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Returns to Hospitality Acquisitions by Method of Payment

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INTRODUCTION

Mergers and acquisitions (M&As) are major investment activities for most bidding firms. As a result, acquiring firms should cautiously invest in M&A activities that will hopefully generate a positive net present value. M&As have many different motivations for which achieving synergy is probably the most well known. This is an argument that the combination of two companies can create higher value than the two companies valued separately. Other M&A motivations include economies of scale, tax consideration, acquisition of assets at bargain prices and achieving operating efficiencies. Numerous studies have investigated whether merger participants actually achieve these goals or whether the M&As were good investments to participants; both bidder and target companies.

Harford (2005) suggests that mergers might occur as a reaction to unexpected shocks to industry structure. According to Harford (2005), a restaurant merger wave started in March of 1985 in order to adapt to customers’ new trends towards take-out from restaurants and convenient supermarket food. It was also an adaptation by restaurants to help them survive from a very competitive and saturated market. The restaurant industry is very dynamic with many new restaurants starting each year as well as failures of many established restaurants each year.

A lodging industry merger wave started in December 1996. Operators such as Starwood went on buying sprees, and other lodging operators also bought properties to gain sufficient bulk to compete in the corporate account business market. The hotel industry was one of the top five industries in terms of average annual merger activity in the 1990s (Andrade, Mitchell, & Stafford, 2001). Saturation in the hotel industry made new hotel development uneconomical in many areas (Kim, 2001). According to Cook Jr. (1997), hotel company valuations were fairly high and capital was generally available. As a result, mergers and acquisitions have been extensively used in the hotel industry as a means to achieve growth and this is anticipated to continue in the future.

In recent years there have also been several mega mergers in the gaming industry. In June of 2005, Harrah’s Entertainment obtained Nevada regulators’ permission to complete its $9.4 billion merger with Caesars Entertainment, once the largest gaming company. In April 2005, MGM Mirage bought out Mandalay Resort Group, previously the fourth largest casino company in Las Vegas, for $7.9 billion.

Recent studies about the rationale for merger waves claim that there is a correlation between merger waves and high stock market valuations. Shleifer and Vishny (2003) and Rhodes-Kropf and Viswanathan’s (2004) present models demonstrating that merger waves result from managerial timing of stock market overvaluations of their firms. Others, such as,
Gort (1969) and Mitchell and Mulherin (1996), claim that merger waves result from an industry’s economic shocks, technological change, or a change in the regulatory environment. Harford (2005) agrees that economic, regulatory and technological shocks drive industry merger waves, however, Harford argues adequate capital liquidity is required before the shock leads to a merger wave.

There has been a great deal of research into the impact of M&As on both bidder and target shareholders and although there is a great deal of uniformity in the empirical results, there are also some significant differences. Generally it has been found that target returns are positive and significant whereas bidder returns are usually not significantly different than zero. One area of research has used signaling and information asymmetry theory to explain the impact of payment method on bidder returns.

There are a number of studies considering mergers and acquisitions in the overall market as well as studies focusing on unique industries. Empirical studies have showed M&A performance to differ between industries and merger waves are often specific to individual industries. The hospitality industry is widely recognized as an industry worthy of independent study and there has been quite a bit of research into M&A activity in the restaurant, lodging, and gaming industries. Although the impact of method of payment upon M&As has generated a number of studies, research into this area in the hospitality industry has been limited. The purpose of this study is to investigate the impact of the method of payment on the returns to bidder firms in hospitality industry mergers and acquisitions.

Three different methodologies for assessing merger success have been nicely explained by Canina, Kim, and Ma, (2010) as follows: “... based on stock prices around the public announcement of the M&A, stock prices after merger completion, and operational performance after merger completion.” The first method, based on stock returns around the announcement date, is the main method used in the finance literature (Canina et al., 2010). Despite the first method being the main method used in the finance literature, to the best of our knowledge this method has not been used to investigate this phenomenon in the hospitality industry in any published study. This is the focus of our study. We do examine announcement period abnormal returns to measure the impact of payment method upon merger success in the hospitality industry.

