



# A Ten-Year Investment Analysis of Hotels

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In the past three to five years, until a few months ago, hotel prices and transactions were accelerating at a remarkable rate. During this period of industry recovery, savvy buyers and sellers were poised to secure assets as revenues and income increased and cap rates declined. This robust investment environment was not unique to hotels; private equity funds, REITs, and other investors actively sought out all types of property including office buildings, shopping center, and residential projects.

In considering the financial investment using a discounted cash flow analysis, two components are typically given the most emphasis: the change in net operating income of the property over time, and impact of the capital markets as reflected in capitalization rates.

Unlike office buildings, retail centers, and even apartment buildings, hotels have no leases to secure income. Rates and occupancy levels change almost daily and often react quickly - positively or negatively - to economic change on a short-term basis. In the last cycle, the peaks at the end of the 1990s and the nadir following in 2001 and 2002 resulted in an extraordinary fluctuation in hotel performance.

## Changes in Hotel Financial Performance

As a demonstration of the annual operating performance of hotels, a series of samples of operating statements from the mid-1990s (1994 to 1996) were compared to the statements for the same samples in the mid-2000s (2004 to 2006). Three samples were examined:

1. 30 full-service hotels
2. 33 select-service and extended-service properties
3. 11 resorts

The periods reviewed were selected as being representative of what we might call “a normalized period.” That is to say, in the mid-1990s many lodging properties were rebounding from the downturn of the recession of the early 1990s, while in the mid-2000s numerous markets were recovering from the impact of the economic downturn following the dot-com bust and the tragic events of 9/11. The middle part of each decade was neither the nadir nor the peak of the respective cycles. As a benchmark for analyzing the hotels’ performance, the CPI index change

of 28.5% for the 10-year period between 1996 and 2006 was used.

While the samples are not representative of all hotels, the trends reflected by the two points in time are consistent with the operating performance of many properties. Each sample includes a range of geographical locations, brands, improvements, and property ages and condition.

For the purposes of comparison, any ground lease payments or other unusual revenues or expenses were excluded from the analysis and franchise fees were incorporated into the marketing expense. Management fees and FF&E reserves for all properties in the sample have been standardized at 3.0% and 4.0% of gross revenues, respectively. It should also be noted that the reallocation of all insurance expense from A&G to the insurance line item in the uniform system of accounts during this period explains some of the decline of the A&G ratio and increase in the insurance line item.

To illustrate the changes in hotel financial performance in the most recent ten-year period, composite statements for three different product types were researched.

## Full-Service Hotel Performance

Table 1 (on the following page) sets forth the performance details for the 30 full-service hotels.

The data reveal that, despite the dramatic income loss experienced by many hotels in 2001 and 2002, the increase in net operating income generated by full-service hotels exceeded the increase in the rate of inflation over the ten-year term identified in this analysis. Average rate increased at 29.8%, a rate slightly higher than the 28.5% inflation rate. Occupancy and RevPAR, however, declined as many full-service hotels have been negatively impacted by a number of factors including the increase of new focused- and select-service hotel inventory.

The increase in food and beverage revenues generally exceeded inflationary growth on a per-occupied room basis, increasing by 41.5%. Telephone revenues, consistent with national and international trends, declined precipitously. Other income increased, as some hotels added amenities such as spa facilities and charged for internet access.

