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Collin Ramdeen
Florida Gulf Coast University

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An Examination of Hospitality Corporation Takeovers Using Earnings and Cash Flow Measurements

Collin Ramdeen

Lutgert College of Business, Florida Gulf Coast University, Fort Myers, FL

ABSTRACT

This study evaluates the ability of cash flow and earnings-based measures of return in the hospitality industry to assess the differences between target companies and their industries and to explain target companies' abnormal returns during takeover periods. Target company abnormal returns observed during takeover periods are significantly related to both the difference between target company and average industry earnings to total assets and the difference in cash flow to total assets. Abnormal returns are negatively related to the difference in earnings to total assets, suggesting that target company assets are underutilized. The difference between target company and target industry cash flow to total assets is positively related to target company abnormal returns, indicating that acquiring companies value the near-term cash flow of target companies.

Keywords: *abnormal returns, cash flows, earnings-based measures, takeovers, target companies*

Introduction

Corporate takeovers continue to get attention from both academics and practitioners (Kiymaz, 2013). Takeover activities tend to be the greatest in periods of general economic expansion (Lessard, Lucea, & Vives, 2013). The motivations for takeover activities are building company capabilities, general economic integration, and corporate growth strategies (Kiymaz, 2013; Lessard, Lucea, & Vives, 2013).

Canina (2009) indicated that in 2007 there were 435 hospitality related takeovers worldwide with a total value of \$109.7 billion. Corporate takeovers are major events for individual firms and sometimes even for entire industries. It is not surprising that the wealth effects of mergers attract significant attention in financial research (Free, Hadlock, & Pierce, 2012). Jarrel, Brickley, and Netter (1988), using the stock price reactions during a short window around announcement dates, reported important gains from takeovers. Wealth gains accrue almost entirely to the target company shareholders. Andrade, Mitchell, and Stafford (2001) presented evidence that the method of payment has an impact

on the reaction of stock markets to the takeover announcement. Acquiring companies that pay with stock tend to earn significant and negative abnormal returns around the announcement date, while acquirers that finance the transaction with cash earn no statistically significant abnormal returns (Andrade, Mitchell, & Stafford, 2001).

Some of the explanations proposed for takeovers include increase in market power (Weber, 2004), improvement in target management (Andrade, Mitchell, & Stafford, 2001), production and distribution efficiencies and mitigation of hold-up problems (Williamson, 1975), and tax advantages (Heron & Lie, 2002). The empirical evidence suggests the overall gains from takeovers are small, with the target shareholders capturing most of the incremental value. Using abnormal stock returns around takeover announcements as a proxy for value creation, Andrade et al. (2001) report the mean combined cumulative abnormal return (CAR) for acquirers and targets is 1.8% over the period 1973–1998. The average CARs for the targets and the acquirers are 16% and –0.7%, respectively (Andrade et al., 2001).

CONTACT: Address correspondence to Collin Ramdeen, Lutgert College of Business, Florida Gulf Coast University, 10501 FGCU Boulevard South, Fort Myers, FL 33965, USA. Email: crandeem@fgcu.edu.

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Low performance of stock acquirers can be related to the signaling hypothesis of Myers and Majluf (1984). In their information asymmetry model, a cash financed takeover is interpreted by the market as good news and a stock-for-stock takeover as bad news. Shleifer and Vishny (2003) developed a model in which the financial markets are strong-form inefficient, leading to the misevaluation of firms. One of the implications of their model is overvalued acquirers make stock-for-stock bids for undervalued targets; the method of payment in mergers reveals the prior misevaluation, causing a negative market reaction.

In the hospitality industry the objectives of takeover are expansion, growth, and maximization of shareholder value (Hsu & Jang, 2007). According to Tsai, Pan, and Lee (2011), takeover in the hospitality industry results in major benefits in the form of economies of scale and synergy for managers, shareholders, and institutional investors. However, Canina (2009) indicated that in theory the benefits are true, but there are several problems that could make the financial benefits less likely to materialize. Canina (2009) also stipulated that two-thirds of takeovers fail to create shareholder value.

