

# A Strategy for Estimating Identified Intangible Asset Value: Hotel Affiliation Contribution

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## abstract

Although researchers and practitioners generally agree that intangible value exists in hotels, methodologies for estimating it continue to evolve. This article presents a strategy for estimating identified intangible asset (IIA) value and applies it to a paired comparison of two franchise-affiliated hotels in the same central business district. The analysis focuses on the benefits versus costs of affiliation. This research concludes that IIA value for affiliation exists to the extent that revenues attributable to affiliation exceed the cost of that affiliation. When costs of affiliation approach or exceed revenues from the franchise relationship, the IIA value for affiliation is limited or nonexistent.

Researchers and practitioners generally agree that intangible value exists in hotels.<sup>1</sup> Although the need to distinguish between tangible and intangible hotel value has been well documented, there is no general agreement regarding how to do so.

The lion's share of a hotel's intangible value is usually based on its brand name.<sup>2</sup> While there appears to be general agreement that a large portion of a hotel's total intangible asset (TIA) value is derived from its brand or franchise affiliation, the value contribution from franchise affiliation can vary widely despite relative uniformity in hotel franchise fees among similar brands. Therefore, using a hotel's franchise fees as the sole basis for estimating a hotel's intangible value may not always be the most appropriate technique for estimating intangible value.

This article presents a strategy for estimating a hotel's intangible value by comparing the market value of the total assets of the business (MVTAB) and value allocated to identified intangible assets due to the affiliation (IIA<sub>a</sub>) of two affiliated hotels in the same central business district, valued as of the same date. Both properties are affiliated with internationally known hotel companies, and they are direct competitors with one another. Having isolated the analysis for time differences, location, and market dissimilarities, comparison can be made of IIA<sub>a</sub>, which, as previously noted, are largely attributable to brand affiliation for hotel properties. It should also be noted, however, that other identified intangible

1. See Heather J. Reichardt and David C. Lennhoff, "Hotel Asset Allocation: Separating the Tangible Personality," *Assessment Journal* 10, no.1 (Winter 2003): 25–31; Eric E. Belfrage, "Business Value Allocation in Lodging Valuation," *The Appraisal Journal* (July 2001): 277–282; and William N. Kinnard, Jr., Elaine M. Worzala, and Dan L. Swango, "Intangible Assets in an Operating First-Class Downtown Hotel," *The Appraisal Journal* (January 2001): 68–83.
2. John W. O'Neill, "An Automated Valuation Model for Hotels," *Cornell Hotel & Restaurant Administration Quarterly* 45, no. 3 (August 2004): 260–268.

assets (IIA) value can be attributed to items such as workforce, contracts, cash, etc. This comparison does not attempt to allocate value to a specific chain, but rather to present a case study demonstrating the flexibility, robustness, and reliability of the methodology used for isolating  $IIA_a$ —a methodology intended to assist real estate appraisers and other real estate analysts undertaking hotel valuation assignments. Previous research has found that the analysis of hotel pairs is a valid approach for the estimation of the value of TIA.<sup>5</sup>

The methodology presented in this article concludes that when room-night sales (demand) attributable to the franchise/brand distribution channels exceed the relative ongoing cost of affiliation, intangible asset value (IAV) is generated. Conversely, when sales attributable to the franchisor approximate or are less than the cost of affiliation, IAV may be minimal or nonexistent. It should be noted, the methodology measures identified intangible assets attributed to affiliation only ( $IIA_a$ ), and although  $IIA_a$  represents the majority of IIA for hotels, as previously stated, it excludes other IIA value attributed to items such as workforce, contracts, cash, etc.

To a very large degree, hotel chain affiliation creates IIA value; other components include service and management,<sup>4</sup> both of which are usually highly controlled and mandated by the hotel franchisor. Chain standards allow a hotel chain to achieve brand consistency, and therefore, loyal guests.<sup>5</sup> This relationship is best evidenced in the success of brand loyalty programs, such as Marriott's "Rewards" program or Hilton's "HHonors" program, at generating repeat business. Therefore, to some degree the resulting room nights delivered to a hotel through its distribution channels (e.g., 1-800 #, corporate Internet bookings, and travel agent relationships) are inclusive of the service and management components expected by the guest of a specific brand.

