IMPACT OF CEO RESIGNATION ON STOCK RETURNS
IN HOSPITALITY INDUSTRY
—AN EVENT STUDY

by
Mo Dong

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Master of Science in Hospitality Information Management

Spring 2012

2012 © Mo Dong
All Rights Reserved
IMPACT OF CEO RESIGNATION ON STOCK RETURNS
IN HOSPITALITY INDUSTRY
—AN EVENT STUDY

by

Mo Dong

Approved:  
Francis A. Kwansa, Ph.D.
Professor in charge of thesis on behalf of the Advisory Committee

Approved:  
Francis A. Kwansa, Ph.D.
Interim Chair of the Department of Hotel, Restaurant and Institutional Management

Approved:  
Bruce W. Weber, Ph.D.
Dean of the Lerner College of Business and Economics

Approved:  
Charles G. Riordan, Ph.D.
Vice Provost for Graduate and Professional Education
ACKNOWLEDGMENTS

This thesis would not have been possible without the guidance and the help of the many individuals who in one way or another contributed and extended their valuable assistance in the preparation and completion of this study. It is a pleasure to thank them here.

Foremost, I would like to express my sincere gratitude to my advisor Prof. Francis A. Kwansa for the continuous support of my masters study and research, for his patience, motivation, enthusiasm, and immense knowledge. Dr. Kwansa has been my inspiration as I overcame all the obstacles towards the completion of this research work. He has the ability to explain things clearly and simply. His guidance helped me during the research and writing of this thesis. He put in great effort; even spent his holidays helping me. We debated, we improved, we argued, we laughed. It has been a wonderful time for me. I could not have imagined having a better advisor and mentor for my thesis study.

Besides my advisor, I would like to thank the rest of my thesis committee: Dr. Robert R. Nelson and Dr. Naveed M. Baqir, for their encouragement, insightful comments, and hard questions. Dr. Nelson brought me refreshing ideas for modeling
the research, which resulted in a better and tighter research design. Dr. Baqir provided me extensive knowledge of data collecting procedures and analytical methodologies.

My sincere thanks also go to Richard C. Jakotowicz, Director of University of Delaware’s Exelon Trading Center. Mr. Jakotowicz tutored me through the entire process of using Bloomberg for this study. He patiently investigated better ways to apply the software to my study, and finally made improvements in my data collection methods.

I am especially grateful to Linda Woo, Ruiqing Fang, and Robert Salami Nchor, who helped and encouraged me through this thesis, and have been great friends.

Last but not the least, I would like to thank my family: my parents Cuiyu Wang and Yongzheng Dong, for giving birth to me in the first place and supporting me spiritually throughout my life. They bore me, raised me, supported me, taught me, and loved me. To them I dedicate this thesis.
# TABLE OF CONTENTS

LIST OF TABLES.................................................................................................................. viii  
LIST OF FIGURES.................................................................................................................. ix  
ABSTRACT................................................................................................................................. x  

Chapter  
1 INTRODUCTION.................................................................................................................. 1  
   1.1 Background..................................................................................................................... 3  
      1.1.1 CEO Resignation................................................................................................. 3  
      1.1.2 Hospitality Stock Performances......................................................................... 5  
      1.1.3 Event Study Analysis......................................................................................... 6  
   1.2 Purpose of the Research............................................................................................... 7  
   1.3 Research Question....................................................................................................... 8  
   1.4 Significance of the Research....................................................................................... 9  
2 LITERATURE REVIEW..................................................................................................... 11  
   2.1 Event Study ................................................................................................................. 12  
      2.1.1 Efficient Market Hypothesis............................................................................. 12  
      2.1.2 Application of Event Study Method............................................................... 14  
   2.2 Studies in Hospitality Stocks....................................................................................... 18  
   2.3 CEO Resignations....................................................................................................... 19  
      2.3.1 Statistical Data.................................................................................................. 21  
      2.3.2 CEO Trends...................................................................................................... 24  
      2.3.3 Factors Affecting CEO Change....................................................................... 26  
      2.3.4 CEO Performance......................................................................................... 28  
3 METHODOLOGY............................................................................................................... 30
3.1 Research Questions and Hypotheses .............................................. 30
3.2 Data Collection Methods ............................................................... 31
3.3 Research Design .......................................................................... 34
3.4 Statistical Analysis ....................................................................... 35
    3.4.1 AR and CAR ........................................................................... 35
    3.4.2 Descriptive Statistics and Histograms ...................................... 37
    3.4.3 Significance Tests ................................................................... 37

4 RESULTS AND DISCUSSION ............................................................... 40

4.1 Descriptive Statistics ...................................................................... 44
    4.1.1 Hospitality VS Non-Hospitality Companies ............................ 44
    4.1.2 Histograms ............................................................................ 45
    4.1.3 3 day vs. 7 day Event Window ........................................... 46

4.2 Significance Test ............................................................................ 47
    4.2.1 T-Statistics according to Day .............................................. 47
    4.2.2 T-statistics according to Industry ....................................... 50
    4.2.3 Comparison T-Statistics between Samples ............................ 53

5 CONCLUSION AND LIMITATION ......................................................... 55

5.1 Conclusion ..................................................................................... 55
    5.1.1 Findings ................................................................................. 55
    5.1.2 Recommendations for Hospitality Operators and Investors .... 58
    5.1.3 Recommendations for Future Research ................................. 58

5.2 Limitations ..................................................................................... 59

REFERENCES ..................................................................................... 61

Appendix

A SECURITY IDENTIFIER, ANNOUNCEMENT DATE AND CEO INFORMATION ................................................. 73
B DAILY RAW RETURNS AND ABNORMAL RETURNS – HOSPITALITY .............................................................. 75
C DAILY RAW RETURNS AND ABNORMAL RETURNS – NON-HOSPITALITY .......................................................... 83
D  DAILY RAW RETURNS AND ABNORMAL RETURNS – HOSPITALITY 7 DAYS .......................................................... 92
E  CUMULATIVE ABNORMAL RETURNS – HOSPITALITY 7 DAYS ...... 103
F  RAW RESULT OF T-TEST FOR DAILY CAR ................................................................. 104
**LIST OF TABLES**

Table 1  Segmented List of Stocks Used in Analysis .................................................. 33
Table 2  Daily Raw Returns and AR --example ...................................................... 40
Table 3  AR of Individual Stocks for Hospitality and Non-hospitality Companies ................................................................. 41
Table 4  CAR of Stocks for Hospitality and Non-hospitality Companies ................. 43
Table 5  Descriptive Statistics of Abnormal Returns—Hospitality VS Non-Hospitality ................................................................. 44
Table 6  Descriptive Statistics of Abnormal Returns---3 day VS 7 day .................. 47
Table 7  Cumulative Abnormal Returns---Each Day ................................................. 47
Table 8  T-Statistics of Cumulative Abnormal Returns for Each Day .................... 49
Table 9  T-Statistics Result of Cumulative Abnormal Returns for Two Samples ..... 51
Table 10 T-test of Cumulative Abnormal Returns for Two Samples ...................... 52
Table 11 T-test of Comparison T-Statistics between Samples ............................... 53
LIST OF FIGURES

Figure 1  Number of CEO Resignations by Calendar Year ........................................ 21
Figure 2  Age Distribution of CEOs ........................................................................ 22
Figure 3  Identity of Incoming CEOs ....................................................................... 24
Figure 4  Regional Turnover Rate- Five Year Average .............................................. 25
Figure 5  Average Tenure of Outgoing CEOs ............................................................ 26
Figure 6  Research Procedure .................................................................................. 34
Figure 7  Frequency Histograms of Abnormal Returns .............................................. 45
ABSTRACT

A change in executive leadership is a significant event in the life of a firm. A chief executive officer’s abilities, preferences, and ultimate decisions affect the firm through the projects the firm selects, its financial policy, and the corporate culture. To the extent that these characteristics and the resulting decisions differ across individuals, CEO changes can alter the course of the firm and its stock performance. Many studies have shown that CEO changes can have a significant impact on shareholder wealth and firm operations.

This study investigates an important consequence of a CEO resignation in the hospitality industry: the impact on stock returns. Two hypotheses were developed about how changes in CEO might affect stock returns, and they were tested by using a sample of 56 CEO resignations over the 1999-2012 periods. The event study method was used to relate the event of CEO resignation to the stock returns of the company. In addition, the same analysis was conducted on data set from both hospitality companies and non-hospitality companies in order to determine whether there are different market reactions across industries.

The results demonstrated that hospitality stocks react significantly to CEO resignation. Hospitality stocks, to a small extent, tend to react negatively before the
CEO resignation, and react positively to a large extent after the event. CAR data from hospitality firms and non-hospitality firms are significantly different from one another.

**Keywords:** CEO resignation, stock returns, event study analysis, abnormal returns, hospitality industry
Chapter 1

INTRODUCTION

On April 10, 2012, Best Buy Co. announced that Chief Executive Brian Dunn resigned abruptly amid what the company described as a probe into his "personal conduct". Director Mike Mikan was named interim CEO. In a statement, the big box retailer said that the agreement was mutual and that the decision had nothing to do with any disagreements with Dunn regarding "operations, financial controls, policies or procedures." However, with the company struggling, it is hard to believe that the rash of store closings and poor fiscal performance are unrelated to the decision that it is "time for new leadership". One day after this announcement, shares of Best Buy stock rose by more than 3%. This is a typical example of how stock returns can be dramatically impacted by a CEO resignation.

Likewise, when Starwood Hotels & Resorts announced that CEO Richard Nanula would step down, the price per share of HOT increased by 5.4% on the announcement day, May 24th, 1999.

On the contrary, there are stocks like Darden Restaurant Inc. (DRI) whose price decreased continuously for three days after they announced that President Edna Morris would leave the firm "to pursue new career opportunities". The cumulative
return to the stock reached -14.5% within the 3 days following the event on Sep 24th, 2003.

There are also stocks that have shown fluctuations when the CEO resignation announcement was made. Bank of America Corp. (BAC), for example, dropped more than 4% on the day they announced CEO’s departure on Oct 1st, 2009, but it recovered by almost the same amount within the next two days.

All in all, a change in executive leadership is a significant event in the life of a firm. A chief executive officer’s abilities, preferences, and ultimate decisions affect the firm through the projects the firm selects, its financial policy, and the corporate culture. To the extent that these characteristics and the resulting decisions differ across individuals, CEO changes can alter the course of the firm and its stock performance. Many chief executive transitions go smoothly, leaving the company’s performance unaffected. At other firms, however, CEO departures can cause a significant amount of distraction for the management team, stealing attention from strategic issues that increase firm value. The purpose of this study is to relate the event of CEO resignation to the stock returns to the company. By using the method of event study, the study provides a quantified result to determine the extent of influence of CEO resignation on stock returns on hospitality companies.
1.1 Background

1.1.1 CEO Resignation

Many studies have shown that CEO changes can have a significant impact on shareholder wealth and on firm operations. The wealth effects associated with an announced change in CEO can be decomposed into an information effect and a real effect. The information effect is the influence of the event that people believe (speculate) would happen, causing the market to act as soon as the information is released. For example, investors may sometimes speculate that the change is a signal that the firm’s prospects are worse than previously believed. On the other hand, the real effect is the actual outcome (effect) that truly emerges from the event, such as the new CEO actually improved performance. Furtado and Karan (1990) cite ten studies that estimate the announcement effect of CEO resignations. They find that the abnormal returns around the announcement are typically 25 to 50 basis points (0.25% - .50%) for all changes. No significant effects were found for 103 external hires. The positive reactions are evidence that markets see boards rewarding and disciplining managers through promotions and dismissals. The non-significant effect of external hires is puzzling. Many researchers believe that external hiring is an answer to efforts to turn around a firm's performance and that this should lead to a positive effect. However, external hires may also be considered an admission that the firm lacks suitable internal candidates or is indirectly dismissing its entire pool of current managers as incapable of providing a top manager. Bonnier and Bruner (1989) find a
stronger positive return of about 2.5% when they attempt to isolate the real effect by focusing on turnovers at distressed firms, where an announced change is unlikely to signal significant information about the state of the firm. As a whole, this evidence suggests that there can be positive real effects, but that the information effect can dominate. Following the event, there is evidence of the subsequent restructuring of firm operations (Denis and Denis, 1995). The sample consisted of 908 non.Takeover-related top management changes announced in the Wall Street Journal over the period 1985 to 1988. These firms significantly downsized their operations following the management change, exhibiting large and significant declines in employment, capital expenditures, and total assets. Furthermore, the forced resignation subsample displayed an unusually high incidence of post turnover market activity.

The Wall Street Journal dubbed 2010 the year of “dramatic departures” with executives like Mark Hurd at Hewlett Packard, Tony Hayward at BP PLC, and Don Blankenship at Massey Energy leaving the top spot after enduring controversy. However, many boards hesitate to change leaders for mere poor performance. Despite weak sales growth across the economy, just 34 companies in the S&P 500 index named a new permanent CEO during the first nine months of 2010, which was on pace to be the lowest level since 2004 when recruiters Spencer Stuart began tracking the data. Ironically, the weak economy is one reason for low turnover at the top. Many corporate boards feared changing horses during a still-weakened economy, and some
aging CEOs postponed retirement to steer their companies through the downturn, recruiters and leadership consultants say.

1.1.2 Hospitality Stock Performances

The hospitality industry saw substantial growth in the 1990s. From 1990 to 2000, restaurant sales were up from $239.3 billion to $399.2 billion while lodging revenues increased from $62.8 billion to $112.1 billion (National Restaurant Association, 2001). The growth, however, suffered a setback during the 2000-2003 period due to an economic recession, which was especially heightened by the 9/11 terrorist attacks in 2001. The economic downturn led to a slowdown in the tourism and hospitality markets.

In some industries, intangible assets like reputation, brand image, goodwill is important drivers of financial success of the firm. The hospitality industry is such an industry where intangible assets are important for a number of reasons. Firstly, since travel is not a necessity for many persons, if a CEO resigns for deplorable reasons that impact the brand negatively, then this could affect the financial performance of the company and consequently the stock price. Secondly, because of the competitive nature of the hospitality industry, customers change their brand loyalties more easily than they do in other industries. Lastly, and perhaps most importantly, because hotels have no ability to store capacity and inventory, effects of
significant corporate events would tend to be immediate and difficult to smooth out over time.

