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F&B Performance in the United States Hotel Industry

Evidences from Time and Location Types

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ABSTRACT
Competitive environments warrant hotels to diversify products and services. Diversification is necessary to reduce the risks associated with revenues and profitability. This study explored whether food and beverage (F&B) activities have the potential to create a diversification of revenue sources for hotel businesses. Using STR hotel performance data from 2007 to 2016, the study conducted panel regression analyses and time trend analyses in the pre- and post-2008 recession period to investigate the impact of diversifying revenue and profit sources through F&B activities. Results indicate that F&B activities can be a source of diversification for upper upscale hotels. Results further suggest that F&B was a supplementary income source at the beginning of the recovery phase of the last recession. Theoretical contributions and managerial implications are discussed.

Keywords: food and beverage, diversification strategy, hotel industry, hotel locations, financial recession

Introduction

The hotel industry in the United States predominantly generates revenue and profits from room sales (Mun et al., 2019). This study investigated whether food and beverage (F&B) activities have the potential to provide diversification in the sources of revenue and profits for the hotel business. Since the recession of 2008, the hotel industry in the United States is facing stagnant growth (Morris, 2019). One of the contributing factors has been the challenges branded higher-end hotels face from the rise of the private accommodation services such as Airbnb and from the small boutique hotel sector (Deloitte, 2019). Other challenges that the hotel industry encounters include the excess of supply versus demand (Morris, 2019) and an increase in labor costs due to the rising national minimum wage (Hotel Business, 2018; Mest, 2019).

Still, according to an industry report, the upper upscale segment of the hotel industry has a positive outlook for the coming years (Hotel Business, 2018). While average daily room rate (ADR) has not significantly changed, upper upscale hotels' profits grew by 2.5% year-on-year, while upscale hotels' profits declined by 2.6% in 2017 (Hotel Business, 2018). This profit growth has been mainly due to higher occupancy rates relative to other hotel segments (Hotel Business, 2018). According to STR, consumer demand for upscale and upper upscale hotels has grown four times the national average, so both segments are expected to continue growing.

Despite many challenges, the hotel industry is still growing due to increases in projected travel and steady economic growth. However, individual hotels must find ways to compete with other comparative hotels and accommodation options to grow market share. One of the diversification strategies that hotels can utilize is to leverage their F&B services. Although food and beverage operations in hotels yield low profit margins (HotStats, 2018), other private accommodation (e.g., Airbnb) do not usually offer food and beverages other than basic breakfast items. Hence, the investment in the F&B

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department can be a competitive edge for hotels to attract consumers (Han & Hyun, 2017). This study investigated the following research question: How do F&B activities enhance the diversification of revenues in the upper upscale hotel segment? Moreover, this study examined the influence of location on the diversification of hotel revenues. Statistics also suggest that the expenditure of eating away from home has surpassed food expenditure at home (Elitzak & Okrent, 2018). Local clientele could further benefit increased diversification using F&B revenues in upper upscale hotels. This customer base could be particularly beneficial at a time when lodging demand is down, for instance during a recession. Therefore, this study also investigated whether F&B revenues can be a source of diversification for upper upscale hotel performance during a recession. Furthermore, the study focused on comparing hotel performance of F&B revenue diversification before and after the 2008 recession.

