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# Hotel Cap Rates and Values in a Changing Market Environment

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It's hard to miss the headlines about the collapse of the sub-prime mortgage market and its impact on residential values these days, but less is heard about the impact of the credit crunch upon commercial real estate values, especially hotels. As of late 2007 we heard that hotel performance was holding up, though the recent stock market plunge and impending recession would clearly indicate a changing market environment.

Gauging just how much hotel values have been impacted by changing market conditions is challenging due to reduced sales activity. We witnessed a marked slowdown in hotel sales transactions during the latter half of 2007 that is expected to continue into 2008. Preliminary projections by HVS indicate that sales activity in 2007 declined by approximately 6% over that of 2006, however, over 75% of those sales occurred during the first six months of the year. Transaction activity began to slow markedly in July after extremely robust activity during the last three years. In 2007, 51 or 24% of the 215 annual major sales recorded thus far took place in the second half of the year, as compared with 115 or 46% of the 249 major sales in 2006. Many of the sales transactions were already in the making; transaction activity has further slowed given the continued uncertainty of the capital markets and the cloud of a recession.

In the absence of transaction data, we can gauge the current trend in hotel values by analyzing the impact the change in the cost of capital has had on hotel capitalization rates. The tightening of credit and stricter loan underwriting has increased the cost of capital and made it more difficult to obtain. Spreads used to set interest rates have increased by roundly 150 to 200 basis points, from as low as 110 to 150 basis points over the yield on the 10-year treasury to 250 to 300 basis points today; however, treasury yields have declined to off-set a large portion of this rise. As of this writing, financing was available in the 6.5% to 7.5% range, very favorable

by historical standards; the effect of the interest rate cut by the Fed on January 22nd still remains to be seen. The biggest impact has been from lower loan-to-value ratios (LTVs), which have been reduced to 65% to 70% from the 75% to 80% range. Debt coverage ratios are back in favor, ranging from 1.30 to 1.40, levels that reflect the norm of hotel financing prior to the looser lending standards of the past few years. In addition to more conservative LTVs, the general availability of capital has been reduced due to limited activity by CMBS lenders and stricter underwriting. Equity investors must contribute a greater portion of the capital required to close transactions. Equity yields have declined as a result, due to decreased leverage and the need to close a portion of the gap between seller and buyer expectations; increased uncertainty about future earnings may change this paradigm. Terminal capitalization rates have also risen in tandem with debt and equity return requirements, though they have not returned to the level considered the norm prior to the 2004 through 2007 period.

A sample hotel valuation has been used as the basis for assessing the impact of the change in market conditions. The following table sets forth the projected performance of a full service hotel. As in many, but not all, US markets today, occupancy reached its cyclical peak in 2006, while above inflationary average rate gains were sustained through 2007. In general, hotel investors are optimistic, and project some upside when making their acquisitions, either due to favorable market conditions, or from operational "value add" factors. Let's look at an analysis that assumes the continuation of favorable market conditions, with slightly above inflationary rate growth over the near term. A healthy increase in NOI results from rates growing faster than inflation, even though growth is less robust than during the rebound experienced over the past few years. The positive operating leverage of hotels in an "up" market is evidenced in the following table.



NOI rises strongly, despite stable occupancy, due to above-inflationary rate gains – a phenomenon which has appealed to new hotel investors during the recent robust transaction cycle.

**Table 1 – Projected Operating Performance of Sample Hotel – Favorable Economy**

	Historical	Projected >>>>			
	2007	2008	2009	2010	2011
Occ.	72%	72%	72%	72%	72%
ADR	128	136	142	148	153
% change		6%	5%	4%	3%
RevPAR	\$92	\$98	\$103	\$107	\$110
% change		6%	5%	4%	3%
NOI/Room	8,265	9,600	10,457	11,070	11,404
% Change		16%	9%	6%	3%

Assuming this favorable outlook for a sample hotel, we have utilized a mortgage-equity capitalization model to assess the change in the cost of capital upon hotel values.