Hospitality industry consulting firms, such as Price Waterhouse Coopers, HVS and Smith Travel Research, provide research on hospitality firm and sector performance with a focus on rooms rates, occupancies, accounting profits and real estate values. However, there are not many research studies on hospitality stock and portfolio performance. This research study examines sector performance in the hospitality industry from the perspective of stock returns. Rather than investigating average daily rate, occupancy, revenue per available room, gross operating profits, income capitalization rates, etc., this study focuses on the returns to stockholders resulting from the announcement of an event. Specifically, the research examines the wealth effects to stockholders of hospitality stocks when a CEO resigns.

1.1.3 Event Study Analysis

Event studies have long been used to quantify the effect of firms’ actions on their market value, and prior literature contains excellent summaries of the use of this method (e.g., Srinivasan and Bharadwaj 2004). Briefly, finance theory asserts that a stock price reflects all the public information about the firm, so only unexpected information can change the price of a stock (Fama et al. 1969). Thus, if new information (“the event,” in our case, news of an acquisition or the sale of a brand) causes investors to expect that the firm will garner higher (lower) future cash flows, the firm’s stock price rises (drops) in reaction. The stock’s abnormal return—the
difference between the stock’s actual return as a result of the event and its expected return according to general market movement— is a measure of the wealth effects (economic value) of the event (Kothari and Warner 2007). The conventional view is that markets move quickly to incorporate the present value of the long-run benefits of the event fully into security prices (McWilliams and Siegel 1997), so that abnormal returns observed at the event could be a reliable reflection of the long-term financial influence that market is expecting from the event, even though the real effect has not occurred. In line with this opinion, we focus on abnormal returns observed at the event in our analysis.

1.2 Purpose of the Research

Whatever the reason, a change in CEO is a significant event for a corporation. When there are multiple changes in a short period of time, the impact on the company can be even greater. This study seeks to describe the market reaction of hospitality stocks to CEO resignations. The study used the event study method to relate the event of CEO resignation to a firm’s stock returns. The objectives are to determine whether the stock market reacts positively or negatively to CEO resignations, the size of the reaction, and its impact on shareholder wealth. Additionally, by using the same analysis on data from both hospitality companies and non-hospitality companies, it is possible to compare the different reactions across industries.
1.3 Research Question

This study used event study method to provide empirical evidence of the effect, and offered recommendations on how hospitality companies should prepare for and react to CEO resignations.

In order to do so, the study examined changes in stock value on the event day and after the event and estimated the returns to the stock on each of the event days. Additionally, another sample of non-hospitality companies was selected from the same time frame and market environment. By implementing the same analysis method on a non-hospitality dataset, we perceived a comparative view of the impact of CEO resignation on hospitality stocks. The following are the research questions:

1) Is there a change in stock returns following the resignation of a CEO in the hospitality industry?

2) Is the change in stock returns positive or negative?

3) Is there a difference in the change in stock returns between hospitality firms and non-hospitality firms who have experienced CEO resignations?
1.4 Significance of the Research

Previous research has used event study method on a variety of corporate events, but only few have focused on CEO resignations. In the hospitality area the potential relationship between CEO resignations and hospitality stock returns has received little attention. This research would be the first empirical study focusing on CEO resignations in the hospitality industry.

The findings from this study provide some evidence of the underlying impact of CEO resignations on companies’ financial performances. The awareness of this impact would give both hospitality operators and hospitality investors the evidence and tools needed to understand the fluctuation of stocks. Furthermore, they will be able to estimate the influence and size of such event on shareholder wealth. Knowledge of the impact of such an event will help hospitality company boards of directors to plan and prepare for CEO transitions carefully in order to minimize any adverse impact.

The research also compared the market reactions between the sample of hospitality firms and non-hospitality firms to CEO resignations. The findings confirmed the existence of this difference, and proposed potential directions for future research studies on this phenomenon.

This study applied the event study method to CEO resignation in the hospitality field. Since there is no precedent for such research, it could be a successful trial of applying event study method to estimating the performance of hospitality
stocks. Accordingly, this sample provided evidence of the legitimacy of using such a method in CEO resignations and other events. Future studies will be able to generalize the event study method that was used in this research to any event in hospitality or an analogous field.
Chapter 2

LITERATURE REVIEW

Over the past two decades numerous studies have been published on the relationship between corporate performance and chief officer (CEO) change (see Furtado and Karan, 1990). Although several theories have predicted a negative relationship (Gannon and Scotch, 1964; Salancik and Pfeffer, 1980; Salancik and Meindl, 1984), empirical findings have been mixed. For example, the change in return on equity was significant in studies by Allen and Panian (1982) and Lubatkin and Chung (1985), but not in studies by Robinson and Brief (1985) or Harrison, Torres, and Kukalis (1988). Nelson and Richard (2009) examined the relationship between firm performance and CEO turnover in the restaurant segment of the hospitality industry. Logistic regression indicates that negative stock and accounting returns can be a good predictor of turnover.

This literature review discussed previous studies in three subjects: event study, hospitality stocks, and CEO resignations. The event study method has long been used in locating the impact of particular events. It is the foundation of our research.
2.1 Event Study

2.1.1 Efficient Market Hypothesis

Event study research was developed in the late 1960s. It is based the Efficient Market Hypothesis (EMH), which was formalized by Fama (1970) and is considered a cornerstone of modern finance theory. In the research, all the empirical research on the theory of efficient markets has been concerned with whether prices "fully reflect" particular subsets of available information. Historically, the empirical work evolved more or less as follows. The initial studies were concerned with weak form tests in which the information subset of interest is only the past price (or return) histories. When extensive tests seemed to support the efficiency hypothesis at this level, attention was turned to semi-strong form tests in which the concern is the speed of price adjustment to other obviously publicly available information (e.g., announcements of stock splits, annual reports, new security issues, etc.). Finally, strong form tests, in which the concern is whether any investor or groups (e.g., managements of mutual funds) have monopolistic access to any information relevant to the formation of prices, have recently appeared.

The categorization of the tests into weak, semi-strong, and strong forms will pinpoint the level of information at which the hypothesis breaks down. There is no strong evidence against the hypothesis in the weak and semi-strong form tests (i.e., prices seem to efficiently adjust to obviously publicly available information) and only limited evidence against the hypothesis in the strong form tests (i.e., monopolistic
access to information about prices does not seem to be a prevalent phenomenon in the investment community).

In the case of this research, we can see that the announcement of CEO resignation is a piece of publicly available information that may cause stock price adjustment. Therefore, a CEO resignation event should be considered a semi-strong form. In a semi-strong form, the EMH states that the market will process all information as soon as it is publicly available and will adjust prices immediately to be in line with the value-relevancy of the information.

Considerable research has been done in finance and accounting that has provided robust evidence of semi-strong form market efficiency (Fama, 1970; Fama et al, 1969; Malkiel, 2005). In theory, price responses should be immediate and complete. However, some research has shown that while the initial response is immediate, the complete response may take a few trading days (Atiase et al, 2005; Beaver, 1968; Grossman and Stiglitz, 1980; May, 1971). Atiase, Li, Supattarakul and Tse (2005) examine market reactions to earnings announcements and future earnings guidance when firms provide both simultaneously. For current earnings news, they found no significant difference between return reactions to stand-alone earnings and to earnings released concurrently with guidance, suggesting that future earnings guidance does not affect return response to current earnings news. In contrast, they found a stronger return reaction to stand-alone guidance than to guidance disclosed concurrently with current earnings announcements.
Researchers have taken the idea of the EMH and used it as a basis for determining the economic impact of disseminated information. In seminal studies, Ball and Brown (1968) and Beaver (1968) assessed the impact of accounting information by examining the release of earnings announcements. This started a research track that has taken a wider view to include various types of value-relevant information such as dividends, stock splits, earnings forecasts, changes in accounting processes, and changes in the tax code. There have been many advances in event study methodology over the years, but the core elements of a typical event study can be found in these early papers.

2.1.2 Application of Event Study Method

The popularity of the event study method in academic research is well documented. Kothari and Warner (2005) report that over the period 1974–2000, five major finance journals published 565 articles that contained event study results. This is clearly a very conservative number as it does not include the many event studies published in accounting journals and other finance journals. Moreover, event studies are now regularly seen outside the realm of mainstream accounting and finance journals. Schwert (1981) is an early example. A sampling of recent papers in various areas in which event studies are now applied might include Ghosh et al. (1995), Meznar et al. (1998), Lamdin (2001), Bhagat and Romano (2002), Nicolau (2002), Nicolau and Sellers (2002), Rose (2003), Drakos (2004), Wulf (2004), Tuck (2005), Cichello and Lamdin (2006), Fornell et al. (2006), Calvo-Gonzalez (2007), Johnston
(2007), Darkow et al. (2008), Misra and Rao (2009), and Roztocki and Weistroffer (2009). There are, of course, many others too numerous to mention here. What is clear is that event studies continue to be popular and has become a part of capital markets research.

The methodology lessens many of the constraints that may plague researchers who utilize other traditional methodologies. For example, it is common to conduct data collection through the administration of a survey to a select group of respondents. Unfortunately, surveys may fail to produce the needed level of responses; low response levels may affect the statistical power of the hypothesis testing.

Additionally, the researcher must consider whether non-response bias colors the research findings. When conducting research via a case study, the researcher must find an organization willing to allow an “outsider” into its internal processes. Many organizations fear the loss of proprietary information from such studies and are therefore hesitant to participate in research projects. In contrast, the event study can eliminate some of the difficulties that affect other methodologies by allowing the researcher to draw upon readily available archival data to form the basis for a research project. The event study relies instead upon gaining assistance from sophisticated statistical programs, which can be used to determine the significance of certain variables. By using statistical methods, event studies can assess an impact that a certain event will have on a dependent variable through the explanatory powers of other independent variables.
The way that an event study is conducted is similar to other research projects. Once the research questions have been set, the data, independent variables, descriptive statistics, and methods of statistical evaluation can be finalized. Once the dependent variable is chosen, research to show what variables could help explain variance in the dependent variable is conducted. For an event study to be more accurate, a large sample of data has to be collected.

The stream of work based on the event study approach is quite extensive. One that is particularly relevant is Singh, Sethi, and Sethi (2005), who explored the reasons for the survival of some Internet start-ups within the framework of organizational adaptation. They proposed that the performance of a firm in a fast-changing environment is related to the adaptability of its business model. Event study methodology was used to assess the impact of 885 business model changes undertaken by 20 dot-coms. The results show that the market rewarded certain types of changes more favorably than others, and that firms could use market reactions to guide their information technology investments.

In a similar vein, Sanchez-Lorda (2006) examined the stock market reaction to diversification and internationalization initiatives. The sample consisted of European telecom companies’ mergers and acquisitions (M&A) and strategic alliances between 1986 and 2001. It showed that the market reaction depended on the geographical and business scope of the initiatives.

There are many other studies that have used the event-based approach. More broadly, any event that has information that is economically relevant to publicly-
traded companies can be examined through the lens of event studies and the EMH. Event studies have been used to investigate a great number of topics, including the impact of antitrust filings on companies' competitors (Bittlingmayer and Hazlett, 2000), the effect of macroeconomic news on stock prices (McQueen and Roley, 1993), the impact of a corporate name change on companies with Internet-related dotcom names (Cooper, Dimitrov and Rau, 2001), and the effect of the Three Mile Island nuclear accident on public utility companies (Hill and Schneeweis, 1983).


Methodologically, the trend has been to use the t-test to assess a stock’s abnormal returns for the pre- and post-announcement periods.
2.2 Studies in Hospitality Stocks

Using an empirical study method, Ming-Hsiang and Chao-Ning (2010) investigated the effects of changes in monetary policy on the stock performance of hospitality firms (airlines, hotels, restaurants and tourism firms) in Hong Kong. They found that among airlines, hotels, restaurants and tourism firms, only hotel and tourism stock prices are significantly influenced by the changes in the monetary policy. Stocks of three of the four sectors of hospitality firms exhibited a higher mean return and lower standard deviation under an expansive monetary policy environment. Charles and Ying (2011) examined a comprehensive data set of all terrorist activities that directly affected Americans between 1973 and 2003, exploring the reaction of hospitality stocks to these events. They found hospitality stocks’ returns following terrorist events are well in excess of those experienced by the rest of the stock market, beating the market by 10 to 15 percent per annum. Contrary to the preponderance of the literature, hospitality stocks respond positively, exhibiting returns that significantly exceed those on non-event days and those of the general stock market. Kwansa (1994) analyzed stock price reaction to merger announcements between 1980 and 1990 for a sample of 18 target hospitality firms and found that target shareholders earned significant positive abnormal returns before and after the announcements.

Empirical studies have supported the relationship between monetary policy and security returns in the developed stock markets (Conover, Jensen and Johnson, 1999; Jensen and Johnson, 1995) and in the emerging stock markets (Chen,
Chen and Kuo, 2007a, 2007b). There is a similar association in various debt markets
(Baker and Meyer, 1980; Cook and Hahn, 1988; Johnson, Buetow, Jensen and Reilly,
2003), in the foreign exchange market (Brown, 1981; Neal, Roley and Sellon, 1998),
and in the mutual fund market (Chen, Chen, Liao and Lin, 2008; Johnson, Buetow and
Jensen, 1999). Several recent hospitality research papers have investigated the
connection between monetary policy factors and stock returns (Barrows and Naka,
the macroeconomic variable, the growth rate of the money supply, was one of the
significant explanatory factors of lodging stock returns in the USA. Similarly, Chen et
al. (2005) found a positive link between money supply growth rate and hotel stock
returns in Taiwan, and Chen (2007) illustrated that a time lag change in the discount
rate could significantly affect Chinese hotel stock returns.