Literature Review

F&B Services in the Hotel Industry

In the United States, F&B offerings in hotels have been a secondary source of revenues and profits (Mun et al., 2019). Research suggests that every dollar increase in F&B sales has the potential of contributing 20% in gross profit versus 80% from every dollar increase in room sales (Kotler, 2003). In a comparative longitudinal study of hotels, Chen and Chang (2012) found that hotels with the significant proportion of total revenue from F&B have higher profit growth over time but with an unstable profit margin, and suggest more emphasis on F&B operations of hotel for a global diversification strategy. For example, predominantly in Asian countries, such as Korea (Seoul, 46% revenue from F&B versus 40% from room) and Japan (Tokyo, 50% revenue from F&B versus 45% from room), hotels rely more on F&B sales than on room sales (Horwath HTL, 2018). The industry in these countries targets local non-overnight restaurant patrons as well as overnight hotel guests. Restructuring the hotel's traditional revenue structure (Whitla et al., 2007) to depend less on room sales and more on F&B sales could potentially provide stable business by diversifying its income source (Chen & Chang, 2012). The F&B service of hotels in the Asian market can be a reference of a successful diversification strategy for hotels within the United States. Preliminary evidence shows that even in the United States, hotels have started to place renewed emphasis on F&B revenue. In recent years as the market recovered from the recession of 2008, as the F&B demand in hotels increased partially due to the more general trend of eating away from home, F&B performance has exhibited a steady increase. One STR report (February 2019) shows an increase of total F&B RevPAR (+2.7%), catering and banquet revenue per available square feet (+3.4%), and restaurant revenue per available seat (+3.0%), with a decrease of in-room dining revenue per occupied room (−4.2%) in 2018 compared with 2017. In addition, special F&B programs have demonstrated the potential to attract publicity exemplified by trend-leading hotel brands such as The NoMad, and The Godfrey Hotel, which have been listed amongst the World's Best 50 Bars. Again, as revealed by the diversified financial structure and its performance of F&B business of hotels from other countries, increasing F&B revenues may provide hotels with higher profitability and stability (Yeh et al., 2012).

The Characteristics of Upper Upscale Hotels

The hotel industry can be divided into six different segments based on annual performance as measured by the average daily room rate and other factors (see Table 1) (STR, 2018). A few examples of upper upscale hotel brands are Hilton, Hyatt, Ace Hotel, Westin, Renaissance, and Pullman. There are significant differences between hotel segments in terms of how they generate revenue and profits and how their size (number of rooms) and investments translate into performance (O'Neill, Hanson, & Mattila, 2008). Among different segments of the hotel industry, due to increased demand driven by economic growth, the upper upscale segment had highest occupancy level among chain hotels and this segment has been forecasted to outperform other segments (Hotel Business, 2018).

U.S. Hotel Market Trend and Location

Despite an increasing number of travelers, the hotel industry is forecasted to slow its growth of occupancy rate and average daily room rate in 2019.

Table 1. *STR Chain Scale*

Chain Scale	Definition	Examples
Luxury	Top 15% average room rate	Crown Hotel, Conrad, Andaz, Four Seasons, Grand Hyatt, JW Marriott
Upper Upscale	16–30% average room rate	Autograph Collection, Hyatt, Marriott, Omni, Westin, Hilton
Upscale	31–45% average room rate	Park Plaza, Radisson, Hilton Garden Inn, Hyatt Place, Novotel Hotels
Upper Midscale	46–60% average room rate	Best Western Plus, Quality, Comfort Inn, Mercure Hotels
Midscale	61–80% average room rate	Motel one, Quality Inn, Best Western, ibis Hotel, Ramada
Economy	Lowest 20% average room rate	Days Inn, ibis budget, Super 8, Econo Lodge, SureStay

Note: Data from STR.

The slowing of the U.S. economy and rising labor costs are among the reasons for the resulting slower growth of the hotel industry, while some experts also blame an oversupply of new hotels (Morris, 2019). The hospitality industry is sensitive to and has been impacted by economic conditions and major national security events such as 9/11 sooner than other industries. As a result of the recession of 2008, the then-successful hotel industry's growth rate dropped into the negative, hitting a decline of 20.4% on monthly RevPAR a few months after the recession (Rael, 2018). As shown in Figures 1 and 2, RevPAR, demand in general, and ADR were negatively impacted during the recession.

The influence of the recession was different among the various segments of the industry and also varied by location. Higher-end hotels, such as luxury and upper upscale properties, were the most negatively influenced industry segments, while lower-end (upper midscale, midscale, and economy) hotels had a smaller decline in revenues (Rael, 2018). Previous literature shows that demand for hotels located in rural locations fluctuated more than those of hotels located in urban settings (Sigala, 2004), and furthermore, the decline in revenue during the recession was most prominent in hotels located in resort, airport, and urban areas (Rael, 2018). Therefore, industry segment and location of hotels are two important

