Who’s Next? An Analysis of Lodging Industry Acquisitions

Qingzhong Ma Ph.D.
Cornell University, qm26@cornell.edu

Peng Liu Ph.D.
Cornell University, pl333@cornell.edu

Follow this and additional works at: https://scholarship.sha.cornell.edu/chrpubs

Part of the Hospitality Administration and Management Commons

Recommended Citation
Who's Next? An Analysis of Lodging Industry Acquisitions

Abstract
The years 2004 through 2007 witnessed a rush of takeover deals in the lodging industry, in which numerous publicly traded hotel companies and hotel real estate investment trusts (REITs) were acquired—mostly by private equity firms, in many cases, Blackstone Group. Notwithstanding the suspension of such activities in the past two years, this article analyzes what factors determine the choice of the targets during that period in the lodging industry. An examination of these takeover deals determined that targets were most likely to: (1) be either a large hotel company or a relatively small REIT; (2) have a high percentage of fixed assets and a low level of debt; (3) have a mismatch between growth prospects and available resources; and (4) be in their middle age as publicly traded firms. Conditions that permit acquisitions, including availability of credit, will eventually return, making this analysis useful to current and future owners, investors, and executives in the lodging industry. Those who want to be acquired, for instance, can adjust their corporate profile to be more attractive, and those who wish to discourage acquisition can take on debt and spin off assets to be less attractive.

Keywords
lodging industry, investments, takeover deals

Disciplines
Business | Hospitality Administration and Management

Comments
Required Publisher Statement
© Cornell University. This report may not be reproduced or distributed without the express permission of the publisher

This article is available at The Scholarly Commons: https://scholarship.sha.cornell.edu/chrpubs/95
Who’s Next?
An Analysis of Lodging Industry Acquisitions

Cornell Hospitality Report
Vol. 10, No. 11, July 2010

by Qingzhong Ma, Ph.D., and Peng Liu, Ph.D.
Advisory Board

Ra’anan Ben-Zur, Chief Executive Officer, French Quarter Holdings, Inc.
Scott Berman, Principal, Industry Leader, Hospitality & Leisure Practice, PricewaterhouseCoopers
Raymond Bickson, Managing Director and Chief Executive Officer, Taj Group of Hotels, Resorts, and Palaces
Stephen C. Brandman, Co-Owner, Thompson Hotels, Inc.
Raj Chandnani, Vice President, Director of Strategy, WATG
Benjamin J. “Patrick” Denihan, Chief Executive Officer, Denihan Hospitality Group
Joel M. Eisemann, Executive Vice President, Owner and Franchise Services, Marriott International, Inc.
Kurt Ekert, Chief Commercial Officer, Travelport GDS
Brian Ferguson, Vice President, Supply Strategy and Analysis, Expedia North America
Chuck Floyd, Chief Operating Officer–North America, Hyatt
Anthony Gentile, Vice President–Systems & Control, Schneider Electric/Square D Company
Gregg Gilman, Partner, Co-Chair, Employment Practices, Davis & Gilbert LLP
Susan Helstab, EVP Corporate Marketing, Four Seasons Hotels and Resorts
Jeffrey A. Horwitz, Partner, Corporate Department, Co-Head, Lodging and Gaming, Proskauer
Kevin J. Jacobs, Senior Vice President, Corporate Strategy & Treasurer, Hilton Worldwide
Kenneth Kahn, President/Owner, LRP Publications
Paul Kanavos, Founding Partner, Chairman, and CEO, FX Real Estate and Entertainment
Kirk Kinsell, President of Europe, Middle East, and Africa, InterContinental Hotels Group
Radhika Kulkarni, Ph.D., VP of Advanced Analytics R&D, SAS Institute
Gerald Lawless, Executive Chairman, Jumeirah Group
Mark V. Lomanno, President, Smith Travel Research
Suzanne R. Mellen, Managing Director, HVS
Trip Schneck, President and Co-Founder, TIG Global LLC
Steve Russell, Chief People Officer, Senior VP, Human Resources, McDonald’s USA
Michele Sarkisian, Senior Vice President, Maritz
Janice L. Schnabel, Managing Director and Gaming Practice Leader, Marsh’s Hospitality and Gaming Practice
Adam Weissengerg, Vice Chairman, and U.S. Tourism, Hospitality & Leisure Leader, Deloitte & Touche USA LLP