**Literature review**

Although, studies of merger waves reveal different characteristics, they also seem to share some similarities. Merger waves occurred in a period of low or falling interest rates, a rising stock market, and an expanding economy. However, they are very much different in industry focus (e.g., oil, banking, utilities, internet, conglomerate, etc.), in type of transaction
Studies show returns to merger participants fluctuate over time. In general, target returns are positive and higher than bidder returns. On the other hand, bidder returns are not consistent, some are positive and some are negative, but most are not significantly different from zero. Jensen and Ruback (1983) conclude that “corporate takeovers generate positive gains” (p. 47) and find target firms in M&As typically receive positive returns and bidding firms returns are break even.

Canina (2001) studied abnormal returns for lodging firms’ mergers from two days before through the day after the merger announcement (-2, +1) between 1982 and 1999. Canina (2001) found positive abnormal returns for lodging industry-bidding firms on the merger-announcement day but not before or after the announcement. The author generally concluded that lodging-industry mergers have been positive net present value investments for bidders. The study (Canina, 2001) also found bidding firms earned 3.6 percent in tender offers but 0.9 percent in mergers. Chatfield, Dalbor, and Ramdeen (2011) studied abnormal returns in the restaurant industry from one day before through the day of the merger announcement (-1, 0) between 1985 and 2004. The study found bidding firms on average earned returns that were not significantly different from zero, although some bidders earned very large, significantly positive returns.

The method of payment can significantly influence the returns for M&A participants. Bidders have a choice between cash, stock, or a combination of both. Some studies argue that bidder returns are likely to be affected by the method of payment. Asquith, Bruner, and Mullins (1990) suggest that negative bidder returns are caused by stock financing of acquisitions that releases adverse information about acquiring firms. Thus negative bidder returns are not evidence of a bad investment but evidence the acquiring firm is overvalued. The bidder payment to target shareholders with stock rather than cash signals this overvaluation. Information asymmetry theory (Myers & Maljuf, 1984) assumes managers are better informed of their own firm’s value than outsiders. The method of payment, in this case stock rather than cash provides a negative signal to the market. The bidding firm’s managers will prefer a cash offer if they believe their firm is undervalued, and prefer a common stock exchange offer if they believe their firm is overvalued (DeAngelo, DeAngelo, & Rice, 1984). Thus, the market will interpret a cash offer positively and a common stock exchange offer negatively regarding the bidding firm’s value.

The choice of payment provides a signal to the market about bidder’s stock value and growth opportunities. Market reactions to M&A method of payment are generally consistent with information asymmetry and signaling theory and many studies show that cash transactions produce significantly positive abnormal returns for bidders whereas stock
transactions produce significantly negative or zero abnormal returns for bidders (see Asquith et al., 1990; Betton, Eckbo, & Thorburn, 2008; Bouwman, Fuller, & Nain, 2009; Carow, Heron, & Saxton, 2004; Fuller, Netter, & Stegemoller, 2002; Heron & Lie, 2002; Huang & Walkling, 1987; Travlos, 1987; Yook, 2003).

A couple of studies find that bidders’ growth opportunities affect bidders’ choice of payment in mergers. Jung, Kim, and Stulz (1996) find that managers with higher growth opportunities prefer to raise funds with equity rather than debt in order to preserve financial flexibility. Martin (1996) also finds that growth opportunities are a significant motive for method of payment in mergers. The more the bidders’ growth opportunities, the more likely stock financing will be used.