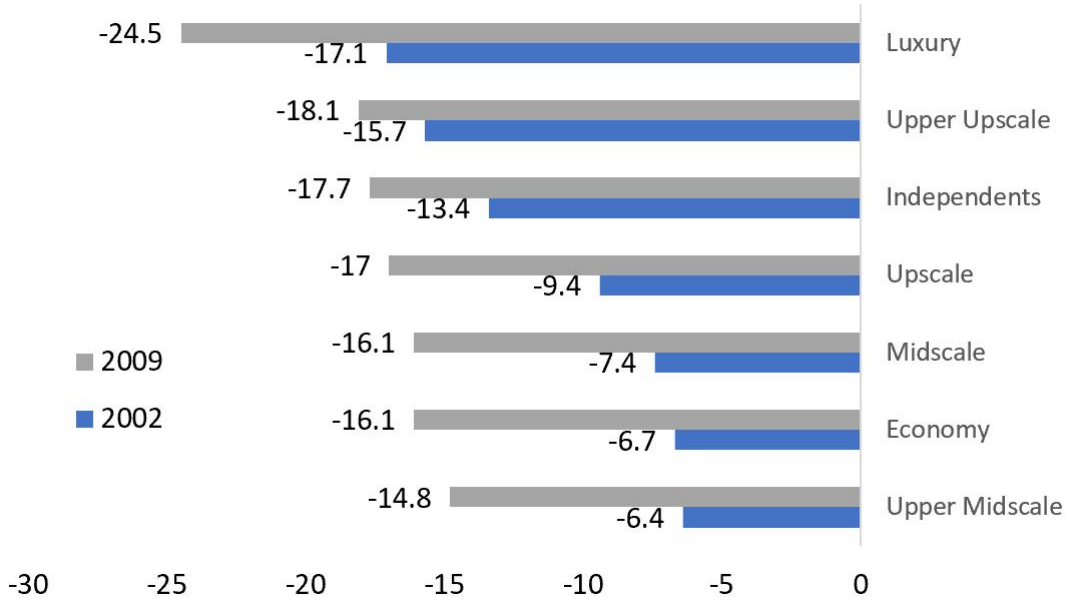

Figure 1. *Peak RevPAR Declines across Different Chain Scales*
Source: Data from STR, 2018.

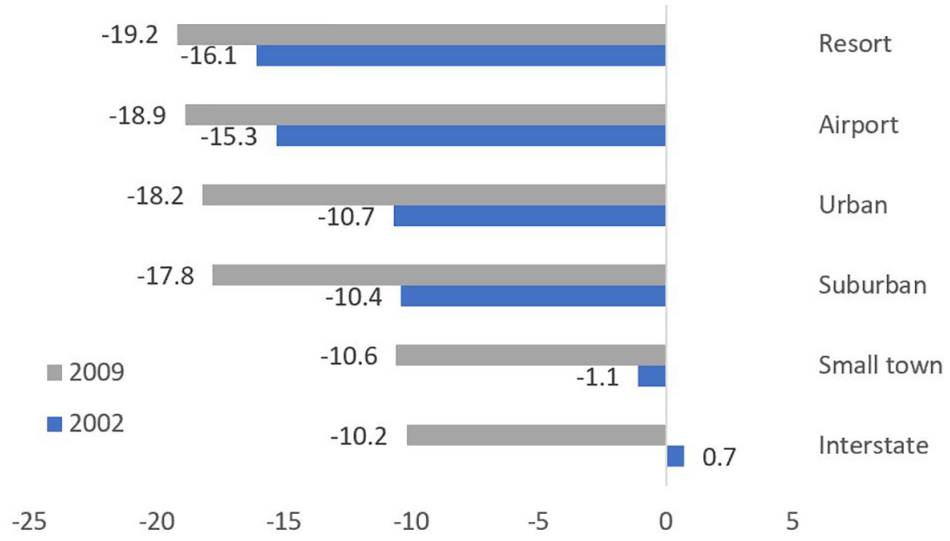

Figure 2. *Peak RevPAR Declines across Different Location Types*
Source: Data from STR, 2018.

factors to consider when assessing the financial performance of the hotel industry.

This study aims to investigate the effect of F&B as a source of diversification of hotel revenues. Moreover, this study also examines how F&B revenues influenced hotel performance across different locations in the pre- and post-2008 recession period.