Prior studies on takeover in the hospitality industry used comparative analysis to examine motives (Quek, 2011), market analysis, and accounting measures (Hsu & Jang, 2007; Yang, Qu, & Kim, 2009). This research utilizes cash flow and earnings-based measures of return to assess the differences in the characteristics of target companies or acquired companies compared to their industries and to examine the association of these measures with target companies' abnormal returns during takeover using modified models from Stokes and Neuburger (1998). Practitioners and the business media have raised concerns that the excessive focus on accounting earnings rather than cash flow leads to suboptimal investment decisions (Sloan, 1996; Liu, Nissim, & Thomas, 2007).

Literature Review

Cash Flow, Earnings, and Takeovers

Accrual accounting earnings has been a matter of interest for managers, current and prospective owners of companies, and financial analysts in the hospitality industry (Andrew, Damitio, & Schmidgall,

2007; Canina, 2009; Tsai, Pan, & Lee, 2011). Cash flow, a useful gauge of liquidity, has also been of interest and in recent decades has received greater attention from academics and accounting regulators (Andrew, Damitio, & Schmidgall, 2007; Canina, 2009; Tsai, Pan, & Lee, 2011). Its supporters view joint earnings and cash flow reporting as an improvement over the issuance of conventional accrual accounting alone (e.g., Lee, 1972; Ashton, 1976; Ijiri, 1978; Belkaoui, 1988). A number of studies have examined, with mixed results, the usefulness of cash flow versus earnings for the purpose of (1) predicting financial distress (Beaver, 1966; Casey & Bartzack, 1985; Gentry, Newbold, & Whitford, 1985; Largay & Stickney, 1980); or (2) determining the information content of financial statements (Rayburn, 1986; Wilson, 1987; Bowen, Burgstahler, & Daley, 1987; Bernard & Stober, 1989).

If takeover bids arise as a result of target firm undervaluation and/or managerial motives (Lev, 1983), then cash flow and earnings measures may be useful tools for analyzing takeovers. Coffee (1988) identifies several potential reasons for target companies' undervaluation, including the failure of management to efficiently handle a company's assets and the risk aversion of managers who may be extremely protective of their own authority. Under this scenario, motivation for a takeover bid stems from the bidder's desire to acquire an undervalued firm, displace current management, and exploit the disparity between the target's potential and current values.

Also, if firms become takeover targets due to undervaluation, then it is possible that the economic characteristics underlying this undervaluation (e.g., inefficient use of assets) are reflected in their accounting-based return measures. As such, the earnings and cash flow to total assets ratios, relative to the industry standard, provide an empirical prediction concerning the sources of value in takeovers and the characteristics of takeover targets. This possibility is addressed empirically by an examination of the target company's earnings to total assets and cash flow to total assets in comparison with the average of these performance measures for companies in the target's industry. The following hypotheses, stated in the alternative form, are tested:

H1a: $D(E/TA)$ is less than zero.

H1b: $D(CF/TA)$ is less than zero.

where

E/TA = earnings to total assets ratio,

CF/TA = cash flow to total assets ratio,

$D(E/TA)$ = difference between target company earnings to total assets and average earnings to total assets for the target company's industry,

$D(CF/TA)$ = difference between target company and average industry cash flow to total assets,

$D(E/TA)$ and $D(CF/TA)$ = based on data from the last full fiscal year prior to takeover resolution.

Takeover results in a gain in wealth for target company's shareholders (Dennis & McConnell, 1986; Huang & Walkling, 1987; Bradley, Desai, & Kim, 1988). Rejection of the null for H1a and H1b will provide some indication that target companies are poor performers compared to their industries. However, this alone will not demonstrate that poor performance is associated with the magnitude of the bid in a takeover offer. The next section describes tests of the association between relative target/industry performance and the abnormal stock returns earned by target company shareholders.

Cash Flow, Earnings, and Takeover Abnormal Returns

When companies become takeover targets due to managements' failure to efficiently employ assets and this underperformance can be remedied by a change in management, then, other things being equal, the lower the performance of the target in comparison to similar companies, the greater the gain to the acquirer. Further, if economic performance is proxy by the target's accounting measures of return, the abnormal returns earned by target shareholders during the takeover period should be associated with target company cash flow and earnings to total assets relative to the industry standard. Under this scenario, $D(CF/TA)$ and $D(E/TA)$ should inversely proxy the extent to which an acquiring company could better exploit the resources of the target firm and, consequently, should be negatively related to the share price increment that the bidding company is willing to pay for the target. This leads to the second hypothesis:

H2a: $D(E/TA)$ is negatively related to target firm cumulative abnormal returns observed during the interval from the first announcement of a takeover offer to the date of takeover resolution.

