Hotel assets: an analysis of brand attributes, franchise fees, hotel age and performance

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Abstract: The selection of a hotel brand is an important consideration for asset managers and others. This study explored factors shaping the relationship between hotel asset managers and the brands with which they affiliate in an attempt to better understand the attributes that hotel brands bring to hotel assets. The particular attributes studied included how long a brand has existed, the franchise fees it exacts from property owners, guest satisfaction with the brand, and, at the individual property asset level, the age of the hotel facilities. By including franchise fees in the analyses of relationships between these attributes, we have broken new ground in this exploratory study, shedding light on the crux of the relationship between franchisees and the brands whose names they carry. To explore these relationships, we analysed a variety of data regarding the abovementioned variables to identify attributes that distinguish one hotel brand from another in terms of financial performance. Our results suggest that hotel property age, brand size, and guest satisfaction may be primary drivers of hotel performance, although the relationships between the factors are not all positive. On the other hand, brand age and franchise fees appear to have a much weaker relationship with hotel performance.

Keywords: franchise fees; brand attributes; guest satisfaction; hotel property age; brand performance.

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1 Introduction

Hotel asset managers, owners and investors are charged with the important decision of selecting hotel brands that will help them to satisfy their guests and maximise their operating performance at a level of franchise fees that is worthy of their investment. In this exploratory study, we investigated critical factors shaping the relationship between hotel asset managers/owners/investors and the brands with which they affiliate in an attempt to better understand the attributes of hotel brands. In spite of the proliferation of brands throughout the industry, there is surprisingly little evidence that indicates how a brand's key attributes affect its value in the marketplace. The particular value attributes we targeted include the franchise fees a brand exacts from property owners, how long the brand has existed and how large it is, and guest satisfaction with the brand. At the property level, we included the age of the hotel asset. We were interested in understanding more about the relationship between the value a brand represents to a hotel property asset manager/owner/investor, the fees that the owner/investor pays for the privilege of the brand affiliation, and overall brand performance. Very few scholarly studies have explored the effects of franchise fees on brand performance or the relationship between fees and the other brand attributes we analysed.[1] Our research findings pertaining to franchise fees opens new avenues for potentially valuable research.

The hotel industry, in the USA and across the globe, is dominated by brands in an environment in which, in virtually all markets and segments, hotel properties commonly affiliate with multi-brand corporate entities. As O'Neill et al. (2006) noted:

> As hotel companies have increasingly evolved from hotel management organizations to hotel branding organizations, and concomitantly have become multi-branded, brand managers are facing a greater challenge of standing out in a crowded marketplace. In its widely recognized forecast of industry trends, the International Society of Hospitality Consultants has regarded branding as one of the top ten critical issues that the hotel industry has to address because [of] increased competition between the brands … (25)

Hotel asset managers, owners and investors have increasingly taken on the task of not only property operations, but of brand selection as major hotel companies shift from hotel management to brand management. As a result, large hotel conglomerates have increasingly sought brand management experience in top executives, a trend that has played out over the better part of the last decade. Consider the following statement by Richard North as he stepped down in 2004 as CEO of the world's largest hotel company, InterContinental Hotels Group PLC, which noted that "our future is increasingly focused on growing our global brands in a predominantly managed and franchised hotel system":

> It is now only a matter of time before the company becomes one predominantly about brands . . . . I would have loved to continue to manage InterContinental Hotels Group PLC as it evolves to become the world's leading hospitality brand owner. But I recognize that someone else whose whole business background has been developing and managing brands may be better placed to ensure the company achieves this vision and creates maximum value for shareholders. (IndUS Business Journal, 2004)

We note that Starwood joins InterContinental in having a former brand manager as its CEO. A report posted online by Hospitality.net (2007) describes the CEO, Frits van Paasschen, as having a "unique perspective, strong performance in managing global brands and deep international experience".

The relationship between a hotel and its brand turns on an inherent source of tension. Hotel property owners in brand relationships typically pay franchise fees to a hotel brand – in some cases on the order of 15% of gross revenue[2] – so it is only natural that they seek to extract as much revenue-generating value from the brand as possible. Brand managers, on the other hand, seek to add properties to their portfolios at the highest possible rates. After all, these fees generate much of *their* revenue. Both parties benefit, of course, when their guests are happy with the product – making guest satisfaction a key metric indicating success. We investigated whether brands that charge higher fees perform better within their segments or markets. Further, we explored whether property owners who pay these fees enjoy corresponding success at the individual property asset level.

To address this broad question, we sought, among other things, to identify specific relationships involving factors that play into the larger structure of brand-property dynamics. This study should, we hope, lead to further research that achieves the depth and comprehensiveness needed to truly understand if and how a brand's attributes and franchise fees affect hotel performance at both the brand and the property levels within the context of the brand's relationships with its property owners and investors. Our study represents a significant step in this direction. We learned enough about these

relationships to offer some strategic guidance that hotel asset managers, owners and investors striving to increase the value of their assets should consider.

2 Review of literature: franchise fees, brand value, and brand performance

Previous research has found that hotel brands have differential effects on the value of the hotels affiliated with the brands (O'Neill and Xiao, 2006), but has not identified the specific factors that result in the differential values of the brands. Other research has shown that hotel performance indicators like occupancy rate and average daily rate (ADR) are predictors of hotel value (O'Neill, 2004). The interests of hotel owners and hotel brands may conflict in some ways, but their relationships potentially pay off in mutual benefits. Owners of branded hotels (franchisees) rely on the brands to provide them with strategic guidance as well as coherent system-wide marketing programmes and a set of standards they hope will be recognised by customers who seek lodging accommodations. In exchange for the cost of marketing programmes and of monitoring compliance with standards across their systems, brand enterprises (franchisors) rely on their affiliated property owners to deliver lodging services that meet brand standards and exploit their familiarity with local lodging and labour markets. Franchising protects brand shareholder capital from risk and, of course, generates franchise fees (O'Neill et al., 2006; Brown and Dev, 1997).

The term *franchise fees* typically denotes not only an initial fee that a property owner pays to affiliate with a brand, but also regular – usually monthly – payments of royalties for the use of the brand name, logo, and goodwill as well as additional fees for other assets such as marketing programmes and referral and reservation systems. These costs add up, generally trailing only payroll as a share of a hotel property's expenses (Rushmore et al., 2011, Rushmore, 2009). A considerable body of research has accumulated over the last decade reflecting how critical it is that hotel property owners choose well when selecting a brand under which to franchise. These studies investigate a wide range of brand-related factors that drive success at the property level (Jiang et al., 2002; Ambler et al., 2002; Brady et al., 2005; Leone et al., 2006; O'Neill et al., 2006; Kayman and Arsali, 2007). Shifting market trends, a host of local factors, and unforeseen circumstances generate rebranding activity in the course of which hotel properties move from one brand to another or scale up to a higher segment within a given hotel company's family of brands (Hanson et al., 2009) as they seek to maximise brand value by positioning themselves advantageously within their markets (O'Neill and Mattila, 2010). For their part, of course, the brand managers attempt to maximise franchise fees while applying their brand resources to drive up guest satisfaction with their brand across their franchises.