Myers and Majluf (1984) argue that the empirical studies finding different bidder returns in mergers versus tender offers may be explained by the method of financing the acquisition. A merger can generally be defined as a negotiated agreement between two firms to join together as one firm. A tender offer can generally be defined as a direct solicitation of the target’s common stock from shareholders and is usually categorized as a hostile takeover. Travlos (1987) shows that returns to bidding firms are typically negative for stock exchanges and normal returns are earned on cash bids. The returns between these two groups are significantly different and not affected by the type of takeover; merger versus tender offers (Travlos, 1987). This finding is consistent with the signaling hypothesis. A takeover using a common stock exchange signals negative information indicating the bidding firm is overvalued. The results of the Travlos’ (1987) study provide an explanation for the results of earlier studies on mergers and tender offers since tender offers are usually cash offers and mergers are usually common stock exchange offers. The difference in earlier studies may be caused by the method of payment rather than type of M&A activity.

The event study method is the dominant approach to measuring M&A profitability (Bruner, 2002; Spyrou and Siougle, 2010). The hospitality literature is lacking in studies of the impact of method of payment on M&A returns using event studies of the market reaction to the announcement of the M&A. Further clarifying this issue, Canina (2010) nicely explained the three different methods typically used to investigate merger success. The first method measures the market reaction around the announcement of the M&A. This first method is the main method used in the finance literature (Canina et al, 2010). The second method examines stock prices after merger completion. The third method considers the operational performance of the combined firm after completion of the merger. We have been unable to identify any published studies using this first method, market reaction around the announcement of the M&A, to investigate the impact of method of payment on hospitality M&As.

Yang, Qu, and Kim (2009) did consider the effect of method of payment on post-merger returns in the hospitality industry with a small sample of 19 mergers occurring from
1996 to 2007. Yang et al. (2009) used the second of the three methodologies described by Canina et al. (2010) by examining long-term returns after the merger. The study found significant positive gains for the bidder in the long-term and also found that method of payment did not significantly impact the post-merger returns to bidders.

Oak, Andrew, and Bryant (2008) found a high percentage of hospitality acquisitions were financed with cash between 1980 and 2004. The focus of this paper was to explain the high level of cash financed acquisitions in the hospitality industry. Cash acquisitions were found to be directly related to the bidders’ debt ratio and firm size, but not related to free cash flow and internal growth opportunities.

There is a quite a bit of empirical work on the impact of method of payment upon merger success but these by and large do not consider the hospitality industry. There is also quite a bit of empirical work on returns from merger activity in the hospitality industry but these do not consider the impact of payment method (Bloom, 2010; Canina, 2001, Canina et al., 2010; Hsu & Jang, 2007; Oak & Andrew, 2003; Sheel & Nagpal, 2000; Yang, Kim, & Qu, 2010). There is very little empirical work on the impact of method of payment on merger success in the hospitality industry. Yang et al. (2009) is an excellent exception but it has a small sample (19) and uses long-term returns after the merger. We are unable to identify a single study that uses the main methodology found in the finance literature (announcement period abnormal returns) to examine the impact of payment method upon merger success in the hospitality industry. This is the focus of our paper. We do examine announcement period abnormal returns for 282 mergers in order to measure the impact of payment method upon merger success in the hospitality industry.

Hypotheses

Based on the previous studies, three hypotheses are identified. There is one hypothesis considering abnormal returns for each method of payment; cash, stock, and a mix of cash and stock. Since previous studies have mixed results, hypotheses are non-directional. Cumulative abnormal return (CAR) is a measure of abnormal returns earned from M&A activity and is explained more fully in the next section. The three hypotheses are:

Cash Offers
Hypothesis 1: The mean cumulative abnormal return (CAR) to bidding firms using a cash offer is equal to zero.
H1: Mean of bidder CARs for cash offer = 0

Stock Offers
Hypothesis 2: The mean cumulative abnormal return (CAR) to bidding firms using a stock
offer is equal to zero.
H2: Mean of bidder CAR for stock offer = 0

Mixed Offers
Hypothesis 3: The mean cumulative abnormal return (CAR) to bidding firms using a mix of cash and stock offer is equal to zero.
H3: Mean of bidder CAR for mix of cash and stock offer = 0