Methodology

Data Sample

This study used hotels' operational performance data in the United States from STR. The study focused on upper upscale hotels in order to ensure data homogeneity in a specific segment of the hotel industry. Although both upper upscale hotels and luxury hotels have significantly larger F&B activities than other industry segments (Crawford, 2018), the upper upscale segment has more properties across different location types and regions, and therefore makes this segment an appropriate fit for our research question. The data obtained for this study was that of a balanced panel sample, which included 147 hotels with 1,470 observations representing performance data from 2007 to 2016. In this study, the financial recession was identified to begin in September 2008, as the term "financial recession" or "financial crisis" came into the media usage in September 2008 (Kotz, 2009). As a consequence, the data in this study represents the following: 2007 as the pre-recession time period, 2008–2009 as the recession time period, and after 2009 as the post-recession time period. This hotel sample represented 9 regions of the United States. There were 15 hotels in Northeast Central region, 10 in Northwest Central region, 3 in Southeast Central region, 19 in Southwest Central region, 11 in Mid-Atlantic region, 28 in South Atlantic region, 13 in Mountain region, 12 in New England region, and 36 in Pacific region. Sample hotels were also categorized into different location types. According to STR (2019), the location types defined urban hotels as those positioned in a densely populated location in a large metropolitan area, and suburban hotels as those positioned in suburbs of metropolitan markets. Also, airport hotels were defined as those in close proximity to an airport that primarily served demand from airport traffic, and resorts were defined as properties located in a resort area or market where a significant source of business is derived from leisure/destination travel. In this study, the sample included 12 (8.16%) airport hotels, 28 (19.05%) resorts, 49 (33.33%) suburban hotels, and 58 (39.46%) urban hotels.

Variables and Models

There are three major analyses in this study. The first part explains the first research question by examining the effect of F&B activities on diversifying the

hotels' revenues and profits. The researchers utilized the Cobb-Douglas production function by including room, F&B, and other operating units as inputs and performance as output (Mun et al., 2019). The measures of input were the performance measures (i.e., revenues, costs, and profits) of room, F&B, and other operating units, while the measures of output were the hotels' revenues, costs, and profits. This model can analyze how inputs influence the output of a hotel. Given the time-variant and firm-specific effects on the regressors, panel regression was used to analyze the Cobb-Douglas production function. Based on the Hausman test result ($\chi^2 = 152.98$, $p < 0.001$) this study used fixed-effect panel regression.

The second and third part of the analysis answers the second research question by investigating the influence of different locations types and time periods on hotel F&B performance. The researchers examined how these inputs and outputs were different across location types. Location dummy variables were added in the analyses for different location types using airport hotels as zero (e.g., "1" for urban and "0" for resort and suburban). Time was used as a variable of interest to examine how these inputs and outputs changed in the sample period of time. Given this time period covers before and after the financial recession of 2008, this study investigated how F&B performance measures of revenues, costs, and profits changed during those time periods. Time trend analyses were conducted to estimate such changes in this period (McCombs & Zhu, 1995). The control variables in the analysis included location and region of the hotel as well as its size (i.e., the number of keys in the hotel) (Yeh et al., 2012).

Results

Cobb-Douglas Production Functions

The researchers also tested the assumptions of the fixed-effect models. Given the characteristics of the fixed-effect model, this study focused on normality and stationarity of the data (Torres-Reyna, 2007). First, this study used the natural log transformations to normalize the variables. Unit root tests were conducted to test data stationarity. The results of Levin-Lin-Chu test indicated that the panels of fixed-effect models were stationary. Therefore, the assumption for fixed-effect models was satisfied.

The results of the analyses are shown in Table 2. The results indicated that room activities were the largest contributor to total revenues revenue ($\beta = 0.697$, $p < 0.001$), total cost ($\beta = 0.534$, $p < 0.001$), and GOP ($\beta = 1.310$, $p < 0.001$). Therefore, room activities were the main driver of total hotel revenue and profit. Although the effects of F&B activities on hotel revenue and profit were not as large as room activities, the standard errors of F&B activities were smaller than room activities in total revenue ($SE_{Room} = 0.067$, $SE_{F\&B} = 0.006$), total variable cost ($SE_{Room} = 0.009$, $SE_{F\&B} = 0.007$), and GOP ($SE_{Room} = 0.021$, $SE_{F\&B} = 0.009$). The results revealed that the parameter estimates of F&B activities were less uncertain and more stable than those of the room activities.