We mention guest satisfaction in this connection because, although it is notoriously difficult to define brand value (and it is beyond the scope of this study to reconcile the various extant definitions), and researchers and analysts agree on its largely subjective nature (Schultz, 2001; Bailey and Ball, 2006), there is a strong connection between hotel guest satisfaction and brand loyalty (O'Neill and Mattila, 2010). Given the subjective nature of brand value, then, guest satisfaction would appear to affect brand value. Other factors remaining equal, a brand that consistently earns higher guest satisfaction ratings than another brand should have greater brand value. Thus, although scholars and analysts

associate a wide range of factors with brand value, we focus on guest satisfaction to do so, and consider the influence of brand age, brand size, property age, and franchise fees on guest satisfaction with a brand.

We also wanted to learn how these factors influence brand performance. How does brand value – as measured by the influence of brand and property attributes on guest satisfaction with a brand – affect brand performance? The conclusion depends on how one measures brand performance, of course, and we chose to represent brand performance in terms of room revenue per available room (RevPAR). Again, the literature includes a wide range of metrics as measures of brand performance, and it is beyond the scope of this study to determine which metrics are most appropriate. Alternative metrics for measuring brand performance include the RevPAR index/revenue growth index, growth rates/number of rooms, ADRs, and occupancy rates/market share (O'Neill et al., 2006). RevPAR is a widely accepted industry standard of hotel performance at the individual property asset level because it is a measure of both occupancy rate and ADR, and we measure RevPAR by brand by summing the RevPAR scores for all properties under each brand in our sample.

In the remainder of this paper, we summarise the purpose of the study, present the questions that drove the study, and introduce the key variables. We then formulate a set of hypotheses with which to test the relationships between the variables and report the results of our analyses. We then discuss the results, identify some limitations of the study, and suggest directions for future related research. We conclude this paper by considering the study's implications and offering guidance for hotel asset managers, owners and investors seeking to increase the value of their assets.

3 Summary of the study: purpose, study questions, and variables

We undertook this study as an attempt to make progress towards resolving the abovementioned uncertainties and subjectivities regarding drivers of brand value and brand performance. Researchers and industry analysts rank hotel brands by specific attributes or performance metrics; we know of no rankings by brand value. Most data that would indicate brand value, and some that indicate aspects of brand performance, are not publicly available. We believe our study is the first to mine primarily publicly available data (one of our data sources is private but operates independently of any brands) to test relationships between factors that the literature suggests may drive brand value and performance. In particular, our purpose in this study was to analyse possible correlations between brand age, franchise fees, and property age with brand-level guest satisfaction and brand performance as measured by RevPAR.

By including both franchise fees and guest satisfaction with a brand in our study, we reflect the perspectives of both hotel property owners and hotel brand managers. We sought answers to the following research questions:

1 How are hotel age, brand age, brand size, and guest satisfaction with a brand related statistically to franchise fees?

2 How are hotel age, brand age, brand size, and franchise fees related statistically to guest satisfaction with a brand?

3 How are franchise fees and guest satisfaction with a brand related statistically to brand performance?

The variables we measured and analysed are therefore as follows: hotel age, brand age, brand size, guest satisfaction with a brand, franchise fees (as the aggregate of fees charged to franchisees), and brand performance. We explain how we operationalised these variables below. To answer the first research question, we tested hotel age, brand age, brand size, and guest satisfaction with a brand as independent variables and franchise fees as the dependent variable. To answer the second question, we tested franchise fees as an independent variable and guest satisfaction with a brand as the dependent variable. To answer the third question, we tested franchise fees and guest satisfaction with a brand as independent variables and brand performance as the dependent variable.

4 Framework of hypotheses

This study is the first attempt to seek statistical relationships between franchise fees and the other variables we tested with guest satisfaction and RevPAR by brand. We developed a set of hypotheses designed to answer our research questions by considering important elements of brand value and brand performance identified in prior studies. For example, Keller (2008, pp.53–54, 60–61) posited that when hotel customers choose a brand to patronise – make a brand choice – brand awareness, brand recognition, and brand recall typically influence that choice. Surely brand choice affects brand value: brands that customers choose more often have greater brand value. If brand awareness, recognition, and recall drive brand choice, then understanding these relationships requires understanding factors that may affect awareness, recognition, and recall. For example, brand age – which should make a brand more visible to consumers due to exposure to its presence in the market – should therefore help to increase brand value, which should, in turn, mean greater guest satisfaction. The age of a hotel property asset should, on the other hand, reduce guest satisfaction insofar as aging facilities tend to be less attractive and less amenable to customer desires, and thus, older hotels within a brand may relate to lower brand value.

Brand size should also increase brand awareness, recognition, and recall, again by making the brand more visible to potential customers. As customers travel and see a given brand more often, they will be more aware of that brand. More importantly, brand size should also influence occupancy positively because of marketing economies of scale that reduce per-unit advertising costs. Moreover, research suggests that brand size fosters customer loyalty (Ipsos-ASI, 2000) and that customers use market share as a quality cue (Heloffs and Jacobsen, 1999). Although market share is not identical to brand size, and this quality signalling effect is not universal, brand size seems likely to provide an advantage in this respect. The perception that a brand's proliferation across markets indicates higher quality makes sense: customers like quality and therefore if they patronise a given brand more often, it must offer quality lodging services, and thus, brand size should relate positively to performance.

The relationships we have described thus far largely follow common sense, but what about the relationship between franchise fees and brand equity or brand performance? Here, the absence in the literature of rigorous studies of franchise fees as a brand success

indicator forced us to rely on our own experience to hypothesise an answer. Regarding guest satisfaction as a measure of brand value, higher franchise fees should indicate greater guest satisfaction because a brand that charges higher franchise fees to its property owners should deliver a premium in higher quality services and resources to those properties; guest satisfaction should rise correspondingly.

The abovementioned considerations led us to propose the following hypotheses about the relationships between our variables of choice and guest satisfaction:

Hypothesis 1A Brand age will be related positively to guest satisfaction with a brand (the older the brand, the higher the guest satisfaction).

Hypothesis 1B Hotel property age will be related negatively to guest satisfaction with a brand (the older the property, the lower the guest satisfaction).

Hypothesis 2 Brand size will be related positively to guest satisfaction with a brand (the larger the brand, the higher the guest satisfaction).

Hypothesis 3 Franchise fees will be related positively to guest satisfaction with a brand (the higher the franchise fees, the higher the guest satisfaction).