Data and methodology

Firms in the gaming, restaurant and hotel industries between 1985 and 2004 are identified according to the Directory of Corporate Affiliations Standard Industry Code (SIC). Mergers and acquisitions data are collected from Security Data Corporation (SDC). Firms are classified according to the acquirer’s ultimate parent SIC from Security Data Corporation. Stock price information was collected from the Center for Research in Security Prices (CRSP) file. All the bidding firms are public corporations since our data sources do not include private bidding firms. Furthermore, only bidding firms traded on the NYSE, AMEX, and Nasdaq stock markets are included in the sample. Also, the sample is restricted to include only bidders acquiring public or private targets. Other bidders such as those acquiring joint ventures and subsidiaries were excluded from this study. Finally, if the same bidder is involved in several M&As, each transaction is counted as a separate M&A.

Standard event study methodology (Brown & Warner, 1985) is used to determine abnormal returns for the bidding firms. This methodology is commonly used in finance research and makes for easy comparison with other studies. Event studies are based upon residual analysis and examine the changes in shareholder wealth ensuing from the announcement of mergers and acquisitions.

The day that an event (merger and acquisition) announcement is made for a particular firm is considered day zero. Each firm will generally have a different announcement date. The days near the announcement date are considered the event period and this period is selected to obtain all stock price changes resulting from the event. A two-day event period is used including the day before the announcement and the day of the announcement (-1, 0). Although a number of other event periods have been used in previous studies, this two-day (-1, 0) event window is commonly used (Beitel, Schiereck, & Wahrenburg, 2002; Chatfield, Dalbor, & Ramden, 2011; Goergen, & Renneboog, 2003; Kohers, & Kohers, 2001; Kuippers, Miller, & Patel, 2003; Mitchell, & Stafford, 2000; Mulherin, & Boone, 2000). This assumes that all information effects from the announcement are captured in this two-day period.

The market model is estimated by running an ordinary least squares regression over an estimation period. The estimation period begins 240 days before the announcement and
ends 61 days before the announcement. This estimation period should be a clean period.

The market model is:

\[ R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \]  

where:

- \( R_{it} \) = the return for firm \( i \) on day \( t \),
- \( \alpha_i \) = the mean return not explained by the market,
- \( \beta_i \) = firm \( i \)'s relationship with the market return (i.e., its risk factor),
- \( R_{mt} \) = the return on the market on day \( t \), where the return on the CRSP equal-weighted stock index is used as a proxy for the market return.
- \( \varepsilon_{it} \) = the error term of the regression.

The predicted return is the expected return if no event took place. The predicted return for firm “\( i \)” on day “\( t \)” in the event period is the return given by the market model using the estimates of \( \alpha_i \) and \( \beta_i \) obtained from the estimation period. Thus, the predicted return using the market model is:

\[ \hat{R}_{it} = \hat{\alpha}_i + \hat{\beta}_i R_{mt} \]  

where \( R_{mt} \) is the return on the market index for the actual day in the event period.

Abnormal returns (AR), also referred to as excess returns or the residual, are estimated for each day in the event period for each firm. The event period in this study is a two day period including the day before the M&A announcement and the day of the M&A announcement (-1, 0). Abnormal returns (AR) are calculated as the actual return for that day minus the predicted return from the estimation period. The AR represents the unpredicted portion of the return of each firm caused by the event:

\[ AR_{it} = R_{it} - \hat{R}_{it} \]  

The average abnormal return (\( \overline{AR} \)) is the sum of the abnormal returns of all firms involved in mergers and acquisitions divided by \( N_t \), the number of firms in the sample for the day \( t \).

\[ \overline{AR}_t = \frac{1}{N_t} \sum_{i=1}^{N_t} AR_{it} \]  

The cumulative abnormal return (CAR) for each firm is calculated by cumulating the daily average abnormal returns (residual) over the 2 day event period. The CAR for a sample of firms represents the average total return of the event for this particular time period.
across all firms in the sample. This assumes that the two day event window captures all the information effects resulting from the event announcement. The CAR is computed as:

\[
CAR = \sum_{t=t_1}^{t_2} AR_t
\]  

(5)

where \( t_1 \) is the first day (-1) in the event period and \( t_2 \) is the last day (0) in the event period.

