



## ACTUAL SHARE REPURCHASES AND CAPITAL GAINS IN THE HOSPITALITY INDUSTRY

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### Abstract

Share repurchases are a very important means of distributing cash to shareholders. The purpose of our study is to determine if share repurchases impact and/or are impacted by stock returns. We analyze the impact share repurchases have on stock returns during the quarter of repurchase, and the impact share repurchases have on stock returns in the quarter following the repurchase. We use a nonparametric test and find that repurchasing hotels and non-repurchasing hotels generally have insignificantly different returns in both the quarter of the repurchase and the quarter following the repurchase. This suggests that repurchases do not drive a firm's stock price up relative to non-repurchasing peers, and stock returns in the quarter following repurchases are generally no better than non-repurchasing peers.

### Actual Share Repurchases and Capital Gains in the Hospitality Industry

#### Introduction

Share repurchases and dividends are the most common methods of distributing cash to shareholders. Historically, dividends have been the preferred method, but share repurchases have become very popular over the last decade. In fact, actual share repurchases grew at a compound annual rate of 36.8% from 1991 to 1999 according to data collected by J.P Morgan.

Dividend distributions tend to be very stable from one quarter to the next. Investors count on this cash distribution and tend to drive the stock price down if it is reduced or eliminated. Alternatively, share repurchases vary considerably from one quarter to the next, and investors don't tend to count on this distribution. With a repurchase, shareholders can choose either a cash distribution by selling shares of stock or an increase in ownership by holding their shares.

Share repurchases have several advantages over dividends. First, dividends force cash distributions, transactions cost, and possibly taxes on all shareholders. Many shareholders simply plow the dividend distribution back into the stock market and must pay transactions cost to do this. Also, if the investor holds the stock in a taxable account, he must pay tax on the distribution. Share repurchases only impose these costs on shareholders choosing to sell their shares. Second, if managers correctly perceive that the stock is undervalued, buying it back will benefit long-term shareholders. Third, share repurchases diminish the dilution of earnings per share caused by conversions, mergers, and/or exercised options.

The primary methods used for repurchasing stock are tender offers and open market repurchases. Companies using a tender offer typically agree to buy a certain percentage of their outstanding shares at a stated price on a specified date from those shareholders that indicate a willingness to sell. Dann (1981) and Vermaelen (1981) find that firms generally repurchase about 15% of their equity in a tender offer, and the average premium offered is 22% above the market price prior to the repurchase announcement.

An open market repurchase is more flexible than a tender offer and generally takes place over several years. Open market repurchase plans are generally announced, and the announcement usually states the amount and duration of the planned repurchases. An open market repurchasing company buys its shares through one broker, and sellers are unaware they are selling to the company. Vermaelen (1981) and Ikenberry and Vermaelen (1996) find that the average announcement period abnormal return is about 3.5%. According to Securities Data Corporation, about 90% of all announced repurchases in the 1986 to 1995 period were to be carried out through the open market.

A recent study by Stephens and Weisbach (1998) finds that firms actually repurchase between 74 and 82 percent of their announced repurchase. The authors find that a firm's actual repurchases are indirectly related to prior stock price performance, suggesting that firms repurchase stock to take advantage of low stock prices.

Ikenberry, Lakonishok, and Vermaelen (1995) examine the long-run firm performance following open market share repurchase announcements and find that the average excess four-year buy-and-hold return, measured after the initial announcement, is 12.1%. This finding suggests that managers are able to determine when the company's stock is significantly undervalued and thus undertake a repurchase program in order to benefit long-term shareholders. It also suggests that investors are underestimating the value of the repurchase announcement.

DeAngelo, DeAngelo, and Skinner (2000) hypothesize that firms use repurchases to raise the firms' stock price in order to fend off takeovers and keep institutional investors happy. They point out that repurchases, takeover pressure, and institutional investing all became significant in the early 1980s.

Our study investigates whether actual share repurchases boost a firm's stock price relative to peers. We analyze the relationship between actual repurchases by firms in the hotel sector and current and future price movements. We focus on capital gains during the current quarter and subsequent quarter of the repurchase. A Wilcoxon Rank Sum Test is used to determine if there is a significant positive relationship.

