounting room rates, the effect of cutting ADR on RevPAR may differ for a variety of reasons. Thus, examining the relationship between discounting room rates and RevPAR would be salient for more comprehensive, empirical research to assist practitioners and researchers with understanding the phenomena and to provide practical as well as theoretical findings and recommendations.

By examining pricing (i.e., ADR), demand (i.e., OCC rate), and revenue (i.e., RevPAR) dynamics during the economic recession of 2008 to 2009, the purpose of this study is to explore whether and how discounting room rates contributed to financial performance. Specifically, this study explores the performance of hotel properties across various classes in different markets across different regions of the United States and identifies dynamics associated with discounting room rates and revenues. The findings of this study expand the understanding with respect to outcomes of relative pricing behavior among various hotel properties relative to their competitors during an economic recession.

Literature Review

Hotel Pricing Mechanisms and Discounting

The hotel industry is classified as a dynamic industry where products or capacity are perishable (Hanks et al., 2002; Van der Rest & Harris, 2008). It is a cause-effect industry where performance is vulnerable to external market factors, such as consumer needs, demands, and product availability, thereby creating variability in performance that could be costly to business (Nicolau, 2005). Therefore, it is important for hotel managers to develop appropriate strategies to offset the imbalances that a fluctuating market creates in terms of supply and demand (Croes & Semrad, 2012). That is, during the season when demand for hotel rooms is low, hotel managers scramble to find a way to make up for the revenue lost caused by low demand and implement a sort of action to overcome the challenges of preserving hotel revenue to the greatest possible extent (Canina & Enz, 2008).

A common way of dealing with the challenge of market dynamics is adopting hotel room rate discounting to a

certain extent. Discounting refers to offering room rates in the short term that are below the normal, historical rates. From a practical standpoint, hotel managers traditionally have responded to the challenge of low demand by engaging in discounting strategies. Managers mathematically calculate the appropriate discounted rate by identifying the OCC rates necessary to maintain total revenue as much as possible, less marginal costs, after the room rates have been discounted (Schwartz & Cohen, 2003). The main purpose of this process is to maximize a hotel's financial performance by inducing demand and bringing the market back to equilibrium. Some extant literature has been critical about discounting (e.g., Canina & Carvell, 2003; Enz & Canina, 2010; Enz et al., 2004, 2009). Similarly, Noone et al. (2013) focused on the relative price position of hotels, that is, relative to competition, and relative price fluctuation, and they found that hotel room revenue performance was strongest for hotels that were priced relatively higher than their competition that maintained a relatively consistent relative price over time. However, their study used annual data that were not limited to a recessionary period. Previous studies that indicated discounting resulted in reduced revenue may have reached this conclusion because either (a) discounting was not compensated by an increase in demand, that is, the volume of sales measured by OCC, or (b) it took a long period of time to recover from room rate reductions, and therefore, it negatively and significantly influenced hotel profitability.

However, the opposite argument could be applicable to hotel room rate discounting strategies based on the concept of price elasticity. Price is clearly an important factor and is classified as a key aspect of consumer information, along with facilities, services, and customers' preferences. Revenue changes depend on the relationship between a change in quantity demanded of hotel rooms and a change in prices. If a certain percentage hotel room rate discount yields more than a certain percentage increase in hotel room sales, demand is regarded as elastic and total revenue is therefore greater than before. Considering that a recession is a period of negative economic growth—falling real incomes and rising unemployment—in such a condition, consumers and businesses are likely to have relatively lower income and be more sensitive to prices. In a similar vein, when hotels offer a discount, consumers may increase their booking intentions. Therefore, even though their arguments are contradictory, both sides of this argument could be plausible depending on what kinds of external factors influence the hotel industry. Furthermore, both sides of this argument could be possible within different aspects of the hotel industry. For example, using annual data that were not limited to a recessionary period and were largely aggregated, Corgel et al. (2012) found there to be short-term elasticity of lodging demand, but they also found noticeable differences between short- and long-term demand elasticity, with

greater elasticity in higher quality hotels. Canina and Carvell (2003), however, used 1989 to 2000 data from relatively homogeneous urban markets and found hotel room price discounts generally did not enhance revenues. They concluded hotel room demand was relatively inelastic. We believe it is plausible that recessionary elasticity may vary based on hotel class.

Economic Recessions and Hotels' Responses

It has been held that during the economic recession of 2008 to 2009 (often regarded most broadly as being from December 2007 to June 2009 in the United States), "there was always one hotel in each comp set that was quick to slash rates. As a result, others felt compelled to follow suit." (Wroten, 2019). The implication of this casual conclusion is that hotels within a competitive, that is, *comp* set would have been more likely to have maintained their ADRs had a *rogue hotel* not slashed its room rates. It is well known that during the economic recession of 2008 to 2009, the U.S. lodging industry experienced dramatic declines in revenue (Enz et al., 2011; Kosova & Enz, 2012; Singh & Dev, 2015; Zheng, 2014), and that U.S. hotels experienced drastic declines in revenue during the recession beginning in 2020, as well (Mandelbaum, 2020).

During recessionary periods, practitioners in the lodging industry have a strong proclivity for cutting room rates (ADRs) to offset the impact of the economic recession directly relevant to the reduction in consumer lodging demand (Kosova & Enz, 2012; O'Neill & Lloyd-Jones, 2001; O'Neill & Mattila, 2006). In particular, hotel managers likely cut ADRs to maintain or maximize OCC. For example, a survey of international hotel owners and operators conducted by Kimes (2010) found hotel operators regarded a room rate discounting strategy as the number-one tactic for survival in recessionary periods. Approximately 70% of respondents indicated that they focused on stabilizing OCC even if that meant lowering ADR (Kimes, 2010). Similarly, in a study of U.S. hotel operators, O'Neill and Mattila (2006) found that most practitioners in the hotel industry heavily cut ADR in recessionary times, which enabled their hotels to gain positive operating income by maintaining or maximizing OCC.

However, cutting ADR to preserve OCC in a recessionary period does not necessarily maintain revenues. Previous research has shown that as a lodging firm lowers ADR compared with its rivals in a competitive set, the firm is more likely to experience relatively poor RevPAR performance (Enz & Canina, 2010; Enz et al., 2004, 2009, 2010; O'Neill & Carlback, 2011), though the effects of ADR declines relative to a hotel's competitive set may lead to differences in RevPAR and OCC across hotel categories (Enz et al., 2004). In one study of luxury class hotels, properties maintaining higher ADR than their competitive set obtained 8% to 14%

higher RevPAR, although OCC became marginally lower or the same as their competitors (Kimes, 2010). However, hotel operators who cut their ADR relative to their rivals suffered 3% to 9% lower RevPAR in the recessionary period of 2008 to 2009 (Kimes, 2010).