H2b: $D(CF/TA)$ is negatively related to target firm cumulative abnormal returns observed during the interval from the first announcement of a takeover offer to the date of takeover resolution.

To analyze the extent to which $D(CF/TA)$ and $D(E/TA)$ can explain abnormal returns of targets, the regression in equation (1) below is estimated. Separate regressions of $CAR(T)$ on $D(E/TA)$ and on $D(CF/TA)$ are also reported in the result section.

$$CAR(T) = a_0 + a_1 D(CF/TA) + a_2 D(E/TA) \quad (1)$$

where

$CAR(T)$ = the cumulative abnormal return of the target over the takeover contest period,

$D(CF/TA)$ = the difference between target company T 's industry, and

$D(E/TA)$ = the difference between target company T 's earnings to total assets and average earnings/total assets for T 's industry.

Additional factors have been found to influence the magnitude of target company abnormal returns during the course of a takeover contest. Huang and Walkling (1987) have found that returns to target shareholders are higher when the target's management opposes the takeover and that more wealth is created in cash transactions than in takeovers conducted all or partly by the exchange of securities. Servaes (1992) also reported that multiple bidders in the contest increased the returns to target shareholders. Finally Bradley et al. (1988) note that, with the appearance of investment banking companies specializing in financing takeovers and the creation of anti-takeover devices, there has been a change in the overall merger environment. These factors may confound the results of the analysis shown in equation (2) below.

$$CAR(T) = b_0 + a_1 D(CF/TA) + b_2 D(E/TA) + b_3 CASH + b_4 HF + b_5 BIDS + b_6 SIZE \quad (2)$$

$CAR(T)$, $D(CF/TA)$, and $D(E/TA)$ are defined above. The control variables have the following definitions: $CASH$ is an indicator variable equaling one if the takeover is primarily for cash and zero otherwise; HF is an indicator variable equaling one if management's reaction to the takeover indicates that it is hostile and zero if friendly; $BIDS$ is an indicator variable equaling one if there is more than one bidder for the target and zero if there is only one bidder; and $SIZE$ is the natural logarithm of the market value of equity of the target firm at the beginning of the year in which the takeover announcement is made.

For $D(CF/TA)$ and $D(E/TA)$ the expectations remain the same. Given the discussion above, the coefficients for $CASH$, HF , and $BIDS$ are expected to be positive. Because $SIZE$ is included as general control variables, there is no directional expectation for their coefficients.

Research Method

Data Collection

A sample of completed takeovers was identified by examining the COMPUSTAT Annual Research File for companies delisted due to merger or acquisition over the period 1994–2007. This period was selected because it displays characteristics of the typical takeover through expansion (Corrao, 2012).

Companies in gaming, hotel, and restaurant industries were included in the sample. Information on industry earnings, cash flow, and total assets were collected from the COMPUSTAT Annual Research File. Similar data for target companies was collected from the COMPUSTAT Annual Research File. Return data was collected from the CRSP Daily Return File. Other information collected includes the date of the first takeover offer for the target firm, the form of payment (cash, securities, or mixed cash and securities), the number of bidding companies, and the nature of the takeover (the takeover was viewed as friendly unless the Wall Street Journal Index reported the opposition of management to the offer). The Wall Street Journal Index on Mergers and Acquisitions (2007) is the source of these information items.

The date of the first offer is the date on which the first bid for the firm was made. In a multi-firm bidding contest, this date is not necessarily the date of

the first bid by the firm that eventually acquired the target.

Analysis of Data

The final sample consists of 52 takeovers that were completed between 1994 and 2007. Table 1 presents the distribution of the sample by industry and number of takeovers. Table 2 subdivides the sample according to various merger characteristics. Due to incomplete coverage in the Wall Street Journal Index on Mergers and Acquisitions (2007), one or more merger characteristics could not be determined for a number of companies.