### Data and Methodology

Data was obtained from Morningstar.com and from FreeEdgar.com for the ten quarters ending with the second quarter of the firm's fiscal 2000 year. Initially, 38 companies categorized as "Hotels" by Morningstar were analyzed. Fourteen hotels were eliminated because of missing data. Table 1 lists the firms in the final sample.

**Table 1**

This table lists the ticker symbol and names of the 24 hotels that were in the final sample.

<b>Ticker</b>	<b>Hotel Name</b>
BUCK	Buckhead America
CHH	Choice Hotels International
CLJ	Crestline Capital
FS	Four Seasons Hotel
GET	Gaylord Entertainment
HLT	Hilton Hotels
HOST	Amerihost Properties
HUDS	Hudson Hotels
HWS	Hotelworks.com
IHCO	Interstate Hotels
JAGI	Janus Hotels and Resorts
JAMS	Jamison Inns
JQH	John A. Hammons Hotels
MAR	Marriot International
MHX	Meristar Hospitality
MMH	Meristar Hotels and Resorts
MTN	Vail Resorts
PDQ	Prime Hospitality
RZT	ResortQuest International
SLAM	Suburban Lodges of America
SVR	Silverleaf Resorts
TWRI	Trendwest Resorts
WEH	Westcoast Hospitality
WYN	Wyndham International

Morningstar was used to look up quarterly stock prices, which were needed to calculate each firm's quarterly capital gain. The capital gain is defined as the firm's ending stock price minus the beginning stock price divided by the beginning stock price.

FreeEdgar was used to find the firm's quarterly cash distribution for share repurchases. A firm distributing cash to shareholders via share repurchases was classified as a repurchasing firm. Some firms have missing information in a few quarters, therefore, the sample size varies slightly from one quarter to the next.

A nonparametric method of testing the relationship between share repurchases and capital gains was used because these variables are not normally distributed. Many firms repurchase no shares (80 % of our sample) and this truncates the distribution. Also, a firm's stock price cannot decrease by more than 100%, but it can increase infinitely. This skews the distribution.

The Wilcoxon Rank Sum Test involves pooling the repurchase sample and the non-repurchase sample, ranking the firms by their quarterly return, and then adding the ranks given to the non-repurchasing firms to form a rank sum T. T has an approximately normal distribution with parameters

$$m_T = \frac{n_N(n_N + n_R + 1)}{2}$$

and

$$\sigma_T^2 = \frac{n_N n_R (n_N + n_R + 1)}{12}$$

where  $n_N$  = the size of the non-repurchasing sample and  $n_R$  = the size of the repurchasing sample. Then by comparing  $(T - m_T) / \sigma_T$  with a standard normal distribution table we determine whether to reject the following null hypotheses:

**Hypothesis 1:** Repurchasing firms do not have above average returns during the quarter of the repurchase.

**Hypothesis 2:** Repurchasing firms do not have above average returns in the quarter following the repurchase.

We believe firms will have above average returns during the quarter of repurchase due to an increase in the quantity of shares demanded, holding other factors constant. Rule 10B-18 under the Securities Exchange Act places four restrictions on a company repurchasing shares in the open market: 1) the company can only operate through one broker; 2) the company cannot lead the market; 3) the company cannot buy at the opening price or buy in the last half-hour of trading; 4) the company's daily repurchase limit is equal to 25% of the previous four-week daily volume average. These restrictions hamper a company's ability to drive the stock price up. However, a company serious about repurchasing its stock can support the price.

We also believe actual stock repurchases send a positive signal to investors who will respond by bidding the firm's stock price up relative to industry peers. Investors can confirm repurchases by analyzing a firm's quarterly statement of cash flows. One potential problem is that investors might expect a bigger repurchase than actually occurs during the quarter. If this happens, investors will be disappointed and will bid the firm's stock price down relative to its peers.

## **Results**

Table 2 shows basic information related to the sample. The sample size starts at 15 in quarter 1 and increases to 24 in quarter 10 due to missing data for some firms. The percentage of repurchasing firms in the sample ranges from 20% to 42.9%. Also, firms repurchased anywhere from 1% to 2.12% of their total assets. Repurchasing behavior is influenced by industry specific factors such as profitability and the level of stock prices. For example, if the industry is very profitable, firms will probably have excess funds to distribute to shareholders via repurchases. Also, if stock prices in general trend downward, firms may see repurchases as a better "investment."