Enz et al. (2009) examined negative consequences of sustaining market share by cutting ADR. The study found that, during recessionary times (2001–2003), hotels with 20% to 30% lower ADR than their competitors enjoyed a 15.5% higher OCC, but they generally showed the lowest RevPAR in their competitive set. That is, although hotels are able to have the advantage of capturing market share by lowering ADR, the discounting strategy may cause negative outcomes in terms of RevPAR. Thus, maintaining ADR could be an effective way to achieve relatively higher RevPAR within a competitive set of hotels (Enz et al., 2004; Singh et al., 2014). Furthermore, Butscher et al. (2009) argued that cutting ADR during a recessionary period may make it difficult for hotel managers to retrieve initial price positioning once the economic conditions become better. There is evidence that hotel managers have a tendency to slash their room rates during recessionary periods because they feel virtually compelled to follow competitors' actions of discounting (Smith, 2009; Wroten, 2019). Specifically, there is evidence that there are often hotel operators in each competitive set who swiftly slash rates, that is, *rogue hotels* (Wroten, 2019). A group of competitive hotel managers may follow the *rouge hotels*, whereas another group of managers may hesitate to discount room rates.

The economic downturn in 2008 to 2009 offered early hope that the phenomenon of decreasing demand leading to declining room rates would not repeat. In reality, for a number of months in 2008, room rates were relatively stable. However, by the last quarter of 2008, the hotel industry essentially launched a race to the bottom for room rates, and that period of time during the early months of that recession, that is, 2008 (and particularly late 2008), is the focus of our research. During the period, room rates were declining at unprecedented levels, down more than 9% (Smith, 2009). Similarly, in the recession beginning in 2020, many U.S. hotel operators were quick to discount room rates (Mandelbaum, 2020).

Some hotel operators may start discounting earlier than their competitive set (defined in this study as hotels sharing the same sub-market and same class as defined by STR), and others may follow the trend later. In addition, some hotel operators may keep discounting their room rates, regardless of the season (i.e., "continuously" pursue discounting strategies during every month of an economic recession), while others may set their room rates lower than their competitors, or lower than their own rates relative to the same month in a previous year, only during certain specific months or time periods. A fundamental question we explore is whether discounting room rates in the earlier

stages of economic recessions is effective because during the later months of recessions there is little variability, that is, virtually all hotels offer discounted rates relative to the same month in the prior year. Similarly, there is often limited variability in room rates during the very early months of economic recessions as many business operators are not yet aware the economy has turned into a recession, and little or no discounting has commenced. In addition, a question of interest is whether recessionary discounting is effective when implemented continuously or sporadically.

This study, therefore, empirically explores the performance of different groups of hotels. The primary time period of interest is 2008, and particularly the latter months of 2008 because during the early months of 2008, most business operators were unaware the United States was in a recession, and hotels continued to achieve monthly increases in ADR, that is, the vast majority of hotels achieved higher ADRs than the corresponding month in 2007. Specifically, this study classified four different groups: hotels in Group 1 had ADRs that were positioned lower than the mean of their competitors (i.e., the other hotels in their competitive set as defined herein) in 2008, but did not continuously pursue a discounting strategy between June and December 2008, that is, their monthly ADR between June and December 2008 was not consistently below every corresponding month in 2007; hotels in Group 2 had lower ADR than their competitors in 2008 and continuously pursued a discounting strategy every month between June and December 2008; hotels in Group 3 had higher ADR than their competitors in 2008, but did not continuously pursue a discounting strategy every month between June and December 2008; and hotels in Group 4 had higher ADR than their competitors in 2008 and continuously pursued a discounting strategy every month between June and December 2008. Based on these classifications, the primary research hypotheses are as follows:

Hypothesis 1: Hotels continuously discounting their room rates (i.e., Groups 2 and 4) achieved a relatively higher level of financial performance measured by RevPAR during the economic recession.

Hypothesis 2: The effect of discounting on the level of hotels' performance measured by RevPAR is different across hotel classes.

Method

Definitions

In this study, *discounting* is defined as a hotel achieving a lower, monthly ADR than the corresponding month during the prior year. *Competitive sets* are defined as hotels of the same class (as defined by STR, formerly known as Smith Travel Research) that are also located in the same submarket (neighborhoods as defined by STR) of the same market (Metropolitan Statistical Area, or MSA).

Sample and Data

For our study, we obtained property-level, monthly data for hotels from STR. The sample for this study comprised 28 competitive sets within six submarkets of six major MSAs in the United States. The MSAs represented two from the East Coast, two from the central United States, and two from the West Coast. The submarkets represented geographically distinct and well-defined downtown, airport, and suburban submarkets, namely Chicago Downtown; San Francisco Market Street; Philadelphia Airport; Anaheim, California; Stamford, Connecticut; and Overland Park, Kansas. It is important to note that while these submarkets were overall complete in terms of containing hotels of all of classes as defined by STR, that is, luxury, upper upscale, upscale, upper midscale, midscale, and economy, not all classes of hotels were contained in all submarkets.

To effectively test the hypotheses, monthly data regarding the following variables were analyzed for each hotel property for the 3-year period between June 2007 and June 2010, including the economic recession, several months prior to the beginning of it, and several months subsequent to its conclusion: room RevPAR, OCC percentage, ADR, submarket location, and class. According to STR, the class for chain-affiliated hotels is the same as their chain scale segment, while independent hotels are assigned a class based on their ADR relative to that of the chain-affiliated hotels in their geographic proximity. The sample consisted of a total of 408 hotels with such information. It should be noted that, to ensure confidentiality, the actual names of the hotels were not disclosed to us, based on our agreement with STR.

The overall time frame of the study was based on a timeline of major events during the financial crisis and economic recession. Some level of hotel room rate discounting was reported by STR on a national basis beginning in 2008, and by October 2008, subsequent to the collapse of Lehman Brothers in September 2008, the average U.S. hotel was discounting its room rates. Therefore, 2008, and particularly the latter portion of the year was the primary focus of our study as discounting commenced and increased during this time period. We note that by 2009, virtually all hotel operators discounted their rates during virtually all months relative to the same month during the prior year. According to STR, room rate discounting continued every month from late 2008 through early 2010, and by mid-2010, 1 year after the end of the recession, the average U.S. hotel reported monthly increases in ADR.

