State of the Hospitality Industry Today
Hotel Values and Cap Rates
Meet the Money® Online
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An Unparalleled Downturn
U.S. Hotel Sales Volume for Q1 2020 Decline Significantly

Source: Real Capital Analytics
Hotel Quarterly Transaction Volume Significantly Down

Source: Real Capital Analytics
Historical 200 bps Spread Popped to 500 Bps Q1 2020

Source: ACLI – Federal Reserve
Historical 200 bps Spread Popped to 500 Bps Q1 2020

Source: ACLI – Federal Reserve
Implied Lodging REIT Cap Rates

Source: HVS
Lodging REIT Net Asset Value Premium (Discount)

Lodging REIT Prices Down Average of 54% Since Outbreak

Source: HVS
Full-Service Hotels

- Full-service hotel asset pricing is more volatile than that of limited-service hotels during the course of an economic cycle.
- Prices began to decline late in the cycle following their peak in late 2006.
- The average price decline of approximately 50% reflects substantial impact to EBITDA during the downturn, as well as the profile of assets transacted.
- Fewer large, high-priced hotels owned by well-capitalized owners sell toward the end of the cycle as prices come under pressure.
- Once hotel performance bottoms out, investors jump in to reap high returns on the recovery.

Source: Real Capital Analytics
Limited-Service Hotels

- Limited-service hotel values are less volatile due to their lower operating leverage, which lessens EBITDA fluctuations during an economic cycle.
- Transactions are less impacted by the capital markets due to the smaller size and lower value of these assets, as well as the entrepreneurial profile of the typical buyer/owner operator.

Source: Real Capital Analytics
A Look at U.S. Historic Price Per Key* Trends

Timeline of the Investment Cycle

**Market Peak** – Prices peaked in Q3 2007 and began to slide prior to the market shock in Q3 2008.

**Market Trough** – Prices bottomed out in Q4 2009, and once hotel performance bottomed out, investors jumped in. Hedonic average price per key declined by 27% from peak to trough.

**Recovery** – Prices reached prior peak in Q2 2015, reflecting a five-year recovery from trough (2009) to peak (2015); eight years from prior peak (2007) to price recovery (2015).

*PPK based on the Real Capital Analytics Hedonic Series (Real Capital Analytics HS), which reflects pricing for the average property rather than an average of the prices of properties that have transacted. The cap rate data are also based on the Real Capital Analytics HS and reflect cap rates for the average property, not the average for the properties transacted.
Hotel RCA CPPI

Source: Real Capital Analytics

* Derived from sales transactions
Capitalization Rates During Previous Downturn

- During healthy economic periods, full-service hotel cap rates generally average 150 basis points (bps) below those of limited-service hotel cap rates.
- During the Great Recession, this differential decreased to 50 bps.
- Full-service cap rates increased by almost 150 bps from Q1 2008 to Q4 2009, while limited-service cap rates increased by only 75 bps, reflecting the greater impact on full-service EBITDA during the downturn.
- Once the recovery commenced, full-service cap rates declined more rapidly and to a greater degree than limited-service cap rates, reflecting buyers’ expectations of significant full-service hotel EBITDA rebound because of positive operating leverage.
- The traditional differential between full-service and limited-service cap rates resumed post recession.

Source: Real Capital Analytics
Lower Cost of Capital Reduced Cap Rates In Last Recovery*

Source: Real Capital Analytics

* Derived from sales transactions
Discount Rates Rose 50 to 150 Bps Great Recession

Source: PWC Korpacz Real Estate Investor Survey
## Full-Service Hotel Operating Leverage Analysis