Table 2 also indicates the average quarterly capital gain for repurchasing and non-repurchasing firms. Hotels repurchasing shares have a higher capital gain in 6 of the 10 quarters. This provides weak evidence supporting the idea that repurchasing firms have higher capital gains than non-repurchasing firms during the quarter that the repurchase takes place.

**Table 2**

This table presents data from the first fiscal quarter of 1998 (Q 1) to the second fiscal quarter of 2000 (Q 10). It shows the number of firms in the sample for each quarter, the number of firms that repurchased stock during the quarter, the percent of firms that repurchased stock during the quarter, the average repurchase distribution to total assets ratio for repurchasers, the average capital gain for repurchasers, and the average capital gain for non-repurchasers.

<b>Hotels</b>	<b>Q 1</b>	<b>Q 2</b>	<b>Q 3</b>	<b>Q 4</b>	<b>Q 5</b>	<b>Q 6</b>	<b>Q 7</b>	<b>Q 8</b>	<b>Q 9</b>	<b>Q 10</b>
Number of Firms	15	17	19	20	21	21	23	23	23	24
Number of Repurchasers	3	4	7	6	8	9	8	9	8	7
Percent of Firms Repurchasing Stock (%)	20%	23.5%	36.8%	30%	38.1%	42.9%	34.8%	39.1%	34.8%	29.2
Average Repurchase Distribution / Total Assets (%)	1.25	1.98	2.12	1.24	1.03	1.25	1.23	1.83	1.12	1.00
Average Capital Gain for Repurchasers (%)	5.91	-13.72	-32.88	12.41	-5.16	19.26	-7.68	-.16	-.36	5.40
Average Capital Gain for Non-Repurchasers (%)	-.80	-9.17	-35.79	22.11	-2.45	8.97	-14.77	7.40	-10.92	-5.25



Table 3 shows the results of the Wilcoxon Rank Sum Test. Ten quarters are presented ending with the second fiscal quarter of 2000. We find no significant differences in quarterly returns of repurchasing firms and non-repurchasing firms during the quarter of repurchase. Therefore, we cannot reject hypothesis 1. It is possible that other significant events that occur during the quarter reduce or eliminate the positive effects a share repurchase has on the stock price.

Firms that repurchased stock in quarter 8 had a significantly higher return in quarter 9 than non-repurchasing firms. All other subsequent returns for the two groups were insignificantly different. We find no evidence that repurchasing firms consistently have higher returns than non-repurchasing firms in the quarter following the repurchase. Therefore, we cannot reject hypothesis 2. However, as previously mentioned this signal is highly dependent upon investors' expectations of actual repurchases. If the repurchase simply met expectations, then no significant increase in share price will occur.

**Table 3**

This table presents the results of the Wilcoxon Rank Sum Test. Ten quarters are presented starting with the first fiscal quarter of 1998. Hotel sector firms that repurchased stock in Quarter 8 had significantly higher returns than non-repurchasing firms in the quarter following the repurchase. The returns for the eight other quarters were insignificantly different.

<b>Hotels</b>	<b>Number</b>	<b>Current Quarter (T-m<sub>T</sub>) / σ<sub>T</sub></b>	<b>Subsequent Quarter (T-m<sub>T</sub>) / σ<sub>T</sub></b>
(Quarter 1, 1998) 1	24	-.58	
2	23	1.02	1.30
3	23	-.76	-.68
4	23	.58	-.76
5	21	.36	.33
6	21	.78	-.07
7	20	.97	-.07
8	19	.95	1.16
9	17	-1.61	-1.76 <sup>a</sup>
(Quarter 2, 2000) 10	15	-.92	-.32

a. Significant at the 10% level.

### **Conclusions**

Share repurchases are a primary method of distributing cash to shareholders. Our study analyzes the impact share repurchases have on stock returns during the quarter of repurchase and the quarter following repurchase. We use a nonparametric test and find that quarterly returns of repurchasing firms and non-repurchasing firms are insignificantly different during the quarter of repurchase. This suggests that share repurchases do not boost a firm's current stock price relative to peers.



We also find that repurchasing firms have significantly higher quarterly returns than non-repurchasing firms in the quarter following the repurchase in only one of nine cases examined. This evidence is very weak and suggests that investors see little value in the confirmation and magnitude of a repurchase plan. We find no compelling evidence that suggests investing in a portfolio of hotel firms will earn above average returns in the short-run.

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