2.3 CEO Resignations

Jensen and Warner (1988) surveyed 17 papers in special issues of the
Journal of Financial Economics. In their findings, they characterize top executive
changes as a “key variable in understanding the forces disciplining managers.” Huson,
Parrino, and Starks (2001) claimed that CEO changes have “long-term implications
for a firm’s investment, operating, and financing decisions.” Previous research on the
issue mostly focused on the rationale for CEO turnovers or the circumstances that led
to CEO changes. Coughlan and Schmidt (1985) investigated the internal managerial
control mechanisms at the disposal of a corporation's compensation-setting board or committee. The hypotheses tested are that both compensation changes and management changes are methods used to control top management, and that the use of these controls methods is motivated by changes in the firm's stock price performance. Public data from the 1977–1980 periods support this hypothesis. They found that the firm's board creates managerial incentives consistent with those of the firm's owners, both by setting compensation and following management change policies that benefit shareholders.

Another critically important question, which has received relatively less attention to this point, is how CEO turnovers affect future firm performance. CEO changes often occur as the result of poor firm performance (Coughlan and Schmidt, 1985; Warner and et al, 1988; Weisbach, 1988; Fee and Hadlock, 2004). Fee and Hadlock studied management turnover for the top five executives in a sample of 443 large firms from 1993 through 1998. They found that the rate of forced turnover for non-CEOs is at least as great as that for CEOs, but the sensitivity of turnover to firm performance is smaller for non-CEOs. The probability that a non-CEO leaves office is elevated around CEO dismissals, particularly when the replacement CEO is an outsider. Many dismissed executives obtain new employment, but on average their new positions are significantly inferior to their prior jobs.

As surprising as it may seem, CEO resignation happens all the time, however, studies of this phenomenon and its association with stock returns and stock
value are limited in the hospitality literature. There are statistical data, though, that reflect the general circumstances surrounding this event.

2.3.1 Statistical Data

A study conducted by Equilar, the leading provider of executive compensation data and research, identified 381 S&P 500 companies that had a change in CEO between 2007 and 2009. Of the three years studied, 2008 had the highest level of CEO turnover, with 156 CEOs leaving their companies. Falling slightly behind 2008, the number of executives leaving the CEO position during 2007 and 2009 were 126 and 138, respectively. The following chart shows the number of CEO resignations during each calendar year.

Figure 1. Number of CEO Resignations by Calendar Year

![Chart showing number of CEO resignations by year](image)
Although the age of a CEO does not necessarily dictate the timing of his or her departure, chief executives often step down as their age advances. These departures can be for personal reasons, or to comply with mandatory or suggested retirement ages imposed by the company’s board of directors. Not surprisingly, the incoming CEOs included in this study are, on average, younger than the executives they replaced. As shown in the graphs below, departing CEOs are more likely to be in their 60s, while incoming CEOs are most often in their 40s or 50s.

The youngest person to step down from the CEO role during the time frame studied was 37 years old; the oldest was 88 years old. The median age of departing CEOs was 60. Among the incoming CEOs, the youngest person to take the reins was 29 years old, while the oldest was 70 years old. The median age of incoming CEOs was 51.

Figure 2. Age Distribution of CEOs
The conventional wisdom is that the person selected to replace the departing CEO plays a major role in the success or failure of the leadership transition. A key consideration is whether the replacement comes from inside or outside the company. In a study of global CEO turnover during the last decade, Booz & Co. (2009) concluded that “insiders perform better and last longer… insiders have produced superior regionally market adjusted shareholder returns in seven of the last 10 years.” However, a recent study conducted by Spencer Stuart (2011) in the Harvard Business Review found that, like many issues in business, the circumstances facing the company must be taken into consideration. The Spencer Stuart study examined the pros and cons of internal and external CEO candidates and found that “insiders are best when the company is performing well; outsiders do better when the company is in crisis.”

Equilar’s study of CEO turnover found that nearly three-quarters (73.0 percent) of the incoming CEOs were internal hires, meaning that they worked for the company prior to being appointed CEO. One quarter (24.9 percent) of the incoming CEOs were hired from outside the company. At the remaining 2.1 percent of firms, a former CEO returned to re-take the reins.
2.3.2 CEO Trends

There are studies focusing on the trends of CEOs over the years. A report conducted by Ken, Per-Ola and Gary (2010) showed ten consecutive years of data on CEO succession among the world’s top 2,500 public companies. Looking across the decade, it is remarkable to see how turnover rates have converged across regions since 2000.
The harmonization of CEO turnover rates suggests that global governance norms are emerging across the world and in every industry—not by fiat but through practice. The percentages of CEOs who are replaced each year in Europe, as well as in the rest of Asia, have reached levels closer to those in North America and Japan.

Furthermore, from the Americas to Asia to Europe, the tenure, role, and duties of chief executives are gradually converging. CEOs have less time to prove themselves now, and boards are more likely to fire them when performance lags. Tenures of 10 to 15 years were not unusual in the latter half of the 20th century, but
the global mean tenure of departing CEOs has dropped from 8.1 years to 6.3 years during the past decade.

**Figure 5. Average Tenure of Outgoing CEOs**

The trend toward CEOs holding a shorter tenure and being appointed at an older age has become increasingly apparent toward the end of the decade.

2.3.3 Factors Affecting CEO Change

Hermalin and Weisbach (1998) proposed a theoretical framework that suggests that poor performance often leads to a loss in reputation for the CEO and raises the probability that the board of directors would replace the CEO. Prior evidence generally confirmed this relationship. Warner, Watts, and Wruck (1988) found a negative relationship between stock price performance and the turnover of top managers (CEO, chairman and president) in the U.S. This evidence has been confirmed by an international body of research. The negative association of turnover
frequency and firm performance is not limited to CEOs. Fee and Hadlock (2004) found that top corporate managers are almost as likely to be terminated as CEOs, although their turnover is less sensitive to stock price performance.

Regarding board size, Yermack (1996) and consequent studies found that firms with smaller boards are more likely to discipline managers than larger boards in the U.S. Dahya, McConnell, and Travlos (2002) confirm this finding for the U.K. For Germany, the size of the supervisory board is regulated by law, with a minimum of three and a maximum of 21 members, with the actual number depending on firm size and industry. Also, all firms in Germany are subject to codetermination rules according to which 50 percent of supervisory board members have to be employee representatives. Firm discretion over board size is therefore more limited in Germany than in the U.S. or the U.K. and any empirical relationship is likely to be weaker.

Apart from the board, which governance mechanisms determine the hiring and firing of CEOs? We consider blockholders, financial leverage and corporate takeovers. Blockholder ownership has been argued to be instrumental in overcoming the free rider problems of management monitoring and acts as a disciplinary mechanism. The empirical evidence is mixed however. While Franks, Mayer, and Renneboog (2001) find no disciplinary mechanism, Huson et al. (2004) found that larger institutional shareholdings improve the sensitivity of turnover to prior performance.
2.3.4 CEO Performance

It is important to stress the difference between voluntary and forced CEO changes. Voluntary turnover can arise in an array of cases. First, managers may retire due to age, expiration of their contract or other circumstances. Such voluntary cases may not be motivated by previous performance and may not reflect leadership quality. Also, as Huson, Malatesta, and Parrino (2004) argue, voluntary turnover does not allow a prediction of whether the replacing manager is of a higher or lower quality than the incumbent. Therefore, changes in expected firm performance after voluntary turnovers should be smaller than those after forced turnover.

Following the rationale in Hermalin and Weisbach (1998), outside board directors are frequently assumed to be independent and play the role of monitors. Further, board size may matter because as boards become too large, agency problems increase within the board, and it’s monitoring quality declines (Jensen, 1993).

In the U.S., outside directors have been shown to increase the sensitivity of turnover to past performance (Weisbach, 1988). The evidence for outside directors in the U.K. is ambiguous. Dahya, McConnell, and Travlos (2002) report a significant disciplinary role for outsider-dominated boards for a sample of 460 U.K. firms from 1988 to 1996. Franks, Mayer, and Renneboog (2001) however, using a sample of 250 U.K. firms from 1988 to 1993, found no evidence of disciplining by outside board members. They suggest that regulatory differences between the U.S. and the U.K. may lead to the irrelevance of outsider board representation. In the U.S. directors have significant fiduciary obligations, whereas very few such obligations exist in the U.K.
With respect to Germany, it has been argued that supervisory board members of German firms might be more or less independent than their U.S. and U.K. counterparts (Roe 1993, Fauver and Fuerst 2006).

There is a similar asymmetric pattern in performance for incoming CEOs. Incoming CEOs are associated with large improvements in performance for poorly performing firms, but have little effect in firms that did not previously underperform. Denis and Denis (1995), Denis and Kruse (2000), Huson, Malatesta, and Parrino (2004) and Cornelli, Kominek, and Ljungqvist (2009) also report post turnover performance improvements in poorly performing firms. The improvement in performance is mostly attributable to the appointment of an external CEO, as opposed to appointing an insider. Firms that appoint an outside CEO candidate experience a significantly higher increase in performance following the appointment. Other governance mechanisms however fail to have an impact on performance or even contribute to a decrease in performance under the new CEO. Incoming CEOs also trigger significant layoffs and downsizing, with large effects concentrated among previously underperforming firms. Incoming CEOs significantly reduce assets over a 3-year period following the turnover. This asset reduction is larger for CEO turnover following bad performance and is of similar size in both countries. Remarkably, layoff patterns are similar in the U.K. and Germany, despite the fact that German employees enjoy a higher level of legal employment protection and can affect corporate decisions through the codetermination system.
Chapter 3
METHODOLOGY

3.1 Research Questions and Hypotheses

This proposed research will examine the influence of CEO resignation on stock performance. This study uses event study method to provide empirical evidence for the effect, and will offer recommendations on how hospitality companies should prepare for and react to CEO resignations.

In order to do so, the study will examine changes in stock value before the event day and after the event day and estimate the returns to the stock on each of the event days. The daily returns to each stock will be compared to the returns to the market to obtain the abnormal return. The cumulative returns will then be examined to determine if they are significantly different from zero. The following is the statements of the first hypothesis:

$H_1$: The cumulative abnormal returns to hospitality stocks following a CEO resignation are not significantly different from zero.

Additionally, another sample of non-hospitality companies was selected from the same time frame and market environment. By implementing the same
analysis on non-hospitality firm dataset, we perceived a comparative view of the impact of CEO resignation on hospitality stocks. Thus, the result could imply more niche targeted reaction for hospitality firms.

Hence, the second hypothesis is:

**H2**: There is no difference between the abnormal returns enjoyed by hospitality firms who have experienced CEO resignation versus non-hospitality firms who have experienced CEO resignation.

### 3.2 Data Collection Methods

The present study requires two pieces of data: stock returns data and CEO resignation data. The former is collected from the Bloomberg database from the Exelon Trading Centre, University of Delaware. The second piece of data is a combined data set of CEO resignation date in both hospitality firms and general firms, which was collected from the ABI Inform Database.

The study examined the impact of CEO resignations on the daily returns to the stocks. The date of the announcement of the resignation was considered the event day. The period of investigation of CEO resignations was from 1999 to 2012. The criteria used to select the samples were:

1) U.S.-based companies;

2) Publicly traded companies;
3) Companies that have experienced CEO resignation during the time frame;

The event window was defined as 3 days before the resignation announcement and 3 days following the announcement, so there will be seven trading days from which the cumulative returns were estimated.

For each company, stock returns information for days T-3 to T+3 was collected using the Bloomberg daily data set. Data was also collected for the S&P 500 index for use in event study model. The initial stock list for all companies can be seen in Table 1. Notable companies for which data were not available were Hyatt Hotels Corp, Burger King, Best Western International, and Premier Hotels &Resorts.

Different businesses cater to and target different types of customers. The sample was grouped into two categories: Hospitality companies were mainly focused on hotels and restaurants, and non-hospitality companies were from other industry. The selection criteria were applied evenly and consistently to each property of 27 hospitality and 29 non-hospitality companies. The list can be seen in Table 1. Information on the security identifiers of select stocks, the actual announcement dates, and CEO information are shown in Appendix A. It is important to remember that companies assigned to the same segment are not necessarily comparable on every characteristic, only the select characteristics used to segment.
**Table 1  Segmented List of Stocks Used in Analysis**

<table>
<thead>
<tr>
<th>Hospitality Companies</th>
<th>Non-Hospitality Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almond Resort</td>
<td>Best Buy</td>
</tr>
<tr>
<td>McDonald's</td>
<td>Eastman Kodak Co.</td>
</tr>
<tr>
<td>Wendy's</td>
<td>Globalfoundries</td>
</tr>
<tr>
<td>Darden</td>
<td>Sonova</td>
</tr>
<tr>
<td>Sunstone Hotel Investors Inc. LLC</td>
<td>Volvo AB</td>
</tr>
<tr>
<td>Tropicana Entertainment</td>
<td>DBS Group Holdings Ltd.</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>Bank of America Corp.</td>
</tr>
<tr>
<td>Vail Resorts Inc.</td>
<td>E*Trade Financial Corp.</td>
</tr>
<tr>
<td>Krispy Kreme Doughnuts Inc.</td>
<td>FedEx Corp.</td>
</tr>
<tr>
<td>InterContinental Hotels Group PLC</td>
<td>Tellabs Inc.</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>Allstate Corp.</td>
</tr>
<tr>
<td>McDonald's</td>
<td>Pepsi Bottling Group Inc.</td>
</tr>
<tr>
<td>Aramark Corp</td>
<td>RadioShack Corp.</td>
</tr>
<tr>
<td>California Pizza Kitchen</td>
<td>DaimlerChrysler AG</td>
</tr>
<tr>
<td>Furr's Restaurant Group Inc. Pizza Inn Inc.</td>
<td>Marsh &amp; McLennan Cos.</td>
</tr>
<tr>
<td>Applebee's International Inc. Luby's Inc.</td>
<td>Vodafone Group PLC</td>
</tr>
<tr>
<td>CKE Restaurants</td>
<td>Tenet Healthcare Corp.</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>El Paso Corp.</td>
</tr>
<tr>
<td>Brinker International Inc. CBRL Group Inc.</td>
<td>Telewest Communications PLC</td>
</tr>
<tr>
<td>Morgans hotel group</td>
<td>Polaroid Corp.</td>
</tr>
<tr>
<td>Orient-Express Hotels</td>
<td>Ford Motor Company</td>
</tr>
<tr>
<td>Carrolls Restaurant</td>
<td>3Com Corp.</td>
</tr>
<tr>
<td></td>
<td>Gtech Holdings Corp.</td>
</tr>
<tr>
<td></td>
<td>Reliance Group Holdings Inc.</td>
</tr>
<tr>
<td></td>
<td>Mattel</td>
</tr>
<tr>
<td></td>
<td>Humana Inc.</td>
</tr>
<tr>
<td></td>
<td>Tenneco Inc.</td>
</tr>
</tbody>
</table>
3.3 Research Design

This was a non-experimental quantitative research. According to the research question, the researcher chose to use mathematical model to quantify the influence. Different kinds of hospitality companies such as hotel, restaurant, airlines, and tourism investment companies were compared to each other. This design produced a comparative value of classifications above. Procedures of this study run as follows.