Main Analysis

Analyses of variance (ANOVAs) were conducted to examine the varying effects of discounting room rates on hotel performance among different classes. Specifically, one-way

ANOVAs were conducted to investigate differences in hotel operating performance, measured by room RevPAR, that is, RevPAR. This study employed RevPAR as a dependent variable because the hotel industry has long used RevPAR as a standard performance measure (Lee et al., 2019). RevPAR is defined as room revenues divided by the number of room nights available during a period of time, or OCC percentage multiplied by ADR, that is, ADR. It should be noted that not only does STR provide RevPAR as a primary property-level performance indicator but also major publicly traded hotel corporations, including Marriott and Hilton, also report their RevPAR along with other performance indicators, such as earning per share (EPS), and earnings before interest, taxes, depreciation, and amortization (EBITDA) in their earnings announcements.

This study examined the effects of ADR changes on RevPAR. Specifically, we first compared hotels' ADRs relative to their competitive sets in 2008. Then, we analyzed RevPAR between June 2008 and June 2010 based on the situation when hotel operators discounted their ADR compared with their ADR during the corresponding month of 2007. Competitive sets were defined as classes of hotels within submarkets, for example, luxury hotels located in the San Francisco Market Street submarket. The continuity in the pricing strategies of hotels was based on whether hotel operators implemented this strategy each month. Based on these criteria, we divided the study sample into four different groups, that is, Groups 1, 2, 3, and 4, as previously described, and examined differences in RevPAR among hotel properties within these four different groups.

The analyses were conducted using STATA (Software for Statistics and Data Science) and SPSS 26 (IBM Statistical Package for Social Science). As part of the ANOVA tests, the Bartlett tests of variance homogeneity were performed. The purpose of the Bartlett tests was to determine whether RevPAR had statistically equal variances as assumed by the ANOVA models. Because the ANOVA models assumed equal variance across samples (i.e., homogeneity of variances), only the samples that qualified based on this assumption were included in our analyses. That is, based on the test statistics of the Bartlett tests, the samples (i.e., the submarkets) of different hotel classes were included in the ANOVA models. Meanwhile, as group sizes were relatively equal, that was generally regarded as robust to violations of the assumption, the samples were included in the ANOVA models.

Results

Tables 1 and 2 illustrate descriptive statistics of the key variables in this study. Specifically, Table 1 presents a summary of OCC, ADR, and room revenues per available room (RevPAR) by fiscal year ending June for Fiscal

2008, 2009, and 2010, and annual percentage changes in each of these figures, for each class of hotel, and for the total sample. Table 2 presents submarket descriptive statistics, that is, OCC, ADR, and RevPAR for each class of hotel. Table 1 illustrates that on average, all classes of hotels experienced declines in OCC, ADR, and RevPAR in Fiscal 2009. However, most classes experienced OCC gains in Fiscal 2010. Specifically, luxury hotels experienced the greatest OCC gains, while midscale hotels experienced the greatest OCC declines in Fiscal 2010. Notably, while the luxury hotel OCC gain in Fiscal 2010 came at the price of the greatest ADR decline of any hotel class, luxury hotel RevPAR declined less than any other hotel class. Furthermore, changes in RevPAR were affected more by changes in ADR than OCC. Table 2 illustrates which classes of hotels existed in which submarkets, and the performance of these classes of hotels in these submarkets. As a whole, these summary statistics support more in-depth analyses.

Tables 3 through 8 illustrate the comparisons of mean RevPAR among hotels within competitive sets of different hotel classes in different submarkets, for example, luxury hotels in Chicago Downtown. It is important to note that not all submarkets contained hotels of all classes (i.e., luxury, upper upscale, upscale, upper midscale, midscale, and economy) or all groups, that is, Groups 1, 2, 3, and 4, as previously described. For example, there were an insufficient number of upper midscale hotels in the San Francisco Market Street submarket to comprise an upper midscale competitive set. Similarly, only the Chicago Downtown and San Francisco Market Street submarkets had a sufficient number of luxury hotels to comprise competitive sets.

Luxury Hotels

As displayed in Table 3, the mean overall value of RevPAR from June 2008 through June 2010 among luxury hotels in Chicago Downtown was highest in hotels in Group 4 (hotels with higher ADR than their competitive set in 2008 that continuously discounted their room rates every month from June 2008 through December 2008) and lowest in hotels in Group 1 (hotels with lower ADR than their competitive set in 2008 that did not continuously discount their room rates every month from June 2008 through December 2008). Similar results were found among luxury hotels located in the San Francisco Market Street competitive set. The results were statistically significant at least at the .05 level for both the Chicago Downtown ($F = 38.39, p < .001$) and San Francisco Market Street ($F = 104.22, p < .001$) luxury competitive sets. The results indicate that luxury hotels with continuously discounted room rates during 2008 had superior revenue performance, that is, RevPAR, compared with those which did not.

Table 1.
Descriptive Statistics—Summary by Fiscal Year and Class.

Fiscal Year Ending June	Occupancy		Average Daily Rate		RevPAR	
	Amount (%)	Percent Change (%)	Amount	Percent Change (%)	Amount	Percent Change (%)
Luxury hotels						
2008	75.23	—	US\$268.40	—	US\$201.92	—
2009	68.40	-9.08	US\$243.54	-9.26	US\$166.58	-17.50
2010	73.89	8.03	US\$214.22	-12.04	US\$158.29	-4.98
Upper upscale hotels						
2008	73.57	—	US\$177.29	—	US\$130.43	—
2009	68.98	-6.24	US\$159.90	-9.81	US\$110.30	-15.44
2010	71.41	3.52	US\$141.91	-11.25	US\$101.34	-8.12
Upscale hotels						
2008	69.95	—	US\$139.78	—	US\$97.78	—
2009	65.84	-5.88	US\$124.96	-10.60	US\$82.27	-15.86
2010	67.59	2.66	US\$114.14	-8.66	US\$77.15	-6.23
Upper midscale hotels						
2008	68.40	—	US\$115.85	—	US\$79.24	—
2009	62.93	-8.00	US\$107.05	-7.60	US\$67.37	-14.99
2010	64.03	1.75	US\$96.44	-9.91	US\$61.75	-8.34
Midscale hotels						
2008	65.37	—	US\$85.17	—	US\$55.68	—
2009	62.07	-5.05	US\$78.70	-7.60	US\$48.85	-12.26
2010	60.16	-3.08	US\$71.30	-9.40	US\$42.89	-12.19
Economy hotels						
2008	68.07	—	US\$66.78	—	US\$45.46	—
2009	59.68	-12.33	US\$63.05	-5.59	US\$37.63	-17.22
2010	61.22	2.58	US\$56.46	-10.45	US\$34.56	-8.14
All hotels						
2008	70.83	—	US\$146.56	—	US\$103.81	—
2009	65.45	-7.60	US\$133.02	-9.24	US\$87.06	-16.13
2010	67.47	3.09	US\$119.04	-10.51	US\$80.32	-7.75

Note. RevPAR = revenue per available room.