Franchise-controlled distribution channels are meticulously tracked for individual hotels by every franchisor and monitored closely by most hotel operators. Delivery of room nights is the currency of the franchise companies; i.e., it is what they have to

sell. Virtually every hotel management professional knows down to the room night the number of rooms (and therefore room revenue) that has been provided by the franchise company. If the revenue for the given period does not exceed the cost of affiliation, the franchisee may be dissatisfied with the franchisee/franchisor relationship. As actual empirical evidence, this quantification may be a reliable tool for the valuations professional appraisers perform in complying with the mandate of the *Uniform Standards of Professional Practice* (USPAP) Standards Rule 1-4(g), which states: "An appraiser must analyze the effect on value of any personal property, trade fixtures, or intangible items that are not real property, but are included in the appraisal."<sup>6</sup>

The case study that follows will show the valuation of the total assets of the business (TAB) and identified intangible assets attributed to the hotel affiliation ( $IIA_a$ ). A step-by-step analysis of the TAB and  $IIA_a$  quantification are included, resulting in a demonstration of two quite different indications of contribution. Both the net income incremental flow-through methodology and the calculation of the appropriate intangible capitalization rates are discussed in a later section of this article.

## Background

Table 1 outlines the valuation of two central business district (CBD) hotels in a major metropolitan city.<sup>7</sup> Although "Hotel A" has only an approximate 19% greater value on a per-guest unit basis, its  $IIA_a$  value is approximately five times that calculated for "Hotel B." One of the recently developed methods of measuring IIA is to consider in part excess market share.

One measure of value attributable to these sort of intangible assets of an operating hotel is any indicated continuing excess of total annual room revenues per available room (RevPAR) over the competitive market norm that can be associated with the name, reputation, and flag affiliation of the hotel being appraised.<sup>8</sup>

The use of the revenue per available room (RevPAR) comparison attributing excess RevPAR over the natural market share does indeed partially quantify intangible value. However, the competitive set

3. Belfrage.

4. Ibid.

5. John W. O'Neill and Anna S. Mattila, "Hotel Branding Strategy: Its Relationship to Guest Satisfaction and Room Revenue," *Journal of Hospitality & Tourism Research* 28, no. 2 (2004): 156–165.

6. Appraisal Standards Board, Standards Rule 1-4(g), Lines 681–682, *Uniform Standards of Professional Appraisal Practice and Advisory Opinions 2004 Edition* (Washington, DC: The Appraisal Foundation, 2004), 120.

7. The case study properties were the subject of tax appeals and the information presented here is part of the public record of those tax appeals.

8. Appraisal Institute, Course 800, "Separating Real and Personal Property from Intangible Business Assets," (Chicago: Appraisal Institute, 2001), 9–17; RevPAR is calculated as occupancy percentage multiplied by average daily rate.

**Table 1 Hotel Valuations**

	<b>Hotel A</b>	<b>Hotel B<sup>1</sup></b>
<b>Physical</b>		
Hotel affiliation	Hyatt	Crowne Plaza
Number of rooms	400	421
Location	CBD	CBD
Date of value estimate <sup>2</sup>	1/1/02	1/1/02
Year built	1983	1987 <sup>3</sup>
Number of stories	22	5-12
Function space (sq. ft.)	17,000	10,000
Rack rate	\$139	\$159
Most recent renovation	1995 <sup>4</sup>	1995 <sup>5</sup>
<b>Economics</b>		
Average daily rate projection	\$122 <sup>6</sup>	\$105
Occupancy projection	65% <sup>6</sup>	68%
RevPAR projection	\$79.30	\$71.40
Projected 2002 market RevPAR	\$62.19	\$62.19
Subject RevPAR yield	128%	115%
Projected room revenue	\$11,577,800 <sup>6</sup>	\$10,971,660
Projected total revenue	\$19,378,050	\$16,300,816
Projected net income ratio	18.7%	19.7%
Projected NOI	\$3,614,777	\$3,208,147
Overall rate	11%	11%
Market value of total assets of business	\$32,900,000 <sup>6</sup>	\$29,200,000
Value per unit	\$82,250	\$69,358
Furniture, fixtures & equipment <sup>7</sup>	\$3,360,000	\$2,300,000
<b>Affiliation Statistics</b>		
Brand identification, source of business report <sup>8</sup>	"Spirit" Distribution Report	Net Room Night Channel Report
Percent of room nights attributed to affiliation <sup>9</sup>	34%	15%
Revenues attributed to franchise <sup>10</sup>	\$3,936,452	\$1,645,749
Amounts included in expenses for affiliation costs	\$1,937,805 <sup>11</sup>	\$1,206,883
IIA <sub>a</sub> revenue residing in cash flow (before operating expenses) <sup>12</sup>	\$1,998,647	\$438,866
Net income to IIA <sub>a</sub> <sup>13</sup>	\$999,324	\$219,433
Intangible capitalization rate <sup>14</sup>	18%	18%
IIA <sub>a</sub> value indication <sup>15</sup>	\$5,551,800	\$1,219,072
Rounded	\$5,600,000	\$1,200,000
IIA <sub>a</sub> /MVTAB	17%	4%