This study utilized the fixed-effect panel models to examine how hotel performances of revenue, cost, and profit varied across different locations. However, given the characteristics of fixed-effect models, some of the location and region variables were omitted due to the multicollinearity problem. Previous

Table 2. *Cobb Douglas Production Function Analysis–Fixed Effects*

	Dependent Variables		
Variables	Log(TotalRevenue)	Log(TotalVariableCost)	Log(GOP)
Intercept	1.105 (0.913)***	3.539 (0.125)***	−8.293 (0.388)***
Room	0.697 (0.067)***	0.534 (0.009)***	1.310 (0.021)***
F&B	0.282 (0.006)***	0.296 (0.007)***	0.140 (0.009)***
Other Operating Dep.	0.009 (0.001)***	0.015 (0.001)***	0.036 (0.040)***
Location (Resort)	Omitted	Omitted	Omitted
Location (Suburban)	−0.001 (0.015)	−0.047 (0.022)*	0.021 (0.082)
Location (Urban)	Omitted	Omitted	Omitted
Region	Omitted	Omitted	Omitted
Number of Keys	−0.000 (0.000)***	−0.000 (0.000)*	0.001 (0.000)
R^2	97.93%	97.91%	93.50%
Wald χ^2	7030.41***	1395.05***	1281.55***

Note: *p < 0.05; **p < 0.01; ***p < 0.001.

studies have used the generalized estimating equations (GEE) method as a robust substitution for the fixed-effect method. GEE estimates coefficients by using maximum likelihood estimates from the firm-year observations panel data (Liang & Zeger, 1986; Hambrick & Cannella, 2004).

Table 3 shows the estimates from the GEE method, indicating GEE provided robust results for the room, F&B, and other operating activities. The reference level for location in these analyses was the airport (airport = 0). As shown in Table 3, resorts had significantly higher revenues than airport hotels ($\beta = 0.062$, $p < 0.001$) and also had significantly higher variable costs than airport hotels ($\beta = 0.074$, $p < 0.001$). Furthermore, resorts ($\beta = -0.129$, $p < 0.01$) and urban hotels ($\beta = -0.146$, $p < 0.001$) had significantly lower profits than airport hotels.

In a follow-up analyses presented in Table 4, this study focused on the role of F&B activities across different location types. Resorts ($\beta = 0.445$, $p < 0.01$), and urban hotels ($\beta = 0.278$, $p < 0.05$) had significantly higher revenues than airport hotels, and resorts ($\beta = 0.613$, $p < 0.001$) and urban hotels ($\beta = 0.391$, $p < 0.001$) had significantly higher costs than airport hotels. The analysis found no significant difference in profit among all hotel location types.

The growth rate of room profit margin and F&B profit margin, shown in Figure 3, illustrates that room profit margin has smaller variations with a narrower range from −3.28% to 1.89% compared to F&B profit margin from −9.04% to 4.26%, which indicates a stable growth for room profit margin because of a smaller standard deviation of the growth rate (Standard $\text{Deviation}_{\text{Room}} = 0.0141$, Standard $\text{Deviation}_{\text{F\&B}} = 0.0412$). During the post-recession period starting in 2010 (i.e., 2008 was the year of recession and 2010 was the first year not including the performance of 2008), F&B profit margin grew faster than room profit margin, except in 2012. The Mann-Whitney U test was conducted and results suggest that F&B profit margin growth was significantly higher than room profit margin growth ($U = 18$, $p < 0.05$).

Time Trend Analyses

In the time trend analyses, the researchers created a time variable and a time quadratic variable in the analyses to examine how the variables of interest

Table 3. *Cobb Douglas Production Function Analysis—GEE*

	Dependent Variables		
Variables	Log(TotalRevenue)	Log(TotalVariableCost)	Log(GOP)
Intercept	0.879 (0.768)***	3.561 (0.126)***	−6.998 (0.274)***
Room	0.696 (0.058)***	0.525 (0.008)***	1.271 (0.018)***
F&B	0.284 (0.005)***	0.313 (0.006)***	0.140 (0.008)***
Other Operating Dep.	0.010 (0.001)***	0.015 (0.001)***	0.031 (0.039)***
Location (Resort)	0.062 (0.014)***	0.074 (0.023)***	−0.129 (0.046)**
Location (Suburban)	−0.011 (0.012)	−0.024 (0.016)	−0.012 (0.041)
Location (Urban)	−0.017 (0.124)	0.003 (0.003)	−0.146 (0.042)***
Region	−0.001 (0.002)	0.000 (0.000)***	0.012 (0.005)*
Number of Keys	0.000 (0.000)	0.000 (0.000)	−0.000 (0.000)***
Wald χ^2	76763.73***	21232.26***	11476.23***

Note: *p < 0.05; **p < 0.01; ***p < 0.001.