Upper Upscale Hotels

Table 4 shows that the mean RevPAR among upper upscale hotels was highest among properties in Group 4, the same as luxury hotels (hotels with higher ADR than their competitive set in 2008 that continuously discounted their room rates from June through December 2008), but the lowest RevPAR varied slightly based on the competitive set. In one competitive set (the Chicago Downtown competitive set), hotels in Group 2 (hotels with lower ADR than their competitive set that continuously discounted their room rates from June through December 2008) had the lowest mean RevPAR, and the mean differences in RevPAR were statistically significant at least at the .05 level ($F = 55.19$, $p < .001$), while hotels in Group 1 (hotels with lower ADR than their competitive set in 2008 that did not continuously discount their room rates from June 2008 through December 2008) had the lowest mean RevPAR among the remaining

competitive sets, the same as luxury hotels. In two upper upscale competitive sets, the mean differences in RevPAR were not statistically significant at the .05 level (i.e., Anaheim and Overland Park), and there were no hotels in some groups in some submarkets (e.g., Group 2 in Philadelphia Airport; and Groups 2 and 3 in Anaheim, Overland Park, and Stamford). However, it should be noted that the reason for there being no hotels in some groups in some submarkets was not due to a limitation of data collection because the data used in this study included all property-level hotel data from the six submarkets from STR. In summary, the upper upscale hotels with the highest mean RevPAR in their competitive set were in Group 4 (the same as luxury hotels), and the upper upscale hotels with the lowest RevPAR were in Group 1 (the same as luxury hotels), except for the upper upscale hotels in one competitive set (Chicago Downtown) where hotels with the lowest RevPAR were in Group 2.

Table 2.
Descriptive Statistics—Summary by Submarket and Class.

Class	Variable	Submarket	Obs.	M	SD	Minimum	Maximum	
Luxury	RevPAR	Chicago Downtown	443	181.16	79.15	32.36	433.49	
	ADR	Chicago Downtown	443	268.48	87.77	108.36	527.48	
	OCC	Chicago Downtown	443	67.08	17.82	12.57	96.86	
	RevPAR	San Francisco Market Street	472	163.74	62.45	23.01	407.05	
	ADR	San Francisco Market Street	472	218.69	83.04	74.44	456.49	
	OCC	San Francisco Market Street	472	75.18	12.52	22.93	97.09	
Upper upscale	RevPAR	Chicago Downtown	1,395	126.30	52.71	4.93	267.95	
	ADR	Chicago Downtown	1,395	175.34	45.60	65.93	305.72	
	OCC	Chicago Downtown	1,395	69.71	17.22	2.99	98.21	
	RevPAR	Philadelphia Airport	148	101.00	24.65	50.22	173.35	
	ADR	Philadelphia Airport	148	129.86	25.58	87.20	189.50	
	OCC	Philadelphia Airport	148	77.84	10.82	42.17	94.26	
	RevPAR	Anaheim	74	89.76	16.90	47.78	133.59	
	ADR	Anaheim	74	119.91	12.64	96.49	149.27	
	OCC	Anaheim	74	74.71	10.48	44.34	90.43	
	RevPAR	Overland Park	111	73.30	18.12	38.57	118.20	
	ADR	Overland Park	111	122.81	13.06	97.62	152.93	
	OCC	Overland Park	111	59.69	12.94	30.92	88.55	
	RevPAR	Stamford	74	91.28	32.13	19.92	163.60	
	ADR	Stamford	74	178.71	52.52	118.42	287.27	
	OCC	Stamford	74	52.75	15.07	12.01	81.23	
Upscale	RevPAR	Chicago Downtown	653	104.94	49.70	2.55	223.11	
	ADR	Chicago Downtown	653	149.43	40.05	67.15	273.74	
	OCC	Chicago Downtown	653	67.90	19.50	1.75	96.61	
	RevPAR	San Francisco Market Street	333	88.15	44.33	20.53	260.31	
	ADR	San Francisco Market Street	333	120.68	50.96	55.97	292.19	
	OCC	San Francisco Market Street	333	72.04	16.48	26.70	98.50	
	RevPAR	Philadelphia Airport	134	87.56	20.46	41.63	130.09	
	ADR	Philadelphia Airport	134	115.13	16.30	78.59	150.32	
	OCC	Philadelphia Airport	134	75.67	11.92	34.39	95.72	
	RevPAR	Anaheim	111	61.63	16.97	20.35	100.79	
	ADR	Anaheim	111	97.81	16.32	68.64	129.63	
	OCC	Anaheim	111	62.85	13.15	23.87	84.40	
	RevPAR	Overland Park	269	60.83	22.00	11.76	106.38	
	ADR	Overland Park	269	101.61	18.89	55.16	135.20	
	OCC	Overland Park	269	58.69	15.28	14.34	89.08	
	RevPAR	Stamford	489	80.81	29.95	5.52	170.87	
	ADR	Stamford	489	119.75	20.20	70.81	188.34	
	OCC	Stamford	489	65.90	18.42	4.94	97.76	
	Upper midscale	RevPAR	Chicago Downtown	359	106.42	43.39	7.30	199.76
		ADR	Chicago Downtown	359	145.41	36.66	59.88	236.79
		OCC	Chicago Downtown	359	70.62	16.90	6.55	95.76
RevPAR		Philadelphia Airport	202	66.26	29.45	13.51	131.46	
ADR		Philadelphia Airport	202	96.69	23.81	47.92	144.04	
OCC		Philadelphia Airport	202	66.34	17.67	16.82	97.27	
RevPAR		Anaheim	175	53.91	12.58	27.64	81.09	
ADR		Anaheim	175	80.11	10.62	54.09	104.54	
OCC		Anaheim	175	67.26	12.54	36.41	88.64	
RevPAR		Overland Park	365	45.17	14.97	5.11	76.42	