Cornell Hospitality Reports, Vol. 10, No. 11 (July 2010)

© 2010 Cornell University

Cornell Hospitality Report is produced for the benefit of the hospitality industry by The Center for Hospitality Research at Cornell University

Rohit Verma, Executive Director
Jennifer Macera, Associate Director
Glenn Withiam, Director of Publications

Center for Hospitality Research
Cornell University
School of Hotel Administration
489 Statler Hall
Ithaca, NY 14853

Phone: 607-255-9780
Fax: 607-254-2922
www.chr.cornell.edu
Thank you to our generous Corporate Members

Senior Partners
Hilton Worldwide
McDonald’s USA
Philips Hospitality
STR
Taj Hotels Resorts and Palaces
TIG Global

Partners
Davis & Gilbert LLP
Deloitte & Touche USA LLP
Denihan Hospitality Group
eCornell & Executive Education
Expedia, Inc.
Forbes Travel Guide
Four Seasons Hotels and Resorts
Fox Rothschild LLP
French Quarter Holdings, Inc.
FX Real Estate and Entertainment, Inc.
HVS
Hyatt
InterContinental Hotels Group
Jumeirah Group
LRP Publications
Marriott International, Inc.
Marsh’s Hospitality Practice
Maritz
PricewaterhouseCoopers
Proskauer
Sabre Hospitality Solutions
SAS
Schneider Electric
Southern Wine and Spirits of America
Thayer Lodging Group
Thompson Hotels
Travelport
WATG

Friends
American Tescor, LLC • Argyle Executive Forum • Berkshire Healthcare • Cody Kramer Imports • Cruise Industry News • DK Shifflett & Associates • ehotelier.com • EyeforTravel • 4Hotels.com • Gerencia de Hoteles & Restaurantes • Global Hospitality Resources • Hospitality Financial and Technological Professionals • hospitalityosite.com • hospitalitynet.org • Hospitality Technology Magazine • Hotel Asia Pacific • Hotel China • HotelExecutive.com • Hotel Interactive • Hotel Resource • HotelWorld Network • International CHRIE • International Hotel Conference • International Society of Hospitality Consultants • iPerceptions • JDA Software Group, Inc. • The Lodging Conference • Lodging Hospitality • Lodging Magazine • LRA Worldwide, Inc. • Milestone Internet Marketing • MindFolio • Mindshare Technologies • Parasol • PhoCusWright Inc. • PKF Hospitality Research • RealShare Hotel Investment & Finance Summit • Resort and Recreation Magazine • The Resort Trades • RestaurantEdge.com • Shibata Publishing Co. • Synovate • TravelCLICK • Unifocus • USA Today • WageWatch, Inc. • The Wall Street Journal • WiWH.COM

Cornell University School of Hotel Administration
Who’s Next? An Analysis of Lodging Industry Acquisitions

by Qingzhong Ma and Peng Liu

EXECUTIVE SUMMARY

The years 2004 through 2007 witnessed a rush of takeover deals in the lodging industry, in which numerous publicly traded hotel companies and hotel real estate investment trusts (REITs) were acquired—mostly by private equity firms, in many cases, Blackstone Group. Notwithstanding the suspension of such activities in the past two years, this article analyzes what factors determine the choice of the targets during that period in the lodging industry. An examination of these takeover deals determined that targets were most likely to: (1) be either a large hotel company or a relatively small REIT; (2) have a high percentage of fixed assets and a low level of debt; (3) have a mismatch between growth prospects and available resources; and (4) be in their middle age as publicly traded firms. Conditions that permit acquisitions, including availability of credit, will eventually return, making this analysis useful to current and future owners, investors, and executives in the lodging industry. Those who want to be acquired, for instance, can adjust their corporate profile to be more attractive, and those who wish to discourage acquisition can take on debt and spin off assets to be less attractive.
ABOUT THE AUTHORS

Qingzhong Ma, Ph.D., is an assistant professor of finance at the Cornell University School of Hotel Administration (qm26@cornell.edu). He does research in corporate finance, especially mergers and acquisitions, divestitures, corporate restructuring, investment banking, institutional investors, corporate governance, capital market efficiency, and real options in hotel management. His work has recently appeared in Cornell Hospitality Quarterly, and he has made numerous conference presentations.