Calculation of Earnings and Cash Flow to Total Assets

Earnings to total assets (E/TA) is calculated as earnings available to common shareholders in year t

Table 1. Frequency Distribution of Sample by Industry and the Number of Takeover Targets (1994–2007)

Industry	Number of Takeovers
Gaming	11
Hotels	22
Restaurants	19
Total	52

Table 2A. Sample Frequency of Takeovers Classified by Method of Payment

Method of Payment	Number of Firms	Percentage
Cash Payment	22	42%
Securities	16	31%
Mixed Cash and Securities	14	27%
Total	52	100%

Table 2B. Sample Frequency of Takeovers According to Management Reaction to Offer

Management Reaction	Number of Firms	Percentage
Hostile Acquisition	11	21%
Friendly Acquisition	30	60%
Unknown	10	19%
Total	52	100%

Table 2C. Sample Frequency of Takeovers Classified by Number of Bidders

Number of Bidders	Number of Firms	Percentage
1 Bidder	32	62%
2 Bidders	8	15%
3 Bidders	4	8%
Unknown	8	15%
Total	52	100%

(data from COMPUSTAT) divided by closing total assets from year $t-1$ (data from COMPUSTAT).

The calculation of cash flow for year t (CF_t) is shown in equation (3) below:

$$CF_t = Earnings_t + Depreciation_t + \text{Deferred Taxes}_t - (\text{Current Assets}_t - \text{Cash}_t - \text{Current Liabilities}_t) + (\text{Current Assets}_{t-1} - \text{Cash}_{t-1} - \text{Current Liabilities}_{t-1}) \quad (3)$$

where

Earnings = earnings available to common shareholders,

Depreciation = current depreciation and amortization expense (data from COMPUSTAT),

Deferred Taxes = current deferred tax effect on the income statement (data from COMPUSTAT),

Current Assets = total current assets,

Current Liabilities = total current liabilities (data from COMPUSTAT), and,

Cash = cash and short-term investments (data from COMPUSTAT).

Cash flow to total assets (CF/TA) is calculated as CF_t divided by total assets as of the end of year $t-1$.

Estimation of Abnormal Returns

CAR(T) is calculated as follows. Daily returns from the CRSP file are used to estimate market model parameters:

$$R_{js} = \alpha_j + \beta_j R_{ms} + \varepsilon_{js} \quad (4)$$

where

R_{js} = daily return on security j on day s ,

R_{ms} = value weighted return on the market on day s ,

ε_{js} = normally distributed error term, and,

α_j and β_j = firm specific parameters to be estimated.

An estimation period from days -210 to -12 relative to the date of the first public announcement

of a merger offer (day O) is used. Day O is defined as the day prior to the day that the announcement of the offer was published in the *Wall Street Journal*. Daily abnormal returns for firm j (AR_{jd}) are the market model prediction errors for each day (d) in the cumulative period:

$$AR_{jd} = R_{jd} - (\alpha_j + \beta_j R_{md}) \quad (5)$$

Finally, the AR_{jd} are cumulated to form CAR(T). The cumulative period is from the date of the first announcement of a merger offer to the date of shareholder approval of the merger. In some cases, the target company's stock was delisted prior to shareholder approval. In these cases, the cumulative of abnormal returns is terminated at the delisting date.

The Cash Flow and Earnings Ratios of Target Firms

The cash flow and earnings to total assets ratios (CF/TA and E/TA, respectively) for each of the target companies were computed for the three fiscal years preceding the resolution of the takeover. Average CF/TA and E/TA were also computed for the industries (hotel, gaming, and restaurant) of the target companies. E/TA and CF/TA for the target companies were then compared to those in their respective industries.

The comparisons of E/TA and CF/TA are in Table 3. Mean E/TA for the takeover targets in the three years preceding the resolution of the takeover are -0.0180 , -0.0230 , and 0.0006 . The comparative industry ratios are 0.0400 , 0.0321 , and 0.0402 . The results of t-tests of differences between these ratios indicate that target companies have significantly lower mean E/TA ratios than the average for their industries in each of the three years. Mean CF/TA ratios of target firms are also significantly lower than those for their industries in the three years prior to resolution of the takeovers. Target companies' mean CF/TA is 0.0641 three years prior to takeover resolution, 0.0059 two years prior to resolution and 0.0461 one year prior to resolution. The related industry ratios are 0.1020 , 0.0853 , and 0.0909 . Median target CF/TA is less than median industry CF/TA, and median target firm E/TA is greater than median industry E/TA, but these differences are not statistically significant. These results suggest that many target companies exhibited lower performance than