(continued)

Table 2. (continued)

Class	Variable	Submarket	Obs.	M	SD	Minimum	Maximum
Midscale	ADR	Overland Park	365	82.04	16.93	37.87	117.13
	OCC	Overland Park	365	55.35	15.06	6.01	86.77
	RevPAR	Stamford	148	61.90	18.76	26.13	113.74
	ADR	Stamford	148	105.95	18.86	74.27	155.28
	OCC	Stamford	148	58.05	12.67	28.70	91.17
	RevPAR	Chicago Downtown	87	92.42	39.83	14.67	161.71
	ADR	Chicago Downtown	87	117.93	33.12	60.42	183.18
	OCC	Chicago Downtown	87	76.19	17.50	20.40	97.93
	RevPAR	Philadelphia Airport	74	68.34	29.65	22.16	114.95
	ADR	Philadelphia Airport	74	93.30	24.80	56.17	133.77
	OCC	Philadelphia Airport	74	70.10	15.50	35.04	95.03
	RevPAR	Anaheim	179	39.88	11.48	10.01	70.76
	ADR	Anaheim	179	65.64	13.84	42.71	126.87
	OCC	Anaheim	179	62.44	17.70	12.92	94.47
Economy	RevPAR	Overland Park	250	39.88	11.48	10.01	70.76
	ADR	Overland Park	250	65.64	13.84	42.71	126.87
	OCC	Overland Park	250	54.65	14.46	19.15	92.32
	RevPAR	Chicago Downtown	148	60.00	30.65	6.46	124.52
	ADR	Chicago Downtown	148	91.59	27.71	48.96	140.13
	OCC	Chicago Downtown	148	63.81	20.72	7.50	98.22
	RevPAR	San Francisco Market Street	98	59.25	22.32	14.38	114.91
	ADR	San Francisco Market Street	98	78.41	19.11	50.21	125.10
	OCC	San Francisco Market Street	98	75.39	20.96	21.24	101.72
	RevPAR	Philadelphia Airport	257	48.00	10.26	22.65	75.63
	ADR	Philadelphia Airport	257	63.84	11.38	42.83	92.48
	OCC	Philadelphia Airport	257	75.69	12.46	38.35	103.19
	RevPAR	Anaheim	348	33.67	10.29	8.00	78.97
	ADR	Anaheim	348	54.35	9.55	34.09	100.29
	OCC	Anaheim	348	62.37	16.31	17.77	93.12
	RevPAR	Overland Park	354	23.00	10.35	1.98	61.72
	ADR	Overland Park	354	45.85	11.91	18.28	80.70
	OCC	Overland Park	354	50.72	18.01	3.64	93.93
RevPAR	Stamford	274	40.72	17.64	7.31	83.46	
ADR	Stamford	274	68.27	11.01	47.00	99.55	
OCC	Stamford	274	59.32	22.89	11.77	99.65	

Note. RevPAR = revenue per available room; ADR = average daily rate; OCC = occupancy.

Table 3.
Comparison of Means (One-Way ANOVA) for RevPAR: Luxury Hotels.

ANOVA	Group	N	M	F	p value
RevPAR (Chicago Downtown)	Group 1	74	149.24	38.39***	.000
	Group 2	185	154.42		
	Group 3	110	204.05		
	Group 4	74	245.90		
RevPAR (San Francisco Market Street)	Group 1	250	136.19	104.22***	.000
	Group 2	74	146.08		
	Group 3	74	197.46		
	Group 4	74	240.75		

Note. ANOVA = analysis of variance; RevPAR = revenue per available room.

*** $p < .01$.

Table 4.
Comparison of Means (One-Way ANOVA) for RevPAR: Upper Upscale Hotels.

ANOVA	Group	N	M	F	p value
RevPAR (Chicago Downtown)	Group 1	331	115.39	55.19***	.000
	Group 2	444	107.95		
	Group 3	213	136.95		
	Group 4	407	148.79		
RevPAR (Philadelphia Airport)	Group 1	74	86.54	112.39***	.000
	Group 3	37	97.70		
	Group 4	37	133.24		
RevPAR (Anaheim)	Group 1	37	86.50	2.820	.097
	Group 4	37	97.70		
RevPAR (Overland Park)	Group 1	37	73.46	0.004	.947
	Group 4	74	73.22		
RevPAR (Stamford)	Group 1	37	80.18	9.899***	.002
	Group 4	37	102.38		

Note. ANOVA = analysis of variance; RevPAR = revenue per available room.
 ***p < .01.

Table 5.
Comparison of Means (One-Way ANOVA) for RevPAR: Upscale Hotels.

ANOVA	Group	N	M	F	p value
RevPAR (Chicago Downtown)	Group 1	154	97.80	6.33***	.000
	Group 2	148	96.22		
	Group 3	139	113.15		
	Group 4	212	110.15		
RevPAR (San Francisco Market Street)	Group 1	222	69.44	162.13***	.000
	Group 2	37	74.38		
	Group 3	37	139.36		
	Group 4	37	163.02		
RevPAR (Philadelphia Airport)	Group 2	37	74.58	14.14***	.000
	Group 3	37	97.16		
	Group 4	60	89.64		
	Group 1	37	46.59		
RevPAR (Anaheim)	Group 2	37	70.70	36.25***	.000
	Group 3	37	67.61		
	Group 1	37	30.05		
RevPAR (Overland Park)	Group 3	84	67.20	125.57**	.000
	Group 4	148	64.91		
	Group 1	82	79.64		
RevPAR (Stamford)	Group 2	111	58.96	59.27***	.000
	Group 3	222	96.29		
	Group 4	74	68.42		
	Group 1	37	80.18		

Note. ANOVA = analysis of variance; RevPAR = revenue per available room.
 p < .05. *p < .01.

Upscale Hotels

Table 5 illustrates somewhat varied results with respect to the effect of discounting room rates on the mean value of RevPAR among upscale hotels. In the Chicago Downtown competitive set, hotels in Group 3 (hotels with higher ADR

than their competitive set in 2008 that did not continuously discount their room rates from June through December 2008) had the highest mean RevPAR, whereas hotels in Group 2 (hotels with lower ADR than their competitive set in 2008 that continuously discounted their room rates

Table 6.
Comparison of Means (One-Way ANOVA) for RevPAR: Upper Midscale Hotels.