We have noted that this study may be the first attempt to correlate franchise fees with the other variables we studied. Consequently, we could only make educated guesses regarding whether or how franchise fees might be related to these other variables. Perhaps an older brand's higher level of awareness, recognition, and recall, which should enhance its brand value, enables it to charge higher franchise fees (the older the brand, the higher the franchise fees). On the other hand, perhaps older brands with more experience have enough of an experience curve advantage to afford charging lower franchise fees (the older the brand, the lower the franchise fees). We could make similarly conflicting cases for brand size. Perhaps larger brands can charge higher fees because they command a stronger market presence (the larger the brand, the higher the franchise fees). On the other hand, with greater economies of scale to leverage, perhaps larger brands can afford to charge lower franchise fees (the larger the brand, the lower the franchise fees). Undaunted by these puzzles, we wanted to explore all possibilities so our hypotheses about the relationship between brand age and size and franchise fees primarily posit that the former attributes will exhibit correlations with the latter. We were prepared to find either a positive relationship or a negative relationship in either case:

Hypothesis 4 There will be a statistically significant relationship between brand age and franchise fees (the older the brand, the higher the franchise fees; or the older the brand, the lower the franchise fees).

Hypothesis 5 There will be a statistically significant relationship between brand size and franchise fees (the larger the brand, the higher the franchise fees; or the larger the brand, the lower the franchise fees).

The final set of hypotheses we tested involved relationships between franchise fees, guest satisfaction, and brand performance as indicated by RevPAR. Again, noting the quality premium that a hotel property should enjoy as a result of paying higher franchise fees, we reasoned that higher franchise fees should indicate higher RevPAR insofar as a hotel property that pays higher fees and in turn enjoys that quality premium from its brand should be able to command higher rates and thus higher RevPAR. Similarly, as we noted

above, if higher franchise fees indicate higher guest satisfaction, then higher guest satisfaction should also generate higher RevPAR by enabling properties to charge higher rates [Prasad and Dev, (2000), p.30]:

Hypothesis 6 Franchise fees will be related positively to RevPAR (the higher the franchise fees, the higher the RevPAR).

Hypothesis 7 Guest satisfaction will be related positively to RevPAR (the higher the guest satisfaction, the higher the RevPAR).

5 Data and results of empirical analyses

5.1 Data

We obtained data pertaining to the hotel property and brand variables we tested from a combination of sources. First, we used the *US Hotel Franchise Fee Guide* that is published by the independent consulting firm, HVS, to obtain franchise fees. The HVS guide lists franchise fees for most US hotel brands. We obtained data pertaining to guest satisfaction from the Market Metrix Hospitality Index (MMHI), which lists guest satisfaction ratings for all US brands. The HVS Franchise Fee Guide and the MMHI are among the most trusted and widely used sources of hotel brand data.[3] Our sample included the 52 brands that were listed on both of these sources, providing us with both franchise fees and guest satisfaction ratings for each brand in the sample. We then sought data pertaining to brand age, brand size, property age, and RevPAR from additional sources. We ascertained brand age, brand size, and RevPAR from the sample companies' annual reports, schedule 10-Ks, or websites as well as media reports and press releases. The independent consulting firm Smith Travel Research (STR Global) graciously agreed to provide us with data pertaining to property age by brand.[4]

Table 1 Hotel brand sample by segment with relevant data

Brand	*Age of brand*	*# of hotels*	*Franchise fee*	*Customer satisfaction*
First-class				
Conrad	20	18	11.1%	89.0
Courtyard	24	858	9.9%	83.6
Crowne Plaza	26	366	10.5%	82.8
Doubletree Hotels	40	218	11.3%	84.6
Embassy Suites	25	201	9.8%	84.4
Four Points	14	148	10.9%	81.8
Hilton	84	520	12.6%	81.7
Homewood Suites	20	275	8.8%	90.0
Hotel Indigo	5	33	11.0%	90.2
Hyatt Place	3	146	9.4%	89.3
Intercontinental Hotels & Resorts	62	166	10.8%	85.0
Le Meridien	37	105	13.3%	84.3
Marriott	52	545	12.2%	83.6
Radisson	100	422	10.3%	82.4

Table 1 Hotel brand sample by segment with relevant data (continued)

Brand	*Age of brand*	*# of hotels*	*Franchise fee*	*Customer satisfaction*
Renaissance	27	143	9.8%	84.9
Residence Inn	34	608	8.6%	86.9
Sheraton	72	398	12.7%	81.7
SpringHill Suites	10	256	9.8%	85.6
Staybridge Suites	11	182	9.7%	88.1
Westin	79	169	15.0%	84.4
Woodfin Suites	9	3	9.1%	87.2
Mid-rate				
Americlnn	25	220	10.0%	84.1
Baymont Inn & Suites	36	240	10.4%	83.4
Candlewood Suites	14	254	10.6%	86.5
Clarion	27	296	9.4%	82.2
Country Inn/Suites	22	494	10.0%	84.9
Fairfield Inn/Suites	22	629	10.1%	83.3
Hampton Inn/Suites	25	1,714	10.3%	84.7
Hawthorn Suites	26	89	8.2%	82.3
Holiday Inn	57	1,319	10.3%	81.7
Holiday Inn Express	18	2,069	11.8%	82.5
Howard Johnson	55	492	10.5%	77.6
La Quinta Inn & Suites	41	750	9.4%	82.9
Mainstay Suites	12	37	9.5%	84.7
Quality Inn/Suites	70	1,354	10.4%	79.4
Ramada	55	910	10.5%	77.1
Red Lion	50	45	8.7%	81.0
Sleep Inn	20	402	10.5%	84.3
TownePlace	12	184	8.9%	85.2
Wingate by Wyndham	13	166	10.7%	86.7
Economy				
Americas Best Value Inn	10	900	5.2%	78.5
Days Inn	39	1,858	12.6%	78.6
Econolodge	40	846	11.0%	80.2
Knights Inn	35	343	7.8%	72.5
Microtel	20	314	9.4%	84.4
Motel 6	47	1,001	10.0%	77.3
Park Inn	23	100	11.1%	79.2
Red Roof Inn	37	345	9.7%	79.5
Rodeway Inn	47	375	7.3%	79.4
Studio 6	11	59	8.5%	80.9
Super 8	35	2,137	11.7%	78.7
Travelodge	69	460	12.0%	80.6

We operationalised brand age as the number of years since a given brand was first established, irrespective of changes in brand name (Westin, for example, began as Western International). The total number of hotels affiliated with each brand constituted that brand's size. For property age, we used the mean age of all properties under each brand as provided by STR. We calculated franchise fees as a percentage of a brand's total room revenue. We based guest satisfaction scores in the first instance on the MMHI 100-point scale. For additional tests, we used the June 2010 *Consumer Reports* ratings to provide an alternative metric. We also included chain scale as a control variable using the abovementioned company sources to classify hotels as first-class, mid-rate, or economy scale. We list the 52 brands we studied and the relevant data for each brand in Table 1.

5.2 Results

We began the analysis of the abovementioned empirical data by conducting a correlation analysis of the variables representing brand and property attributes. Table 2 shows that we found a strong correlation between brand age and franchise fees and a weak correlation between brand size and franchise fees. Insofar, as these results indicated statistical relationships between these variables, we conducted multiple linear regressions to learn more about those relationships.