Figure 6. Research Procedure
3.4 Statistical Analysis

3.4.1 AR and CAR

In order to examine the impact of CEO resignation on stock revenue; the event study method was used. This methodology postulates that the market takes into account all available information in determining security prices (McWilliams & Siegel, 1997). Hence, when an unexpected event that brings new information is announced, if such event is value relevant, the market reaction to the event will be observed over an event window \([T_1,T_2]\) that overlaps with the event’s first announcement date. Where the event date is denoted day 0, following convention, the event window was defined as starting from three days before the announcement (day \(T_{-3}\)) and ending three days after the announcement (day \(T_{+3}\)) to account for possible leakage of information prior to the announcement, and extending up to three days following the announcement to give stock prices time to adjust to the event.

The standard protocols for short-term event studies were followed (Srinivasan and Bharadwaj 2004). The abnormal return on a given day is the difference between the stock’s actual return and its expected return on that day, where the rate of return of the benchmark market portfolio (S&P 500) for the event day is used as a proxy for the expected return.

The market reaction to an event is estimated traditionally using the following steps. The first step estimates normal stock returns. Expected returns for a firm \(i\) at date \(t\) are estimated through the single index market model:
Where,

\[ R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it} \] ---- (1)

\( R_{it} \) = Return on security \( i \) in period \( t \),

\( R_{mt} \) = Rate of return on market portfolio in period \( t \),

\( \epsilon_{it} \) = Stochastic portion of the individualistic factor, which is part of security return that cannot be explained by \( R_{mt} \) or \( \alpha_i \),

\( a_{it}, \beta_i = \text{Intercept and slope respectively,} \)

\[ \beta_i = \frac{\text{cov}\ (R_{it}, R_{mt})}{\sigma^2 (R_{mt})}, \quad \alpha_i = E(R_{it}) - \beta_i [E(R_{mt})] \]

Under the model specified above, many market indexes may be used as market proxy for the calculation of expected returns of individual stocks. The regression coefficients: \( a_{it} \) and \( \beta_i \) are obtained from a prior period of analysis further removed from the event window where the daily market return is regressed upon the daily returns from the stock for a number of continuous trading days. The regression coefficients are then used to estimate the expected daily stock returns in the event window.

To calculate the abnormal return (AR) for any event day, the expected return on that day is subtracted from the actual return. The daily abnormal returns are then cumulated over the event window to obtain a cumulative abnormal return for each stock. Abnormal returns (ARs) for firms are calculated as:
In this study, the S&P 500 daily return will be used as a proxy for the expected return for each stock. Therefore the S&P 500 return will be subtracted from each daily return to obtain the abnormal return. The daily abnormal returns will be cumulated over the event window for each stock.

Since the complete price response to new information can potentially take several days, cumulative abnormal returns (CARs) are calculated over multiple trading days known as the event window. In this paper, we construct CARs using the primary event window.

\[
AR_{it} = R_{it} - \left( \hat{\alpha} + \hat{\beta}R_{mt} \right)
\]

\( \text{(2)} \)

\[
CAR_{i3} = AR_{i0} + AR_{i1} + AR_{i2}, \quad \text{---- (3)}
\]

\[
CAR_{i,-3} = AR_{i,-3} + AR_{i,-2} + AR_{i,-1} \quad \text{---- (4)}
\]

3.4.2 Descriptive Statistics and Histograms

Descriptive statistics for the data are presented including max, min, mean, and standard deviation. Frequency histograms of abnormal returns are presented to show the distribution tendency of both hospitality and non-hospitality companies.

3.4.3 Significance Tests.

A significance test was performed to determine whether the cumulative abnormal return is significantly different from zero. Adjusted versions of the Basic
Metabolic Panel (BMP) test were used. In terms of their general construction, the BMP test assesses whether sums of standardized CARs are sufficiently far from zero and the Portfolio test performs a similar procedure, but on an equally-weighted portfolio of the stocks in the sample (see references for more detailed information).

Scaled abnormal returns are used by BMP to define the following t-statistic:

$$t_B = \frac{A \sqrt{n}}{s}.$$  

Where $s$ is the (cross-sectional) standard deviation of the event-day scaled abnormal returns defined as the square root of the sample variance, or

$$s^2 = \frac{1}{n-1} \sum_{i=1}^{n} (A_i - \bar{A})^2.$$  

It can be easily shown that

$$E\left[ s^2 \right] = (1 - \rho)\sigma_A^2.$$  

Thus, Equation (6) is a biased estimator of the variance $\sigma_A^2$ when contemporaneous return correlations are nonzero. Normally, because $\rho$ is positive, $s^2$ understates the true cross-sectional variance. Because

$$E[s^2/(1 - \rho)] = \sigma_A^2,$$  
a feasible estimator of the variance $\sigma_A^2$ is
$s_A^2 = \frac{s^2}{1 - \bar{r}}$

--- (8)

where $\bar{r}$ is the average of the sample cross-correlations of the estimation-period residuals. Using this variance in the t-ratio results in a scaled test statistic (hereafter ADJBMP) that accounts for both cross-correlation and event-induced volatility in testing for the mean event effect:

$$t_{AB} = \frac{\bar{A}}{s_A} = \frac{\bar{A} \sqrt{n}}{s_A \sqrt{1 + (n - 1)\bar{r}^2}}$$

--- (9)

Hence, the BMP t-statistic can be adjusted as follows:

$$t_{AB} = t_B \sqrt{\frac{1 - \bar{r}}{1 + (n - 1)\bar{r}^2}}$$

--- (10)

If the average return cross-correlation is zero, the ADJ-BMP and BMP statistics yield the same results even if the event days are clustered with cross-correlated returns.
Chapter 4

RESULTS AND DISCUSSION

Table 2 is an example of how raw returns on the event dates and abnormal returns were calculated. “MCD Equity” indicated the security form and identifier of the stock. “CHG_PCT_1D” refers to the Change of Price percentage in one market day. On each day in the event window, the actual return and expected return of the stock, in our case- S&P 500 Index, were collected. Then the expected return was subtracted from the actual return of the observed stock following the standard procedure of event studies.

Table 2  Daily Raw Returns and AR --Example

<table>
<thead>
<tr>
<th>MCD Equity</th>
<th>CHG_PCT_1D</th>
<th>SPX Index</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td></td>
<td>Date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011/8/12</td>
<td>0.255</td>
<td>2011/8/12</td>
<td>0.53</td>
<td>-0.275 T-2</td>
</tr>
<tr>
<td>2011/8/15</td>
<td>0.3699</td>
<td>2011/8/15</td>
<td>2.18</td>
<td>-1.8101 T-1</td>
</tr>
<tr>
<td>2011/8/16</td>
<td>-0.1728</td>
<td>2011/8/16</td>
<td>-0.97</td>
<td>0.7972 T0</td>
</tr>
<tr>
<td>2011/8/17</td>
<td>0.9577</td>
<td>2011/8/17</td>
<td>0.09</td>
<td>0.8677 T+1</td>
</tr>
<tr>
<td>2011/8/18</td>
<td>-2.16</td>
<td>2011/8/18</td>
<td>-4.46</td>
<td>2.3 T+2</td>
</tr>
<tr>
<td>2011/8/19</td>
<td>1.8923</td>
<td>2011/8/19</td>
<td>-1.5</td>
<td>3.3923 T+3</td>
</tr>
</tbody>
</table>
The same procedure was carried out for the 56 selected stocks. Raw returns on the actual announcement date and abnormal returns for each of the 27 hospitality firms are displayed in Appendix B. Raw data for 29 non-hospitality companies are shown in Appendix C.

Table 3 lists total ARs (Abnormal Returns) for hospitality companies and non-hospitality companies examined. It was calculated by cumulating the daily AR for each stock within the event window. Some of the hospitality firms like Morgans Hotel Group, Pizza Inn Inc and Furr’s Restaurant Group Inc showed relatively high positive ARs. Non-hospitality firms such as Polaroid Corp., El Paso Corp. and Gtech Holdings Corp. presented large negative ARs.

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Abnormal Return-1 Stock</th>
<th>Company Name</th>
<th>Abnormal Return-1 Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almond Resort</td>
<td>3.4035</td>
<td>Best Buy</td>
<td>-3.2894</td>
</tr>
<tr>
<td>McDonald’s</td>
<td>3.2587</td>
<td>Eastman Kodak Co.</td>
<td>2.4988</td>
</tr>
<tr>
<td>Wendy’s</td>
<td>4.3828</td>
<td>Globalfoundries</td>
<td>0.1738</td>
</tr>
<tr>
<td>Darden</td>
<td>3.0668</td>
<td>Sonova</td>
<td>-1.7924</td>
</tr>
<tr>
<td>Sunstone Hotel Investors Inc.</td>
<td>-2.9276</td>
<td>Volvo AB</td>
<td>-1.7448</td>
</tr>
<tr>
<td>Tropicana Entertainment LLC</td>
<td>-4.4803</td>
<td>DBS Group Holdings Ltd.</td>
<td>0.283</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>6.6387</td>
<td>Bank of America Corp.</td>
<td>1.5639</td>
</tr>
<tr>
<td>Vail Resorts Inc.</td>
<td>-9.212</td>
<td>E*Trade Financial Corp.</td>
<td>7.4892</td>
</tr>
<tr>
<td>Krispy Kreme Doughnuts Inc.</td>
<td>-7.2675</td>
<td>FedEx Corp.</td>
<td>-2.763</td>
</tr>
<tr>
<td>Company</td>
<td>AR</td>
<td>Company</td>
<td>AR</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------</td>
<td>--------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Starbucks</td>
<td>8.1397</td>
<td>Tellabs Inc.</td>
<td>-11.7193</td>
</tr>
<tr>
<td>McDonald's</td>
<td>1.4877</td>
<td>Allstate Corp.</td>
<td>1.6229</td>
</tr>
<tr>
<td>Aramark Corp.</td>
<td>-3.6224</td>
<td>Pepsi Bottling Group Inc.</td>
<td>0.5457</td>
</tr>
<tr>
<td>InterContinental Hotels Group PLC</td>
<td>6.0113</td>
<td>RadioShack Corp</td>
<td>-10.6499</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>-6.7696</td>
<td>DaimlerChrysler AG</td>
<td>13.3477</td>
</tr>
<tr>
<td>Darden Restaurants Inc</td>
<td>-14.2073</td>
<td>Havas SA</td>
<td>-0.7382</td>
</tr>
<tr>
<td>California Pizza Kitchen</td>
<td>1.3352</td>
<td>Boeing Co.</td>
<td>4.7965</td>
</tr>
<tr>
<td>Furr’s Restaurant Group Inc</td>
<td>35.8205</td>
<td>Marsh &amp; McLennan Cos.</td>
<td>14.3489</td>
</tr>
<tr>
<td>Pizza Inn Inc.</td>
<td>15.2376</td>
<td>Vodafone Group PLC</td>
<td>-4.5356</td>
</tr>
<tr>
<td>Applebee's International Inc.</td>
<td>-6.3834</td>
<td>Tenet Healthcare Corp</td>
<td>0.8905</td>
</tr>
<tr>
<td>Luby's Inc.</td>
<td>-5.4245</td>
<td>El Paso Corp.</td>
<td>-17.5617</td>
</tr>
<tr>
<td>CKE Restaurants</td>
<td>4.8135</td>
<td>Telewest Communications PLC</td>
<td>26.281</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>-3.4993</td>
<td>Polaroid Corp.</td>
<td>-43.9052</td>
</tr>
<tr>
<td>Brinker International Inc.</td>
<td>2.1307</td>
<td>Ford Motor Company</td>
<td>1.2688</td>
</tr>
<tr>
<td>CBRL Group Inc.</td>
<td>6.0173</td>
<td>3Com Corp.</td>
<td>33.1116</td>
</tr>
<tr>
<td>Morgans hotel group</td>
<td>10.1756</td>
<td>Gtech Holdings Corp.</td>
<td>-17.0707</td>
</tr>
<tr>
<td>Orient-Express Hotels</td>
<td>-6.2398</td>
<td>Reliance Group Holdings Inc.</td>
<td>9.4926</td>
</tr>
<tr>
<td>Carrols Restaurant</td>
<td>-1.7482</td>
<td>Mattel</td>
<td>2.3146</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Humana Inc.</td>
<td>-12.2674</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tenneco Inc.</td>
<td>-2.922</td>
</tr>
</tbody>
</table>