ANOVA	Group	N	M	F	p value
RevPAR (Chicago Downtown)	Group 1	103	99.87	21.45***	.000
	Group 2	108	86.17		
	Group 3	74	126.42		
	Group 4	74	124.92		
RevPAR (Philadelphia Airport)	Group 1	91	48.98	245.52***	.000
	Group 2	37	43.37		
	Group 3	74	98.96		
RevPAR (Anaheim)	Group 1	74	51.04	42.13***	.000
	Group 2	37	44.41		
	Group 3	64	62.72		
RevPAR (Overland Park)	Group 1	107	39.92	88.11**	.000
	Group 2	37	30.02		
	Group 3	166	52.48		
	Group 4	55	43.50		
RevPAR (Stamford)	Group 1	74	57.85	39.45***	.000
	Group 2	37	50.31		
	Group 4	37	81.60		

Note. ANOVA = analysis of variance; RevPAR = revenue per available room.
 ** $p < .05$. *** $p < .01$.

from June through December 2008) had the lowest mean RevPAR. The mean differences were statistically significant at least at the .05 level ($F = 6.33, p < .001$). In the San Francisco Market Street competitive set, however, Group 4 (hotels with higher ADR than their competitive set in 2008 that continuously discounted their room rates from June through December 2008) had the highest mean RevPAR, whereas Group 1 had the lowest mean RevPAR ($F = 162.13, p < .001$). More consistent results came from other competitive sets. Specifically, Group 3 (hotels with higher ADR than their competitive set in 2008 that did not continuously discount their room rates from June through December 2008) had the highest mean RevPAR. That is, discounting room rates had an adverse effect on subsequent performance (RevPAR) of Group 3 hotels relative to Group 4 hotels within the same competitive set. The mean differences in RevPAR were statistically significant at least at the .05 level at the Philadelphia Airport ($F = 14.14, p < .001$), Anaheim ($F = 36.25, p < .001$), Overland Park ($F = 125.57, p < .001$), and Stamford ($F = 59.27, p < .001$) competitive sets of upscale hotels. In other words, while the hotels within some competitive sets of upscale properties benefited from consistent discounting, others did not. In summary, most upscale hotels in Group 3 had the highest mean RevPAR in their competitive set (upscale hotels in Group 4 in one competitive set, that is, San Francisco Market Street, had the highest RevPAR, the same as luxury and upper upscale hotels), whereas most upscale hotels in Group 1 had the lowest RevPAR (the same as luxury and upper upscale hotels).

Upper Midscale Hotels

Upper midscale hotels showed a fairly consistent pattern. As presented in Table 6, hotels in Group 3 (hotels with higher ADR than their competitive set in 2008 that did not continuously discount their room rates from June through December 2008) had the highest mean RevPAR in most competitive sets (all upper midscale competitive sets except Stamford), whereas hotels in Group 2 (hotels with lower ADR than their competitive set in 2008 that continuously discounted their room rates from June through December 2008) had the lowest mean RevPAR in all the upper midscale competitive sets, namely Chicago Downtown, Philadelphia Airport, Anaheim, Overland Park, and Stamford. The results were consistent across all competitive sets where Group 2 and 4 competitive sets existed. In summary, most upper midscale hotels in Group 3 had the highest RevPAR in their competitive set, whereas upper midscale hotels in Group 2 had the lowest RevPAR in their competitive set. The mean differences in RevPAR were statistically significant at least at the .05 level across all competitive sets of upper midscale hotels, indicating that there were generally adverse effects of upper midscale continuously discounting during the recessionary period studied.

Midscale Hotels

Table 7 illustrates fairly consistent results with respect to the effect of discounting room rates on the mean value of RevPAR among midscale hotels, very similar to upper

Table 7.
Comparison of Means (One-Way ANOVA) for RevPAR: Midscale Hotels.

ANOVA	Group	N	M	F	p value
RevPAR (Chicago Downtown)	Group 1	50	76.09	27.50***	.000
	Group 3	37	115.70		
RevPAR (Philadelphia Airport)	Group 2	37	41.97	291.13***	.000
	Group 3	37	94.72		
RevPAR (Anaheim)	Group 2	111	41.17	3.71	.055
	Group 3	68	37.78		
RevPAR (Overland Park)	Group 1	38	39.43	8.77***	.000
	Group 2	73	33.45		
	Group 3	37	42.98		
	Group 4	102	39.76		

Note. ANOVA = analysis of variance; RevPAR = revenue per available room.
 *** $p < .01$.

midscale hotels. In the Chicago Downtown competitive set, where there were no Group 2 and 4 hotels, Group 3 hotels (hotels with higher ADR than their competitive set in 2008 that did not continuously discount their room rates from June through December 2008) had the highest mean RevPAR, whereas hotels in Group 1 (hotels with lower ADR than their competitive set in 2008 that did not continuously discount their room rates from June through December 2008) had the lowest mean RevPAR ($F = 27.50, p < .001$). In Philadelphia Airport, where there were no Group 1 and 4 hotels, Group 3 hotels (hotels with higher ADR than their competitive set in 2008 that did not continuously discount their room rates from June through December 2008) had the highest mean RevPAR, whereas hotels in Group 2 (hotels with lower ADR than their competitive set in 2008 that continuously discounted their rooms rates from June through December 2008) had the lowest mean RevPAR ($F = 291.13, p < .001$). Similar results were found in Overland Park, while no significant differences in RevPAR were found in Anaheim. That is, as with upper midscale hotels, among midscale hotels, Group 3 hotels had the highest RevPAR, and discounting room rates negatively affected RevPAR, especially when conducted continuously.