Table 3. Comparison of Target Firms' Earnings to Total Assets Ratios (E/TA) and Cash Flow to Total Assets Ratios (CF/TA) to Industry Average

Year	Var	n	Target Firms		Target Industry		t-statistic ^b
			Mean	Median	Mean	Median	
t-3 ^a	E/TA	51	-0.0180	0.0703	0.0400	0.0630	-2.19**
	CF/TA	50	0.0641	0.1030	0.1020	0.1211	-1.51*
t-2	E/TA	51	-0.0230	0.0601	0.0321	0.0463	-2.40***
	CF/TA	50	0.0059	0.0871	0.0853	0.1087	-2.11**
t-1	E/TA	50	0.0006	0.0611	0.0402	0.0497	-1.69**
	CF/TA	50	0.0461	0.0859	0.0909	0.1029	-1.89**

^a Year $t-i$ represents the i^{th} complete fiscal year prior to the resolution of the takeover.

^b Test of the null hypothesis that $D(E/TA) = D(CF/TA) = 0$.

* Significant at $\alpha = 0.10$, one-tailed test.

** Significant at $\alpha = 0.05$, one-tailed test.

*** Significant at $\alpha = 0.01$, one-tailed test.

other firms in their industry over an extended period of time prior to the resolution of the takeovers.

Cash Flow, Earnings, and Target Firm Abnormal Returns

Target companies' cash flow and earnings to total assets are lower than their industry averages in the three years preceding the takeover completion. In this section, the differences between target companies' and industry average CF/TA and E/TA from the last complete fiscal year prior to the resolution of the takeover [$D(CF/TA)$ and $D(E/TA)$ respectively] are employed in an attempt to explain the abnormal returns, which accrue to the shareholders of target companies during the period of the takeover contest. Cumulative abnormal returns realized on target companies' shares are regressed on $D(E/TA)$ and $D(CF/TA)$; if the value created in takeovers is greater when target companies have lower cash flow and earnings per dollar of total assets relative to their industries, then the coefficients on these variables should be negative.

The results of regression analyses of $CAR(T)$ on $D(E/TA)$ and $D(CF/TA)$, both individually and jointly, are reported in Table 4. Part A reports the results of regressions in which $CAR(T)$ is cumulated from the date of the first announcement of a merger offer. Part B reports the results of regressions in which $CAR(T)$ is cumulated from one week (five trading days) prior to the first announcement of a merger offer.

In Part A, column 1, the regression of $CAR(T)$ on $D(E/TA)$ is insignificant. Similarly, in column 3,

the coefficient for $D(E/TA)$ is insignificant at conventional levels, although, in both regressions, the sign agrees with H2a and H2b. The coefficients for $D(CF/TA)$ in the regressions reported in columns 2 and 3 of Part A are each significantly different than zero, but the sign of the coefficients is positive, indicating that increasing cash flow per dollar of total assets relative to the industry average is associated with higher abnormal returns for their shareholders. This result does not agree with H2a and H2b, which hypothesized a negative relationship between $CAR(T)$ and $D(CF/TA)$, but may be indicative of a desire, by acquiring companies, to quickly generate cash to cover the cost of the takeover. Alternatively, it may be related to Jensen's (1986) free cash flow theory of takeovers whereby companies are taken over to distribute cash flow that the target management is retaining for investment in negative net present value projects.

Since abnormal returns are cumulated from one week prior to the first public announcement of a merger offer, similar, but quantitatively stronger, results are observed. The coefficients for $D(E/TA)$ in columns 1 and 3 of Part B remain positive and, in these regressions, are significant. $D(CF/TA)$ remains negatively correlated with $CAR(T)$. This suggests that information, or speculation, about the merger offer was present in the market prior to the public announcement reported by the *Wall Street Journal* and that abnormal returns were accruing to target firm shareholders in advance of the offer.