On the expense side, hotel operators continue to improve



**Table 1: Full-Service Hotel Performance**

	Year: 1994 to 1996			1994 to 1996			2004 to 2006			Mid 1990s to Mid 2000s		
	Number of Rooms:	12,865		12,865	Percentage of Revenue	Amount per Occupied Room	13,348	Percentage of Revenue	Amount per Occupied Room	Percentage Change	Amount per Available Room	Percentage Change
Occupied Rooms:	3,456,586		3,456,586	73.6%	\$145.69	\$147.20	3,362,101	69.0%	\$147.20			
Days Open:	365		365				365					
Occupancy:	73.6%		73.6%									
Average Rate:	\$113.39	58.8 %	\$113.39	58.8 %	\$39,144	\$145.69	\$494,886	56.4 %	\$37,076		21.7%	29.8%
RevPAR:	\$83.47	36.4	\$83.47	36.4	\$24,207	\$90.09	\$333,464	38.0	\$24,982		32.6%	41.5%
		2.7		2.7	\$1,826	\$6.79	\$9,638	1.1	\$722		-49.2%	-45.8%
		2.1		2.1	\$1,415	\$5.27	\$40,241	4.6	\$3,015		173.8%	192.1%
Total	\$66,742	100.0	\$66,742	100.0	\$66,591	\$247.84	\$878,229	100.0	\$65,795		27.0%	35.4%
<b>DEPARTMENTAL EXPENSES</b>												
Rooms	100,912	25.7	100,912	25.7	\$10,079	\$37.51	\$128,854	26.0	\$9,653		23.1%	31.3%
Food & Beverage	186,953	77.1	186,953	77.1	\$18,672	\$69.49	\$230,284	69.1	\$17,252		18.7%	26.6%
Telephone	8,574	46.9	8,574	46.9	\$856	\$3.19	\$9,443	98.0	\$707		6.1%	13.2%
Other Income	5,258	37.1	5,258	37.1	\$525	\$1.95	\$12,679	31.5	\$950		132.4%	147.9%
Total	\$301,698	45.2	\$301,698	45.2	\$30,132	\$112.15	\$381,260	43.4	\$28,563		21.8%	29.9%
<b>DEPARTMENTAL INCOME</b>												
Administrative & General	51,980	7.8	51,980	7.8	\$5,192	\$19.32	\$64,827	7.4	\$4,857		20.2%	28.2%
Marketing	42,253	6.3	42,253	6.3	\$4,220	\$15.71	\$76,567	8.7	\$5,736		74.7%	86.3%
Property Operations & Maintenance	31,470	4.7	31,470	4.7	\$3,143	\$11.70	\$37,114	4.2	\$2,780		13.7%	21.3%
Utilities	23,714	3.6	23,714	3.6	\$2,368	\$8.81	\$30,697	3.5	\$2,300		24.8%	33.1%
Total	\$149,416	22.4	\$149,416	22.4	\$14,923	\$55.54	\$209,205	23.8	\$15,673		34.9%	43.9%
<b>HOUSE PROFIT</b>												
Management Fee	215,628	32.3	215,628	32.3	\$21,536	\$80.15	\$287,764	32.8	\$21,559		28.6%	37.2%
<b>INCOME BEFORE FIXED CHARGES</b>												
Income Before Fixed Charges	195,620	29.3	195,620	29.3	\$19,538	\$72.72	\$261,366	29.8	\$19,581		27.2%	35.6%
<b>FIXED EXPENSES</b>												
Property Taxes	22,523	3.4	22,523	3.4	\$2,250	\$8.37	\$30,133	3.4	\$2,257		28.9%	37.5%
Insurance	4,203	0.6	4,203	0.6	\$420	\$1.56	\$10,658	1.2	\$798		144.4%	160.7%
Miscellaneous	883	0.1	883	0.1	\$88	\$0.33	\$4,710	0.5	\$353		414.1%	448.4%
Reserve for Replacement	25,845	3.9	25,845	3.9	\$2,581	\$9.61	\$35,198	4.0	\$2,637		31.3%	40.0%
Total	\$33,454	8.0	\$33,454	8.0	\$3,339	\$19.87	\$80,699	9.2	\$6,046		45.5%	55.2%
<b>NET INCOME</b>												
Net Income	\$142,166	21.3 %	\$142,166	21.3 %	\$14,199	\$52.85	\$180,667	20.6 %	\$13,535		22.5%	30.7%



performance efficiencies. Despite the lower RevPAR performance in the mid-2000s, rooms department expense decreased as a percentage of revenue. More notably, the food and beverage expense ratio also decreased, positively impacting the overall profitability of the hotels. As can be expected, telephone expenses increased as a percentage of a diminishing revenue source. During the period tracked for this article, many operators have invested in better cost-control methodology and practice.