**Note:** Units of all figures are percentage.

We cumulate the individual total ARs to get the CARs (Cumulative Abnormal Returns) for both samples of studied stocks. Results are displayed in Table 4. The final CAR for hospitality stocks was 40.1377. Compared to the -11.2777 CARs for non-hospitality stocks, hospitality securities provided more evidence of positive reaction to the event.
<table>
<thead>
<tr>
<th>Company Name --- Hospitality</th>
<th>Cumulative Abnormal Return</th>
<th>Company Name --- Non-Hospitality</th>
<th>Cumulative Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almond Resort</td>
<td>3.4035</td>
<td>Best Buy</td>
<td>-3.2894</td>
</tr>
<tr>
<td>McDonald’s</td>
<td>6.6622</td>
<td>Eastman Kodak Co</td>
<td>-0.7906</td>
</tr>
<tr>
<td>Wendy’s</td>
<td>11.045</td>
<td>Globalfoundries</td>
<td>-0.9644</td>
</tr>
<tr>
<td>Darden</td>
<td>14.1118</td>
<td>Sonova</td>
<td>-2.7568</td>
</tr>
<tr>
<td>Sunstone Hotel Investors Inc.</td>
<td>11.1842</td>
<td>Volvo AB</td>
<td>-4.5016</td>
</tr>
<tr>
<td>Tropicana Entertainment LLC</td>
<td>6.7039</td>
<td>DBS Group Holdings Ltd</td>
<td>-4.2186</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>13.3426</td>
<td>Bank of America Corp.</td>
<td>-2.6547</td>
</tr>
<tr>
<td>Vail Resorts Inc</td>
<td>4.1306</td>
<td>E*Trade Financial Corp</td>
<td>4.8345</td>
</tr>
<tr>
<td>Krispy Kreme Doughnuts Inc</td>
<td>-3.1369</td>
<td>FedEx Corp.</td>
<td>2.0715</td>
</tr>
<tr>
<td>Starbucks</td>
<td>5.0028</td>
<td>Tellabs Inc</td>
<td>-9.6478</td>
</tr>
<tr>
<td>McDonald’s</td>
<td>6.4905</td>
<td>Allstate Corp.</td>
<td>-8.0249</td>
</tr>
<tr>
<td>Aramark Corp</td>
<td>2.8681</td>
<td>Pepsi Bottling Group Inc.</td>
<td>-7.4792</td>
</tr>
<tr>
<td>InterContinental Hotels</td>
<td>8.8794</td>
<td>RadioShack Corp</td>
<td>-18.1291</td>
</tr>
<tr>
<td>Group PLC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>2.1098</td>
<td>DaimlerChrysler AG</td>
<td>-4.7814</td>
</tr>
<tr>
<td>Darden Restaurants Inc</td>
<td>-12.0975</td>
<td>Havas SA</td>
<td>-5.5196</td>
</tr>
<tr>
<td>California Pizza Kitchen</td>
<td>-10.7623</td>
<td>Boeing Co.</td>
<td>-0.7231</td>
</tr>
<tr>
<td>Furr's Restaurant Group Inc</td>
<td>25.0582</td>
<td>Marsh &amp; McLennan Cos.</td>
<td>13.6258</td>
</tr>
<tr>
<td>Pizza Inn Inc</td>
<td>40.2958</td>
<td>Vodafone Group PLC</td>
<td>9.0902</td>
</tr>
<tr>
<td>Applebee's International Inc</td>
<td>33.9124</td>
<td>Tenet Healthcare Corp</td>
<td>9.9807</td>
</tr>
<tr>
<td>Luby's Inc</td>
<td>28.4879</td>
<td>El Paso Corp.</td>
<td>-7.581</td>
</tr>
<tr>
<td>CKE Restaurants</td>
<td>33.3014</td>
<td>Telewest</td>
<td>18.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Communications PLC</td>
<td></td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>29.8021</td>
<td>Polaroid Corp.</td>
<td>-25.2052</td>
</tr>
<tr>
<td>Brinker International Inc</td>
<td>31.9328</td>
<td>Ford Motor Company</td>
<td>-23.9364</td>
</tr>
<tr>
<td>CBRL Group Inc</td>
<td>37.9501</td>
<td>3Com Corp</td>
<td>9.1752</td>
</tr>
<tr>
<td>Morgans hotel group</td>
<td>48.1257</td>
<td>Gtech Holdings Corp.</td>
<td>-7.8955</td>
</tr>
<tr>
<td>Orient-Express Hotels</td>
<td>41.8859</td>
<td>Reliance Group Holdings Inc.</td>
<td>1.5971</td>
</tr>
<tr>
<td>Carrols Restaurant</td>
<td>40.1377</td>
<td>Mattel</td>
<td>3.9117</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Humana Inc.</td>
<td>-8.3557</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tenneco Inc</td>
<td>-11.2777</td>
</tr>
</tbody>
</table>
4.1 Descriptive Statistics

4.1.1 Hospitality VS Non-Hospitality Companies

Table 5 shows the summary descriptive statistics for the abnormal returns for the two samples. The mean total AR for hospitality firms is 1.49, and that for non-hospitality is -0.39. The important finding here is the positive mean AR for hospitality firms. The mean AR for non-hospitality firms is not too far from zero.

Maximum and minimum indicated the range where the AR figures are located and hospitality ARs showed higher results on both of them.

Standard Deviation of ARs for hospitality firms is 9.56 while that for non-hospitality firms is 13.81. Deviation reveals that there is larger difference in ARs in the non-hospitality firms. This is an expected result because of the diversity of non-hospitality sample.

Table 5 Descriptive Statistics of Abnormal Returns—Hospitality VS Non-Hospitality firm

<table>
<thead>
<tr>
<th>Max</th>
<th>Min</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitality</td>
<td>35.8205</td>
<td>-14.2073</td>
<td>1.486581</td>
</tr>
</tbody>
</table>
4.1.2 Histograms

Separate histograms of ARs (1 stock accumulation) for companies of different industry are shown in Figure 7. Abnormal return bars are on the x-axis. Y-axis represents the percentage of the stocks with AR. Returns is over a 3-day event window accumulation for all stocks for hospitality firms and non-hospitality firms.

Hospitality AR distribution showed more positive tendency, while non-hospitality ARs distributed symmetric around zero, appearing to support the hypothesis that two types of companies react differently to the CEO resignation event.

![Figure 7. Frequency Histograms of Abnormal Returns](image)
4.1.3 3 day vs. 7 day Event Window

The ±3 day window \([T-3, T+3]\) was selected as the event window in this study. Considering the leakage of information and continuous influence of the event, it was worth considering the possibility that a larger event window may lead to higher precision. In order to investigate the possibility of the choice of window, the \([T-7, T+7]\) daily AR data for the same hospitality firm sample was collected. The 7-day window AR results are shown in Appendix D, and the 7-day CAR results were shown in Appendix E.

Descriptive statistics results were presented in Table 6. From the results, 7-day window resulted in a lower absolute value of mean AR than the 3-day result for the hospitality sample. The relatively high SD (standard deviation) also illustrates the
higher randomness of the data, implying the 7 day window did take into account more irrelevant factors.

Table 6  Descriptive Statistics of Abnormal Returns---3 day VS 7 day

<table>
<thead>
<tr>
<th></th>
<th>Max</th>
<th>Min</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 day AR</td>
<td>35.8205</td>
<td>-14.2073</td>
<td>1.486581</td>
<td>9.559306</td>
</tr>
<tr>
<td>7 day AR</td>
<td>37.2038</td>
<td>-16.4576</td>
<td>-0.94292</td>
<td>11.61800</td>
</tr>
</tbody>
</table>

4.2 Significance Test

4.2.1  T-Statistics According to Day

In Table 7 are the CARs for each of the days in the event window, that is, from 3 days prior to the announcement till 3 days after the announcement of the CEO resignation. For every day, the ARs for individual stocks are cumulated.

Table 7  Cumulative Abnormal Returns---Each Day

<table>
<thead>
<tr>
<th></th>
<th>CAR -</th>
<th>CAR- Non-Hospitality</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-3</td>
<td>-36.8223</td>
<td>-9.46998</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>-------</td>
</tr>
<tr>
<td>T-2</td>
<td>36.1766</td>
<td>-0.73818</td>
</tr>
<tr>
<td>T-1</td>
<td>-10.3607</td>
<td>-11.4121</td>
</tr>
<tr>
<td>T0</td>
<td>2.1183</td>
<td>-69.9712</td>
</tr>
<tr>
<td>T+1</td>
<td>7.0313</td>
<td>51.28299</td>
</tr>
<tr>
<td>T+2</td>
<td>23.4548</td>
<td>5.10534</td>
</tr>
<tr>
<td>T+3</td>
<td>34.3904</td>
<td>25.05321</td>
</tr>
</tbody>
</table>

On the event date itself (T0) abnormal returns for the hospitality sample was 2.12%. The total cumulative abnormal return during the period day T-3 to day T-1 is around -11%, and total cumulative abnormal return during the period day T=1 to day T+3 is around 65%. This finding point out that hospitality stocks, to a relatively small extent, tend to react negatively before the CEO resignation and react positively after the event to a large extent. This fluctuation could be attributed to investors’ uncertainty of the resignation rumor.

On the other hand, non-hospitality stocks suffered huge negative price change on the event day. Before the event, non-hospitality stocks react consistently negatively. After the event, they react consistently positively. Significant change happened on T0 and T+1. CAR (T0) reached nearly -70% while the market recovered for 51.28% just the next day. This pattern of dramatic fluctuation serves as a sign to short term investors to be cautious when facing CEO resignation events.

Accordingly, t-statistics were calculated for each-day on the AR data for hospitality stocks to determine if they are significantly different from 0. In other
words, this result provided evidence of whether the AR is significantly different from 0. The t-statistics and p-values are displayed in Table 8.

Table 8  T-Statistics of Cumulative Abnormal Returns for Each Day

<table>
<thead>
<tr>
<th></th>
<th>CAAR</th>
<th>CAR</th>
<th>t-statistics</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-3</td>
<td>-1.36379</td>
<td>-</td>
<td>-4.3831****</td>
<td>0.000171</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>36.8223</td>
<td></td>
</tr>
<tr>
<td>T-2</td>
<td>1.339874</td>
<td>36.1766</td>
<td>3.450323***</td>
<td>0.001924</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10.3607</td>
<td></td>
</tr>
<tr>
<td>T-1</td>
<td>-0.38373</td>
<td>-</td>
<td>-7.94677****</td>
<td>2E-08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10.3607</td>
<td></td>
</tr>
<tr>
<td>T0</td>
<td>0.078456</td>
<td>2.1183</td>
<td>8.23879****</td>
<td>1.01E-08</td>
</tr>
<tr>
<td>T+1</td>
<td>0.260419</td>
<td>7.0313</td>
<td>3.662186***</td>
<td>0.001121</td>
</tr>
<tr>
<td>T+2</td>
<td>0.868696</td>
<td>23.4548</td>
<td>8.066982****</td>
<td>1.51E-08</td>
</tr>
<tr>
<td>T+3</td>
<td>1.273719</td>
<td>34.3904</td>
<td>5.487295****</td>
<td>9.33E-06</td>
</tr>
</tbody>
</table>

**Note:** The sample is April 1999 to April 2012 on US based hospitality companies that experienced CEO resignations. The event study method of defining CAR was used. ****, *** Indicate significance at the 99.9%, 99% levels.

The Cumulative Average Abnormal Returns (CAAR) was also shown in the table. It is considered the average of CAR of the day. For instance, the average CAR on the announcement date is 0.078 percent, and average CAR(T-1) is -0.38 percent. The same table reports p-values of regular t-tests over daily cumulative abnormal returns and 0. The raw results of t-test containing Mean, Variance, Pearson Correlation, t Stat, P (T<=t) one-tail, P (T<=t) two-tail scores are displayed in Appendix F.
In this case, the results indicated that CARs for all of the days within the event window were significant. Daily CAR data showed significance at 99% level on T-2 and T+1, and significance at 99.9% level on other observed days. Thus, it can be concluded that the hospitality market reacted significantly negatively on T-3 and T-1. The market reacted significantly positively on T-2, T0, T+1, T+2, and T+3.

CAR for different days in the event window show a definite pattern. On T-3, abnormal return is negative and statistically significant; perhaps an indication of persistence of lack of confidence regarding the departure of CEOs. On the following day T-2, the abnormal return is positive; indicating that the market expects that there might be some positive outcome. On day T-1, the return is negative and statistically significant. The result indicates that there might have been information leakage upon CEO resignation in certain cases, before the official announcement, signifying possible insider trading to some extent.

On T0 and after announcement of the event, cumulative abnormal returns continuously grow till the seventh day of observation. The t test result demonstrated a significance level of over 99%, meaning the continuous positive CAR was also statistically significant.

4.2.2 T-Statistics According to Industry

Presented below in Table 9 are the results of t-tests on CARs on the hospitality and non-hospitality stocks following CEO resignation. Means and
differences in means are calculated and accompanied by p-values testing these values against the null hypothesis that each is equal to zero.

<table>
<thead>
<tr>
<th>Industry</th>
<th>CAR</th>
<th>t-statistics</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitality</td>
<td>40.1377</td>
<td>5.167045****</td>
<td>2.16E-05</td>
</tr>
<tr>
<td>Non-hospitality</td>
<td>-11.2777</td>
<td>-1.57772</td>
<td>0.125863</td>
</tr>
</tbody>
</table>

**Note:** The sample is April 1999 to April 2012 on US based hospitality and non-hospitality stocks experience CEO resignation event. The event study method of defining CAR was used. **** Indicate significance at the 99.9% levels.

The full sample was sorted into the hospitality vs. non-hospitality subsamples, and t-tests were conducted for each subsample. **Table 10** summarizes the t test results on the CAR data. Panel A of Table 10 reports t-statistics for the hospitality firm sample, and Panel B reflects the results for non-hospitality firm sample. Mean, Variance, Pearson Correlation, t Stat, P (T<=t) one-tail, P (T<=t) two-tail scores are calculated in order to address the significance level. As we expected, hospitality stocks outperform non-hospitality stocks in significance level with a remarkably little two-tail p-value of 2.16E-05.
Table 10  T-test of Cumulative Abnormal Returns for Two Samples

<table>
<thead>
<tr>
<th>Panel A</th>
<th>CAR (Hospitality)</th>
<th>Panel B</th>
<th>CAR (Non-Hospitality)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>17.06769</td>
<td>Mean</td>
<td>-2.92228</td>
</tr>
<tr>
<td>Variance</td>
<td>294.5973</td>
<td>Variance</td>
<td>99.49041</td>
</tr>
<tr>
<td>Observations</td>
<td>27</td>
<td>Observations</td>
<td>29</td>
</tr>
<tr>
<td>Hypothesized</td>
<td>0</td>
<td>Hypothesized</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>0</td>
<td>df</td>
<td>28</td>
</tr>
<tr>
<td>df</td>
<td>26</td>
<td>t Stat</td>
<td>-1.57772</td>
</tr>
<tr>
<td>t Stat</td>
<td>5.167045</td>
<td>P(T&lt;=t) one- tail</td>
<td>0.062931</td>
</tr>
<tr>
<td>P(T&lt;=t) one- tail</td>
<td>1.08E-05</td>
<td>t Critical one- tail</td>
<td>1.701131</td>
</tr>
<tr>
<td>P(T&lt;=t) two- tail</td>
<td>2.16E-05</td>
<td>t Critical two- tail</td>
<td>2.048407</td>
</tr>
</tbody>
</table>

The results showed that hospitality firms have higher absolute value of cumulative abnormal returns overall. Hospitality stocks reached a positive CAR as high as 40.14%, while non-hospitality resulted in a negative CAR at -11.28%.