Peng Liu, Ph.D., is an assistant professor of real estate at the Cornell University School of Hotel Administration (pl333@cornell.edu). In addition to his work at Cornell, he has taught courses in stochastic calculus, credit risk, and mortgage-backed securities at the Haas Business School at the University of California Berkeley. His research focuses on asset pricing and hedging in the real estate market, with specific interests in mortgage pricing, mortgage-backed securities, and commodity futures research. Among other publications, his work has appeared in Journal of Real Estate Finance and Economics, Journal of Banking and Finance, and Cornell Real Estate Review. Prior to his career in academics, Liu worked in various industries, including engineering, advertising, consulting, and hedge funds.
In July 2007, Blackstone announced the acquisition of Hilton Hotels Corp. for about $20 billion in cash, making it one of the largest acquisitions in the lodging history. Despite its size, this deal was not exceptional for that year or for the years immediately prior. As Exhibit 1 shows (page 8), from 2004 to 2007 a total of twenty operating hotel companies and real estate investment trusts (REITs) specializing in hotels were acquired, mainly by private equity firms. These acquisitions, with a total deal value of over $60 billion, involved 12 percent of all hotel companies and hotel REITs that are publicly traded in the United States, and represent 18 percent of the annual industry-wide total market capitalization over these years.1

1 Authors’ estimates based on the data used for analysis, as explained in Exhibit 1.
Theoretical Underpinning

The finance literature has suggested numerous theories to explain which firms are targets of mergers and acquisitions. By and large, the theories can be summarized into the following four general categories: (1) room for improvement in targeted companies; (2) the preferences of acquiring companies; (3) an inefficient capital market; and (4) economic shocks. First, we’ll explore the implications of these theories in the context of acquisitions by private equity firms and then discuss the financial measures that we used for this analysis.

Room for Improvement in Targets

When a company has room for improvement, so the theory goes, other management teams find it profitable to take over that firm and operate it more efficiently. The implication of this category of theories is straightforward: the likelihood of being a target is negatively correlated with a firm’s performance. To measure this concept for our analysis, we use past stock returns and past accounting performance such as return on assets, profit margin, and asset turnover as measures of performance. In addition, if a company has a mismatch between its growth prospects and its resources, this can be a sign of mismanagement, making it more attractive as a takeover target.

To give examples of resource mismatches from the companies listed in Exhibit 1, Four Seasons had low sales growth but a high level of liquid assets with low leverage. On the other hand, Hilton Hotels Corp. had experienced

---

2 The Dow Jones average of 30 industrials decreased from 13,365.87 on December 28, 2007, to its recent lowest point at 6,626.94 on March 6, 2009, a loss of more than 50 percent. The number of deals and the total deal volume also significantly decreased in 2008 and 2009. See: Linda Canina, Jin-Young Kim, and Qingzhong Ma, “What We Know about M&A Success: A Research Agenda for the Lodging Industry,” Cornell Hospitality Quarterly, Vol. 51, No. 1 (February 2010), pp. 81–101.