**Notes:**

- Property consists of a 377-room Crowne Plaza and a 44-room boutique hotel, jointly operated.
- Retrospective tax lien date.
- Original construction of 278 rooms was in 1987; a 99-room addition was completed in 1997, along with the renovation of an adjacent, circa-1910 loft operated as a boutique hotel that also houses the property's food service division.
- Complete renovation in 1995; some soft goods and TVs were replaced in 2000-2001; a \$6,000,000 renovation was postponed due to 9/11 and planned for 2004.
- Complete renovation in 1995; guest-room renovations totaling \$3.2 million completed in 2000.
- Assumes completion of renovations required by Hyatt.
- Allocated based on personal property tax return. Also referred to as tangible personal property (TPP).
- Distribution reports provided for analysis of room nights attributed to franchisor channels (1-800 #, corporate Internet, and global distribution channels, i.e., travel agents).
- Reservations driven by various channels adjusted for walk-in business. Also adjusted for nonaffiliated revenue from the "Lofts" of Hotel B.
- Annual rooms revenue multiplied by percentage attributed to affiliation.
- Equivalent to 10% of total revenue (17% of rooms revenue); incorporates all-inclusive management/franchise agreement.
- Based on total revenue attributed to affiliation, less costs of affiliation paid in various expense line items.
- Based on application of net income flow through ratio to gross IIA<sub>a</sub> revenue.
- Intangible capitalization rate quantified in subsequent section.
- NOI attributable to IIA<sub>a</sub>/intangible capitalization rate.

used to measure the fair share will likely contain similarly affiliated hotels. Each of these hotels will bring service, affiliation, and management components together to compete for its fair share. Earning RevPAR equal to the submarket average can be a positive accomplishment for an operator, and it does not necessarily represent a baseline below which no intangible value exists. The RevPAR analysis appears effective, but requires additional consideration to build up the total contribution of identified intangibles. Further, a hotel does not necessarily possess intangible value merely because of occupancy and average daily rate (i.e., RevPAR) premiums; its RevPAR premiums may be due to its physical location. This is the case for Hotel B. Recent research has concluded that such premiums are in fact often attributable to a hotel's location in its market, i.e., realty.<sup>9</sup>

The conclusions depicted in Table 1 under Affiliation Statistics show the total benefit of affiliation in both percentage of rooms sold and dollars of room revenue. The costs paid for that affiliation are deducted, resulting in the net benefit of the franchise. This methodology shows the cost versus benefit of the actual affiliation to the specific hotel. It employs the chains' own accounting of actual rooms attributed to their distribution channels. These channels provide guests through the toll-free reservation telephone lines, corporate Internet sites, and travel agent relationships, as opposed to reasons relating to real estate such as location, physical characteristics, access, exposure, etc. Lesser and Rubin have indicated that

The use of a recognized brand name generally increases a hotel's revenue-generating ability and thus adds to the hotel's bottom line, enhancing its value. Yet this portion of the property's value is clearly attributable to the brand name rather than the property's real estate component...<sup>10</sup>

In the literature, similar statements are made by both Dowell and Rushmore.<sup>11</sup> The Rushmore valuation method of determining TIA asserts that if management and franchise fees are removed from the cash flow, the residual value is real estate. This approach may be counter to market expectations that the affiliation component should generate revenues in excess of cost.