Moreover, t-test results indicated hospitality CAR was significantly different from 0, while non-hospitality CARs did not reach the significance level of 90% to reject the null. The figures demonstrated that hospitality stocks react significantly to CEO resignation.

On the other hand, non-hospitality stocks were impacted by the event to a certain extent, but not as much to reject the null hypothesis confidently.
4.2.3 Comparison T-Statistics between Samples

As we victimed the remarkable difference between the t-statistic results for hospitality firms and non-hospitality firms, a t-test that aims at comparing the mean difference between the two samples was conducted. Table 11 displayed the result.

<table>
<thead>
<tr>
<th></th>
<th>Hospitality CAR</th>
<th>Non-Hospitality CAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>17.06769</td>
<td>-2.92228</td>
</tr>
<tr>
<td>Variance</td>
<td>294.5973</td>
<td>99.49041</td>
</tr>
<tr>
<td>Observations</td>
<td>27</td>
<td>29</td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>5.278512</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>2.28E-06</td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.682878</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) two-tail</td>
<td>4.56E-06</td>
<td></td>
</tr>
<tr>
<td>t Critical two-tail</td>
<td>2.019541</td>
<td></td>
</tr>
</tbody>
</table>

The two-tail p-value achieved as low as 4.56E-06, which means the CAR data from the two subsamples are significantly different from each other. This finding rejected our second hypothesis that there is no difference between the abnormal returns enjoyed by hospitality firms who have experienced CEO resignation versus non-hospitality firms.

The possible reason for this phenomenon could be as following:

1) Compared to other industries, the hospitality industry is
more capital intensive involving investment decisions (Ming-Hsiang and Chao-Ning, 2010). This nature determined that these stocks are highly sensitive to operational events that may have effects on capital structure of the firm, which would make the cumulative abnormal return more significant than other firms.

2) The different reaction of stock price could be attributed to size, diversity of the operations, experience level of the CEOs, and the age of the companies, as well as investor expectations of company performance (Nelson et al, 2006). On average, hospitality firms have smaller sizes, lower diversity of operation, and lower company age. Some of the restaurant companies have only been established 1 or 2 years ago. These characteristics may affect the way stocks react.

3) The hospitality industry is a market with high flexibility. Unlike other industries that provide necessities or household products, service products have more substitutes. This flexibility results in a high level of reaction to events that influence the market’s expectation of the stock.
Chapter 5
CONCLUSION AND LIMITATIONS

5.1 Conclusion

CEO changes occur frequently. In 2008 alone, 156 CEOs left their companies. A study of the impact on stock returns could shed light on the reaction of the stock market to such events, especially in hospitality industry.

This study sought to describe the reaction of hospitality stocks to CEO resignation. The event study method was used to relate the event of CEO resignation and stock returns to the company. In addition, the same analysis was conducted on data set from both hospitality companies and non-hospitality companies to determine whether there are different market reactions.

5.1.1 Findings

The daily returns to each stock were compared to the returns to the market to obtain the abnormal return (above expected return). Hospitality ARs showed higher results on Maximum and Minimum, which implied a comparatively positive range of the population. Hospitality AR distribution showed more positive tendency, while
non-hospitality ARs distributed symmetrically around zero, supporting the hypothesis that two samples of companies react differently to the CEO resignation event.

The individual ARs were calculated to obtain the CARs (Cumulative Abnormal Returns) for all studied stocks. The final CAR for hospitality stocks was 40.1377. Compared to the -11.2777 for the non-hospitality sample, hospitality firms provided more evidence of positive reaction to the event.

The hospitality firms have higher absolute value of cumulative abnormal returns overall. Hospitality stocks tend to react negatively before the CEO resignation to a relatively small extent, and react positively after the event to a large extent.

ARs of all samples on each event days were cumulated. The findings showed that the market did not react consistently before the event. The market fluctuation could be attributed to investors’ uncertainty of the resignation rumor. On the other hand, non-hospitality stocks suffered large negative price change on the event day. Before the event, non-hospitality stocks reacted consistently negatively, but the reaction was consistently positive after the event. Significant change occurred on T0 and T+1. Stock return dropped heavily and recovered just the next day. This pattern of dramatic fluctuation could be instructive for short term stock investors when facing CEO resignations. In general, hospitality market reacts significantly negatively on T-3 and T-1. The market reacted significantly positively on T-2, T0, T+1, T+2, and T+3.
The cumulative returns were then examined to determine if they are significantly different from zero. T-test results indicated hospitality CAR was significantly different from 0 while non-hospitality CAR did not reach the significance level of 90% to reject the null. The figures demonstrated that hospitality stocks react significantly to CEO resignation. The following hypothesis was rejected:

\( H_1 \): The cumulative abnormal returns to hospitality stocks following a CEO resignation are not significantly different from zero.

The sample of non-hospitality companies was selected from the same time frame and market environment. By implementing the same analysis on the non-hospitality dataset, it was possible to compare the market reaction to both samples.

A t-test that aims at comparing the mean difference between the two samples was conducted. The two-tail p-value achieved as low as 4.56E-06, which means the CAR data from the two subsamples are significantly different from each other. This finding led to a rejection of the second hypothesis:

\( H_2 \): There is no difference between the abnormal returns enjoyed by hospitality firms who have experienced CEO resignation versus non-hospitality firms who have experienced CEO resignation.

Possible reason for this difference could be the average smaller size, lower diversity of operation, lower company age, and higher capital intensity of hospitality firms.
The event window for this study was ±3 days around the announcement date. A 7-day window resulted in a lower absolute value of mean AR than the 3-day result. It indicated the uncontrolled noise within the 7-day window, like other event in the firm, could have blended the impact of CEO resignation.

5.1.2 Recommendations for Hospitality Operators and Investors

For hospitality operators, it is highly recommended that the CEO resignation information is prevented from the public before the announcement. Result of this study showed significant negative reaction to the information leakage before the event. The market tends to recover after the announcements. Awareness of these patterns would help operators prepare better response plans.

For hospitality investors, especially short-term investors, immediate purchase of a stock is recommended on the announcement day of CEO resignations. Selling within one week of these stocks has high probability of earning a positive capital gain.

5.1.3 Recommendations for Future Research

Several issues were not considered in this paper and deserve further study, for instance, the differences in the natures of different hospitality companies. Do hotel firms react differently to this event than restaurant companies? Does company size
influence the result? Researches can move on to investigate the types of firms that have more versus less pronounced abnormal returns. A number of firm characteristics, including firm type, firm size, and leverage could be investigated.

Voluntary vs. involuntary is an important way of sorting CEO resignations. In this paper, this difference in the reason of CEO departure was not investigated.

Furthermore, the market reactions to CEO resignation were different for hospitality stocks and non-hospitality stocks. The reason for this difference requires future study.

5.2 Limitations

There are a few caveats to our analysis. First, a considerable number of companies were not included because their stock was not publicly-traded. This does not diminish the relevance or significance of the analysis of publicly-traded companies, but it does mean that external validity is not certain and care should be taken when forming out-of-sample conclusions. Second, some hospitality companies are composed of a variety of types of subsidiaries. The process of segmenting companies into hospitality and non-hospitality segments is not simple and unambiguous. While it can be tempting to be guided by anecdotal evidence or opinion, instead dispassionate criteria were employed in an attempt to segment different types of hospitality companies on the basis of specific characteristics.
Finally, the expected stock returns were not calculated as it is done traditionally. Instead, the S&P 500 Index was used as the expected market change. This procedure on one hand may reduce the uncontrolled noise from the movement of the overall market. On the other hand, it might cause biased results.
REFERENCES


### Appendix A

**SECURITY IDENTIFIER, ANNOUNCEMENT DATE AND CEO INFORMATION**

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Security Identifier</th>
<th>Announcement Date</th>
<th>CEO's name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almond Resort</td>
<td>ARI</td>
<td>April 11, 2012</td>
<td>Ralph Taylor</td>
</tr>
<tr>
<td>McDonald’s</td>
<td>MCD</td>
<td>Aug 16, 2011</td>
<td></td>
</tr>
<tr>
<td>Wendy’s</td>
<td>WEN</td>
<td>Sep 2, 2011</td>
<td></td>
</tr>
<tr>
<td>Darden</td>
<td>DRI</td>
<td>July 15, 2010</td>
<td></td>
</tr>
<tr>
<td>Sunstone Hotel Investors Inc.</td>
<td>SHO</td>
<td>Dec 22, 2010</td>
<td>Art Buser</td>
</tr>
<tr>
<td>Tropicana Entertainment LLC</td>
<td>TPCA</td>
<td>Jun 9, 2008</td>
<td>William J. Yung III</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>HOT</td>
<td>Apr 2, 2007</td>
<td>Steven Heyer</td>
</tr>
<tr>
<td>Vail Resorts Inc</td>
<td>MTN</td>
<td>Jan 31, 2006</td>
<td>Adam Aron</td>
</tr>
<tr>
<td>Krispy Kreme Doughnuts Inc</td>
<td>KKD</td>
<td>Jan 24, 2005</td>
<td>Scott A. Livengood</td>
</tr>
<tr>
<td>Starbucks</td>
<td>SBUX</td>
<td>Oct 13, 2004</td>
<td></td>
</tr>
<tr>
<td>McDonald’s</td>
<td>MCD</td>
<td>Nov 23, 2004</td>
<td>Bill Leonard</td>
</tr>
<tr>
<td>Aramark Corp</td>
<td>RMK</td>
<td>Sep 23, 2004</td>
<td></td>
</tr>
<tr>
<td>InterContinental Hotels Group PLC</td>
<td>IHG</td>
<td>Sep 16, 2004</td>
<td>Richard North</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>HOT</td>
<td>Oct 30, 2003</td>
<td>Barry S. Sternlicht</td>
</tr>
<tr>
<td>Darden Restaurants Inc</td>
<td>DRI</td>
<td>Sep 24, 2003</td>
<td>Edna Morris</td>
</tr>
<tr>
<td>California Pizza Kitchen</td>
<td>CPKI</td>
<td>Aug 4, 2003</td>
<td>Fred Hipp</td>
</tr>
<tr>
<td>Furr's Restaurant Group Inc</td>
<td>FRRG</td>
<td>Oct 7, 2002</td>
<td>Craig S. Miller</td>
</tr>
<tr>
<td>Pizza Inn Inc</td>
<td>PZZI</td>
<td>Aug 22, 2002</td>
<td>C. Jeffrey Rogers</td>
</tr>
<tr>
<td>Applebee's International Inc</td>
<td>APPB</td>
<td>Aug 6, 2001</td>
<td>Julia Stewart</td>
</tr>
<tr>
<td>Luby’s Inc</td>
<td>LUB</td>
<td>Oct 9, 2000</td>
<td>Barry J.C. Parker</td>
</tr>
<tr>
<td>CKE Restaurants</td>
<td>CKR</td>
<td>Sep 18, 2000</td>
<td>Tom Thompson</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>HOT</td>
<td>May 24, 1999</td>
<td>Richard Nanula</td>
</tr>
<tr>
<td>Brinker International Inc</td>
<td>EAT</td>
<td>Dec 26, 1999</td>
<td>Gerard Centioli</td>
</tr>
<tr>
<td>CBRL Group Inc</td>
<td>CBRL</td>
<td>Apr 26, 1999</td>
<td>Ronald Magruder</td>
</tr>
<tr>
<td>Morgans hotel group</td>
<td>MHGC</td>
<td>Sep 20, 2007</td>
<td>W. Edward Scheetz</td>
</tr>
<tr>
<td>Orient-Express Hotels</td>
<td>OEH</td>
<td>July 8, 2011</td>
<td>Paul White</td>
</tr>
<tr>
<td>Carrols Restaurant</td>
<td>TAST</td>
<td>Dec 31, 2011</td>
<td>Alan Vituli</td>
</tr>
<tr>
<td>Best Buy</td>
<td>BBY</td>
<td>Apr 10, 2012</td>
<td>Brian Dunn</td>
</tr>
<tr>
<td>Eastman Kodak Co</td>
<td>EKDKQ</td>
<td>Dec 28, 2011</td>
<td>Herald Chen and Adam Clammer</td>
</tr>
<tr>
<td>Company</td>
<td>Name</td>
<td>Date</td>
<td>Name</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------</td>
<td>------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Globalfoundries</td>
<td>Doug Grose</td>
<td>Jun 17, 2011.</td>
<td></td>
</tr>
<tr>
<td>Sonova</td>
<td>Valentin Chapero</td>
<td>Mar 30, 2011.</td>
<td></td>
</tr>
<tr>
<td>DBS Group Holdings Ltd</td>
<td>Koh Boon Hwee</td>
<td>Mar 17, 2010.</td>
<td></td>
</tr>
<tr>
<td>Havas SA</td>
<td>Alain de Pouziillac</td>
<td>Jun 20, 2005.</td>
<td></td>
</tr>
<tr>
<td>Telewest Communications PLC</td>
<td>Adam Singer</td>
<td>Aug 1, 2002.</td>
<td></td>
</tr>
<tr>
<td>Polaroid Corp</td>
<td>Gary T. DiCamillo</td>
<td>May 9, 2002.</td>
<td></td>
</tr>
</tbody>
</table>
### Appendix B

