### Lodging Stocks Outperform Casinos on Wall Street, Reversing Their 1992-93 Performance

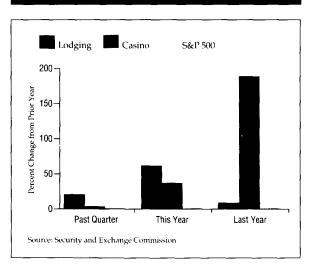
comparison of the stock market performance of lodging stocks and casino stocks over the past year reveals returns superior to the S&P500 for both groups. Over the 52-week period ending March 18, 1994, the average price of a sample portfolio of lodging stocks rose 61.6%, and a corresponding portfolio of casino stocks advanced 37.2%, compared with the S&P500's 4.6% return over the same period. The gain for lodging stocks represents a sharp rebound from the prior 52-week period, but a slowdown for the casino stocks. The strong showing of these stocks over the last year, as well as the changes in relative performance can be explained by an analysis of measures of fundamental value, such as the profit margin, return on equity, and return on assets, as well as structural changes in the industries. Interest in lodging and casino stocks by institutional investors is encouraging, but significant uncertainties, in particular with respect to taxation of gaming revenues and legalization of specific forms of gambling, present ongoing risks that could lead to continued stock price volatility.

This study seeks to determine the underlying causes for recent changes in the market performance of two hospitality industry portfolios, one composed of 25 lodging stocks with total revenues of \$9.18 billion in 1993 and the other comprised of 42 casino stocks with total revenues of \$3.52 billion.<sup>1</sup> These stocks comprise about 60% of those publicly-traded in each category. Most of the companies excluded from the study provide peripheral services and equipment or are thinly traded.

Each portfolio includes companies whose business focuses on either the lodging or casino industry. The lodging portfolio contains stocks of franchisors and owneroperators, limited service and luxury/resort hotel companies. Similarly, the casino portfolio includes large multi-unit casino companies, small or single unit properties, casinos doing business in Las Vegas, Atlantic City, and on the Mississippi River as well as Indian reservations.

#### Lodging and Casino Stock Returns Far Outstrip S&P500

Lodging stocks produced returns between mid-March 1993 and mid-March 1994 that were an average of 61.6% higher than the previous 52-week period, while casino stock prices increased by over 37.2%, compared to the 4.6% return on the S&P500. These figures are based on a simple mean of the percent changes in stock prices of the individual companies in each portfolio. This trend continued during the three-month period ending in mid-March 1994, as lodging stocks increased by 20.4% and casino stocks increased by 3.8%, still higher than the 2% return on the S&P500 (Chart 9). This



#### Chart 9. Returns of Lodging and Casino Stocks Far Outpace 8&P500 Over Last Year

represents a sharp improvement for lodging stocks, which returned only 8.8% during the prior 52-week period, less than the S&P500's 10% return. For the casino group, whose returns nearly tripled during the 1992-93 period, it represents a significant slowdown.

These results are even more impressive when the portfolios' returns are adjusted for market risk. The theory behind the Capital Asset Pricing Model (CAPM) states that stocks with higher measures of relative risk, or Beta, must yield higher returns to compensate their owners for the market risk imbedded in the stock. Beta is a measure of stock price volatility relative to the market. The overall market Beta is defined as 1.0.<sup>2</sup> The average Beta for stocks in the lodging portfolio was 1.17 while the average Beta for stocks in the casino portfolio was 2.10. This implies that stocks in the lodging portfolio were only 17% more risky than the market, while casino stocks were more than twice as risky as the overall market. Based on the CAPM, market risk adjustment is captured by calculating the required return on the portfolio, or

 $E(R_p) = R_f + (R_m - R_f) \beta_p$ 

where:

 $E(R_p)$  = the required return on the portfolio  $R_f$  = the return on risk free 30 yr. U.S. Gov't. Bonds

 $(R_m-R_f)$  is defined as the market's risk premium (historically equal to 7%)  $\beta_p$  = the portfolio's relative market risk or Beta (Lodging=1.17, Casino=2.1)

According to the equation above, the lodging portfolio had a required return equal to 16.2% for the year, while the casino portfolio's required return was 22.7%. By comparing the actual return to the required return we can find the excess return (ER), where :

ER = Actual Return - Expected Return

For the lodging portfolio, the excess return over the last year was 45.4% compared to the 14.5% excess return of the casino portfolio. Within the framework of the CAPM, positive excess return measures the investor's economic profit from a portfolio in the same way that an internal rate of return (IRR) in excess of the discount rate measures the profit from a real estate investment.