To test whether a share price effect is statistically significant, a t-statistic is computed. The null hypothesis for the t-test is that the average CAR in the event window equals zero. All the hypotheses are non directional two-tailed tests. The one-sample t test examines if the mean of the single variable (CAR) differs from a hypothesized zero value. That is, if there is no abnormal return from the announcement of the mergers and acquisitions (M&A), the cumulative abnormal returns should be equal to zero. If there is an M&A effect, cumulative abnormal returns should be significantly different from zero.

Findings

At first, 893 mergers and acquisitions by hospitality bidders are identified. Due to the lack of bidders’ stock price information and method of payment information, the final sample of this study was reduced to a total of 282 M&As (see Table 1). There are only 119 different bidding firms involved with the 282 M&As with a number of bidders completing more than one M&A. Among these 282 M&As, 158 (56.0%) were 100% cash offers, 57 (20.2%) were 100% stock offers and 67 (23.8%) were a mix of cash and stock. The results show hotel industry bidders were the most likely to use cash offers. There were more hotel cash offers than gaming and restaurant combined (85 versus 73) and hotel bidders were more likely to use cash offers than a stock or mixed offer. More than 71% of all M&As with hotel bidders used a cash offer.

The Pearson chi-square test shows there is a significant association between the type of hospitality firm (gaming, restaurant, or hotel) and method of payment (see Table 1). The guidelines for the chi-square commonly used are “no cell has an expected value less than 1.0 and not more than 20% of the cells have expected values less than 5” (SPSS Base 10.0 Applications Guide, p. 67). No cell has an expected count less than 5 and thus the assumptions are met. The second part of Table 1 shows the p-value is less than 0.05 so the null hypothesis that the variables are independent is rejected (Pearson chi-square = 28.82, \( df = 4, p < .005 \)). This tends to support the premise that there is an association between these two variables.
## Table 1

### Bidders’ Industry vs. Method of Payment

<table>
<thead>
<tr>
<th>Method of Payment (N=282)</th>
<th>Bidders’ Industry Type</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gaming</td>
<td>26</td>
<td>47</td>
<td>85</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>Restaurant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hotel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock</td>
<td></td>
<td>8</td>
<td>38</td>
<td>11</td>
<td>57</td>
</tr>
<tr>
<td>Mixed</td>
<td></td>
<td>15</td>
<td>29</td>
<td>23</td>
<td>67</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>49</td>
<td>114</td>
<td>119</td>
<td>282</td>
</tr>
</tbody>
</table>

Pearson Chi-Square Test of Independence

<table>
<thead>
<tr>
<th>Method of Payment</th>
<th>Adjusted Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>-0.5</td>
</tr>
<tr>
<td>Stock</td>
<td>-0.7</td>
</tr>
<tr>
<td>Mixed</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Pearson chi-square = 28.818, df = 4, p = .000**

<table>
<thead>
<tr>
<th>Method of Payment (N=282)</th>
<th>Bidders’ Industry Type</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gaming</td>
<td>16.5%</td>
<td>29.7%</td>
<td>53.8%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Restaurant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hotel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of Firm Type for each Method of Payment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mixed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