**DAILY RAW RETURNS AND ABNORMAL RETURNS - HOSPITALITY**

<table>
<thead>
<tr>
<th>MCD Equity</th>
<th>SPX Index</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
</tr>
<tr>
<td>2011/8/12</td>
<td>0.255</td>
<td>2011/8/12</td>
</tr>
<tr>
<td>2011/8/15</td>
<td>0.3699</td>
<td>2011/8/15</td>
</tr>
<tr>
<td>2011/8/16</td>
<td>-0.1728</td>
<td>2011/8/16</td>
</tr>
<tr>
<td>2011/8/17</td>
<td>0.9577</td>
<td>2011/8/17</td>
</tr>
<tr>
<td>2011/8/18</td>
<td>-2.16</td>
<td>2011/8/18</td>
</tr>
<tr>
<td>2011/8/19</td>
<td>1.8923</td>
<td>2011/8/19</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEN Equity</th>
<th>SPX Index</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
</tr>
<tr>
<td>2011/8/29</td>
<td>5.0526</td>
<td>2011/8/29</td>
</tr>
<tr>
<td>2011/8/30</td>
<td>-1.002</td>
<td>2011/8/30</td>
</tr>
<tr>
<td>2011/8/31</td>
<td>-1.417</td>
<td>2011/8/31</td>
</tr>
<tr>
<td>2011/9/1</td>
<td>1.6427</td>
<td>2011/9/1</td>
</tr>
<tr>
<td>2011/9/2</td>
<td>-1.6162</td>
<td>2011/9/2</td>
</tr>
<tr>
<td>2011/9/6</td>
<td>0.8214</td>
<td>2011/9/6</td>
</tr>
<tr>
<td>2011/9/7</td>
<td>2.8513</td>
<td>2011/9/7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DRI Equity</th>
<th>SPX Index</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
</tr>
<tr>
<td>2010/7/12</td>
<td>0.634</td>
<td>2010/7/12</td>
</tr>
<tr>
<td>2010/7/13</td>
<td>3.8306</td>
<td>2010/7/13</td>
</tr>
<tr>
<td>2010/7/14</td>
<td>-0.8252</td>
<td>2010/7/14</td>
</tr>
<tr>
<td>2010/7/15</td>
<td>0.6118</td>
<td>2010/7/15</td>
</tr>
<tr>
<td>2010/7/16</td>
<td>-3.2839</td>
<td>2010/7/16</td>
</tr>
<tr>
<td>2010/7/19</td>
<td>-0.1258</td>
<td>2010/7/19</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
</tr>
<tr>
<td>---------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td>2010/7/20</td>
<td>2.7953</td>
<td>2010/7/20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/12/17</td>
<td>0.7692</td>
<td>2010/12/17</td>
<td>0.08</td>
<td>0.6892 T-3</td>
</tr>
<tr>
<td>2010/12/20</td>
<td>-4.8664</td>
<td>2010/12/20</td>
<td>0.25</td>
<td>-5.1164 T-2</td>
</tr>
<tr>
<td>2010/12/21</td>
<td>0.3009</td>
<td>2010/12/21</td>
<td>0.6</td>
<td>-0.2991 T-1</td>
</tr>
<tr>
<td>2010/12/22</td>
<td>1.5</td>
<td>2010/12/22</td>
<td>0.34</td>
<td>1.16 T0</td>
</tr>
<tr>
<td>2010/12/23</td>
<td>-1.5764</td>
<td>2010/12/23</td>
<td>-0.16</td>
<td>-1.4164 T+1</td>
</tr>
<tr>
<td>2010/12/27</td>
<td>1.8018</td>
<td>2010/12/27</td>
<td>0.06</td>
<td>1.7418 T+2</td>
</tr>
<tr>
<td>2010/12/28</td>
<td>0.3933</td>
<td>2010/12/28</td>
<td>0.08</td>
<td>0.3133 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008/6/4</td>
<td>0.2532</td>
<td>2008/6/4</td>
<td>-0.03</td>
<td>0.2832 T-3</td>
</tr>
<tr>
<td>2008/6/5</td>
<td>3.5859</td>
<td>2008/6/5</td>
<td>1.95</td>
<td>1.6359 T-2</td>
</tr>
<tr>
<td>2008/6/6</td>
<td>-4.3393</td>
<td>2008/6/6</td>
<td>-3.09</td>
<td>-1.2493 T-1</td>
</tr>
<tr>
<td>2008/6/9</td>
<td>-2.4975</td>
<td>2008/6/9</td>
<td>0.08</td>
<td>-2.5775 T0</td>
</tr>
<tr>
<td>2008/6/10</td>
<td>-1.2023</td>
<td>2008/6/10</td>
<td>-0.24</td>
<td>-0.9623 T+1</td>
</tr>
<tr>
<td>2008/6/11</td>
<td>-2.6984</td>
<td>2008/6/11</td>
<td>-1.69</td>
<td>-1.0084 T+2</td>
</tr>
<tr>
<td>2008/6/12</td>
<td>-0.2719</td>
<td>2008/6/12</td>
<td>0.33</td>
<td>-0.6019 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007/3/28</td>
<td>-0.4769</td>
<td>2007/3/28</td>
<td>-0.8</td>
<td>0.3231 T-3</td>
</tr>
<tr>
<td>2007/3/29</td>
<td>0.3246</td>
<td>2007/3/29</td>
<td>0.37</td>
<td>-0.0454 T-2</td>
</tr>
<tr>
<td>2007/3/30</td>
<td>-0.077</td>
<td>2007/3/30</td>
<td>-0.12</td>
<td>0.043 T-1</td>
</tr>
<tr>
<td>2007/4/2</td>
<td>4.5798</td>
<td>2007/4/2</td>
<td>0.26</td>
<td>4.3198 T0</td>
</tr>
<tr>
<td>2007/4/3</td>
<td>2.9785</td>
<td>2007/4/3</td>
<td>0.93</td>
<td>2.0485 T+1</td>
</tr>
<tr>
<td>2007/4/4</td>
<td>1.4605</td>
<td>2007/4/4</td>
<td>0.11</td>
<td>1.3505 T+2</td>
</tr>
<tr>
<td>2007/4/5</td>
<td>-1.1008</td>
<td>2007/4/5</td>
<td>0.3</td>
<td>-1.4008 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006/1/26</td>
<td>0.1487</td>
<td>2006/1/26</td>
<td>0.72</td>
<td>-0.5713 T-3</td>
</tr>
<tr>
<td>2006/1/27</td>
<td>-3.5926</td>
<td>2006/1/27</td>
<td>0.78</td>
<td>-4.3726 T-2</td>
</tr>
<tr>
<td>2006/1/30</td>
<td>-3.8497</td>
<td>2006/1/30</td>
<td>0.12</td>
<td>-3.9697 T-1</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>---------</td>
<td>------------</td>
<td>---------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>2006/1/31</td>
<td>-2.6586</td>
<td>2006/1/31</td>
<td>-0.4</td>
<td>-2.2586 T0</td>
</tr>
<tr>
<td>2006/2/1</td>
<td>0.6581</td>
<td>2006/2/1</td>
<td>0.19</td>
<td>0.4681 T+1</td>
</tr>
<tr>
<td>2006/2/2</td>
<td>-0.948</td>
<td>2006/2/2</td>
<td>-0.91</td>
<td>-0.038 T+2</td>
</tr>
<tr>
<td>2006/2/3</td>
<td>0.9901</td>
<td>2006/2/3</td>
<td>-0.54</td>
<td>1.5301 T+3</td>
</tr>
</tbody>
</table>

### KKD Equity

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>SPX Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005/1/19</td>
<td>-4.6826</td>
<td></td>
</tr>
<tr>
<td>2005/1/20</td>
<td>-0.5459</td>
<td></td>
</tr>
<tr>
<td>2005/1/21</td>
<td>-0.7684</td>
<td></td>
</tr>
<tr>
<td>2005/1/24</td>
<td>-3.208</td>
<td></td>
</tr>
<tr>
<td>2005/1/25</td>
<td>1.1429</td>
<td></td>
</tr>
<tr>
<td>2005/1/26</td>
<td>0.678</td>
<td></td>
</tr>
<tr>
<td>2005/1/27</td>
<td>-1.6835</td>
<td></td>
</tr>
</tbody>
</table>

### SBUX Equity

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>SPX Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004/10/8</td>
<td>0.6371</td>
<td></td>
</tr>
<tr>
<td>2004/10/11</td>
<td>0.8863</td>
<td></td>
</tr>
<tr>
<td>2004/10/12</td>
<td>0.4811</td>
<td></td>
</tr>
<tr>
<td>2004/10/13</td>
<td>-0.8118</td>
<td></td>
</tr>
<tr>
<td>2004/10/14</td>
<td>0.2938</td>
<td></td>
</tr>
<tr>
<td>2004/10/15</td>
<td>3.5154</td>
<td></td>
</tr>
<tr>
<td>2004/10/18</td>
<td>1.6778</td>
<td></td>
</tr>
</tbody>
</table>

### MCD Equity

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>SPX Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004/11/18</td>
<td>-1.4803</td>
<td></td>
</tr>
<tr>
<td>2004/11/19</td>
<td>-2.1703</td>
<td></td>
</tr>
<tr>
<td>2004/11/22</td>
<td>0.273</td>
<td></td>
</tr>
<tr>
<td>2004/11/23</td>
<td>2.4506</td>
<td></td>
</tr>
<tr>
<td>2004/11/24</td>
<td>0.9967</td>
<td></td>
</tr>
<tr>
<td>2004/11/26</td>
<td>0.5592</td>
<td></td>
</tr>
<tr>
<td>2004/11/29</td>
<td>0.5888</td>
<td></td>
</tr>
</tbody>
</table>