#### High P/E Implies High Risk

Similarly, fundamental analysis reveals that the profitability ratios for the lodging stocks were well above those of the casino stocks. As we can see from Table 23 (p.35), the Profit Margin, Return on Equity (ROE), and Return on Assets (ROA), of lodging companies are almost double those of the casino companies. Although current profitability measures are higher for lodging companies, the market's expectations of future growth, measured by the price earnings multiple (P/E), is higher for casino companies. The average P/E for casino companies is 71 compared to 55 for companies in the lodging portfolio. Both portfolios' P/E's are higher than the market P/E of 19, which implies that the market's growth estimate for companies in both industries is far above the market's average. These very high P/E's also mean that if earnings growth were less than expected, both lodging and casino stocks would face sharper than average price declines, implying greater than average risk for companies in both groups.

The relative risk in both industries can also be assessed by comparing the average financial leverage and interest coverage of companies in the two portfolios. The debt-equity (D/E)ratio for casinos is 1.66, or about 40% higher than the 1.19 average D/E for lodging companies. At the same time, casino companies have a lower interest coverage ratio than the lodging companies, at 1.7 and 2.2 respectively. The combination of more debt and lower interest coverage means that casinos have more financial risk in addition to the higher market risk measured by the P/E ratio and Beta. Lodging companies, in contrast, have a larger cushion in case of an economic downturn as well as more flexibility to add more debt to their capital structure if

	Lodging	Casino
Price/Earnings	55.1	71
Price/Book	5.41	5.44
Price/Revenue	3.35	2.21
Debt/Equity	1.19	1.66
Interest Coverage	2.2	1.7
Profit Margin (%)	6.4	3.1
ROE (%)	9.8	7.7
ROA (%)	3.7	2.4

# Bable 23: Fundamental Analysis Indicates That Casino StocksAre Riskier Than Lodging Stocks

necessary. Therefore, based on market and financial analysis, lodging companies have less risk than casino companies, although both industries are more risky than average.

#### Lodging Shake-out and New Casino Entries Help Explain Reversal of Fortune

The lodging industry's turnaround and the casino industry's slowdown in market performance can be explained by a number of economic and structural developments. First, the shake-out and consolidation of operating companies and franchisors in the lodging industry has been reflected on Wall Street as the de-listing of five of the companies in the lodging portfolio between 1992 and 1993. While de-listing may occur when a company is subsumed under another entity, it generally indicates that the firm has ceased to operate. With the weaker companies eliminated, the remaining lodging companies are financially stronger. This shift in market composition helps explain the six-fold increase in the 1993-94 average annual return of lodging stocks from the year before. Second, the growth forecast and high P/E's associated with the 189% average annual return on casino stocks during 1992-93 caused a rush of initial public offerings (IPO's). Between the 1992-93 and 1993-94 periods, the number of casino companies doubled from 21 to 42. Although the growth prospects for the growing

international gaming industry and the newly opened markets on the Mississippi River and Native American Reservations are still considered optimistic, Wall Street has become wary of the crowded field, given the probability that not all companies will survive the new competitive dynamics. This helps explain why Casino stocks did not continue to have triple digit returns through 1993-94.

Casino stocks are also especially vulnerable to political developments. Many investors first became concerned in early April when the White House floated the concept of a 4% tax on gaming revenues to help fund welfare reform.<sup>3</sup> Then, just a few days later, Missouri voters narrowly rejected an amendment that would have allowed slot machines on riverboat casinos,<sup>4</sup> sending many casino stocks with a stake in Missouri into sharp decline on April 6. Casino operators now face the decision whether to open planned facilities with only games of skill or to wait to see if the Amendment is passed on a second vote expected this summer. Then, the following week, the stock market, rocked by increases in short-term interest rates, registered a sharp correction. During the week ended April 15, 1994, the lodging portfolio registered a 4.5% decline, compared with a 7.3% decline for the casino portfolio. Year-to-date returns were -3.0% and -20.2% for

the lodging and casino portfolios, respectively. While neither the Missouri vote nor the stock market decline represent major setbacks for gaming, investor reaction illustrates the high degree of volatility inherent in casino stocks.

With significant excess risk-adjusted returns, the favorable reception of lodging companies on Wall Street reflects the industry's current operating performance on Main Street. Franchisors have continued to focus on the more profitable limited-service segment of the market. Many have recently instituted a number of "value added" strategies to improve performance at the property level. The result has been increasing revenues through yield management, product differentiation and cost reductions resulting from purchasing power and distribution synergies.

By structuring management contracts that align their interests with those of the owners and making equity contributions, the management contract company/partner is becoming the rule rather than the exception. Now that most fee percentages are applied to bottom-line operating profits, management companies have cut costs by "flattening" the organization while empowering employees and outsourcing F&B operations to reduce uncertain revenue streams. As a result, the lodging industry is composed of a leaner and more profitable group of companies.