Table 2 Correlation matrix of main variables (see online version for colours)

Variables	*# of hotels*	*Age of brand*	*Franchise fee*	*Customer satisfaction*
# of hotels	*1.000*	0.182	0.162	–0.396
Age of brand	0.182	*1.000*	0.430	–0.419
Franchise fee	0.162	0.430	*1.000*	0.082
Customer satisfaction	–0.396	–0.419	0.082	*1.000*

We first regressed brand age, brand size, and franchise fees (the independent variables) on guest satisfaction with a brand (the dependent variable). Table 3 shows that the coefficient of determination (R^2), which can be interpreted as the percent of the variance in the dependent variable predicted by variation in all the independent variables, was 0.385. In other words, we can explain 38.5% of the total variation in guest satisfaction with a brand by the linear relationship between brand age, brand size, and franchise fees. The p-values of the independent variables were all below the 0.05 cut-off level (or 95% confidence interval), indicating that the coefficients were all statistically significant. The negative coefficients of brand age and brand size indicate that they are not strong indicators of guest satisfaction with a brand, disconfirming Hypothesis 1A and Hypothesis 2. On the other hand, the coefficient of franchise fees is positive, supporting Hypothesis 3.

For our second test, we regressed brand age, brand size, and guest satisfaction as independent variables on franchisee fees as the dependent variable. We show the coefficient of determination in Table 4: $R^2 = 0.309$. The results indicate that we can explain 30.9% of the total variation in franchise fees by the linear relationship between brand age, brand size, and guest satisfaction with a brand. We found brand age and guest satisfaction to be statistically significant at the 0.05 level, with brand size statistically significant at the 0.10 level. These results tentatively support Hypotheses 4 and 5, pending additional tests that control for hotel age and chain scale.

Table 3 The relationship between brand age, brand size, franchise fees and guest satisfaction with a brand

Regression statistics								
Multiple R			0.621					
R square			0.385					
Adjusted R square			0.347					
Standard error			2.889					
Observations			52					
	df		*SS*		*MS*		*F*	
Regression	3		251.030		83.677		10.025 ($p < 0.05$)	
Residual	48		400.629		8.346			
Total	51		651.659					
	Coefficients	*Standard error*	*t stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	78.722	2.705	29.102	3.777E-32	73.283	84.161	73.283	84.161
Age of brand	–0.082	0.0204	–4.014	0.000	–0.123	–0.041	–0.123	–0.041
#of hotels	–0.002	0.001	–3.128	0.003	–0.004	–0.001	–0.004	–0.001
Franchise fee	80.886	28.388	2.849	0.006	23.809	137.964	23.809	137.964

Table 4 The relationship between brand age, brand size, guest satisfaction with a brand and franchise fees

Regression statistics								
Multiple R			0.556					
R square			0.309					
Adjusted R square			0.266					
Standard error			0.014					
Observations			52					
	df		*SS*		*MS*		*F*	
Regression	3		0.004		0.001		7.15 ($p < 0.01$)	
Residual	48		0.009		0.000			
Total	51		0.013					
	Coefficients	*Standard error*	*t stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	–0.063	0.054	–1.160	0.252	–0.172	0.046	–0.172	0.046
Age of brand	0.000	9.466E-05	4.224	0.000	0.000	0.001	0.000	0.001
#of hotels	6.622E-06	3.932E-06	1.684	0.099	–1.284E-06	1.453E-05	–1.284E-06	1.453E-05
Customer satisfaction	0.002	0.001	2.849	0.006	0.001	0.003	0.001	0.003

Table 5 The relationship between brand age, brand size, guest satisfaction with a brand, franchise fees, and brand RevPAR

Regression statistics								
Multiple R			0.824					
R square			0.679					
Adjusted R square			0.496					
Standard error			10.828					
Observations			12					
	df		*SS*		*MS*		*F*	
Regression	4		1,736.556		434.139		3.703 ($p < 0.10$)	
Residual	7		820.683		117.240			
Total	11		2,557.239					
	Coefficients	*Standard error*	*t stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	–404.791	137.808	–2.937	0.022	–730.655	–78.927	–730.655	–78.927
Age of brand	0.274	0.203	1.350	0.219	–0.206	0.753	–0.206	0.753
#of hotels	0.008	0.008	0.982	0.359	–0.011	0.028	–0.011	0.028
Customer satisfaction	5.095	1.816	2.805	0.026	0.801	9.389	0.801	9.389
Franchise fee	102.728	414.015	0.248	0.811	–876.262	1,081.718	–876.262	1,081.718

For our third test, we regressed brand age, brand size, guest satisfaction, and franchise fees as independent variables on RevPAR as the dependent variable. Table 5 displays the coefficient of determination to be $R^2 = 0.679$, indicating that we can explain 67.9% of the total variation in RevPAR by the linear relationship between brand age, brand size, franchise fees, and guest satisfaction. However, among the variables we tested, only guest satisfaction was statistically significant, at the 0.05 level. This test failed to demonstrate a positive relationship between franchise fees and RevPAR, and therefore offers no significant support for Hypothesis 6. The results of the test do, however, support Hypothesis 7, providing evidence of a positive relationship between guest satisfaction and RevPAR.

Following these tests of the main variables, we added chain scale (first-class, mid-rate, and economy) as a control variable and conducted additional multiple linear regression analyses. For this test, we regressed brand age, brand size, franchise fees, and chain scale as the independent variables on guest satisfaction as the dependent variable. Table 6 displays the results, with brand size ($p = 0.23$) and franchise fees ($p = 0.19$) becoming statistically insignificant while brand age ($p < 0.05$) remained statistically significant.

Table 6 The relationship between brand age, brand size, franchise fees, chain scale, and satisfaction with a brand

Model	*Unstandardised coefficients*		*Standardised coefficients*	*t*	*Sig.*
	B	*Std. error*	*Beta*		
Constant	87.857	2.535		34.651	0.000
Age of brand	–0.078	0.015	–0.480	–5.026	0.000
# of hotels	–0.001	0.001	–0.118	–1.223	0.227
Franchise fee	0.309	0.230	0.137	1.345	0.185
Chain scale	–2.732	0.449	–0.600	–6.089	0.000

Table 7 Interaction effects of brand age, brand size and franchise fees on guest satisfaction with a brand

Model	*Unstandardised coefficients*		*Standardised coefficients*	*t*	*Sig.*
	B	*Std. error*	*Beta*		
Constant	82.219	9.328		8.814	0.000
Age of brand	–0.250	0.208	–1.546	–1.202	0.236
# of hotels	–0.010	0.013	–1.445	–0.737	0.465
Franchise fee	0.473	0.912	0.210	0.518	0.607
Age x #	0.000	0.000	2.721	1.071	0.290
Age x fee	0.015	0.019	1.174	0.806	0.425
# x fee	0.001	0.001	1.218	0.577	0.567
Age x # x fee	–4.014E-5	0.000	–2.849	–1.070	0.291

We then tested for interaction effects between variables, regressing brand age, brand size, and franchise fees as independent variables on guest satisfaction as the dependent variable. As we show in Table 7, none of the variables was statistically significant,

suggesting that there are no significant interaction effects between the independent variables.