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2009</th>
<th>2014</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Occupancy</strong></td>
<td>70.0%</td>
<td>62.5%</td>
<td>73.9%</td>
<td>74.4%</td>
</tr>
<tr>
<td><strong>Average Rate</strong></td>
<td>$167</td>
<td>$147</td>
<td>$181</td>
<td>$202</td>
</tr>
<tr>
<td><strong>RevPAR</strong></td>
<td>$117</td>
<td>$92</td>
<td>$134</td>
<td>$151</td>
</tr>
<tr>
<td><strong>% Change</strong></td>
<td>-21%</td>
<td>46%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td><strong>Revenue PAR</strong></td>
<td>$67,301</td>
<td>$52,650</td>
<td>74,975</td>
<td>85,412</td>
</tr>
<tr>
<td><strong>% Change</strong></td>
<td>-22%</td>
<td>42%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td><strong>Expenses PAR</strong></td>
<td>$50,298</td>
<td>$43,143</td>
<td>$55,911</td>
<td>64,292</td>
</tr>
<tr>
<td><strong>% Change</strong></td>
<td>-14%</td>
<td>30%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td><strong>EBITDA PAR</strong></td>
<td>$17,003</td>
<td>$9,507</td>
<td>19,064</td>
<td>21,120</td>
</tr>
<tr>
<td><strong>% Change</strong></td>
<td>-44%</td>
<td>101%</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td><strong>EBITDA Ratio</strong></td>
<td>25.3%</td>
<td>18.1%</td>
<td>25.4%</td>
<td>24.7%</td>
</tr>
</tbody>
</table>

**Multiple of EBITDA Change to Revenue Change:**

- 2.0 X
- 2.4 X
- 0.8 X

Source: STR Host Almanac, HVS
# Limited-Service Hotel Operating Leverage Analysis

<table>
<thead>
<tr>
<th>Limited-Service Hotels</th>
<th>2007</th>
<th>2009</th>
<th>2014</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupancy</td>
<td>69.2%</td>
<td>63.3%</td>
<td>74.2%</td>
<td>75.5%</td>
</tr>
<tr>
<td>Average Rate</td>
<td>$95</td>
<td>$85</td>
<td>$102</td>
<td>$128</td>
</tr>
<tr>
<td>RevPAR</td>
<td>$66</td>
<td>$54</td>
<td>$76</td>
<td>$97</td>
</tr>
<tr>
<td>% Change</td>
<td>-18%</td>
<td>41%</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>Revenue PAR</td>
<td>$24,349</td>
<td>$20,128</td>
<td>28,516</td>
<td>36,835</td>
</tr>
<tr>
<td>% Change</td>
<td>-17%</td>
<td>42%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Expenses PAR</td>
<td>$14,606</td>
<td>$13,583</td>
<td>$17,710</td>
<td>23,677</td>
</tr>
<tr>
<td>% Change</td>
<td>-7%</td>
<td>30%</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>EBITDA PAR</td>
<td>$9,743</td>
<td>$6,545</td>
<td>10,806</td>
<td>13,158</td>
</tr>
<tr>
<td>% Change</td>
<td>-33%</td>
<td>65%</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>EBITDA PAR</td>
<td>40.0%</td>
<td>32.5%</td>
<td>37.9%</td>
<td>35.7%</td>
</tr>
</tbody>
</table>

**Multiple of EBITDA Change to RevPAR Change:**
- 1.9 X
- 1.6 X
- 0.7 X

Source: STR Host Almanac, HVS
Positive Operating Leverage Will Return

- Reducing operating expenses to the bone will enable hotel operators to rethink how they operate their businesses from top to bottom
- Housekeeping and other service cutbacks
- Food and beverage service curtailed or reduced
- Bringing back furloughed staff will be done judiciously
- Owners and operators are reporting lower breakeven levels: 30% to 35% select service; 40-45% full service
- Retaining these savings will enhance operating leverage as demand and revenue recovers
How Will Hotel Values Be Affected in the Current Downturn?

The current downturn will have a significant impact on hotel values.

Sharp revenue declines result in double the decreases in EBITDA, with the many hotels experiencing negative EBITDA, whether closed or open.

The debt market has pulled back from the hotel sector, with lenders reporting lower loan-to-value ratios and higher spreads resulting in higher interest rates, if they are lending at all.