Similar regression results, which include the control variables, are reported in Table 5. In general, the control variables add no explanatory power

Table 4. Regression Results of Target Firm Abnormal Returns on D(E/TA) and D(CF/TA)^a
Part A: CAR(T) from Takeover Offer Date^b

	Reg. of CAR(T) on D(E/TA)		Reg. of CAR(T) on D(CF/TA)		Joint Reg. of CAR(T) on D(E/TA) & D(CF/TA)	
Intercept	0.231	(0.01)***	0.159	(0.01)***	0.192	(0.01)***
D(E/TA)	-1.401	(0.12)			-1.369	(0.12)
D(CF/TA)			1.163	(0.05)**	1.151	(0.05)**
F-statistic	2.711	(0.12)	3.986	(0.05)**	3.577	(0.05)**
Adjusted R ²	0.052		0.087		0.143	
n	31		30		30	

Part B: CAR(T) from One Week prior to Takeover Offer Date

	Reg. of CAR(T) on D(E/TA)		Reg. of CAR(T) on D(CF/TA)		Joint Reg. of CAR(T) on D(E/TA) & D(CF/TA)	
Intercept	0.298	(0.01)***	0.229	(0.01)***	0.27	(0.01)***
D(E/TA)	-1.811	(0.05)**			-1.801	(0.05)**
D(CF/TA)			1.489	(0.01)***	1.481	(0.01)***
F-statistic	4.402	(0.05)**	7.801	(0.01)***	7.117	(0.01)***
Adjusted R ²	0.087		0.167		0.2703	
n	31		30		30	

^a D(E/TA) is the difference between target firm earnings to total assets and average earnings to total assets for the target firm's industry. D(CF/TA) is the difference between target firm and average industry cash flow to total assets. D(E/TA) and D(CF/TA) are calculated from data from the last full fiscal year prior to takeover resolution.

^b The takeover offer date is the date of the first announcement of an offer for the target firm in the takeover contest. It is not necessarily the date of the first offer from the eventual acquirer. CAR(T) is cumulated from the offer date in Part A (one week prior to the offer date in Part B), 0 to the date of target firm shareholder approval or exchange delisting, whichever is earlier.

Figures reported for regression variables are coefficient (two-tailed p-value); for F-statistic, F-statistic (p-value); for n, observations.

* Significant at $\alpha = 0.10$, one-tailed test.

** Significant at $\alpha = 0.05$, two-tailed test.

*** Significant at $\alpha = 0.01$, two-tailed test.

to the regressions. The adjusted R² of the regressions declined, and all of the regressions in Part A, along with the regression in column 1 of Part B, have insignificant F-statistics. In the two significant regressions, reported in columns 2 and 3 of Part B, D(E/TA) and D(CF/TA) display the same relationship to CAR(T) as they did in the regressions without control variables (see Table 4). Among the control variables in these two regressions, only SIZE has significant explanatory power.

Discussion and Conclusions

This study examined the cash flow to total assets and earnings to total assets of a sample of 52 merger targets that were taken over in the period 1994–2007. The first result of the study concerns the ability of cash flow and earnings-based measures of return to assess the differences between target companies and their industries. More specifically, the results corroborate the general premise in the literature that target companies are underperformers prior to the acquisition compared to other companies in their

industries. They further indicate that this low performance is evident not only in an earnings-based measure but also when a cash flow-based measure is used.

Results indicate that cumulative abnormal returns accruing to target company shareholders are associated at 0.05 significance level with these measures of the relative performance of targets versus their industries. As hypothesized, the target company versus industry difference in earnings to total assets is negatively correlated with abnormal returns earned by target shareholders, indicating that target companies may be acquired to put their assets to a more efficient use. Contrary to the study's hypothesis, the target versus industry difference in cash flow to assets is positively correlated to abnormal returns earned by target shareholders. One interpretation is that, while target companies underperform relative to their industry in terms of cash flow generation, acquiring companies value cash flow in merger targets and will pay a higher price to get it. This may result from a desire for the acquiring company to cover near-term costs of the merger. Alternatively,

Table 5. Regression Results of CAR(T) on D(E/TA) and D(CF/TA) with Control Variables Related to Target Firm and Merger Characteristics^a
Part A: CAR(T) from Takeover Offer Date^b