Table 4. *Regression Analysis: Focus on F&B*

	Dependent Variables		
Variables	Log(F&B Revenue)	Log(F&B Cost)	Log(F&B Profit)
Intercept	14.804 (0.153)***	14.446 (0.145)***	13.557 (0.269)***
Location (Resort)	0.445 (0.146)**	0.613 (0.139)***	−0.033 (0.251)
Location (Suburban)	−0.023 (0.078)	0.047 (0.079)	−0.171 (0.209)
Location (Urban)	0.278 (0.125)*	0.391 (0.119)***	0.026 (0.226)
Region	−0.017 (0.020)	0.004 (0.013)	0.037 (0.028)
Number of Keys	0.001 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Wald χ^2	266.83***	313.31***	97.94***

Note: *p < 0.05; **p < 0.01; ***p < 0.001.

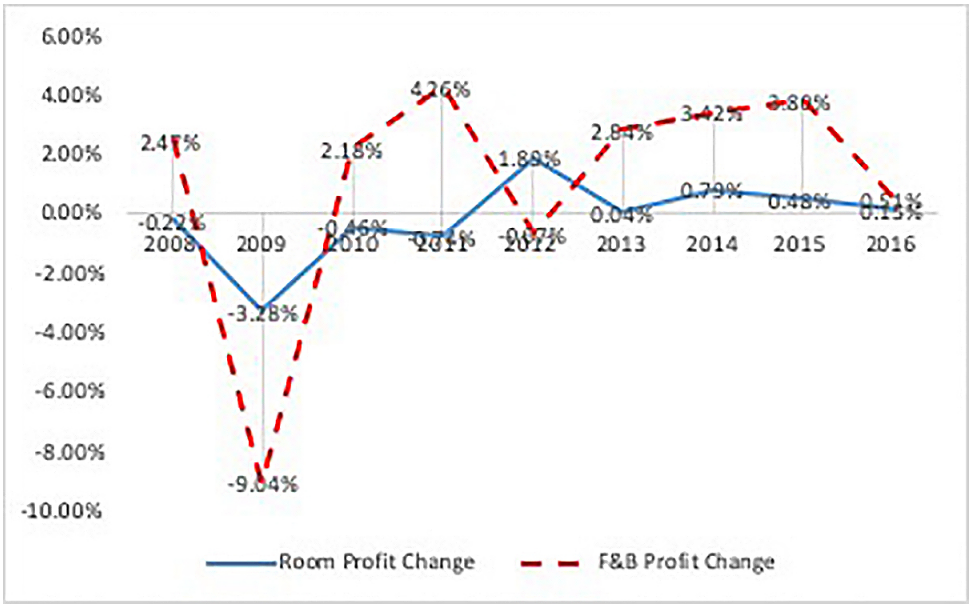

Figure 3. *A Comparison of Room and F&B Profit Margin*

changed over time. Total revenue (β = 0.0088, p < 0.001), room revenue (β = 0.0088, p < 0.001), and F&B revenue (β = 0.0081, p < 0.001) all had significant negative quadratic effects (see Table 5). F&B revenue was the most stable among all three revenue sources, given the coefficient of the quadratic effect was the smallest, which represents the smallest rate of revenue change. Moreover, after the 2008 recession, F&B revenue declined after the room revenue did, given the axis of symmetry information ($Axis_{F\&B}$ = 5.00, $Axis_{Room}$ = 4.20).