Administrative and general and property operations and maintenance departments are areas where staffing and fixed costs have been heavily scrutinized. On a per-available-room basis and on an operating margin basis, both line items have increased at below-inflationary levels. While marketing expense is largely controllable, this function has been heavily invested in by hotel operators. Full-service properties still require extensive sales and marketing staff to sell the product, particularly when differentiating their product from the select-service sector. Over this ten-year period, guest loyalty became both more prevalent and more expensive with individual properties bearing increased program-associated costs. Utility costs are less controllable and have grown at 41.1%, thus exceeding inflation on a per-occupied-room basis over the ten-year period. The most dramatic increases have been in the fixed expenses. Soaring property taxes and insurance costs have burdened many hotels.

As a result of largely better cost controls, particularly in the food and beverage department, overall profitability of the sample hotels improved over the ten-year period. Despite the decline in occupancy between the two periods under analysis, net operating income in mid-2000s was 21.3 % of gross revenues as compared to 21.1 % in the mid-1990s.

#### **Select-service and Extended Stay hotel performance**

Using a sample of 33 select-service hotel and extended-stay hotel statements, the same comparison was made. While average rate increased by over 40% between the two periods, the decline in occupancy resulted in a RevPAR gain of 33.5%, still higher than the 28.5% rate of inflation. For this particular sample of select-service and extended-stay hotels, net operating income on a per-room basis was on par with the inflation index. The composite performance from the select-service and extended-stay sample is shown in Table 2.

#### **Resort Performance**

Of the three product types considered in this analysis, resorts demonstrated the strongest performance. Because of the difficulty and expense involved in the construction

of resorts, the supply of properties in this segment is more limited. As such, when demand is strong, destination resorts are often able to robustly yield-manage average rates. The average rate for the sample increased 30.9% during the ten-year period. Occupancy also increased marginally, resulting in a RevPAR increase of 32.0%, compared to the CPI change of 28.5%, as shown in Table 3.

In recent years, resorts have also been able to increase food and beverage sales while reducing food and beverage departmental expenses. The improved revenue contribution from food and beverage and the higher departmental profitability have provided positive operating leverage for the segment. This trend has also been evidenced in the spa department. (In this particular sample, the golf facility of one property was under renovation, negatively skewing the golf department performance.) As with full-service hotels, fixed costs are heavily managed, resulting in continued strong operating performance.

#### **Influence of the Capital Markets**

Hotels are difficult and volatile businesses. While the cash flow potential of the properties may not support investors' return requirements, the timing of the capital markets can often dramatically impact the valuation of the assets. In the last cycle, holding on to the assets and selling them at the right time more than compensated for the uncertainty of the annual income.

Using the capitalization rate from the two different points in time to represent the investment requirements, the composite net operating incomes from the samples were capitalized. Based on data collected by HVS, average capitalization rates for full-service hotels from 1994 to 1996 ranged from 5.7% to 7.0% and from 2004 to 2006 ranged from 5.2% to 5.5%.

Using these ranges and adjusting upwards 150 basis points from the full-service capitalization rates to those applied to the select-service properties, the change in value between the two periods far exceeds the inflation index change of 28.5%. The chart on Page 6 sets forth the results.

Capitalization rates reached their nadir in 2007 and, as a result, the increase in the capitalized values of the properties between the mid-1990s and the mid-2000s well exceeded the growth in net operating income, not to mention inflation. While hotel investors may have profited from a ten-year holding period, market timing remains a critical force in profiting from hotel cycles. The long-term value of a hotel in the most recent cycle is primarily in the influence of the financial markets.