Economy Hotels

Table 8 shows somewhat consistent results with respect to the effect of discounting room rates on the mean value of RevPAR among economy hotels. In the Chicago Downtown competitive set, where there were no Group 2 hotels (hotels with lower ADR than their competitive set in 2008 that continuously discounted their room rates from June through December 2008), hotels in Group 3 (hotels with higher ADR than their competitive set in 2008 that did not continuously discount their room rates from June through December 2008) had the highest mean RevPAR, whereas hotels in Group 1 (hotels with lower ADR than their

competitive set in 2008 that did not continuously discount their room rates from June through December 2008) had the lowest mean RevPAR ($F = 56.26, p < .001$). In the Anaheim competitive set, where there were no Group 1 hotels (hotels with lower ADR than their competitive set in 2008 that did not continuously discount their room rates from June through December 2008), hotels in Group 3 (hotels with higher ADR than their competitive set in 2008 that did not continuously discount their room rates from June through December 2008) had the highest mean RevPAR, whereas hotels in Group 2 (hotels with lower ADR than their competitive set in 2008 that continuously discounted their room rates from June through December 2008) had the lowest mean RevPAR ($F = 13.47, p < .001$). Similar results came from other economy competitive sets, as well, including Overland Park and Stamford. Results varied somewhat in the San Francisco Market Street and Philadelphia Airport competitive sets where not all groups were represented. That is, among economy hotels, discounting room rates negatively affected RevPAR, especially when continuously implemented, comparable to the results in upper midscale and midscale hotels.

Discussion

The results provide support for Hypothesis 1 related to higher class hotels, that is, the results indicate that the outcomes of recessionary room rate discounting varied based on the class of hotel, with fairly consistent results in luxury and upper upscale properties. Specifically, based on our sample of luxury hotels, the properties with the highest mean RevPAR from June 2008 to June 2010 were in Group 4 (properties with higher ADR than their competitive set in 2008 that continuously discounted their room rates every month from June through December 2008), whereas the luxury hotels with the lowest mean RevPAR were in Group 1 (properties with lower ADR than their competitive set in

Table 8.
Comparison of Means (One-Way ANOVA) for RevPAR: Economy Hotels.

ANOVA	Group	N	M	F	p value
RevPAR (Chicago Downtown)	Group 1	37	35.19	56.26***	.000
	Group 3	74	74.29		
	Group 4	37	56.23		
RevPAR (San Francisco Market Street)	Group 1	74	65.86	36.04***	.000
	Group 2	24	38.87		
RevPAR (Philadelphia Airport)	Group 1	72	48.46	31.39***	.000
	Group 2	74	41.25		
	Group 4	111	52.20		
RevPAR (Anaheim)	Group 2	275	32.23	13.47***	.000
	Group 3	37	45.69		
	Group 4	36	32.28		
RevPAR (Overland Park)	Group 1	184	19.93	27.21**	.000
	Group 2	37	18.75		
	Group 3	133	28.42		
RevPAR (Stamford)	Group 1	89	34.62	66.71***	.000
	Group 2	74	29.95		
	Group 3	111	52.79		

Note. ANOVA = analysis of variance; RevPAR = revenue per available room.
 ** $p < .05$. *** $p < .01$.

2008 that did not continuously discount their room rates from June through December 2008). Similar results were found with upper upscale hotels. That is, in luxury and upper upscale hotels, operators that continuously discounted their recessionary room rates generated higher room revenues, that is, RevPAR, whereas operators that did not continuously discount their room rates generated lower RevPAR. In summary, there were generally revenue benefits of luxury and upper upscale hotels discounting their recessionary room rates relatively early during the recession, providing support for Hypothesis 1 related to luxury and upper upscale hotels, and providing support for Hypothesis 2, as well.

The results in upscale hotels were mixed, providing some support for Hypothesis 1. Based on our sample, the upscale hotels with the highest mean RevPAR were generally in Group 3 (properties with higher ADR than their competitive set in 2008 that did not continuously discount their room rates from June through December 2008). These results were consistent with the results found in relatively lower class (upper midscale, midscale, and economy) hotels. The upscale properties with the lowest mean RevPAR were generally in Group 1 (properties with lower ADR than their competitive set in 2008 that did not continuously discount their room rates from June through December 2008). These results were consistent with the results found in the higher class (luxury and upper upscale) hotels. In other words, upscale hotels shared characteristics of hotels in higher and lower classes where specifically, there were room revenue benefits of not consistently discounting when

upscale hotels had higher ADRs than their competitive set during the early months of the recession, but there were deleterious effects of not consistently discounting when upscale hotels had lower ADRs than their competitive set during the early months of the recession. These results provide support for Hypothesis 2.

The results in upper midscale, midscale, and economy hotels were fairly consistent, providing support for Hypothesis 2. Based on our sample, these relatively lower class hotels with the highest mean RevPAR were generally in Group 3 (properties with higher ADR than their competitive set in 2008 that did not continuously discount their room rates from June through December 2008), and those with the lowest mean RevPAR were generally in Group 2 (properties with lower ADR than their competitive set in 2008 that continuously discounted their room rates from June through December 2008). Thus, among these classes of hotels, there were room revenue benefits of not continuously discounting their recessionary room rates, and there were negative revenue effects of continuously discounting recessionary room rates.

In summary, we found that there were positive effects on room revenue, that is, RevPAR of higher class (luxury and upper upscale) hotels offering discounted recessionary room rates (and negative effects on room revenue of not discounting room rates). We found that with upscale hotels, the effects of discounted room rates generally varied depending on whether the properties had higher or lower ADRs than their competitive set during the early months of the recession, that is, during 2008. Upscale hotels having

higher ADRs that their competitive set in 2008 benefited from not continuously discounting room rates, whereas the room revenue of upscale hotels with lower ADRs than their competitive set in 2008 was hurt by not offering continuously discounted room rates. The room revenue of upper midscale, midscale, and economy hotels benefited by not continuously offering discounted room rates, and was hurt by continuously offering discounted rates. The message from this study is that the room revenue of higher class hotels is benefited from discounted recessionary room rates, whereas the revenue of relatively lower class hotels is hurt by such discounting.

Because RevPAR is the product of OCC percentage and ADR, the benefit to luxury and upper upscale hotels of recessionary discounting is stronger OCC. It is conceivable that travelers who had frequented relatively lower class hotels prior to the recession, such as upscale and upper midscale hotels, may have *traded up* to upper upscale and luxury hotels when the room rates were reduced. Examples of brands in the luxury and upper upscale classes include Ritz-Carlton and Hyatt. As luxury and upper upscale hotels represent the highest class properties in each of the submarkets we studied, it is reasonable to conclude that during the recession, travelers seeking hotel accommodations in each of these geographic locations may have chosen alternative, higher quality accommodations at a desirable price point. Luxury and upper upscale hotels benefited from such trading up. Similarly, luxury hotels may have benefited from the accommodation of guests who had patronized upper upscale hotels prior to the recession.