Capital market disruption is leading to all-cash transactions, seller financing, and other capital solutions that are putting downward pressure on values.
Example of Valuation Assuming Refinancing Following Recovery

- Initial purchase is assumed at all cash or reduced 50% LTV, with equity requiring a 16% IRR, reflecting low leverage.

- The unlevered discount rate derived from a value, assuming low leverage throughout a 10-year holding period, equates to 12%.

- The refinancing model assumes that the hotel is refinanced at the end of Year 4. A normalized LTV of 65% and equity IRR of 17% are assumed; the unlevered 10-year DCF discount rate equates to 10.25% based on these parameters as of that point in time.

- A 10-year DCF based on four years of low leverage, a refinancing, and six years of higher leverage results in a blended unlevered discount rate of 10.9%, which reflects an investor’s overall return expectations.

- The cap rates derived from the concluded value reflect the challenge of using a cap rate to value hotels at this time.

<table>
<thead>
<tr>
<th>DCF Investment Parameters</th>
<th>Current Valuation*</th>
<th>Stabilized Valuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest Rate</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Loan-to-Value</td>
<td>50%</td>
<td>65%</td>
</tr>
<tr>
<td>Equity Yield Rate</td>
<td>16%</td>
<td>17%</td>
</tr>
<tr>
<td>Terminal Cap Rate</td>
<td>8.5%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Derived Discount Rate</td>
<td>12%*</td>
<td>10.25%</td>
</tr>
<tr>
<td>Refinancing Year</td>
<td>End of Year 4</td>
<td></td>
</tr>
</tbody>
</table>

*Or All Cash Transaction

**Conclusion Assuming Refinancing**

- Value Conclusion $33,400,000
- Derived Discount Rate 10.9%
- Cap Rate - TTM EBITDA 11.8%
- Cap Rate - 1st Yr. EBITDA -7.3%
- Cap Rate - Deflated Stab. EBITDA 9.7%

Source: HVS
## Example of Refinancing Following EBITDA Recovery

<table>
<thead>
<tr>
<th>Year</th>
<th>EBITDA Available for Debt Service</th>
<th>Debt Service</th>
<th>EBITDA After Debt Service</th>
<th>Plus Refi/Sales Proceeds</th>
<th>Total Cash Flow to Equity</th>
<th>Equity Yield Rate</th>
<th>Discounted Cash Flow to Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>-1,397,000</td>
<td>-1,091,000</td>
<td>-2,488,000</td>
<td></td>
<td>-2,488,000</td>
<td>0.86207</td>
<td>(2,145,000)</td>
</tr>
<tr>
<td>2021</td>
<td>1,667,000</td>
<td>1,091,000</td>
<td>576,000</td>
<td></td>
<td>576,000</td>
<td>0.74316</td>
<td>428,000</td>
</tr>
<tr>
<td>2022</td>
<td>2,923,000</td>
<td>1,091,000</td>
<td>1,832,000</td>
<td></td>
<td>1,832,000</td>
<td>0.64066</td>
<td>1,174,000</td>
</tr>
<tr>
<td>2023</td>
<td>3,534,000</td>
<td>1,091,000</td>
<td>2,443,000</td>
<td>15,736,000</td>
<td>18,179,000</td>
<td>0.55229</td>
<td>10,040,000</td>
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<tr>
<td>2024</td>
<td>3,640,000</td>
<td>2,132,000</td>
<td>1,508,000</td>
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<td>1,508,000</td>
<td>0.45611</td>
<td>688,000</td>
</tr>
<tr>
<td>2025</td>
<td>3,749,000</td>
<td>2,132,000</td>
<td>1,617,000</td>
<td></td>
<td>1,617,000</td>
<td>0.38984</td>
<td>630,000</td>
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<tr>
<td>2026</td>
<td>3,862,000</td>
<td>2,132,000</td>
<td>1,730,000</td>
<td></td>
<td>1,730,000</td>
<td>0.33320</td>
<td>576,000</td>
</tr>
<tr>
<td>2027</td>
<td>3,978,000</td>
<td>2,132,000</td>
<td>1,846,000</td>
<td></td>
<td>1,846,000</td>
<td>0.28478</td>
<td>526,000</td>
</tr>
<tr>
<td>2028</td>
<td>4,097,000</td>
<td>2,132,000</td>
<td>1,965,000</td>
<td></td>
<td>1,965,000</td>
<td>0.24340</td>
<td>478,000</td>
</tr>
<tr>
<td>2029</td>
<td>4,220,000</td>
<td>2,132,000</td>
<td>2,088,000</td>
<td>23,998,000</td>
<td>26,086,000</td>
<td>0.20804</td>
<td>5,427,000</td>
</tr>
</tbody>
</table>