**Table 2: Select-Service and Extended-Stay Hotel Performance**

Year:	1994 to 1996				1994 to 1996				2004 to 2006				Mid 1990s to Mid 2000s				
	Number of Rooms:	3,827	3,827	3,827	3,901	3,901	3,901	3,901	3,901	3,901	3,901	3,901	3,901	3,901	3,901	3,901	Percentage Change
Occupied Rooms:	1,074,980	1,074,980	1,074,980	1,074,980	1,074,980	1,074,980	1,074,980	1,074,980	1,074,980	1,074,980	1,074,980	1,074,980	1,074,980	1,074,980	1,074,980	1,074,980	Percentage Change
Days Open:	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365	365	Percentage Change
Occupancy:	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%	77.0%	Percentage Change
Average Rate:	\$70.25	\$70.25	\$70.25	\$70.25	\$70.25	\$70.25	\$70.25	\$70.25	\$70.25	\$70.25	\$70.25	\$70.25	\$70.25	\$70.25	\$70.25	\$70.25	Percentage Change
RevPAR:	\$54.06	\$54.06	\$54.06	\$54.06	\$54.06	\$54.06	\$54.06	\$54.06	\$54.06	\$54.06	\$54.06	\$54.06	\$54.06	\$54.06	\$54.06	\$54.06	Percentage Change
<b>REVENUE</b>																	
Rooms	75,516	75,516	75,516	75,516	75,516	75,516	75,516	75,516	75,516	75,516	75,516	75,516	75,516	75,516	75,516	75,516	Percentage Change
Telephone	2,254	2,254	2,254	2,254	2,254	2,254	2,254	2,254	2,254	2,254	2,254	2,254	2,254	2,254	2,254	2,254	Percentage Change
Other Income	1,774	1,774	1,774	1,774	1,774	1,774	1,774	1,774	1,774	1,774	1,774	1,774	1,774	1,774	1,774	1,774	Percentage Change
Total	79,544	79,544	79,544	79,544	79,544	79,544	79,544	79,544	79,544	79,544	79,544	79,544	79,544	79,544	79,544	79,544	Percentage Change
<b>DEPARTMENTAL EXPENSES*</b>																	
Rooms	17,011	17,011	17,011	17,011	17,011	17,011	17,011	17,011	17,011	17,011	17,011	17,011	17,011	17,011	17,011	17,011	Percentage Change
Telephone	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	1,087	Percentage Change
Other Expenses	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	1,007	Percentage Change
Total	19,105	19,105	19,105	19,105	19,105	19,105	19,105	19,105	19,105	19,105	19,105	19,105	19,105	19,105	19,105	19,105	Percentage Change
<b>DEPARTMENTAL INCOME</b>																	
Total	60,439	60,439	60,439	60,439	60,439	60,439	60,439	60,439	60,439	60,439	60,439	60,439	60,439	60,439	60,439	60,439	Percentage Change
<b>OPERATING EXPENSES</b>																	
Administrative & General	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	8,320	Percentage Change
Marketing	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	Percentage Change
Property Operations & Maintenance	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	3,994	Percentage Change
Utilities	3,567	3,567	3,567	3,567	3,567	3,567	3,567	3,567	3,567	3,567	3,567	3,567	3,567	3,567	3,567	3,567	Percentage Change
Total	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	21,078	Percentage Change
<b>HOUSE PROFIT</b>																	
Total	39,361	39,361	39,361	39,361	39,361	39,361	39,361	39,361	39,361	39,361	39,361	39,361	39,361	39,361	39,361	39,361	Percentage Change
Management Fee	2,386	2,386	2,386	2,386	2,386	2,386	2,386	2,386	2,386	2,386	2,386	2,386	2,386	2,386	2,386	2,386	Percentage Change
<b>INCOME BEFORE FIXED CHARGES</b>																	
Total	36,975	36,975	36,975	36,975	36,975	36,975	36,975	36,975	36,975	36,975	36,975	36,975	36,975	36,975	36,975	36,975	Percentage Change
<b>FIXED EXPENSES</b>																	
Property Taxes	3,156	3,156	3,156	3,156	3,156	3,156	3,156	3,156	3,156	3,156	3,156	3,156	3,156	3,156	3,156	3,156	Percentage Change
Insurance	533	533	533	533	533	533	533	533	533	533	533	533	533	533	533	533	Percentage Change
Miscellaneous	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	Percentage Change
Reserve for Replacement	3,182	3,182	3,182	3,182	3,182	3,182	3,182	3,182	3,182	3,182	3,182	3,182	3,182	3,182	3,182	3,182	Percentage Change
Total	6,884	6,884	6,884	6,884	6,884	6,884	6,884	6,884	6,884	6,884	6,884	6,884	6,884	6,884	6,884	6,884	Percentage Change
<b>NET INCOME</b>																	
Total	\$30,091	\$30,091	\$30,091	\$30,091	\$30,091	\$30,091	\$30,091	\$30,091	\$30,091	\$30,091	\$30,091	\$30,091	\$30,091	\$30,091	\$30,091	\$30,091	Percentage Change