It is interesting to note that Hotel B actually maintains a higher stabilized-occupancy rate than Hotel A, yet attributes fewer occupied rooms to its affiliation. This difference is due in part to its loca-

tion across the street from a convention center and heavy reliance on direct group sales that are generated by the city's convention facilities authority, as well as the property's own sales effort. These room sales are not directly attributable to the InterContinental Hotel Group (parent company of Crowne Plaza) affiliation, and are therefore property specific. In other words, the guests are staying at Hotel B in large part because of its convenient location relative to the convention center. This factor is not directly related to any of the components of intangible assets (service, affiliation, or management) and should therefore be attributed to real estate, as indicated by the previously discussed logic. Of course, it is possible that someone might choose to stay at an affiliated hotel in part because of its brand recognition, but not use the brand distribution channels to reserve a room. Room nights generated in this manner would not be specifically included in the methodology here. These room nights are not "identified," and therefore not considered as IIA revenue.

During the research process, the management company of Hotel B expressed dissatisfaction with the amount of business derived from the affiliation; it has considered alternate or independent operation, i.e., disaffiliating. This potential strategic shift is supported and demonstrated by the data shown in Table 1, which indicates minimal IIA<sub>a</sub> contribution. In short, it is market-based proof that little IIA<sub>a</sub> value exists for Hotel B, despite its quality brand affiliation and relatively high RevPAR yield. The converse is true for Hotel A. Its management is pleased with the maximization of value attributable to affiliation; approximately 34% of the rooms sold can be attributed to the hotel's affiliation with Hyatt Hotels Corporation. These are rooms sold as a result of being managed and franchised by the Hyatt corporate entity. Although approximately 17% of room revenue (10% of total revenue) is charged by the franchisor in an "all inclusive agreement," a significant amount of intangible revenue continues to reside in the cash flow. The capitalized net income attributed to IIA<sub>a</sub> indicates the value attributed to affiliation for Hotel A.

Consider the pro forma revenue and expense summaries for the two hotels as presented in Tables 2 and 3. The Hyatt affiliation accounts for approximately 34% of room revenues, or about \$3.9 million

9. O'Neill.

10. Daniel H. Lesser and Karen E. Rubin, "Understanding the Unique Aspects of Hotel Property Tax Valuation," *The Appraisal Journal* (January 1993): 9-27.

11. Bernice T. Dowell, "Hotel Investment Analysis: In Search of Business Value," *Journal of Property Tax Management* 4, no. 2 (Mar/Apr 1997): 46-53; Stephen Rushmore, *Hotels and Motels: A Guide to Market Analysis, Investment Analysis, and Valuations* (Chicago: Appraisal Institute, 1992), 247.

in revenue, based on its “Spirit” distribution report (the “Spirit” system is Hyatt’s proprietary central reservation system). Management and franchise fees are combined under the all-inclusive agreement at 6% of total revenue (including food and beverage). Other fees paid to the franchisor include a 2% allocation to the room department expense, accounting for reservation expenses, and travel agent commissions paid as a result of the global distribution system (GDS) relationships held by the franchise company. Additional costs of affiliation are included in the marketing expense line item. This category includes chain advertising and guest loyalty program costs. These costs, as with those allocated to “rooms,” are determined through a study of historic statements, and a review of the franchise agreement. The combined costs of affiliation paid by the hotel entity approximate 10% of total revenue (17% of room revenue) annually. Typically, franchise costs are based on room revenue; however, in some full-service upscale and upper high-end properties, a portion of costs of affiliation can be based on a ratio to total revenues. Generally, hotel operators assume the benefit of franchise relationships resides in the franchisor’s ability to produce guest room sales. This assumption exists because rooms are the most profitable hotel department/division, and usually represent the majority of revenue in a hotel operation. While it is possible that in full-service hotels, other departmental revenues, such as food and beverage revenue, could benefit from the affiliation, these revenues are not identified, and not included as IIA revenue in this methodology.

In the case of Hotel A, the subject receives a revenue enhancement of \$3,936,452 (see Table 2) that was delivered to the property through the franchise relationship, not due to physical or real estate reasons. The cost (fees paid to Hyatt) associated with the receipt of this revenue totals \$1,937,805, resulting in a positive gross benefit to the hotel of \$1,998,647 annually, on a stabilized basis. Of course, this revenue is still subject to operating expenses. These calculations are detailed in Table 2. The net income incremental flow through (discussed later) at 50% is used to process the gross revenue, indicating net IIA<sub>a</sub> for Hotel A at \$999,524.