## Deals involving public hotel companies and hotel REITs as targets from 2004 to 2007

<table>
<thead>
<tr>
<th>Target</th>
<th>Type (Hotel or REIT)</th>
<th>Year</th>
<th>Acquirer</th>
<th>Deal value ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandalay Resort Group</td>
<td>Hotel</td>
<td>2004</td>
<td>MGM Mirage, Inc</td>
<td>7,811</td>
</tr>
<tr>
<td>Prime Hospitality Corp.</td>
<td>Hotel</td>
<td>2004</td>
<td>Blackstone Group LP</td>
<td>570</td>
</tr>
<tr>
<td>Extended Stay America Inc.</td>
<td>Hotel</td>
<td>2004</td>
<td>Blackstone Group LP</td>
<td>2,066</td>
</tr>
<tr>
<td>Caesars Entertainment Inc.</td>
<td>Hotel</td>
<td>2004</td>
<td>Harrah’s Entertainment Inc</td>
<td>6,332</td>
</tr>
<tr>
<td>John Q. Hammons Hotels Inc.</td>
<td>Hotel</td>
<td>2005</td>
<td>Investor Group</td>
<td>544</td>
</tr>
<tr>
<td>Wyndham International Inc.</td>
<td>Hotel</td>
<td>2005</td>
<td>Blackstone Group LP</td>
<td>1,367</td>
</tr>
<tr>
<td>La Quinta Corp.</td>
<td>Hotel</td>
<td>2005</td>
<td>Blackstone Group LP</td>
<td>2,344</td>
</tr>
<tr>
<td>Jameson Inns Inc.</td>
<td>Hotel</td>
<td>2006</td>
<td>JER Partners</td>
<td>374</td>
</tr>
<tr>
<td>Kerzner International Ltd.</td>
<td>Hotel</td>
<td>2006</td>
<td>K-Two Holdco Ltd</td>
<td>3,077</td>
</tr>
<tr>
<td>*MeriStar Hospitality Corp.</td>
<td>REIT</td>
<td>2006</td>
<td>Blackstone Group LP</td>
<td>1,846</td>
</tr>
<tr>
<td>Boykin Lodging Co.</td>
<td>REIT</td>
<td>2006</td>
<td>Braveheart Holdings LP</td>
<td>196</td>
</tr>
<tr>
<td>Four Seasons Hotels and Resorts Inc.</td>
<td>Hotel</td>
<td>2006</td>
<td>Investor Group</td>
<td>2,712</td>
</tr>
<tr>
<td>Fairmont Hotels &amp; Resorts Inc.</td>
<td>Hotel</td>
<td>2006</td>
<td>Nova Scotia Ltd</td>
<td>3,640</td>
</tr>
<tr>
<td>Hilton Hotels Corp.</td>
<td>Hotel</td>
<td>2007</td>
<td>Blackstone Group LP</td>
<td>20,168</td>
</tr>
<tr>
<td>*Equity Inns Inc.</td>
<td>Hotel</td>
<td>2007</td>
<td>Whitehall Street Global Real</td>
<td>2,206</td>
</tr>
<tr>
<td>*Crescent Real Estate Equities</td>
<td>REIT</td>
<td>2007</td>
<td>Morgan Stanley Real Estate</td>
<td>6,434</td>
</tr>
<tr>
<td>Winston Hotels Inc.</td>
<td>REIT</td>
<td>2007</td>
<td>Inland American RE Tr Inc</td>
<td>438</td>
</tr>
<tr>
<td>Innkeepers USA Trust</td>
<td>REIT</td>
<td>2007</td>
<td>Apollo Investment Corp</td>
<td>805</td>
</tr>
<tr>
<td>Highland Hospitality Corp.</td>
<td>REIT</td>
<td>2007</td>
<td>JER Partners Acquisitions IV</td>
<td>1,458</td>
</tr>
<tr>
<td>Eagle Hosp Prop Trust Inc.</td>
<td>REIT</td>
<td>2007</td>
<td>AP AIMCAP</td>
<td>317</td>
</tr>
</tbody>
</table>

### Notes

Data source. The sample is originally drawn from Securities Data Corporation (SDC) Platinum Online Mergers and Acquisition Database, where the targets’ primary Standard Industry Codes (SIC) are 7011 (hotel and motels), 6799, and 6798 (REITs). The deals are announced between 2004 and 2007. Only completed deals are included. We then use a list of hotel REITs extracted from S&L to exclude REIT targets that are not specialized in hotels. The remaining targets are further required to have stock price data from the Center for Research in Security Prices (CRSP) at the University of Chicago and accounting data from Standard & Poor’s Compustat at the yearend before the announcement. * MeriStar, Equity Inn, and Crescent are not included in our final sample for analysis because of missing data on plants, properties, and equipment (PP&E).
We see potential support for this theory among the companies listed in Exhibit 1, where the market value of most of the acquired hotel operating companies is above the industry median, while the market value of most of the hotel REITs was below the industry median. Also in keeping with this theory, the percentage of fixed assets for most of the targeted companies was well above the industry median. Extended Stay, Prime Hospitality, Jameson Inns, Inkeepers, and Eagle Hospitality were all ranked in the top 10 percent among industry peers on that criterion before they were taken over. Along the same line, the debt-to-asset ratio of many targets was lower than the industry median. However, we must note that Mandalay, John Q. Hammons Hotels, Park Place Entertainment, and Hilton already carried high debt levels when they were acquired. As a closing point for this strategy, it’s worth noting that the credit freeze and recession brought to a halt the “round trip machine” of taking companies private, reconfiguring them, and then spinning them off into an initial public offering. Eventually that activity will resume.