However, upper midscale, midscale, and economy hotels did not exhibit benefit from room rate discounting as did luxury and upper upscale hotels. Examples of brands in these classes include Hampton Inn, Days Inn, and Motel 6. These properties represent the lower end of the guest room price spectrum in each of the submarkets we studied, and they did not benefit from increased OCC by reducing their room rates. Rather, they were more likely to have merely accommodated their usual patrons and usual types of patrons at reduced room rates. We believe this project advances hospitality research theory, and adds to earlier studies by providing such a nuanced perspective regarding hotel room rate discounting during recessionary times based on hotel *class*.

From a practitioner standpoint, this research project results in the following practical recommendations. Luxury and upper upscale hotel operators should selectively consider offering discounted room rates each month (compared with the same month during the prior year) during recessionary times, even during the initial months of the recession. The tradeoff is likely to result in increased OCC and RevPAR relative to the hotel's competitive set. These data regarding hotels' competitive sets are available (and usually provided) to hotel owners and operators by STR in the form of monthly trend reports, that is, *STAR* reports.

Upscale hotel operators should similarly consider offering room rate discounts; however, our recommendation is more muted than in the case of luxury and upper upscale hotels. Specifically, our research indicates that when upscale hotels have achieved higher ADRs than other upscale hotels in the same submarket going into the recession, operators of such hotels should be highly selective in offering discounts such that monthly ADR is not lower than the competitive set every month during the initial months of the recession. However, when upscale hotels have achieved lower ADR than other upscale hotels in the same submarket going into the recession, operators of such hotels would be more likely to benefit from relatively more discounting such that the property achieves lower monthly ADRs than each of the corresponding months during the prior year.

Upper midscale, midscale, and economy hotel operators should be extremely cautious about offering discounted room rates, particularly during the initial months of a recession. While there will most likely come a time during a recession when discounting will be unavoidable, possibly several months into a recession, substantial discounting during the early months of the recession is unlikely to generate enough OCC to result in increased RevPAR or room revenue, and therefore, the lower class property will be likely to be accommodating reduced volume at reduced rates and reduced profitability because of the fixed nature of many hotel expenses, such as property insurance, real estate taxes, and certain administrative and general expenses.

As with all research of this nature, this project is subject to limitations. Specifically, the focus of this study is on the economic recession which is generally considered to have occurred in 2008 and 2009 in the United States, and particularly, the early months of the recession, that is, 2008, when U.S. hotel operators began to offer discounted room rates. As a result, the findings of this project may not be generalizable to other time periods or other recessions because while recessions share comparable declining economic conditions, every recession is unique. Notably, the most recent recession, which commenced in 2020, was distinct because of the high speed at which the previous economic heyday subsided, as well as its relatively extreme effects on the hotel industry compared with other industries.

Similarly, our area of interest is the United States. Our findings and recommendations may not be generalizable to other geographic areas.

Limitations and Suggestions for Future Research

As with most research of this type, this study is subject to limitations. As we worked with STR to request the data used in this study, we sought to obtain data that would both represent different classes of hotels and different geographical locations in the United States. Furthermore, we wanted our sample to be sufficiently large enough from which to

draw conclusions which may have at least some generalizability. However, although our data were stratified to represent all STR classes, and represent eastern, central, and western regions of the United States, it was not possible to obtain all STR data, or data regarding every city, MSA, or state. As a result, it is not possible to determine the extent to which our findings are in fact generalizable to the entire United States.

Furthermore, every recession is unique in some fashion. The recession we studied was, at the time, and for years afterwards, referred to a great and significant. The most recent recession has been referred to similarly, particularly in relation to the hotel industry. A benefit of analyzing the recession we studied was that it had clearly ended at the time we commenced our research. Thus, we were able to fairly comprehensively study its effects on hotel performance. However, our conclusions may not be generalizable to all future recessions.

In addition, our dependent variable of focus is RevPAR. While we would expect the effects quantified and described herein in relation to room revenue to be similar in relation to total revenue (because total revenue is likely to be largely a function of room revenue), we do not know how the RevPAR effects we describe would affect costs or profit (net operating income).

For future research, we recommend additional geographic areas be studied to determine whether our findings may have been evidenced elsewhere. Similarly, we recommend that future research study additional recessionary time periods. Finally, future research could study how maximizing RevPAR (or minimizing RevPAR decreases) during recessionary times affects hotel profit.

Conclusion

Previous research regarding the effects of hotel room rate discounting on hotel room revenue during economic recessions has resulted in some similar conclusions, but overall, it has not been consistent regarding findings and recommendations. We, therefore, sought to not only explore this topic in depth but also develop nuanced findings and recommendations. It has become clear that regardless of previously divergent recommendations from research in this area, the vast majority of hotel operators have opted to discount their room rates during recessionary times. However, we note that although such decisions are market driven, there is variability in the speed at which hotel operators respond to and enact room rate discounts. That particular dimension has been the focus of this research project.

To address the issue of room rate discounts being market driven, we analyzed the room rate discounting and revenue effects of hotels within competitive sets based on STR definitions. Specifically, we analyzed room pricing and achieved room revenue within geographic submarkets

and within hotel classes. Our sample consisted of 408 hotels within 28 competitive sets, stratified to represent different types and locations of competitive sets. Across these different types and locations, we found similar results based on hotel class.

Specifically, we found that the highest classes of hotels, namely luxury and upper upscale properties, relatively consistently benefited from continuous recessionary discounting (every month) of room rates in terms of higher achieved OCC and RevPAR than the mean of their competitive sets. However, we found the OCC and RevPAR benefit of the operators of upscale hotels engaging in recessionary room rate discounting depended on whether the upscale hotel's ADR was higher or lower than its competitive set during the early months of the recession.

Within the remaining classes of hotels, namely upper midscale, midscale, and economy properties, our findings were essentially the opposite of luxury and upper upscale hotels. That is, such properties did not benefit from continuously discounting their room rates during the early months of the recession because such hotels with continuous discounts typically achieved RevPAR below the mean of their competitive set. Upper midscale, midscale, and economy hotels that did not continuously discount their room rates generally achieved RevPAR greater than the mean of their competitive set.

These conclusions should advance the state of knowledge regarding research on hotel room rate discounting during recessionary times. From our research, there are cases when it appears to be highly advisable for hotel operators to discount their room rates during recessionary times. However, there are cases when discounting not only provides no measureable benefit, but, in fact, has a deleterious effect. By identifying and describing such different cases, this research project has implications for both research and practice.



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