The following value sets forth the debt and equity returns required by the market (Valuation Inputs), while the value per room, capitalization and discount rates and debt coverage rates resulting from our model are set forth as the Valuation Outputs. The “Current Credit Crunch” investment parameters reflect the rates of return evidenced in the present more conservative lending environment. The more favorable “Pre-Credit Crunch” investment parameters that were in evidence during the past three years are applied to the same projected income in order to assess the impact of the change in market conditions. Interest rates are assumed to have increased by 50 basis points, while the LTV utilized in the model reflects a decline from 80% to 70%. The required equity yields is forecast to decline by 200 basis points due to the lower risk and yield potential associated with lower leverage, as well as the need for a reduction in equity yields to strike a deal. In this analysis both capitalization and discount rates increase roundly 100 basis points from the prior to current market conditions, resulting in a 10% decline in value. The magnitude of the value decline for a specific hotel will of course vary and will depend upon when the asset was purchased. Those acquired during the earlier part of the cycle may feel little to no value decline, while those purchased at the peak of the market with an

aggressive financing structure will likely be the most vulnerable to current market conditions.

**Table 2 – Impact of Credit Crunch – Favorable Economic Conditions**

Valuation Inputs	Investment Parameters	
	Current Credit Crunch	Pre-Credit Crunch
Interest Rate:	6.50%	6.00%
Loan -to-Value Ratio:	70%	80%
Equity Yield Rate:	18%	20%
Terminal Cap Rate	9.0%	8.0%
<b>Valuation Outputs</b>		
Value Per Room:	\$122,000	\$136,000
DCR Trailing Twelve	1.3	1.1
DCR Year 1	1.5	1.2
Discount Rate:	10.8%	10.1%
Implied Cap Rate:	7.8%	7.1%
Derived Cap Rate TT	6.8%	6.1%
Derived Cap Rate (1st Yr. NOI)	7.9%	7.1%
<b>Change in Value to Current</b>		<b>10%</b>

Our analysis reflects a 70 basis point increase in the capitalization rate applied to the trailing twelve NOI, and an 80 basis point increase in the capitalization rate based on projected first year’s net income. The discount rate utilized in a 10-year discounted cash flow analysis and the implied capitalization rate (discount rate less the annual rate of inflation, assumed to be 3%) increase by 70 basis points. Investors and brokers surveyed for this analysis confirmed the increase in capitalization rates, and indicated that while some deals are still being struck, pricing is clearly less robust than during the first half of 2007. Assuming a still favorable economic outlook, the decline in value was not as large as what might be expected due to the willingness of equity investors to reduce their return requirements to close the deal. Older or obsolete lodging products, and those in weaker markets, are facing the largest value decline, while prime assets in strong markets with high barriers to entry have felt the least impact from the change in market conditions.

The looming economic recession is creating an additional drag on hotel values. Our sample hotel’s net income has been forecast under a scenario reflecting a potential purchaser’s expectation of an economic downturn, i.e. no upside in rate (until a post recession recovery) and a four point decline in occupancy.



**Table 3 – Projected Operating Performance of Sample Hotel – Recession**

	Historical	Projected >>>>				
		2008	2009	2010	2011	2013
Occ.	72%	67%	68%	70%	72%	72%
ADR	128	132	133	137	144	153
% change		3%	1%	3%	5%	6%
RevPAR	\$92 <sup>F</sup>	\$88 <sup>F</sup>	\$91 <sup>F</sup>	\$96 <sup>F</sup>	\$104	\$110
% change		-4%	3%	6%	8%	6%
NOI/Room	8,265	6,716 <sup>F</sup>	7,010 <sup>F</sup>	8,278 <sup>F</sup>	9,995	11,203
% Change		-19%	4%	18%	21%	12%

The change in value resulting from the lowering of income expectations, and the same “current credit crunch” investment parameters, is set forth in the following table. The analysis implies that investors would reduce their offering price on this sample hotel by 12% due to the potential decline in income resulting from a economic downturn. This impact may be more or less severe, depending upon a hotel’s specific micro economic operating environment, the product type in question and management’s ability to rein in expenses in the face of declining revenues. Some hotels will weather a storm better than others. A relatively new hotel with a strong brand will sustain its value better than an older, obsolete property that has relied upon overflow demand over the past few years.