Inefficient Capital Market

A company presents an investment opportunity when the value of its outstanding stock trades lower than its (presumed) intrinsic or book value. To measure this value, we use a company’s book-to-market or B/M ratio (book value of equity to market value of equity). The higher the B/M ratio, the more likely a company becomes a target. Targets that fell into this category are Eagle Hospitality and La Quinta.

Economic Shocks

Mergers and acquisitions tend to follow economic shocks, such as deregulation. The relevant economic shock for the period of 2004–2007 was actually increased regulation, in the Sarbanes-Oxley Act of 2002. Enacted in response to the Enron bankruptcy, “Sarb-Ox” imposes extra costs on publicly traded companies—costs which could be particularly burdensome for small firms. A direct implication of this theory is that smaller lodging companies are more likely to go private by being acquired by private equity firms. This theory’s prediction about company size, however, contradicts theories based on preferences of acquiring firms. As a result, how company size affects the likelihood of becoming a target is essentially an empirical question.

Empirical Findings

To test these theoretical propositions, we analyzed a panel of target and non-target publicly traded lodging companies and hotel REITs for the years 2004 through 2007.

Theory predicts that acquisition targets should be large, and have substantial fixed assets, relatively low debt-to-asset ratios, and room for improvement in operations.

Logit regression models are employed to estimate the strength of the factors identified and discussed above. A logit model generates regression coefficients on the independent variables that indicate the direction of their effects and their statistical significance. Exhibit 2 presents the results of three logit regressions. In the column next to the independent variables are the expected signs according to the theoretical discussion above. Then, under each model the first column lists the regression coefficient and the second its T-statistics. The sign of the coefficient represents the direction of the effect (for comparison with the expected sign). For example, a positive coefficient on a variable means the larger the variable, the more likely the company becomes a target, and vice versa. Whether the effect is statistically significant, however, depends on whether the magnitude of its corresponding T-statistic is large enough. We note three levels of significance. The 10-percent confidence level (marked with a single asterisk *), the 5-percent level (two asterisks **), and 1-percent level (three asterisks ***). At the 1-percent level, we can be almost totally confident that the effect is significant, but at the 10-percent level there remains a 10-percent probability that the effect is actually insignificant even though we have erroneously concluded that it is