From the perspective of cost (Table 6), total cost (β = 0.0054, p < 0.001), room cost (β = 0.0043, p < 0.01), and F&B cost (β = 0.0070, p < 0.001) all had significant quadratic effects. F&B cost was the most unstable and fluctuating with the larger quadratic effect and larger standard deviation (β = 0.0070, SD = 0.0003, p < 0.001) among all three. Yet, after the 2008 recession, F&B cost declined after the room cost did, given the axis of symmetry information ($Axis_{F\&B}$ = 5.29, $Axis_{Room}$ = 2.56).

From the perspective of profit (Table 7), GOP (β = 0.0167, p < 0.001), room profit (β = 0.0107, p < 0.001), and F&B profit (β = 0.0125, p < 0.001) all had significant quadratic effects. F&B profit was more unstable and fluctuating with the larger quadratic effect and larger standard deviation (β = 0.0125, SD = 0.0003, p < 0.001) than room profit. Similar to the revenues and costs, after the 2008 recession, F&B profit declined after the room profit did, given the axis of symmetry information ($Axis_{F\&B}$ = 4.72, $Axis_{Room}$ = 4.39).

Table 5. *Time Trend Analyses on Revenues*

	Dependent Variables		
Variables	Log(Total Revenue)	Log(Room Revenue)	Log(F&B Revenue)
Intercept	16.446 (0.548)***	15.924 (0.053)***	15.121 (0.086)***
Time	−0.078 (0.015)***	−0.074 (0.015)***	−0.081 (0.024)***
$Time^2$	0.0088 (0.001)***	0.0088 (0.001)***	0.0081 (0.002)***
Location	−0.031 (0.007)***	−0.05 (0.007)	−0.028 (0.012)**
Region	−0.006 (0.004)	0.003 (0.004)	0.017 (0.007)**
Number of Keys	0.002 (0.000)***	0.001 (0.000)***	0.002 (0.000)***
Axis of Symmetry	4.43	4.20	5
R^2	77.54%	77.79%	59.37%
F-stat	1010.89***	1025.45***	427.87***

Note: *p < 0.05; **p < 0.01; ***p < 0.001.

Table 6. *Time Trend Analyses on Costs*

	Dependent Variables		
Variables	Log(Total Variable Cost)	Log(Room Cost)	Log(F&B Cost)
Intercept	16.072 (0.540)***	14.514 (0.057)***	14.832 (0.082)***
Time	−0.045 (0.015)**	−0.022 (0.016)	−0.074 (0.023)***
Time^2	0.0054 (0.001)***	0.0043 (0.001)**	0.0070 (0.002)***
Location	−0.034 (0.007)***	−0.016 (0.008)*	−0.029 (0.011)**
Region	−0.002 (0.004)	−0.001 (0.004)**	−0.005 (0.006)
Number of Keys	0.001 (0.000)***	0.002 (0.000)***	0.002 (0.000)***
Axis of Symmetry	4.17	2.56	5.29
R^2	76.53%	77.57%	62.50%
F-stat	954.80***	1012.58***	488.10***

Note: *p < 0.05; **p < 0.01; ***p < 0.001.

Table 7. *Time Trend Analyses on Profits*

	Dependent Variables		
Variables	Log(GOP)	Log(Room Profit)	Log(F&B Profit)
Intercept	15.189 (0.774)***	15.644 (0.545)***	13.704 (0.133)***
Time	−0.158 (0.022)***	−0.094 (0.015)***	−0.118 (0.037)***
Time^2	0.0167 (0.002)***	0.0107 (0.001)***	0.0125 (0.003)***
Location	−0.014 (0.010)	−0.000 (0.007)	−0.020(0.018)
Region	0.027 (0.006)***	0.008 (0.004)	0.046 (0.010)***
Number of Keys	0.002 (0.000)***	0.001 (0.000)***	0.001 (0.000)***
Axis of Symmetry	4.73	4.39	4.72
R^2	67.50%	75.81%	35.08%
F-stat	606.76***	917.66***	153.00***

Note: *p < 0.05; **p < 0.01; ***p < 0.001.