For Hotel B, about 15% of room revenue can be attributed to the InterContinental affiliation. This amount reflects the net contribution after having isolated and removed the rooms sold at the small boutique hotel operated in conjunction with this asset. Typically, an InterContinental affiliation will con-

tribute a greater number of occupied rooms; however, in this case, group rooms attributed to the convention center are sold directly by the hotel and convention center staff. This situation understandably minimizes IIA<sub>a</sub> because the rooms are sold due to location, i.e., real estate-related factors. Removal of the costs associated with affiliation, which total 11% of room revenue, leaves only \$438,866 in gross IIA<sub>a</sub> revenue (the net benefit of affiliation). Application of the 50% flow-through ratio offers \$219,433 in net IIA<sub>a</sub> revenue for Hotel B. These calculations are detailed in Table 3.

### **Incremental Flow Through of Net Operating Income**

The incremental flow through of gross IIA<sub>a</sub> revenue to net is reflected at a higher ratio than the overall net operating income (NOI) ratio. Comparison of matched-pair revenue streams was conducted to determine the flow through of gross IIA<sub>a</sub> revenue to net. Samples of 14 comparable, full-service, U.S. hotel operating statements were selected that reflected multiple year operations with significant revenue (volume) changes. The data showed that on average, the top incremental 20.2% of total revenue resulted in a mean 55.7% rate of flow through to NOI. The data further showed that the range of top 13% to 38% of revenue experienced a rate of flow through to NOI of 35% to 67%. While additional research could be conducted to refine these conclusions, the analysis has relied on a 50% flow-through rate to NOI, which falls near the middle of the 35% to 67% range for comparable properties.

### **Capitalization Rate Determination**

A major issue with processing net IIA<sub>a</sub> revenue is the lack of market support for an applicable matching intangible asset capitalization rate. Since the hotel intangible revenue does not sell separately from the real estate revenue, there is no market-based return criteria.

A reasonable method to determine the intangible capitalization rate is to prepare a band-of-investment table allocating value components to their appropriate real estate and nonrealty items. To solve for the intangible capitalization rate, the following are necessary:

- An appropriate indication of the overall capitalization rate for hotel investments
- An appropriate indication of the overall capitalization rate for a comparable “real estate only” asset

**Table 2 Hotel A 2002 Pro Forma**

<b>Description</b>	<b>Total</b>	<b>Revenue from/ to Franchise</b>	<b>Percent of Room Revenue</b>
<b>Income:</b>			
Rooms (400)	\$11,577,800	\$3,936,452	34.00%
Food & beverage	\$6,453,200		
Telephone	\$427,050		
Other	\$920,000		
<b>Total Revenue</b>	<b>\$19,378,050</b>		
<b>Expenses:</b>			
<b>Percent of Total Revenue</b>			
<b>Operated Dept.</b>			
Rooms	\$2,952,339	\$387,561	2.00%
Food & beverage	\$5,033,496		
Telephone	\$320,288		
Other operated dept.	\$506,000		
<b>Total Oper. Dept. Expenses</b>	<b>\$8,812,123</b>		
<b>Undistributed Expenses</b>			
Energy	\$678,232		
Marketing	\$1,162,683	\$387,561	2.00%
Franchise fees	\$0		
Repair & maintenance	\$775,122		
Admin. & general	\$1,550,244		
<b>Total Undistributed Expenses</b>	<b>\$4,166,281</b>		
<b>Management/ franchise (all inclusive)</b>	<b>\$1,162,683</b>	<b>\$1,162,683</b>	<b>6.00%</b>
<b>Fixed Expenses</b>			
Insurance	\$290,671		
Taxes	\$556,394		
Other	\$0		
Reserves	\$775,122		
<b>Total Fixed Expenses</b>	<b>\$1,622,187</b>		
<b>Total Expenses</b>	<b>\$15,763,273</b>	<b>\$1,937,805</b>	<b>10.00%</b>
		\$1,998,647	<i>gross IIA<sub>a</sub> revenue before expenses</i>
<b>Net Operating Income</b>	<b>\$3,614,777</b>	<b>\$999,324</b>	<i>net IIA<sub>a</sub> revenue at 50% flow through</i>
Rooms Sold	94,900		
Occupancy	65.00%		
Average Daily Rate	\$122.00		
Average F&B Per Occupied Room	\$68.00		

- An appropriate indication of overall capitalization rate for the tangible personal property (TPP)
- An estimate of the percentage of the total assets of the business attributable to real estate, tangible personal property, and intangible assets

An algebraic equation can be used to solve for the return applicable to intangibles if the other variables can be approximated. Table 4 demonstrates the extraction of the intangible capitalization rate. Of course, refinements can tailor the variables in Table 4 to a specific set of property criteria; however, in this case, a more generic set of variables applicable to both Hotels A and B is employed.