---


## Logit regression models on the likelihood of public lodging companies being targeted

<table>
<thead>
<tr>
<th>Category</th>
<th>Variable</th>
<th>Expected Signs</th>
<th>Coef.</th>
<th>T</th>
<th>Sig.</th>
<th>Coef.</th>
<th>T</th>
<th>Sig.</th>
<th>Coef.</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size and growth</strong></td>
<td>REIT size</td>
<td>+/-</td>
<td>-0.52</td>
<td>-1.63</td>
<td></td>
<td>-0.54</td>
<td>-1.64</td>
<td></td>
<td>-0.57</td>
<td>-1.68</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Hotel size</td>
<td>+/-</td>
<td>0.33</td>
<td>1.85</td>
<td>*</td>
<td>0.30</td>
<td>1.70</td>
<td>*</td>
<td>0.30</td>
<td>1.77</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Sales growth</td>
<td></td>
<td>-1.00</td>
<td>-0.98</td>
<td></td>
<td>-1.10</td>
<td>-1.07</td>
<td></td>
<td>-1.00</td>
<td>-0.98</td>
<td></td>
</tr>
<tr>
<td><strong>Balance-sheet structure</strong></td>
<td>PP&amp;E/asset</td>
<td>+</td>
<td>4.35</td>
<td>2.59</td>
<td>***</td>
<td>3.88</td>
<td>2.22</td>
<td>**</td>
<td>4.56</td>
<td>2.74</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>D/A</td>
<td></td>
<td>-3.67</td>
<td>-1.87</td>
<td></td>
<td>-3.27</td>
<td>-1.60</td>
<td></td>
<td>-3.66</td>
<td>-1.92</td>
<td>*</td>
</tr>
<tr>
<td><strong>Historical performance</strong></td>
<td>ROA</td>
<td></td>
<td>-3.61</td>
<td>-0.53</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Profit margin</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sales/asset</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Abnormal return, 1-year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Structural problem</strong></td>
<td>G-R mismatch</td>
<td>+</td>
<td>2.00</td>
<td>2.10</td>
<td>**</td>
<td>1.85</td>
<td>1.90</td>
<td>*</td>
<td>1.99</td>
<td>2.12</td>
<td>**</td>
</tr>
<tr>
<td><strong>Future performance</strong></td>
<td>Capx/asset</td>
<td>+/-</td>
<td>-9.92</td>
<td>-0.94</td>
<td></td>
<td>-9.12</td>
<td>-0.86</td>
<td></td>
<td>-11.65</td>
<td>-1.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B/M</td>
<td></td>
<td>-0.84</td>
<td>-1.36</td>
<td></td>
<td>-0.87</td>
<td>-1.36</td>
<td></td>
<td>-0.93</td>
<td>-1.49</td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>Hotel operator</td>
<td>+/-</td>
<td>-2.14</td>
<td>-1.29</td>
<td></td>
<td>-2.13</td>
<td>-1.28</td>
<td></td>
<td>-2.08</td>
<td>-1.25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middle age</td>
<td>+</td>
<td>1.23</td>
<td>1.82</td>
<td></td>
<td>1.18</td>
<td>1.69</td>
<td></td>
<td>1.25</td>
<td>1.86</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td></td>
<td>-0.80</td>
<td>-0.38</td>
<td></td>
<td>0.05</td>
<td>0.02</td>
<td></td>
<td>-0.88</td>
<td>-0.43</td>
<td></td>
</tr>
<tr>
<td></td>
<td>McFadden’s LRI</td>
<td></td>
<td>0.24</td>
<td></td>
<td></td>
<td>0.25</td>
<td></td>
<td></td>
<td>0.24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The sample includes a panel of the targeted companies listed in Exhibit 1 and the non-targeted lodging companies and hotel REITs that have available necessary data. The dependent variable is binary, which is equal to one for a company and year if an announcement was made in that year that the company was to be acquired, and zero if no such announcement was made. The independent variables are defined as follows. REIT size is the ranked market value of assets (0 to 9) of hotel REITs for the year against the population; Hotel size is the ranked market value of assets (0 to 9) of hotel companies for the year against the population; Sales growth is the growth rate in sales over the past two years; PP&E/asset is the ratio of PP&E to asset of the past year; D/A is the ratio of debt to assets, all measured at the previous year’s end; ROA is return on asset; Profit margin is defined as net income/sales of the past year; Sales/asset is the ratio of sales to total assets over the past year; Abnormal return, 1-year is the buy-and-hold abnormal returns of the company adjusted by CRSP value-weighted market returns over the prior calendar year; G-R mismatch is a binary variable that is equal to one if one of the following is true: (a) past-year sales growth is ranked in the top 1/3 but the liquid assets (cash plus receivables) as a percentage of total assets is ranked in the bottom 1/3 and the long term debt to equity ratio is ranked in the top 1/3 of the year among all lodging firms; or (b) past year sales growth is ranked in the bottom 1/3 but the liquid assets (cash plus receivables) as a percentage of total assets is ranked in the top 1/3 and the long-term debt to equity ratio is ranked in the bottom 1/3 of the year among all lodging firms; Capx/asset is the ratio of capital expenditure to total assets; B/M is the ratio of book value of equity (of past fiscal year) to the market capitalization (of past year end); Hotel operator is an indicator equal to one if the company is a hotel operating company and zero otherwise; and Mid age is a dummy variable if in the year the company’s age as a publicly traded company is in the middle 40% among all existing lodging firms. Expected signs are listed in the first column. Asterisks denote statistical significance, as follows: ; *** indicates the 1% level; **, 5%; and *, 10%.
significant. So, the smaller the significance level number, the stronger the statistical significance of the coefficient. For comparison, we tested three models using alternative measures of past performance.