	Reg. of CAR(T) on D(E/TA)		Reg. of CAR(T) on D(CF/TA)		Joint Reg. of CAR(T) on D(E/TA) & D(CF/TA)	
Intercept	0.109	(0.49)	-0.181	(0.37)	-0.101	(0.60)
HF	-0.189	(0.30)	-0.251	(0.14)	-0.258	(0.12)
CASH	0.091	(0.39)	0.089	(0.41)	0.091	(0.39)
BIDS	0.131	(0.43)	0.192	(0.27)	0.188	(0.21)
D(E/TA)	-1.397	(0.48)			-1.143	(0.25)
D(CF/TA)			1.601	(0.01)***	1.497	(0.05)**
SIZE	0.029	(0.51)	0.083	(0.05)**	0.059	(0.10)*
F-statistic	0.701	(0.63)	1.601	(0.21)	1.609	(0.19)
Adjusted R ²	-0.061		0.089		0.120	
n	31		30		30	

Part B: CAR(T) from One Week prior to Takeover Offer Date

	(1)		(2)		(3)	
Intercept	0.251	(0.19)	-0.089	(0.59)	0.010	(0.93)
HF	-0.170	(0.31)	-0.226	(0.21)	-0.252	(0.13)
CASH	0.080	(0.51)	0.098	(0.39)	0.091	(0.37)
BIDS	0.088	(0.49)	0.159	(0.30)	0.171	(0.26)
D(E/TA)	-1.886	(0.05)*			-1.701	(0.05)*
D(CF/TA)			1.891	(0.01)***	1.798	(0.01)***
SIZE	0.017	(0.61)	0.068	(0.05)*	0.061	(0.18)
F-statistic	0.079	(0.56)	2.038	(0.05)*	2.501	(0.05)**
Adjusted R ²	-0.027		0.158		0.241	
n	31		30		30	

^a D(E/TA) [D(CF/TA)] is target firm earnings to total assets (cash flow to total assets) less average earnings to total assets (cash flow to total assets) for the target's industry calculated from data from the last fiscal year prior to takeover resolution. The indicator variables are: HF = 1 if the merger is hostile; CASH = 1 if the merger is for cash; BIDS = 1 if there is more than one bidder for the target. SIZE is the natural log of the target's market value of equity at the beginning of the last year prior to the first takeover offer.

^b The takeover offer date is the date of the first announcement of an offer for the target firm in the takeover contest. It is not necessarily the date of the first offer from the eventual acquirer. CAR(T) is cumulated from the offer date in Part A (one week prior to the offer date in Part B), to the date of target firm shareholder approval or exchange delisting, whichever is earlier.

Figures reported for regression variables are coefficient (two-tailed p-value); for F-statistic, F-statistic (p-value); for n, observations.

* Significant at $\alpha = 0.10$.

** Significant at $\alpha = 0.05$.

*** Significant at $\alpha = 0.01$.

while Jensen's (1986) free cash flow theory is not directly tested here, a possible interpretation of this result is that target companies are being acquired to release, or to better invest, cash flow that previous management retained to invest in negative net present value projects.

Of the 52 completed takeovers over for the period 1994–2007, takeover targets have mean cash flow and earnings to total assets below their industry means in each of the three fiscal years preceding the year in which the takeover was completed. If these ratios are interpreted as measures of managerial performance, the implication is that target firms were underperformers that may have been taken over for a better use of their asset potential.

Abnormal returns observed for a target company during the takeover period are significantly related to

the difference between the target company and target industry earnings to total assets ratios and to the difference in cash flow to total assets ratios. Abnormal returns are negatively related to the difference in the earnings to total assets ratio, suggesting that target company assets are indeed underutilized. The difference between target company and target industry cash flow to total assets is positively related to target company abnormal returns, suggesting that acquiring companies value the near-term cash flow of targets.

The results of this research will be useful information for practitioners planning to use cash flow and earnings-based measures to identify the types of target hospitality companies that will be profitable after takeover. The findings can also assist the management of hospitality companies in making critical

strategic decisions relating to takeover of target hospitality companies. In addition, the results contribute to the body of prior research supporting the fact that hospitality companies can benefit from expansion and growth through the takeover process. Finally, this research presents empirical findings regarding takeovers in the hospitality industry that was done for the first time using cash flow and earnings-based measurements in a modified model. Therefore, it adds to the body of empirical research on mergers and acquisitions in the hospitality industry.

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