In the exploratory spirit of this study, we analysed whether we might find differing results for guest satisfaction if we were to use another metric for that measure. Calling this 'guest ratings', we obtained our figures from the June 2010 *Consumer Reports* study of hotel brands. *Consumer Reports* surveyed just over two-thirds of the hotels included in the MMHI survey on which we had based our guest satisfaction measure, including what it characterised as chains for which there were a significant number of participants, rating those brands while excluding brands it regarded as having an insufficient numbers of participants. We then ran a series of tests using the *Consumer Reports* guest ratings in place of the guest satisfaction figures we had obtained from MMHI, finding similar results.

We first regressed brand age, brand size, and franchise fees as independent variables on guest ratings as the dependent variable, producing a coefficient of determination of $R^2 = 0.247$. Thus, we can explain 24.7% of the total variation in guest ratings by the linear relationship between brand age, brand size, and franchise fees. As we show in Table 8, brand age and brand size were statistically significant at $p = 0.05$ while franchise fees was statistically significant at $p = 0.10$. We then controlled for chain scale, yielding a coefficient of determination of $R^2 = 0.698$, indicating that we can explain 69.8% of the total variation in guest ratings by the linear relationship between brand age, brand size, and franchise fees. However, as shown in Table 9, brand size ($p = 0.993$) and franchise fees ($p = 0.144$) became statistically insignificant in this model at the 0.05 level, while brand age remained statistically significant ($p = 0.001$). We then tested these variables for interaction effects on guest satisfaction, and found no statistically significant interaction effects between brand age, brand size, and franchise fees on guest satisfaction, as we show in Table 10.

Table 8 The relationship between brand age, brand size, franchise fees, and guest ratings

Model	*Unstandardised coefficients*		*Standardised coefficients*	*t*	*Sig.*
	B	*Std. error*	*Beta*		
Constant	68.377	7.580		9.020	0.000
Age of brand	–0.124	0.054	–0.422	–2.274	0.030
# of hotels	–0.004	0.002	–0.355	–2.262	0.031
Franchise fee	1.545	0.807	0.357	1.913	0.065

Table 9 The relationship between brand age, brand size, franchise fees, chain scale, and guest ratings

Model	*Unstandardised coefficients*		*Standardised coefficients*	*t*	*Sig.*
	B	*Std. error*	*Beta*		
Constant	86.134	5.551		15.516	0.000
Age of brand	–0.130	0.035	–0.443	–3.710	0.001
# of hotels	1.255E-5	0.001	0.001	0.009	0.993
Franchise fee	0.797	0.531	0.184	1.501	0.144
Chain scale	–6.778	1.012	–0.774	–6.699	0.000

Table 10 Interaction effects of brand age, brand size, and franchise fees on guest ratings when controlling for chain scale

Model	*Unstandardised coefficients*		*Standardised coefficients*	*t*	*Sig.*
	B	*Std. error*	*Beta*		
Constant	92.003	27.907		3.297	0.003
Age of brand	–0.334	0.450	–1.140	–0.743	0.464
# of hotels	–0.023	0.032	–1.866	–0.706	0.487
Franchise fee	0.091	2.734	0.021	0.033	0.974
Age x #	0.001	0.001	3.291	1.304	0.204
Age x fee	0.022	0.042	0.948	0.518	0.609
# x fee	0.002	0.003	2.191	0.767	0.450
Age x # x fee	–0.061E-5	0.000	–3.647	–1.382	0.179
Chain scale	–6.344	1.045	–0.724	–6.071	0.000

At this juncture, we brought hotel property age into the analysis as a covariate. We regressed brand age, brand size, and franchise fees as independent variables on guest ratings as the dependent variable. After controlling for hotel age, we found a coefficient of determination of $R^2 = 0.592$, indicating that we can explain 59.2% of the total variation in guest ratings by the linear relationship between brand age, brand size, franchise fees, and hotel age. Table 11 shows that, after controlling for hotel age, brand size and franchise fees were statistically significant at the 0.05 level, while brand age became statistically insignificant ($p = 0.53$). This result suggests that the control variable, hotel age, accounts for the difference, thus supporting Hypothesis 1B. On the other hand, we discovered that controlling for hotel age eliminated the tentative support we had found in an earlier test for Hypothesis 4: Our study failed to confirm a correlation between brand age and franchise fees. Yet, adding hotel age to the analysis had no effect on the relationship between brand size and franchise fees, so Hypothesis 5 remains supported.

Table 11 The relationship between brand age, brand size, franchise fees, hotel property age, and guest satisfaction with a brand

Model	*Unstandardised coefficients*		*Standardised coefficients*	*t*	*Sig.*
	B	*Std. error*	*Beta*		
Constant	84.040	2.480		33.885	0.000
Age of brand	–0.014	0.022	–0.085	–0.627	0.534
# of hotels	–0.002	0.001	–0.349	–3.661	0.001
Franchise fee	0.517	0.241	0.229	2.142	0.037
Hotel age	–0.238	0.049	–0.597	–4.877	0.000

We ran three additional tests. First, we added chain scale as an additional covariate in the regression model. As we show in Table 12, controlling for both hotel age and chain scale rendered brand age and franchise fees statistically insignificant as predictors of guest satisfaction, while brand size remained statistically significant at the 0.10 level. Next, again controlling for hotel age and chain scale, we tested for interaction effects of brand

age, brand size, and franchise fees on guest satisfaction. As we show in Table 13, none of the interactions were statistically significant. Finally, we again controlled for hotel age and chain scale and regressed brand age, brand size, and franchise fees as independent variables on guest ratings as the dependent variable. As we show in Table 14, none of the independent variables was statistically significant with these controls in the model.