Overall capitalization rates for hotel investments have been well documented by numerous national studies, including the nationally known, quarterly Korpacz Real Estate Investor Survey. The hotels that

are the subject of this article are both institutional-grade, full-service properties that substantially conform to the capitalization rates reported by the Korpacz survey. The average overall rate for a full-service hotel investment is 10.77% according to the first quarter 2002 Korpacz report. For purposes of this analysis, and to conform to the overall rate used in the valuation of Hotels A and B, this indication has been rounded to 11%. This rate is applicable to the total assets of the business.

A good indicator of an overall capitalization rate for the real estate alone would be a property type that possesses minimal or no intangible value. Apartments, while requiring some management intensity, are generally not considered to have a large intangible component. The same Korpacz survey is used to estimate the overall capitalization rate applicable

**Table 3 Hotel B 2002 Pro Forma**

Description	Total	Revenue from/to Franchise	Percent of Room Revenue
<b>Income</b>			
Rooms (421)	\$10,971,660	\$1,645,749	15.00%
Food & Beverage	\$4,493,156		
Telephone	\$209,000		
Other	\$627,000		
<b>Total Revenue</b>	<b>\$16,300,816</b>		
<b>Expenses:</b>			
<b>Operated Dept.</b>			
Rooms	\$2,907,490	\$219,433	2.00%
Food & beverage	\$3,369,867		
Telephone	\$146,300		
Other operated dept	\$501,600		
<b>Total Oper. Dept. Expenses</b>	<b>\$6,925,257</b>		
<b>Undistributed Expenses</b>			
Energy	\$489,024		
Marketing	\$1,385,569	\$493,725	4.50%
Franchise fees	\$489,024	\$493,725	4.50%
Repair & maintenance	\$611,281		
Admin. & general	\$1,467,073		
<b>Total Undistributed Expenses</b>	<b>\$4,441,972</b>		
<b>Management</b>			
Management	\$407,520		
<b>Fixed Expenses</b>			
Insurance	\$163,008		
Taxes	\$502,879		
Other	\$0		
Reserves	\$652,033		
<b>Total Fixed Expenses</b>	<b>\$1,317,920</b>		
<b>Total Expenses</b>	<b>\$13,092,669</b>	<b>\$1,206,883</b>	<b>11.00%</b>
Net Operating Income	\$3,208,147	\$438,866	<i>gross IIA<sub>a</sub> revenue before expenses</i>
Rooms Sold	104,492	\$219,433	<i>net IIA<sub>a</sub> revenue</i>
Occupancy	68.00%		
Average Daily Rate	\$105.00		
Average F&B Per Occupied Room	\$43.00		

**Table 4 Extraction of Intangible Asset Capitalization Rate**

Position	Percent of Value	Capitalization Rate	Product
Real estate	70%	8.5% <sup>1</sup>	5.95
Personal property (TPP)	10%	15.0%	1.50
Intangibles (TIA)	20%	(x)	3.55
<b>Total Rate (TAB)</b>	<b>100%</b>		<b>11.0<sup>2</sup></b>

1. Real estate  $R_e$  (based on first quarter 2002 Korpacz Real Estate Investor Survey—Apartments, average 8.56%, rounded 8.5%).

2. Hotel  $R_o$  (TAB) (based on first quarter 2002 Korpacz Real Estate Investor Survey—Full-Service Hotels, average 10.77%, rounded 11.0%).

to a similar, investment-grade apartment property. This rate averaged 8.56% for the first quarter in 2002, rounded to 8.5% in Table 4.

Tangible personal property would understandably have a higher capitalization rate than either of the two returns cited previously, primarily because these assets are a depreciating class of property. Typically, hotel personalty such as furniture, mattresses, case goods, etc., is replaced as frequently as every 6 to 10 years. Generally, these items have little value at the end of the life cycle. A 15% capitalization rate for TPP is used in this analysis; this rate is based on typical furnishing finance rates and amortization periods incorporating both returns on and of value.