% of Offer Type for each Industry

<table>
<thead>
<tr>
<th>Method of Payment</th>
<th>Gaming</th>
<th>Restaurant</th>
<th>Hotel</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>53.1%</td>
<td>41.2%</td>
<td>71.4%</td>
<td>56.0%</td>
</tr>
<tr>
<td>Stock</td>
<td>16.3%</td>
<td>33.3%</td>
<td>9.2%</td>
<td>20.2%</td>
</tr>
<tr>
<td>Mixed</td>
<td>30.6%</td>
<td>25.4%</td>
<td>19.3%</td>
<td>23.8%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Notes: The first part of the table describes the number of bidders from the gaming, restaurant and hotel industries and the method of payment (cash, stock and mixed offer) for the years 1985 through 2004. The second part of the table shows the adjusted residuals from the chi-square test between bidders’ industry type and method of payment. The third part of the table breaks down each method of payment by the proportion of each method by industry of bidder. The fourth part of the table shows for each industry the proportion of each payment method used by that industry’s bidders.
Although the chi-square test (p-value) indicates a significant association, it provides little information about how the variables are related or how strong are the relationships. An examination of the residuals in the second part of Table 1 provides information about the direction and strength of the associations. Residual values far below -2 or above +2 indicate cells that significantly depart from the model of independence. In the restaurant industry, the adjusted residuals of -4.1 in cash and 4.5 in stock indicate that restaurant bidders had fewer cash and more stock offers than expected if the method of payment and type of hospitality firm were independent. In the hotel industry, the adjusted residuals of 4.5 in cash and -3.9 in stock indicated that hotel bidders had more cash and fewer stock offers than expected under the independence assumption.

This association between method of payment and type of hospitality firm can be seen more clearly in the bottom half of Table 1. The third part of Table 1 shows that 66.7% of all stock offers occurred in the restaurant industry versus only 29.7% of cash offers and 43.3% of mixed offers occurred in this industry. Hotel industry bidders made 53.8% of all cash offers.

Table 2 summarizes the t-tests results of bidder returns by method of payment. The one sample t-tests are performed to examine if the mean of each of the three groups is different from zero. Since three t-tests are performed simultaneously, the p-values are adjusted with the Bonferroni correction by multiplying each p-value by three. For example, the p value for cash offers was 0.001 times 3 equals 0.003. This results in a 98.33% confidence interval in order to obtain a 95% confidence interval. The mean CAR for cash bidders (N = 158) is 1.58% and is significantly different from zero, t(157) = 3.518, SD = 5.64%, p < .01. This means the confidence interval does not include zero. Therefore, the H-1 null hypothesis is rejected. The bidder returns for stock offers, N = 57, µ = 1.50%, t(56) = 1.316, SD = 8.63%, p > .05, and mixed offers, N = 67, µ = 0.77%, t(66) = 0.749, SD = 8.45%, p > .05, are not significantly different from zero. In both cases the confidence interval included zero. Therefore, the H-2 and H-3 null hypotheses are not rejected.

The results obtained here for the hospitality industry are generally consistent with other non-hospitality method of payment studies. Bidder returns were positive and statistically significant when M&As were paid by cash, but bidder returns are not significantly different from zero if M&As were paid by stock or a combination of cash and stock.
### Table 2

**Bidders’ Cumulative Abnormal Returns by Method of Payment**

<table>
<thead>
<tr>
<th>Sub Group</th>
<th>N</th>
<th>Mean (%)</th>
<th>Median (%)</th>
<th>t statistic</th>
<th>SD (%)</th>
<th>p</th>
<th>Min (%)</th>
<th>Max (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-1 Cash</td>
<td>158</td>
<td>1.58</td>
<td>0.95</td>
<td>3.518</td>
<td>5.64</td>
<td>0.003**</td>
<td>-12.12</td>
<td>35.43</td>
</tr>
<tr>
<td>H-2 Stock</td>
<td>57</td>
<td>1.50</td>
<td>0.42</td>
<td>1.316</td>
<td>8.63</td>
<td>0.582</td>
<td>-20.79</td>
<td>32.15</td>
</tr>
<tr>
<td>H-3 Mixed</td>
<td>67</td>
<td>0.77</td>
<td>0.38</td>
<td>0.749</td>
<td>8.45</td>
<td>N/A*(1)</td>
<td>-32.29</td>
<td>16.76</td>
</tr>
</tbody>
</table>

*(1) After the Bonferroni correction, resulting p-value is greater than 1.

**p < .01.

**Notes:** The table shows the t test results for the three hypotheses. The cumulative abnormal return (CAR) is the average total return of the event (merger and acquisition) for the particular time period (-1 to 0 day of the event) across all firms. The N/A in the p-value column for hypothesis 3 is due to the Bonferroni correction with a resulting p-value greater than one.