Table 12 The relationship between brand age, brand size, franchise fees, hotel property age, chain scale, and guest satisfaction with a brand

Model	*Unstandardised coefficients*		*Standardised coefficients*	*t*	*Sig.*
	B	*Std. error*	*Beta*		
Constant	90.279	2.184		41.329	0.000
Age of brand	–0.027	0.017	–0.168	–1.600	0.116
# of hotels	–0.001	0.001	–0.150	–1.857	0.070
Franchise fee	0.176	0.194	0.078	0.905	0.370
Hotel age	–0.178	0.039	–0.448	–4.606	0.000
Chain scale	–2.262	0.389	–0.497	–5.817	0.000

Table 13 Interaction effects of brand age, brand size, and franchise fees on guest satisfaction with a brand when controlling for hotel property age and chain scale

Model	*Unstandardised coefficients*		*Standardised coefficients*	*t*	*Sig.*
	B	*Std. error*	*Beta*		
Constant	85.899	6.288		13.660	0.000
Age of brand	0.079	0.147	0.489	0.536	0.595
# of hotels	0.005	0.009	0.676	0.511	0.612
Franchise fee	0.619	0.611	0.274	1.013	0.317
Hotel age	–0.190	0.043	–0.478	–4.395	0.000
Chain scale	–2.240	0.410	–0.492	–5.469	0.000
Age X #	0.000	0.000	–0.926	–0.535	0.596
Age X fee	–0.010	0.013	–0.760	–0.759	0.452
# X fee	–0.001	0.001	–0.932	–0.653	0.517
Age X # X fee	1.430E-5	0.000	1.014	0.559	0.579

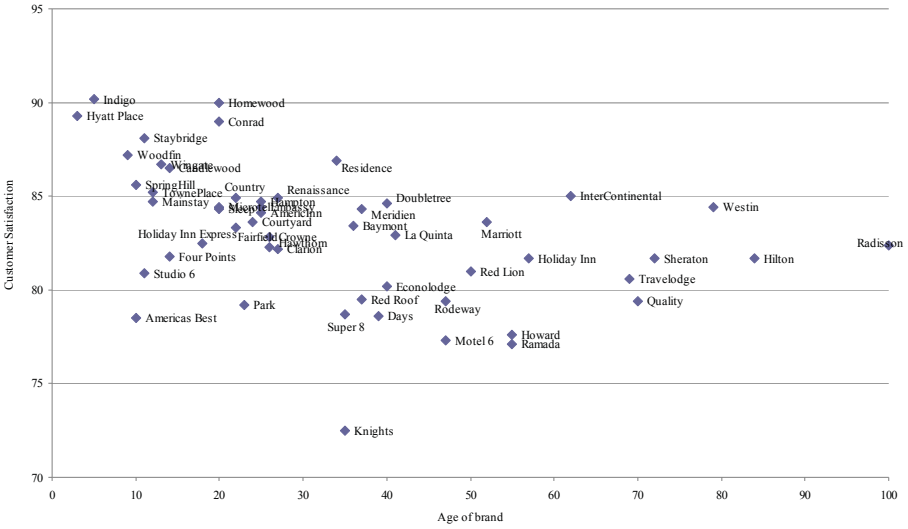
Table 14 The relationship between brand age, brand size, franchise fees, hotel property age, chain scale, and guest ratings

Model	*Unstandardised coefficients*		*Standardised coefficients*	*t*	*Sig.*
	B	*Std. error*	*Beta*		
Constant	93.788	4.583		20.464	0.000
Age of brand	–0.020	0.036	–0.067	–0.549	0.587
# of hotels	–9.035E-5	0.001	–0.007	–0.085	0.933
Franchise fee	0.321	0.422	0.074	0.760	0.454
Hotel age	–0.399	0.086	–0.489	–4.642	0.000
Chain scale	–6.032	0.796	–0.689	–7.579	0.000

6 Discussion of results

We offered seven hypotheses in our analyses of correlations between franchise fees, other hotel brand attributes, and property age with brand performance. As our hypotheses predicted, hotel age correlated negatively with guest satisfaction with a brand, franchise fees correlated positively with guest satisfaction, brand size correlated positively with franchise fees, and guest satisfaction correlated positively with RevPAR. On the other hand, neither brand age nor brand size indicated guest satisfaction with a brand, brand age was not related to franchise fees, and there was no relationship between franchise fees and RevPAR. In this section, we discuss these results, providing a series of scatterplot graphs that illustrate our findings as well as a figure depicting a model in which franchise fees play a role in generating strong performance.

Figure 1 The relationship between brand age and guest satisfaction with a brand (see online version for colours)



We found that hotel age is more likely than brand age to drive guest satisfaction ratings for brands. Although longevity might in itself boost a brand's reputation, and most likely does boost its recognition in the marketplace, an aging brand might also find it difficult to keep pace with marketplace dynamics. Consider Figure 1, a graphical scatterplot of the scores for brand age and guest satisfaction with each brand. Several newer brands form a cluster of higher guest satisfaction scores – Hotel Indigo is a prominent example of this – while several older brands rank near the bottom. Perhaps the latter offer relatively outdated or overly traditional physical plants, helping to account for the lower guest ratings, but clearly Hotel Indigo – a new, boutique brand emphasising local art and culture – has quickly ascended the ratings ladder, earning the top rating among first-class brands from J.D. Power and Associates as recently as 2011 (IHG, 2011). Another highly rated newer brand, Hyatt Place, calls each of its lobbies a Hyatt Place Gallery, offering an adjoining Bakery and Café, a TV den, and other home-like comforts. We suggest that the

higher ratings earned by these newer brands may be due to newer, more contemporary facilities and currently popular amenities.

Figure 2 The relationship between brand size and guest satisfaction with a brand (see online version for colours)

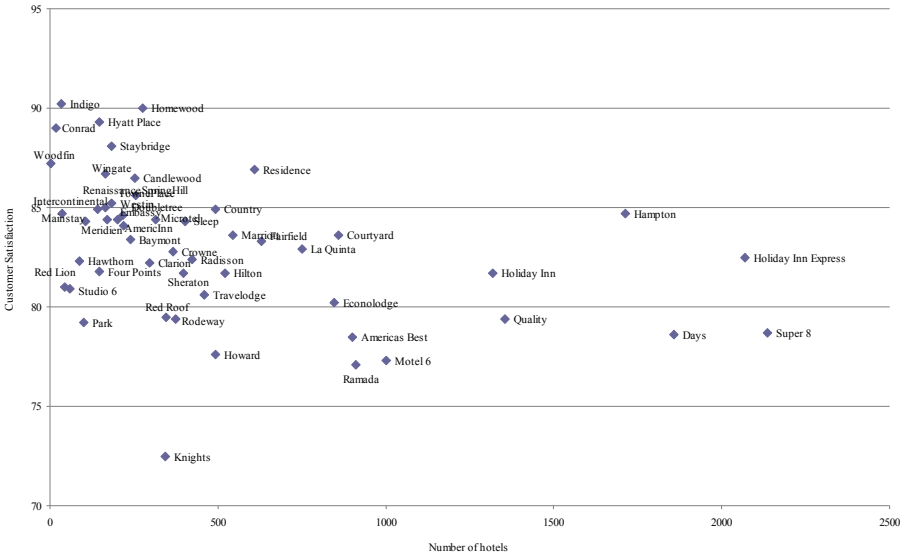
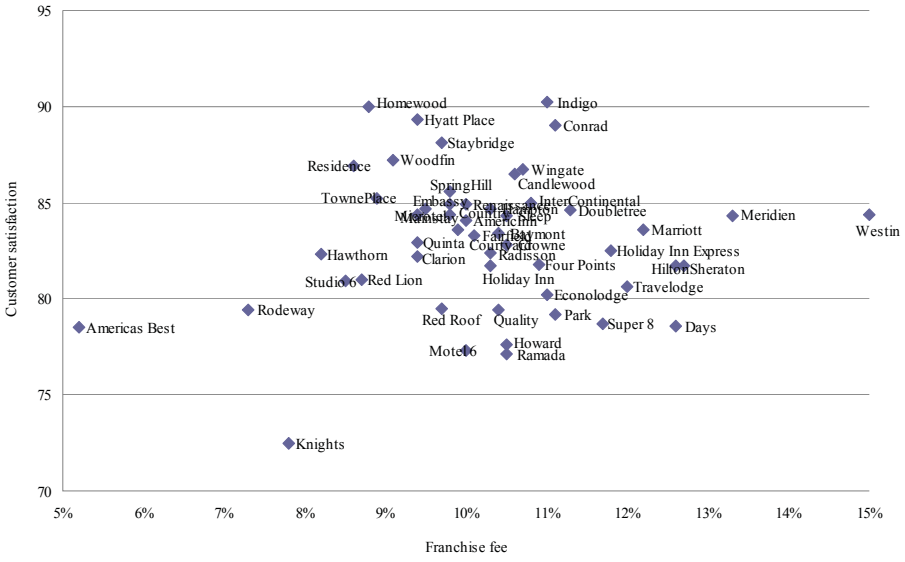