Across the three models, the following results are salient. First, larger hotel operating companies and smaller hotel REITs are more likely to become targets; second, the size of the company’s fixed assets (measured as plant, property, and equipment, or PP&E) as a percentage of total assets have a significant positive effect on the company’s becoming a target; third, the debt-to-asset ratios all have negative coefficients, and two out of three are statistically significant at the 10-percent confidence level; fourth, the growth-resource mismatch has a positive significant coefficient across all three models. The three models also show that companies in their “middle-age” as publicly traded companies are more likely to become targets. By contrast, no performance measure carries a significant coefficient, whether that measure is stock- or accounting-based; the book-to-market ratio does not appear relevant either, particularly since all three coefficients have a sign opposite to what would be expected; and the measure of future performance, capital expenditures as a percentage of assets, does not have significant coefficients. By and large, these findings are consistent with what the theories predict.

Implications for Owners, Investors, and Executives

Summarizing this analysis, publicly traded targets during the acquisition wave in the lodging industry from 2004 through 2007 exhibited one or more of the following characteristics:

- They were larger hotel operating companies or smaller hotel REITs,
- Their PP&E as percentage of total assets was higher than most companies,
- They had relatively low debt-to-asset ratios,
- They displayed a mismatch between growth prospects and available resources, and
- They were “middle-aged,” as a publicly traded company.

To the extent that the model helps identify potential targets among all lodging firms, the implications of our analysis should be clear to current and future owners and investors in lodging companies. To reap high returns from receiving takeover offers, potential investors should invest in lodging companies that share the characteristics listed above. Shareholders and executives of public lodging companies who wish to sell could position their companies toward the characteristics listed above. For example, operating hotel companies can increase their size by buying up other smaller lodging assets, especially those that can increase their fixed assets, and by lowering their debt level. Executives that do not welcome takeover offers could do the opposite, for example, by increasing debt load or shedding fixed assets.

This analysis is based on publicly traded lodging firms because only these firms have sufficient good quality financial and accounting data. For owners and future investors of privately held hotel companies, whether and to what extent this analysis extends to privately held lodging assets are open to discussion. Nonetheless, it seems safe to infer that private companies act in some ways like public firms, in regard to the effect of fixed assets and debt ratios on takeover potential.
### 2010 Reports

Vol. 10, No. 9  **Building Customer Loyalty: Ten Principles for Designing an Effective Customer Reward Program**, by Michael McCall, Ph.D., Clay Voorhees, Ph.D., and Roger Calantone, Ph.D.

Vol. 10, No. 8  **Developing Measures for Environmental Sustainability in Hotels: An Exploratory Study**, by Jie J. Zhang, Nitin Joglekar, Ph.D., and Rohit Verma, Ph.D.

Vol. 10, No. 7  **Successful Tactics for Surviving an Economic Downturn: Results of an International Study**, by Sheryl E. Kimes, Ph.D.

Vol. 10, No. 6  **Integrating Self-service Kiosks in a Customer-service System**, by Tsz-Wai (Iris) Lui, Ph.D., and Gabriele Piccoli, Ph.D.

Vol. 10, No. 5  **Strategic Pricing in European Hotels, 2006–2009**, by Cathy A. Enz, Ph.D., Linda Canina, Ph.D., and Mark Lomanno

Vol. 10, No. 4  **Cases in Innovative Practices in Hospitality and Related Services, Set 2: Brewerkz, ComfortDelgro Taxi, DinnerBroker.com, Iggy’s, Jumbo Seafood, OpenTable.com, PriceYourMeal.com, Sakae Sushi, Shangri-La Singapore, and Stevens Pass**, by Sheryl E. Kimes, Ph.D., Cathy A. Enz, Ph.D., Judy A. Siguaw, D.B.A., Rohit Verma, Ph.D., and Kate Walsh, Ph.D.