The percentage of the total assets of a business (TAB) that are allocated to the three components (realty, personalty, and intangibles) can be based on an iteration of the revenue percentages adjusted for various rates of return, or known values in the case of the depreciated value of personal property. Alternatively, this analysis applies percentage estimates cited in other published discussions on intangible value. The Appraisal Institute's Course 800 states: "Several recent studies have shown quite clearly that name recognition and good reputation for high-quality service ('name brand'), plus affiliation ('flag'), can add as much as 20% to 25% to the value of a successfully operating hotel."<sup>12</sup> Belfrage in his article indicates that "...a business component of between 15% to 25% is reasonable in this case."<sup>13</sup> For illustration purposes, the following allocation of value components are used: 70% real estate, 10% TPP, and 20% IAV. The calculation appears in Table 4.

In the above example, the difference between the hotel capitalization rate ( $R_o$ ) and the real estate and TPP "products" (3.55%) can be divided by the intangible asset percentage (20%) to determine the required return to intangibles. Solving for  $X$  results in the following:

$$\begin{aligned} X &= (R_o - (R_{RE} \times \%RE) - (R_{TPP} \times \%TPP)) / \%TIA \\ X &= (11.0 - (8.5 \times .7) - (15 \times .1)) / .2 \\ X &= (11.0 - (5.95) - (1.5)) / .2 \\ X &= (11.0 - 7.45) / .2 \\ X &= 3.55 / .2 \\ X &= 17.75 \\ X &= 18\% \text{ (rounded)} \end{aligned}$$

This calculation indicates the market would require an approximate 18% capitalization rate on this level of intangible revenue for comparable hotels of institutional grade. Of course, hotel assets that are not institutional grade would require a matching data set of return requirements for both hotel and apartment (or alternate real estate vehicle) investments. Adjustments to the ratios of various components of value also may be required.

## Value Calculations

Net operating income attributable to the intangible affiliation revenue capitalized at the appropriate capitalization rate (calculated in this case at 18%) offers the following value indications attributed to the affiliation for each property:

Net IIA <sub>a</sub> Revenue: R(IIA <sub>a</sub> ) = IIA <sub>a</sub> value attributed to franchise affiliation	
Hotel A: \$999,324/18%	= \$5,551,800, rounded \$5,600,000
Hotel B: \$219,433/18%	= \$1,219,072, rounded \$1,200,000

## Conclusion

Having controlled for time, location, and market characteristics, this case study demonstrates a method of allocation of IIA value attributable to affiliation (IIA<sub>a</sub>). Other intangibles that are not readily quantifiable may exist. This method incorporates a cost-benefit analysis capitalizing the actual net revenues attributed to the specific franchise relationship, after deducting the associated costs. The methodology is market-based because it employs the properties' own empirical tracking reports generated by the franchise companies to estimate revenue attributed to affiliation.

Flexibility is demonstrated by comparison of the property fundamentals. Hotel A offers an understandably higher IIA<sub>a</sub> value in this case because the net IIA<sub>a</sub> revenue is substantially greater than with Hotel B; greater reliance is placed on the franchise relationship to generate room sales for Hotel A. The process automatically accounts for the lower level of reliance on affiliation of Hotel B, placing more value on the real estate due to locational attributes, a large portion of which relates to the adjacent convention center (an attribute credited to real estate only).

12. Appraisal Institute, Course 800, 9-17.

13. Belfrage, 281.

The reliability of this process is supported by its market-related conclusions as evidenced by the operator of Hotel B indicating dissatisfaction with the franchise affiliation. The application of this methodology indicated a substantially lower contribution to value, consistent with management's assertion. As was determined in the research process, minimal  $IIA_a$  value is not necessarily related to the specific affiliation; in this case it is due to the group destination of the adjacent convention center, allowing/requiring greater than typical direct sales. These direct sales are attributed to real estate attributes, not intangibles. The methodology presented herein inherently accounts for this factor and consistently measures the contribution to the intangibles attributable to franchise affiliation.

The specific conclusion of this study is that identified intangible assets related to affiliation ( $IIA_a$ ) exist to the extent that revenues attributable to affiliation exceed the cost of that affiliation. The reverse is also true; when costs of affiliation approach or exceed revenues from the franchise relationship, the  $IIA_a$  is limited or nonexistent. In these cases, hoteliers often inherently realize the lack of contribution by repositioning through alternate franchise affiliation or independent operations.

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