Figure 3 The relationship between customer satisfaction and RevPAR (see online version for colours)

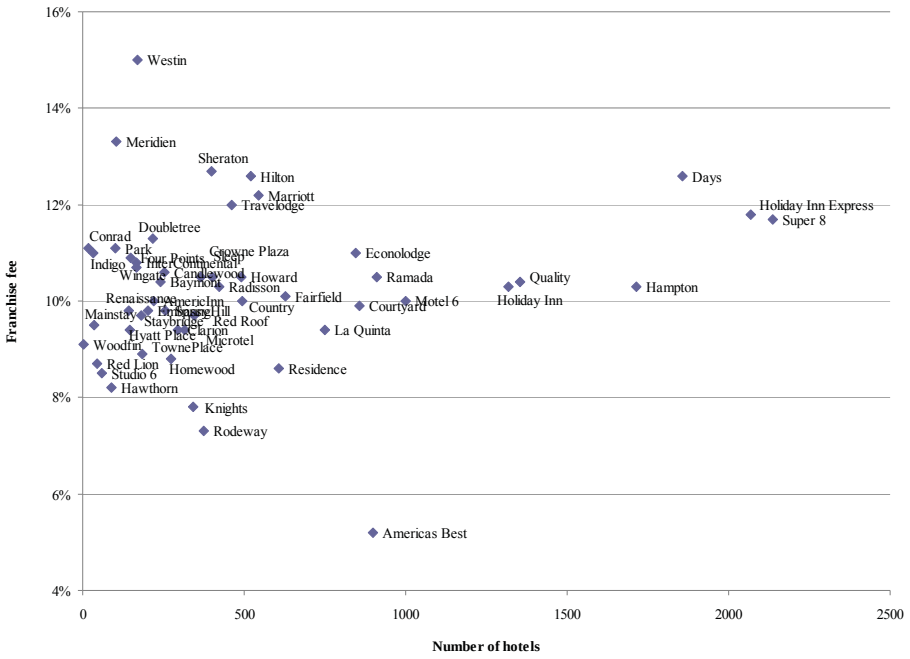
Based on our results, we suggest that brand size is no better indication of guest satisfaction fwith a brand than is brand age. Indeed, it appears that the larger the brand, the less satisfied the guest, as depicted in Figure 2 scatterplot. None of the 12 largest brands in our sample earned an MMHI rating above 85, while nearly all the brands that earned a rating above 85 were among the smaller brands. This result may be due to difficulties in maintaining consistency across a brand with many properties, as smaller brands may find it easier to maintain brand standards across a smaller set. Beyond these results, we found few correlations involving either brand size or brand age on the one hand and guest satisfaction or RevPAR on the other. Indeed, only guest satisfaction among the brand attributes we tested correlated with RevPAR (see Figure 3). It is not surprising that satisfied guests mean more revenue to a brand, but this result may be because first-class hotels draw customers who are more likely to value quality over economy, thus driving up RevPAR through higher prices. This conclusion is rather speculative, of course, due to the small sample size, but Figure 3 suggests it is possible, given the correlation between RevPAR and guest satisfaction shown for Staybridge (a relatively new, upscale suites brand) and Hotel Indigo.

Figure 4 The relationship between franchise fees and guest satisfaction with a brand (see online version for colours)



From a theoretical perspective, we expected that our findings pertaining to franchise fees as a brand attribute would be enlightening due to the scarcity of studies seeking correlations between franchise fees and the other attributes we included in our analysis. In this respect, we emphasise the support we found for Hypothesis 3, indicating that the higher the franchise fees, the higher the guest satisfaction with a brand. This finding seems to validate our argument that higher franchise fees come with a service premium offered by a brand to its hotel properties, which means superior amenities and services to guests. A glance at the scatterplot of this finding in Figure 4 suggests that, while this correlation may be weakly positive, it is positive nonetheless.

Figure 5 The relationship between franchise fees and brand size (see online version for colours)



Our findings also provided evidence supporting the correlation between higher franchise fees and brand size. As shown in Figure 5, although a number of smaller brands are clustered below the 10% fee rate, the nine largest brands all charge at or above this rate. We suggest that higher brand awareness may account for this phenomenon, as larger brand size signals the achievement of a stable and trustful franchising experience that provides a premium to asset managers, owners, and investors, even for lower-scale hotels such as Holiday Inn Express and Super 8. On the other hand, although we found evidence supporting a similar relationship between brand age and franchise fees, that evidence proved misleading when we controlled for hotel age (see Figure 5).

In spite of these encouraging results for correlations involving franchise fees, we were surprised to find no correlation between higher fees and higher RevPAR. Our results for RevPAR relied on a small sample, however, so perhaps future research will find such a correlation. In the meantime, we tentatively posit a theoretical basis for franchise fees as an indicator of better brand performance, which we characterise as a 'virtuous circle' operating at the hotel property level (see Figure 6). Leading from franchise fees to a motivation to increase revenue to operational improvement to higher guest satisfaction to higher RevPAR, such a relationship, if it exists, assigns an important role to franchise fees in brand success – to the extent that other factors help translate property success into brand success. That is, a hotel property owner facing relatively high franchise fees should be strongly motivated to generate a stronger revenue stream by improving its operation. While we could not confirm this proposition, our findings in support of the hypothesis that higher franchise fees correlate with higher guest satisfaction takes a step in that direction.

Figure 6 The 'virtuous' circle of franchise fees, guest satisfaction with a brand and brand RevPAR (see online version for colours)

7 Limitations and directions for future research

We hope our research for this study spawns more work that will explore several interesting issues in greater depth. We acknowledge a range of limitations that necessitate such work if we are to understand more fully how the brand attributes we studied – including franchise fees – play into hotel performance.