Vol. 10, No. 3  **Customer Preferences for Restaurant Brands, Cuisine, and Food Court Configurations in Shopping Centers**, by Wayne J. Taylor and Rohit Verma, Ph.D.


Vol. 10, No. 1  **Compendium 2010**

### 2010 Roundtable Retrospectives

Vol. 2, No. 1  **Sustainability Roundtable 2009: The Hotel Industry Seeks the Elusive “Green Bullet.”**

### 2010 Industry Perspectives

No. 4  **Hospitality Business Models Confront the Future of Meetings**, by Howard Lock and James Macaulay

### 2009 Reports

Vol. 9, No. 18  **Hospitality Managers and Communication Technologies: Challenges and Solutions**, by Judi Brownell, Ph.D., and Amy Newman


Vol 9 No 16  **The Billboard Effect: Online Travel Agent Impact on Non-OTA Reservation Volume**, by Chris K. Anderson, Ph.D.

Vol 9 No 15  **Operational Hedging and Exchange Rate Risk: A Cross-sectional Examination of Canada’s Hotel Industry**, by Charles Chang, Ph.D., and Liya Ma

Vol 9 No 14  **Product Tiers and ADR Clusters: Integrating Two Methods for Determining Hotel Competitive Sets**, by Jin-Young Kim and Linda Canina, Ph.D.

Vol 9 No 13  **Safety and Security in U.S. Hotels**, by Cathy A. Enz, Ph.D.

Vol 9 No 12  **Hotel Revenue Management in an Economic Downturn: Results of an International Study**, by Sheryl E. Kimes, Ph.D.

Vol 9 No 11  **Wine-list Characteristics Associated with Greater Wine Sales**, by Sybil S. Yang and Michael Lynn, Ph.D.

Vol 9 No 10  **Competitive Hotel Pricing in Uncertain Times**, by Cathy A. Enz, Ph.D., Linda Canina, Ph.D., and Mark Lomanno

Vol 9 No 9  **Managing a Wine Cellar Using a Spreadsheet**, by Gary M. Thompson Ph.D.

Vol 9 No 8  **Effects of Menu-price Formats on Restaurant Checks**, by Sybil S. Yang, Sheryl E. Kimes, Ph.D., and Mauro M. Sessarego

Vol 9 No 7  **Customer Preferences for Restaurant Technology Innovations**, by Michael J. Dixon, Sheryl E. Kimes, Ph.D., and Rohit Verma, Ph.D.

Vol 9 No 6  **Fostering Service Excellence through Listening: What Hospitality Managers Need to Know**, by Judi Brownell, Ph.D.

Vol 9 No 5  **How Restaurant Customers View Online Reservations**, by Sheryl E. Kimes, Ph.D.

Vol 9 No 4  **Key Issues of Concern in the Hospitality Industry: What Worries Managers**, by Cathy A. Enz, Ph.D.
The Office of Executive Education facilitates interactive learning opportunities where professionals from the global hospitality industry and world-class Cornell faculty explore, develop and apply ideas to advance business and personal success.

**The Professional Development Program**

The Professional Development Program (PDP) is a series of three-day courses offered in finance, foodservice, human-resources, operations, marketing, real estate, revenue, and strategic management. Participants agree that Cornell delivers the most rewarding experience available to hospitality professionals. Expert faculty and industry professionals lead a program that balances theory and real-world examples.

**The General Managers Program**

The General Managers Program (GMP) is a 10-day experience for hotel general managers and their immediate successors. In the past 25 years, the GMP has hosted more than 1,200 participants representing 78 countries. Participants gain an invaluable connection to an international network of elite hoteliers. GMP seeks to move an individual from being a day-to-day manager to a strategic thinker.

**The Online Path**

Online courses are offered for professionals who would like to enhance their knowledge or learn more about a new area of hospitality management, but are unable to get away from the demands of their job. Courses are authored and designed by Cornell University faculty, using the most current and relevant case studies, research and content.

**The Custom Path**

Many companies see an advantage to having a private program so that company-specific information, objectives, terminology and methods can be addressed precisely. Custom programs are developed from existing curriculum or custom developed in a collaborative process. They are delivered on Cornell’s campus or anywhere in the world.