Conclusion and Discussion

F&B Performance in the Hotel Industry

The purpose of this study was to investigate the role of F&B activities as a source of revenue and profit diversification in upper upscale hotels. Diversification of revenue and profits can bring greater stability to the overall performance of the hotel business. Such diversification can reduce the standard deviation of performance measures, particularly during a recession. Therefore, this current study examined the role of F&B in the upper upscale hotel market and compared how F&B performed as a source of revenue and profit for this hotel segment during the pre- and post-2007–8 recession period. Results of this study found that F&B activities provided substantial revenue for the hotel industry, yet their impact on overall hotel performance was smaller than the impact of the room department. The findings of this study confirmed earlier evidence presented by Chen and Chang (2012) that F&B activities can diversify hotel revenue and profit. In terms of profit margin, after the recession of 2008 the F&B profit margin had a higher growth rate than room profit margin. In other words, during and after an economic recession, hotel managers should consider paying more attention to F&B activities given that F&B profit has the potential of growing faster than room revenue. Moreover, given the high variations in F&B costs, hotel managers should manage the F&B operations more efficiently by controlling the costs of food and beverage as well as labor.

Performance across Locations

This study also investigated the impact of location on hotel, and especially F&B, performance. Overall, resorts and urban hotels had significantly lower profit than airport hotels, despite the higher revenues from resorts and urban hotels. Compared to airport hotels, resort and urban hotels had higher F&B revenue but also higher F&B cost, which lead to no significant profit difference among these two locations. The possible reasons for this phenomenon could be 1) higher quality of the product in resorts and urban locations; 2) higher labor cost at those locations; and 3) higher competition among urban hotels. Moreover, F&B activities in urban hotels and

resorts can diversify hotel revenue sources. Activities such as partnering with celebrity chefs, doing thematic events, and elaborating packages for hotel guests can provide additional stimulus for generating F&B revenues.

Performance across Times

The findings of the analyses suggest that the F&B department could provide effective diversification of hotel revenue for upper upscale hotels, particularly during an economic recession. The results indicate that F&B performance was impacted after room performance, hence F&B could continue to be an income source at the beginning of the recession even while the room division decreases in its performance. Nevertheless, F&B cost changed faster than room cost during the recession. One possible reason could be that most of F&B costs depend on consumer volume (high proportion of variable costs such as food). The consumer volume in the recession had a significant drop, which lead to fluctuations in F&B costs. Moreover, F&B profit margin rebounded relatively quickly during the post-recession period compared to room profit margin. In other words, the F&B profit margin had a faster growth rate than room profit margin during the post-recession period. This result suggests that at least after the 2007–8 recession, F&B performance of the upper upscale segment rebounded sooner than that of the room department. There could be a number of reasons for this. First and foremost, F&B revenues, particularly in urban locations, are not entirely reliant on hotel guests. Non-hotel guests can also be a source of generating F&B revenues. Furthermore, as noted earlier, hotels could have leveraged the increasingly popular food trends to capitalize on the F&B activities.

Theoretical Contribution and Practical Implication

This study contributes to the existing understanding of F&B as a source of diversification to enhance hotel performance. The findings of this study can justify how F&B influenced hotel performance as a diversification strategy. Moreover, this study also offers an empirical analysis of how hotels recovered after the 2008 recession in context of F&B performance. This evidence can provide epistemic supports for how hotels perform when facing financial crises.

This study offers valuable managerial implications for hotel managers and investors. Hotel managers should recognize that although the room department has been the most significant contributor to hotel performance, the role of F&B is getting more critical due to its profit potential. Given the potential of F&B revenue and profit to provide stability through the diversification of hotel performance and consumer-led F&B trends, hotel operators should consider placing greater emphasis on the role F&B activities could play in the overall performance of these businesses. Based on the findings of this study, F&B profit margins have shown a dramatic growth in the upper upscale hotel, especially after the 2008 recession. F&B performance was impacted by the recession after the room department. Hotel managers can pay more attention to F&B activities as a source of recovery during a post-recession period.

Limitations and Future Studies

This study has a few limitations. First, this study investigated the upper upscale hotel market. Future studies can examine the research question with other hotel markets to generalize the results. Second, this study focuses on the F&B sector in the hotel industry. Future studies can use different proxies of F&B performance. For example, the dollar amount of the average check and the number of covers can move the analyses further by investigating the scope of F&B revenue management. Third, the dataset had hotel property performance data. However, it does not contain any information regarding hotel resources allocated for each operating department. Future studies can investigate the efficiency of how hotel F&B managers utilize resources to diversify hotel revenue and profit.

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