| Equity Value | 17,822,000 |
| Value of Initial Mortgage | 15,547,000 |
| Total Property Value | 33,400,000 |

**Unlevered Discount Rate Equating EBITDA Before Debt Service to Property Value: 10.9%**

Source: HVS
**Best Case** – the value decline is 20% as of mid-year 2020. EBITDA recovers to base-2019 levels by 2023/24.

**Most Likely Case** – the value decline is 27% as of mid-year 2020. EBITDA recovers to base-2019 levels by 2024/25.

**Worst Case** – the value decline is 35% as of mid-year 2020. EBITDA recovers to base-2019 levels by 2025/26.

For context, according to the Real Capital Analytics hedonic data, the value of an average hotel declined by 27% in the last downturn.
Current Expectations for Market Values

**Annual Percent Change in Value**

- **2020**: 12% (Best Case), 8% (Most Likely), 3% (Worst Case)
- **2021**: 13% (Best Case), 10% (Most Likely), 6% (Worst Case)
- **2022**: 23% (Best Case), 12% (Most Likely), 5% (Worst Case)
- **2023**: 12% (Best Case), 13% (Most Likely), 23% (Worst Case)
- **2024**: 13% (Best Case), 10% (Most Likely), 23% (Worst Case)
- **2025**: 23% (Best Case), 12% (Most Likely), 5% (Worst Case)
- **2026**: 35% (Best Case), 23% (Most Likely), 13% (Worst Case)

**Relationship to 2019 Value**

- **Best Case**: 79% (2020), 89% (2021), 96% (2022), 99% (2023), 102% (2024), 105% (2025), 109% (2026)
- **Most Likely**: 73% (2020), 82% (2021), 91% (2022), 96% (2023), 99% (2024), 103% (2025), 106% (2026)
- **Worst Case**: 64% (2020), 79% (2021), 88% (2022), 92% (2023), 96% (2024), 100% (2025), 103% (2026)

Source: HVS
Market Value: Willing Buyer and Willing Seller

**Downwards Pressure**
- Unprecedented revenue and EBITDA decline
- Economic recession
- Deep ADR declines
- Uncertainty regarding return of normalized travel patterns
- Potential for prolonged recovery
- Cash drain may force owners to sell

**Upwards Pressure**
- Improved business operating model
- Return of positive operating leverage
- Yield hungry funds lining up capital to jump into the market will create competition and help to sustain values
- Low cost of capital likely to continue
- Lenders want to wait for values to rise before losses are recognized
Superior Results Through Unrivaled Hospitality Intelligence. Everywhere.

HVS has been supporting the hospitality industry in the U.S. and around the world for over 40 years. Our senior staff represents a collective 300+ years of experience advising our industry, including through multiple prior cycles and events.

Our expertise covers the full range of hospitality assets and spans the full lifecycle of a hotel, including services that support developers, owners, operators, lenders, and investors. With 40+ offices in markets across the U.S., we offer local insights on a real-time basis.

This knowledge and experience is available to support you as you navigate these challenging times. Our platform is fully functional on a remote basis, so even though we are not currently traveling, our staff can access the full resources of HVS on your behalf.

Let us know how we can assist you.

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