Perhaps the most obvious limitation pertains to sample size. For our main variables, we were able to collect data on only 52 brands. We omitted brands at the highest end of the scale (many of which do not franchise). These characteristics of the sample increase the likelihood that we omitted relevant factors from our analysis. We note, however, the existence of statistical studies with samples in the $N = 52$ range in other fields[5], and we cite O'Neill et al. (2006), another study related to franchising in the hotel industry, which used a sample of only 26 brands. From a statistical perspective, problems with sample size have more to do with representing a target population in relevant ways than with sample size, per se. By excluding luxury brands from our sample, we limit our findings in a way that has nothing to do with sample size. With only several hundred brands on the global hotel marketplace, our sample represents most segments at both the brand and market levels, save for those luxury brands. The sample at our disposal to test relationships involving RevPAR, however, consisting of only 12 brands, clearly raises questions about sample representativeness. Relatively few brands make their RevPAR figures public, so any research involving RevPAR is problematic, even though it provides a natural indication of brand performance.

These sampling issues suggest that future research into the relationships we studied should attempt to cover all segments of the broader global market and seek other sources of market data, perhaps through direct communication with the brands themselves. Moreover, we used brand-level data; future research should gather corresponding data at the local market level to amplify the property owner's perspective, which we captured

only through data regarding average property age at the brand level. Further, we could not consider nor obtain data regarding the effects on age of individual property renovations, significant or otherwise.

Promising avenues of future research might also open up with a finer-grained approach to franchise fees. We aggregated all fees extracted by brands from hotel property owners, which overlooked important distinctions among the components of such fees. For example, our study will have missed significant brand-to-brand differences in the proportion of total fees devoted to marketing programmes that property owners can use to generate business. The same is true for reservations systems. Thus, future research should parse aggregate fees to determine which components of the fee structure play the most prominent roles in brand performance.

Although we may have occasionally implied causality in our comments, we cannot claim to have identified causal relationships in a cross-sectional study such as this one. To determine causal relationships between the brand attributes we tested, we would have had to study these relationships over time. Future research should do so.

In this study, we addressed promising ideas in an exploratory fashion. We wanted to take a step towards discovering new research directions, especially regarding the extent to which franchise fees indicate, or perhaps even generate, better performance. We also wanted to generate tentative recommendations for hotel owners seeking to maximise guest satisfaction, increase market share and revenue, and ultimately, the value of their hotels.

8 Conclusions and implications

Our research yielded a number of findings, and at least one result opens the way to potentially important future research. Before we mention it, we review some results that reinforce what we believe are natural intuitions. For example, in finding that hotel property age correlates negatively with guest satisfaction, we confirm a commonsense connection between the condition and appeal of a hotel's physical plant and current trends in marketing and consumer demand. We also found that guest satisfaction with a brand correlates positively with brand RevPAR, another result we expected to find, as a brand that consistently garners high marks from guests should command higher rates.

These findings yield lessons for both hotel property owners and brand managers. For example, a brand manager would do well to set aside the resources necessary to infuse the brand's properties with updated facilities and services that keep pace with, if not lead industry trends. This might very well bear important implications for franchising contracts. A brand manager who agrees to a particularly long contract may be vulnerable to declining ratings if the contract does not allow the brand to keep its franchised facilities up to date. Conversely, a hotel property owner would do well to understand how its brand tracks guest satisfaction at the brand level and take steps to maintain brand standards. Because guest satisfaction with a brand enhances RevPAR, following these recommendations should make franchising relationships more lucrative for both parties.

Among the more interesting of our findings was that brand size correlates negatively with guest satisfaction with a brand. One might expect it to be difficult for a brand to grow significantly without achieving high marks for guest satisfaction, but a large-scale chain operation may also meet with considerable difficulty in monitoring its properties

for compliance with brand standards. A prospective hotel property owner, or one considering switching brands should consider smaller brands first and compare their guest satisfaction ratings with those of larger brands before entering into a franchise contract. For their part, managers of large brands should ensure that their brands measure and manage guest ratings extensively and establish correspondingly extensive communication channels through which to monitor their franchisees' operations.

Finally, we found a positive correlation between franchise fees and guest satisfaction with a brand, our most interesting finding insofar as our research into relationships between franchise fees and other brand and property attributes advances the farthest into new territory. If we could attribute this finding to superior services and resources provided to franchisors by brands that charge higher franchise fees, we would recommend that a prospective franchisee carefully weigh the value-for-money proposition in a prospective franchising relationship and maintain pressure on its franchisor to deliver that value. Since doing so should increase guest satisfaction and therefore RevPAR, both parties win. Yet, this finding raises the question regarding precisely how superior brand services and resources enable hotel property owners to achieve higher guest ratings for their franchisors.

Given the exploratory nature of this study, its greatest value lies perhaps in laying the groundwork for future research, especially regarding franchise fees. In particular, we hope to see further studies into the role of franchise fees that parse out the components of the aggregate costs of franchising to hotel property owners. Does the positive relationship between franchise fees and guest satisfaction depend more on a brand's marketing programme or on its reputation? How great a competitive advantage does a strong reservations system provide hotel property owners? We must answer these questions if we are to understand why higher franchise fees yield higher guest ratings. We believe that higher fees provide superior resources, and propose that confirming that proposition should motivate future research.

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Notes

1 O'Neill and Carlbäck (2011) compared branded versus non-branded hotel operations at the individual property level and considered the effects of franchise fees in that context. Conlon (2004) considered franchise fees in the context of analysing the effects of franchising on competition in hotel markets.

2 Rushmore, 2009, reports a range of franchise fees by segment, the highest of which were 12.6% in the 'Economy Class' (Days Inn), 11.8% in the 'Mid-Rate Class' (Holiday Inn Express), and 15% in 'First Class' (Westin). Global Hotel Exchange, 2012, mentions a '15% of gross franchise fee' for the 'average hotel'.

3 HVS (http://www.hvs.com) is perhaps the leading worldwide hospitality-focused consulting and services organisation. HVS publishes the *US Hotel Franchise Fee Guide* approximately every two years. The Guide covered 25 economy, 29 mid-rate, and 42 first-class hotel brands in 2011. Market Metrix (http://www.marketmetrix.com) provides feedback solutions to more than 100 hospitality enterprise clients in 70 countries. The MMHI compiles guest satisfaction ratings, based on 35,000 guest interviews, for more than 250 hotel, car rental, and airline brands, on a quarterly basis. Guest satisfaction scores range from 0 = fully dissatisfied to 100 = fully satisfied.

4 Smith Travel Research, founded in 1985, formed STR Global in 2008, combining its non-North American operations with Deloitte's Hotel Benchmark and The Bench. Between STR and STR Global, the company provides data supporting market share analysis for all global hotel brands, representing more than 5 million hotel rooms worldwide.

5 See, for example, Wallace et al. (2006) and Ma et al. (2007). Although these studies involve medical research, they illustrate the use of samples in the same range as ours on which to base research inferences. Parts of both studies include N = 52 samples.