One outlier in this study earned 87.75%. A restaurant company, Host America Corporation, acquired a private target, GlobalNet Energy Investors Inc. in 2003. The value of the transaction was $3.207 million, and the acquisition was a 100% stock offer. This was not included in the empirical results. If included, the mean return for stock offers would have been higher, but still not significantly different than zero.

### Conclusion

This study examines cumulative abnormal returns for bidding firms in hospitality industry M&As by method of payment over a 20 year period. Investigating abnormal returns under such circumstances has been a frequent topic of research but to the best of our knowledge, this is the first study to empirically examine the impact of method of payment on abnormal returns in response to merger and acquisition announcements in the hospitality industry. Our findings for the hospitality industry are generally consistent with the literature. The study found that bidder returns were positive and statistically significant when M&As were paid by cash. However, bidder returns are not significantly different from zero if M&As were paid by stock or a combination of cash and stock. The results support the information asymmetry and signaling theory; that is the negative market reaction to stock offers offsets the potential gains from M&As. Therefore if hospitality bidders would like to achieve higher return from M&As, they should consider cash offers if possible.

The results tend to confirm that M&As in the hospitality industry follow the same pattern as M&As generally. Both managers and investors should be aware of the impact of financing M&As with cash versus stock. Returns to cash offers are more likely to be
significantly positive, but not so for stock offers.

Information asymmetry theory assumes management has better information about the firm than outside investors. Therefore, when the market undervalues the company’s stock, management does not want to issue stock or use stock for acquisition, and is thus more likely to use cash for acquisitions. On the other hand, when management believes their stock is overvalued in the market, they are more likely to use stock for acquisitions.

One study found an interesting anomaly regarding stock offers. Chang (1998) finds bidders earn positive abnormal returns for stock financed takeovers of privately owned targets but not abnormal returns for cash offers for privately owned targets. This is the opposite from most studies which find negative or no abnormal returns from stock financed takeovers. There are several possible explanations for this result. One includes the limited competition for privately held targets. A second explanation is the creation of outside blockholders out of the few owners of the target. These blockholders can serve as effective monitors of the new entity. A third possible explanation is it may be easier to overcome information asymmetry when there are just a few owners of a target company as is likely the case when the target is privately held. The expectation that method of payment may have a different impact on the acquisition of privately held targets in the hospitality industry is empirically supported in a recent paper (Ma, Zhang, & Chowdhury, 2011).

The impact of method of payment on merger success has not been ignored in the finance literature. However the topic has not been empirically investigated very thoroughly in the hospitality industry. We believe the hospitality industry is a significant industry worthy of attention in this area. There is also evidence that merger and acquisition activity and impacts are not homogeneous across all industries. For example Oak et al. (2008) found a much higher percentage of hospitality acquisitions were financed with cash than was true in other industries during the 1980 to 2004 time period. Canina (2001) generally concluded that lodging-industry mergers have been positive net present value investments for bidders. This has generally not been true in other industries. Additionally the empirical evidence available is not consistent. For example, Yang et al. (2009) found method of payment to have no impact in a post-merger return study with a sample of 19 whereas we found it has a significant impact in an announcement period return study with a sample of 282 M&As. Unfortunately there is no perfect way to settle the issue as both studies have their weaknesses. A post-merger return study will have a difficult time isolating the impact of the merger on returns. Over a long period of time how can you be sure there are not a number of other variables effecting returns? Also the Yang et al. (2009) study has a small sample. However our study looks at announcement period returns and thus isolates the impact of the merger on market expectations. But market expectations can certainly be wrong and change over time as additional information about the merger becomes available. Our study does have a good size sample that enhances the confidence in generalizing the
results of the study to the hospitality industry. But for now the evidence is mixed and
hopefully the scientific process will continue with further empirical studies that will
hopefully increase our confidence in just what is the impact of method of payment on M&A
success.

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