Departmental expense ratios are expressed as a percentage of departmental revenues

\*Marketing expenses include franchise fees

**Table 3: Resort Performance**

	Composite Statement						Composite Statement						Mid 1990s to Mid 2000s Percentage Change						
	Year: 1994 to 1996			Year: 2004 to 2006			1996			2004 to 2006									
	Number of Rooms:	Occupied Rooms:	Days Open:	Occupancy:	Average Rate:	RevPAR:	Number of Rooms:	Occupied Rooms:	Days Open:	Occupancy:	Average Rate:	RevPAR:		Number of Rooms:	Occupied Rooms:	Days Open:	Occupancy:	Average Rate:	RevPAR:
	5755	1,545,699	365	73.6%	\$170.76	\$125.65	5755	212,647	365	73.6%	\$161.41	\$165.87	5985	1,620,585	365	74.2%	\$223.59	\$165.87	
<b>REVENUE</b>																			
Rooms	\$263,940	183,271	9,794	35.7	51.5	\$45,863	\$339,135	235,484	12,584	35.7	\$58,929	\$362,353	298,425	8,123	35.7	46.2	\$60,544	\$362,353	
Food and Beverage																			
Telephone																			
Golf																			
Spa																			
Retail																			
Other Income																			
Total	512,872	331,811	89,118	100.0	51.5	\$8,118	658,987	426,334	483,464	100.0	\$130,908	783,486	483,464	46.9	45.7%				
<b>DEPARTMENTAL EXPENSES</b>																			
Rooms	60,334	22,506	808	22.9	22.9	13,471	77,523	28,918	107,671	22.9	14,702	87,994	54,301	40.2	39.1%				
Food and Beverage																			
Telephone																			
Golf																			
Spa																			
Retail																			
Other Income																			
Total	227,038	39,451	146,881	44.3	44.3	50,690	188,731	213,995	213,995	44.3	57,931	346,718	213,995	46.8	45.7%				
<b>DEPARTMENTAL INCOME</b>																			
Rooms	285,834	184,921	49,667	55.7	55.7	63,817	367,267	237,611	269,511	55.7	72,977	436,768	269,511	46.9	45.7%				
Food and Beverage																			
Telephone																			
Golf																			
Spa																			
Retail																			
Other Income																			
Total	285,834	184,921	49,667	55.7	55.7	63,817	367,267	237,611	269,511	55.7	72,977	436,768	269,511	46.9	45.7%				
<b>OPERATING EXPENSES</b>																			
Administrative & General	36,687	23,731	819	7.2	7.2	8,191	47,139	30,501	33,151	7.2	8,975	53,718	33,151	40.8	39.7%				
Marketing	32,215	20,841	7,193	6.3	6.3	7,193	41,393	26,781	31,111	6.3	8,423	50,414	31,111	50.5	49.3%				
Property Operations & Maintenance	24,301	15,721	3,629	4.7	4.7	5,426	31,224	20,201	18,711	4.7	5,066	30,320	18,711	20.0	19.0%				
Energy	16,295	10,521	3,629	3.2	3.2	3,629	20,886	13,511	14,241	3.2	3,856	23,080	14,241	36.5	35.4%				
Total	109,498	70,821	24,438	21.3	21.3	24,438	140,642	90,991	97,971	21.3	26,528	158,771	97,971	39.5	38.3%				
<b>HOUSE PROFIT</b>																			
Management Fee	15,386	9,951	3,435	3.0	3.0	3,435	19,770	12,791	14,501	3.0	3,927	23,505	14,501	46.9	45.7%				
<b>INCOME BEFORE FIXED CHARGES</b>																			
	160,990	104,151	206,855	31.4	31.4	35,944	254,492	133,831	157,041	31.4	42,522	254,492	157,041	52.0	50.8%				
<b>FIXED EXPENSES</b>																			
Property Taxes	14,163	9,161	3,162	2.8	2.8	3,162	18,198	11,771	12,401	2.8	3,357	20,093	12,401	36.4	35.3%				
Insurance	4,239	2,741	946	0.8	0.8	946	5,447	3,521	6,041	0.8	1,637	9,795	6,041	122.2	120.4%				
Leases	328	57	73	0.1	0.1	73	421	0.27	7,441	0.1	2,015	12,061	7,441	3435.8	3407.2%				
Other	1,451	252	324	0.3	0.3	324	1,864	1,211	3,181	0.3	860	5,149	3,181	241.2	238.5%				
Reserve for Replacement	20,515	13,271	4,580	4.0	4.0	4,580	26,359	17,051	19,341	4.0	5,236	33,339	19,341	46.9	45.7%				
Total	40,696	26,331	9,086	8.0	8.0	9,086	52,290	33,831	48,401	8.0	13,106	78,437	48,401	85.3	83.8%				
<b>NET INCOME</b>																			
	\$120,294	\$77,821	\$154,565	23.4	23.4	\$26,858	\$176,055	\$100,001	\$108,641	23.4	\$29,416	\$176,055	\$108,641	40.7	39.6%				