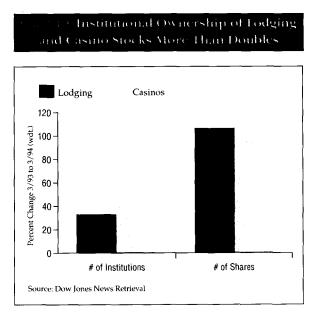
The casino industry has also experienced a resurgence, although quite different from that of the lodging industry. The casino portfolio has been consistently outperforming the overall market, based on continued growth in the casino industry caused by three major factors. First, Mirage, Circus-Circus, and the MGM-Grand Casino company have each added 'mega-projects' that seem to embody the concept that supply creates its own demand. The second reason behind the popularity of casino stocks has been the legalization of gambling along the Mississippi River. Argosy Gaming, Casino Magic, President Riverboat Casinos, and Delta Queen Steamboat are examples of the more prominent companies focusing almost entirely on this segment of the industry.

Finally, recognizing their exclusion from state prohibitions on gambling, Native American Indian tribes have begun to build casinos. A number of companies focusing on developing Indian Reservation casinos have recently become publicly traded through IPO's. Advanced Gaming Technology, American Casino Enterprises, Grand Casinos, and Boyd Gaming are examples of companies focusing on this sector of the casino industry. Wall Street has been quick to realize the potential of legalized gambling across the country as more and more states are acknowledging the gains in tax revenues and employment potential that follow the legalization of gambling into their states. In addition to traditional players, existing companies like Hilton, Mirage and Circus-Circus, new entrants like ITT and now Hospitality Franchise Systems (HFS) are all seeking to penetrate this potentially profitable industry. In addition to a large number of recent IPO's, there are now more than seventy gaming stocks trading on the various exchanges.

The connection between the growth in gaming operations and the future growth of the lodging industry is potentially very strong. Development of new hotels associated with casinos adds another contributing factor for the performance of lodging stocks during the past year.

## Institutional Investors Renew Interest in Lodging and Casino Stocks

The high P/E multiples and annual returns of both portfolios may be partly due to recent purchases of lodging and casino stocks by institutional investors. Since they must limit investments in high risk speculative securities to comply with "Prudent Investor" regulations,<sup>5</sup> institutions tend to buy and sell together. A number of studies have established a correlation between increases in institutional investor participation and high returns and P/E multiples, reflecting this



"herding" behavior. Chart 10 shows the weighted percent change in institutional ownership of casino and lodging stocks from 1993 to 1994.

Both lodging and casino stocks experienced a percentage increase in the number of shares held of 106.1% and 115.3%, respectively, and a 32.7% (lodging) and 49.3% (casinos) increase in the number of institutions holding shares. We believe this trend is likely to continue, since institutions tend to continue to buy and to bring more institutional investors with them. Now that institutions are investing in these companies through the stock market there is a greater probability that they will make other investments as well. Institutions, such as insurance companies and pension funds, invest in the hotel industry by making direct real estate equity investments, by lending out money through mortgages and other private placements, as well as by investing in securitized real estate like REIT's. Increased institutional investor interest in the hotel industry from this study may therefore result in the availability of additional investment financing in the future.

We expect that institutions will continue to buy equity in casino companies as long as public and governmental sentiment toward gaming is basically supportive. For lodging stocks, the continued interest of the institutional investment community will be dependent on sustained earnings growth and strong financial performance. Higher profitability and lower financial risk is likely to translate into a more active real estate and financial market for the hotel industry. Favorable stock performance could have the positive effect of making additional funds available for refinancing mortgages and refurbishing older hotels at the property level through securitized mortgage obligations, which institutions favor over direct, individual property lending.

- <sup>1</sup> Since most of the lodging companies in the sample represent management companies or property franchisors, their revenues represent only a small percentage of the total revenues of the properties belonging to each chain organization. Revenues associated with the casino portfolio are likely to be closer to the total for the group, since a higher percentage of casino revenue is derived from publicly traded companies, most of which represent owner operators.
- <sup>2</sup> Beta is defined as:  $\beta_i = cov(r_i, r_m/var(r_m)).$
- where:  $j = stock \ m = market$
- <sup>3</sup> During the third week in April, the White House announced support for a scaled-down welfare reform plan that does not depend on the gaming tax for funding.
- <sup>1</sup> The Amendment would have lifted the state's han on games of chance. Slot machines have been disallowed by the state Supreme Court, because it is unclear whether they are games of skill or games of chance.
- <sup>5</sup> "Prudent Investor" regulations stipulate that institutions sbould invest in those stocks and financial obligations that would be considered investment quality by an individual, responsible investor. For bonds, this translates into those rated BBB or better, but for stocks, the concept is more subjective, so institutions prefer stocks in which other institutions have shown interest.