**Table 4 – Impact of Recession**

<b>Valuation Inputs</b>	
Interest Rate:	6.50%
Loan -to-Value Ratio:	70%
Equity Yield Rate:	18%
Terminal Cap Rate	9.0%
<b>Valuation Outputs</b>	
Value Per Room:	\$107,000
DCR Trailing Twelve	1.5
DCR Year 1	1.2
Discount Rate:	11.2%
Implied Cap Rate:	8.2%
Derived Cap Rate TT	7.7%
Derived Cap Rate (1st Yr. NOI)	6.3%
<b>Change in Value</b>	<b>12%</b>

Prime assets in gateway cities will likely experience some of the smallest value declines due to increased interest in U.S. real estate by foreign investors. Combining the effects of the credit crunch and a

recession results in a total potential 22% decline in the value of this sample hotel, as illustrated below.

**Table 5 – Impact of Credit Crunch and Recession on Sample Hotel**

Valuation Inputs	Credit Crunch and Recession	Pre-Credit Crunch
Value Per Room:	\$107,000	\$136,000
DCR Trailing Twelve	1.5	1.1
DCR Year 1	1.2	1.2
Discount Rate:	11.2%	10.1%
Implied Cap Rate:	8.2%	7.1%
Derived Cap Rate TT	7.7%	6.1%
Derived Cap Rate (1st Yr. NC)	6.3%	7.1%
<b>Change in Value</b>	<b>22%</b>	

The capitalization rate derived from the hotel’s trailing twelve NOI increases 160 basis points, while that based on first year projected NOI increases 80 basis points, a phenomenon resulting from the recessionary decline in NOI. The implied capitalization rate and discount rate have each increased 110 basis points from the pre-credit crunch period, to 8.2% and 11.2%, respectively, still 100 to 200 basis points below their historic norm prior to the aggressive lending and acquisition market of the past three years. Low interest rates and an abundance of equity capital will likely keep capitalization and discount rates in an attractive range, though not as favorable as the recent past. This analysis reflects why there has been such a marked reduction in hotel transactions and why activity will likely slow further over the near term. The uncertainty caused by a potential economic downturn impacts hotel investments more than any other form of commercial property due to the decline in net operating income that ensues from reduced revenues. The new investors that have been attracted to the hotel market over the past four years appear to have retained their interest in diversifying their real estate portfolios to include hospitality assets. Their commitment to the industry will be tested when net incomes decline in a recessionary environment. The good news is that recessions are generally short lived, and hotel net incomes and values typically rebound rapidly once an economic recovery takes hold. However, the fear of a prolonged recession or continued weak economic growth could prove to be



challenging for hotel owners that want to dispose of their assets. In gauging market value, it is always important to remember that it takes a willing buyer and a willing seller to consummate a deal. In an uncertain market most sellers will choose to hold off until market conditions improve before putting their hotel on the market. The majority of hotel owners are well capitalized and will weather the storm. Only time will tell how many owners stressed by significant leverage will be forced to sell, creating opportunities for others.

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#### About the Author



*Suzanne R. Mellen is the Managing Director of the San Francisco office of HVS, heading up the San Francisco Consulting & Valuation and Gaming divisions. She has been evaluating hotels and associated real estate for 29 years, has authored a number of articles, and is a frequent lecturer and expert witness on the valuation of hotels and related issues. Ms. Mellen has a BS degree in Hotel Administration from Cornell University and holds the following designations: MAI (Appraisal Institute), CRE (Counselor of Real Estate), ISHC (International Society of Hospitality Consultants) and FRICS (Fellow of the Royal Institution of Chartered Surveyors).*

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