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**Per-Room Value Analysis**


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		Net Operating Income per Room	Percentage Difference	Cap Rate	Implied Value	Percentage Difference
Full Service	1994 to 1996	\$8,489		7.00 %	\$121,273	
	2004 to 2006	11,258	32.6 %	5.50	204,682	68.8 %
Select Service	1994 to 1996	\$7,863		8.50 %	\$92,503	
	2004 to 2006	9,602	22.1 %	7.00	137,170	48.3 %
Resort	1994 to 1996	\$20,903		7.00 %	\$298,607	
	2004 to 2006	31,107	48.8 %	5.50	565,578	89.4 %

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**About the Author:**


*Elaine Sahlins is Senior Vice President with the HVS Consulting & Valuation office in San Francisco, California. She holds an undergraduate degree from Barnard College, Columbia University in New York City and an MPS degree in Hotel Administration from Cornell University. After graduating from Cornell she worked for VMS Realty in Chicago analyzing hotel investments, and then went on to join Security Pacific in San Francisco, which was subsequently acquired by Bank of America. She joined HVS in 1987 as a Director in the San Francisco office. Ms. Sahlins also, with Suzanne Mellen, directs the HVS Gaming division.*

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**About HVS:**

Since 1980, HVS has provided hospitality services to more than 10,000 hotels throughout the world. Principals and associates of the firm have written textbooks and thousands of articles regarding all aspects of the hospitality industry, and literally “wrote the book” on how hotels should be valued.