### RMK Equity

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>SPX Index</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005/1/19</td>
<td>-4.6826</td>
<td>-3.7326 T-3</td>
</tr>
<tr>
<td>2005/1/20</td>
<td>-0.5459</td>
<td>0.2341 T-2</td>
</tr>
<tr>
<td>2005/1/21</td>
<td>-0.7684</td>
<td>-0.1284 T-1</td>
</tr>
<tr>
<td>2005/1/24</td>
<td>-3.208</td>
<td>-2.858 T0</td>
</tr>
<tr>
<td>2005/1/25</td>
<td>1.1429</td>
<td>0.7429 T+1</td>
</tr>
<tr>
<td>2005/1/26</td>
<td>0.678</td>
<td>0.198 T+2</td>
</tr>
<tr>
<td>2005/1/27</td>
<td>-1.6835</td>
<td>-1.7235 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004/10/8</td>
<td>0.6371</td>
<td>1.3871 T-3</td>
</tr>
<tr>
<td>2004/10/11</td>
<td>0.8863</td>
<td>0.6863 T-2</td>
</tr>
<tr>
<td>2004/10/12</td>
<td>0.4811</td>
<td>0.7111 T-1</td>
</tr>
<tr>
<td>2004/10/13</td>
<td>-0.8118</td>
<td>-0.0818 T0</td>
</tr>
<tr>
<td>2004/10/14</td>
<td>0.2938</td>
<td>1.2238 T+1</td>
</tr>
<tr>
<td>2004/10/15</td>
<td>3.5154</td>
<td>3.0654 T+2</td>
</tr>
<tr>
<td>2004/10/18</td>
<td>1.6778</td>
<td>1.1478 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004/11/18</td>
<td>-1.4803</td>
<td>-1.6203 T-3</td>
</tr>
<tr>
<td>2004/11/19</td>
<td>-2.1703</td>
<td>-1.0503 T-2</td>
</tr>
<tr>
<td>2004/11/22</td>
<td>0.273</td>
<td>-0.317 T-1</td>
</tr>
<tr>
<td>2004/11/23</td>
<td>2.4506</td>
<td>2.4806 T0</td>
</tr>
<tr>
<td>2004/11/24</td>
<td>0.9967</td>
<td>0.5867 T+1</td>
</tr>
<tr>
<td>2004/11/26</td>
<td>0.5592</td>
<td>0.4792 T+2</td>
</tr>
<tr>
<td>2004/11/29</td>
<td>0.5888</td>
<td>0.9288 T+3</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>2004/9/20</td>
<td>0.2418</td>
<td>2004/9/20</td>
</tr>
<tr>
<td>2004/9/21</td>
<td>-0.0402</td>
<td>2004/9/21</td>
</tr>
<tr>
<td>2004/9/22</td>
<td>-5.712</td>
<td>2004/9/22</td>
</tr>
<tr>
<td>2004/9/23</td>
<td>0.256</td>
<td>2004/9/23</td>
</tr>
<tr>
<td>2004/9/24</td>
<td>-0.0426</td>
<td>2004/9/24</td>
</tr>
<tr>
<td>2004/9/27</td>
<td>-0.4257</td>
<td>2004/9/27</td>
</tr>
<tr>
<td>2004/9/28</td>
<td>0.4703</td>
<td>2004/9/28</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004/9/13</td>
<td>1.2809</td>
<td>2004/9/13</td>
<td>0.17</td>
<td>1.1109 T-3</td>
</tr>
<tr>
<td>2004/9/14</td>
<td>1.9874</td>
<td>2004/9/14</td>
<td>0.22</td>
<td>1.7674 T-2</td>
</tr>
<tr>
<td>2004/9/15</td>
<td>0.7086</td>
<td>2004/9/15</td>
<td>-0.71</td>
<td>1.4186 T-1</td>
</tr>
<tr>
<td>2004/9/16</td>
<td>3.9578</td>
<td>2004/9/16</td>
<td>0.28</td>
<td>3.6778 T0</td>
</tr>
<tr>
<td>2004/9/17</td>
<td>-0.7614</td>
<td>2004/9/17</td>
<td>0.45</td>
<td>-1.2114 T+1</td>
</tr>
<tr>
<td>2004/9/20</td>
<td>-0.682</td>
<td>2004/9/20</td>
<td>-0.56</td>
<td>-0.122 T+2</td>
</tr>
<tr>
<td>2004/9/21</td>
<td>0</td>
<td>2004/9/21</td>
<td>0.63</td>
<td>-0.63 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003/10/27</td>
<td>1.6586</td>
<td>2003/10/27</td>
<td>0.22</td>
<td>1.4386 T-3</td>
</tr>
<tr>
<td>2003/10/28</td>
<td>1.0127</td>
<td>2003/10/28</td>
<td>1.52</td>
<td>-0.5073 T-2</td>
</tr>
<tr>
<td>2003/10/29</td>
<td>0.8076</td>
<td>2003/10/29</td>
<td>0.13</td>
<td>0.6776 T-1</td>
</tr>
<tr>
<td>2003/10/30</td>
<td>-4.6961</td>
<td>2003/10/30</td>
<td>-0.11</td>
<td>-4.5861 T0</td>
</tr>
<tr>
<td>2003/10/31</td>
<td>-2.2319</td>
<td>2003/10/31</td>
<td>0.36</td>
<td>-2.5919 T+1</td>
</tr>
<tr>
<td>2003/11/3</td>
<td>-0.2668</td>
<td>2003/11/3</td>
<td>0.79</td>
<td>-1.0568 T+2</td>
</tr>
<tr>
<td>2003/11/4</td>
<td>-0.6837</td>
<td>2003/11/4</td>
<td>-0.54</td>
<td>-0.1437 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003/9/19</td>
<td>-0.4002</td>
<td>2003/9/19</td>
<td>-0.32</td>
<td>-0.0802 T-3</td>
</tr>
<tr>
<td>2003/9/22</td>
<td>-1.6518</td>
<td>2003/9/22</td>
<td>-1.3</td>
<td>-0.3518 T-2</td>
</tr>
<tr>
<td>2003/9/23</td>
<td>-0.8171</td>
<td>2003/9/23</td>
<td>0.61</td>
<td>-1.4271 T-1</td>
</tr>
<tr>
<td>2003/9/24</td>
<td>-2.1968</td>
<td>2003/9/24</td>
<td>-1.91</td>
<td>-0.2868 T0</td>
</tr>
<tr>
<td>2003/9/25</td>
<td>-12.2602</td>
<td>2003/9/25</td>
<td>-0.61</td>
<td>-11.6502 T+1</td>
</tr>
<tr>
<td>2003/9/26</td>
<td>-1.92</td>
<td>2003/9/26</td>
<td>-0.64</td>
<td>-1.28 T+2</td>
</tr>
<tr>
<td>2003/9/29</td>
<td>1.8488</td>
<td>2003/9/29</td>
<td>0.98</td>
<td>0.8688 T+3</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>----------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>2003/7/30</td>
<td>-1.7084</td>
<td>2003/7/30</td>
<td>-0.18</td>
<td>-1.5284</td>
</tr>
<tr>
<td>2003/7/31</td>
<td>1.4484</td>
<td>2003/7/31</td>
<td>0.29</td>
<td>1.1584</td>
</tr>
<tr>
<td>2003/8/1</td>
<td>1.0851</td>
<td>2003/8/1</td>
<td>-1.03</td>
<td>2.1151</td>
</tr>
<tr>
<td>2003/8/4</td>
<td>-1.1299</td>
<td>2003/8/4</td>
<td>0.27</td>
<td>-1.3999</td>
</tr>
<tr>
<td>2003/8/5</td>
<td>0.9143</td>
<td>2003/8/5</td>
<td>-1.77</td>
<td>2.6843</td>
</tr>
<tr>
<td>2003/8/6</td>
<td>-0.3398</td>
<td>2003/8/6</td>
<td>0.17</td>
<td>-0.5098</td>
</tr>
<tr>
<td>2003/8/7</td>
<td>-0.4545</td>
<td>2003/8/7</td>
<td>0.73</td>
<td>-1.1845</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002/10/1</td>
<td>-23.8095</td>
<td>2002/10/1</td>
<td>4</td>
<td>-27.8095</td>
</tr>
<tr>
<td>2002/10/2</td>
<td>25</td>
<td>2002/10/2</td>
<td>-2.36</td>
<td>27.36</td>
</tr>
<tr>
<td>2002/10/3</td>
<td>-20</td>
<td>2002/10/3</td>
<td>-1.08</td>
<td>-18.92</td>
</tr>
<tr>
<td>2002/10/7</td>
<td>0</td>
<td>2002/10/4</td>
<td>-2.24</td>
<td>2.24</td>
</tr>
<tr>
<td>2002/10/8</td>
<td>0</td>
<td>2002/10/7</td>
<td>-1.91</td>
<td>1.91</td>
</tr>
<tr>
<td>2002/10/10</td>
<td>25</td>
<td>2002/10/8</td>
<td>1.69</td>
<td>23.31</td>
</tr>
<tr>
<td>2002/10/11</td>
<td>25</td>
<td>2002/10/9</td>
<td>-2.73</td>
<td>27.73</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002/8/19</td>
<td>-3.8095</td>
<td>2002/8/19</td>
<td>2.36</td>
<td>-6.1695</td>
</tr>
<tr>
<td>2002/8/20</td>
<td>0</td>
<td>2002/8/20</td>
<td>-1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>2002/8/21</td>
<td>1.8812</td>
<td>2002/8/21</td>
<td>1.27</td>
<td>0.6112</td>
</tr>
<tr>
<td>2002/8/22</td>
<td>1.069</td>
<td>2002/8/22</td>
<td>1.41</td>
<td>-0.341</td>
</tr>
<tr>
<td>2002/8/26</td>
<td>-6.25</td>
<td>2002/8/26</td>
<td>0.75</td>
<td>-7</td>
</tr>
<tr>
<td>2002/8/27</td>
<td>0</td>
<td>2002/8/27</td>
<td>-1.39</td>
<td>1.39</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001/8/1</td>
<td>0.7261</td>
<td>2001/8/1</td>
<td>0.39</td>
<td>0.3361</td>
</tr>
<tr>
<td>2001/8/2</td>
<td>-0.0983</td>
<td>2001/8/2</td>
<td>0.4</td>
<td>-0.4983</td>
</tr>
<tr>
<td>2001/8/3</td>
<td>-0.492</td>
<td>2001/8/3</td>
<td>-0.52</td>
<td>0.028</td>
</tr>
<tr>
<td>2001/8/6</td>
<td>-2.2742</td>
<td>2001/8/6</td>
<td>-1.14</td>
<td>-1.1342</td>
</tr>
<tr>
<td>2001/8/7</td>
<td>-7.2513</td>
<td>2001/8/7</td>
<td>0.33</td>
<td>-7.5813</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>-----------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>2001/8/8</td>
<td>0.1818</td>
<td>2001/8/8</td>
<td>-1.73</td>
<td>1.9118</td>
</tr>
<tr>
<td>2001/8/9</td>
<td>0.5445</td>
<td>2001/8/9</td>
<td>-0.01</td>
<td>0.5545</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000/10/4</td>
<td>0</td>
<td>2000/10/4</td>
<td>0.55</td>
<td>-0.55</td>
</tr>
<tr>
<td>2000/10/5</td>
<td>0</td>
<td>2000/10/5</td>
<td>0.14</td>
<td>-0.14</td>
</tr>
<tr>
<td>2000/10/6</td>
<td>0</td>
<td>2000/10/6</td>
<td>-1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>2000/10/9</td>
<td>-3.6145</td>
<td>2000/10/9</td>
<td>-0.49</td>
<td>-3.1245</td>
</tr>
<tr>
<td>2000/10/10</td>
<td>0</td>
<td>2000/10/10</td>
<td>-1.07</td>
<td>1.07</td>
</tr>
<tr>
<td>2000/10/11</td>
<td>0</td>
<td>2000/10/11</td>
<td>-1.62</td>
<td>1.62</td>
</tr>
<tr>
<td>2000/10/12</td>
<td>-8.75</td>
<td>2000/10/12</td>
<td>-2.55</td>
<td>-6.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000/9/13</td>
<td>3.7736</td>
<td>2000/9/13</td>
<td>0.2</td>
<td>3.5736</td>
</tr>
<tr>
<td>2000/9/14</td>
<td>-1.8182</td>
<td>2000/9/14</td>
<td>-0.27</td>
<td>-1.5482</td>
</tr>
<tr>
<td>2000/9/18</td>
<td>-5.0847</td>
<td>2000/9/18</td>
<td>-1.45</td>
<td>-3.6347</td>
</tr>
<tr>
<td>2000/9/19</td>
<td>-3.5714</td>
<td>2000/9/19</td>
<td>1.07</td>
<td>-4.6414</td>
</tr>
<tr>
<td>2000/9/20</td>
<td>-1.8519</td>
<td>2000/9/20</td>
<td>-0.59</td>
<td>-1.2619</td>
</tr>
<tr>
<td>2000/9/21</td>
<td>1.8868</td>
<td>2000/9/21</td>
<td>-0.16</td>
<td>2.0468</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999/5/19</td>
<td>0</td>
<td>1999/5/19</td>
<td>0.82</td>
<td>-0.82</td>
</tr>
<tr>
<td>1999/5/20</td>
<td>2.8777</td>
<td>1999/5/20</td>
<td>-0.4</td>
<td>3.2777</td>
</tr>
<tr>
<td>1999/5/21</td>
<td>0.8741</td>
<td>1999/5/21</td>
<td>-0.64</td>
<td>1.5141</td>
</tr>
<tr>
<td>1999/5/24</td>
<td>-2.4263</td>
<td>1999/5/24</td>
<td>-1.78</td>
<td>-0.6463</td>
</tr>
<tr>
<td>1999/5/25</td>
<td>-3.3748</td>
<td>1999/5/25</td>
<td>-1.7</td>
<td>-1.6748</td>
</tr>
<tr>
<td>1999/5/26</td>
<td>-4.9632</td>
<td>1999/5/26</td>
<td>1.59</td>
<td>-6.5532</td>
</tr>
<tr>
<td>1999/5/27</td>
<td>-0.3868</td>
<td>1999/5/27</td>
<td>-1.79</td>
<td>1.4032</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999/4/21</td>
<td>2.8169</td>
<td>1999/4/21</td>
<td>2.29</td>
<td>0.5269</td>
</tr>
<tr>
<td>1999/4/22</td>
<td>2.5114</td>
<td>1999/4/22</td>
<td>1.7</td>
<td>0.8114</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>----------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>1999/4/21</td>
<td>0.6734</td>
<td>1999/4/23</td>
<td>-0.14</td>
<td>1.2536 T-1</td>
</tr>
<tr>
<td>1999/4/26</td>
<td>-1.1013</td>
<td>1999/4/26</td>
<td>0.24</td>
<td>-1.3413 T0</td>
</tr>
<tr>
<td>1999/4/27</td>
<td>0.8909</td>
<td>1999/4/27</td>
<td>0.2</td>
<td>0.6909 T+1</td>
</tr>
<tr>
<td>1999/4/28</td>
<td>1.5453</td>
<td>1999/4/28</td>
<td>-0.87</td>
<td>2.4153 T+2</td>
</tr>
<tr>
<td>1999/4/29</td>
<td>-2.8261</td>
<td>1999/4/29</td>
<td>-0.6</td>
<td>-2.2261 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999/4/21</td>
<td>0.6734</td>
<td>1999/4/23</td>
<td>-0.14</td>
<td>1.2536 T-1</td>
</tr>
<tr>
<td>1999/4/22</td>
<td>2.3411</td>
<td>1999/4/23</td>
<td>-0.14</td>
<td>0.6411 T-2</td>
</tr>
<tr>
<td>1999/4/26</td>
<td>2</td>
<td>1999/4/26</td>
<td>0.24</td>
<td>1.76 T0</td>
</tr>
<tr>
<td>1999/4/27</td>
<td>2.7778</td>
<td>1999/4/27</td>
<td>0.2</td>
<td>2.5778 T+1</td>
</tr>
<tr>
<td>1999/4/28</td>
<td>2.3847</td>
<td>1999/4/28</td>
<td>-0.87</td>
<td>3.2547 T+2</td>
</tr>
<tr>
<td>1999/4/29</td>
<td>0.6211</td>
<td>1999/4/29</td>
<td>-0.6</td>
<td>1.2211 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007/9/19</td>
<td>3.3609</td>
<td>2007/9/19</td>
<td>0.61</td>
<td>2.7509 T-1</td>
</tr>
<tr>
<td>2007/9/20</td>
<td>1.0505</td>
<td>2007/9/20</td>
<td>-0.67</td>
<td>1.7205 T0</td>
</tr>
<tr>
<td>2007/9/21</td>
<td>0.5446</td>
<td>2007/9/21</td>
<td>0.46</td>
<td>0.0846 T+1</td>
</tr>
<tr>
<td>2007/9/24</td>
<td>0.3939</td>
<td>2007/9/24</td>
<td>-0.53</td>
<td>0.9239 T+2</td>
</tr>
<tr>
<td>2007/9/25</td>
<td>5.1496</td>
<td>2007/9/25</td>
<td>-0.03</td>
<td>5.1796 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/7/5</td>
<td>-0.5357</td>
<td>2011/7/5</td>
<td>-0.13</td>
<td>-0.4057 T-3</td>
</tr>
<tr>
<td>2011/7/6</td>
<td>0.7181</td>
<td>2011/7/6</td>
<td>0.1</td>
<td>0.6181 T-2</td>
</tr>
<tr>
<td>2011/7/7</td>
<td>0.713</td>
<td>2011/7/7</td>
<td>1.05</td>
<td>-0.337 T-1</td>
</tr>
<tr>
<td>2011/7/8</td>
<td>-3.6283</td>
<td>2011/7/8</td>
<td>-0.7</td>
<td>-2.9283 T0</td>
</tr>
<tr>
<td>2011/7/11</td>
<td>-5.2342</td>
<td>2011/7/11</td>
<td>-1.81</td>
<td>-3.4242 T+1</td>
</tr>
<tr>
<td>2011/7/12</td>
<td>-0.969</td>
<td>2011/7/12</td>
<td>-0.44</td>
<td>-0.529 T+2</td>
</tr>
<tr>
<td>2011/7/13</td>
<td>1.0763</td>
<td>2011/7/13</td>
<td>0.31</td>
<td>0.7663 T+3</td>
</tr>
</tbody>
</table>

TAST Equity

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999/4/21</td>
<td>0.6734</td>
<td>1999/4/23</td>
<td>-0.14</td>
<td>1.2536 T-1</td>
</tr>
<tr>
<td>1999/4/26</td>
<td>-1.1013</td>
<td>1999/4/26</td>
<td>0.24</td>
<td>-1.3413 T0</td>
</tr>
<tr>
<td>1999/4/27</td>
<td>0.8909</td>
<td>1999/4/27</td>
<td>0.2</td>
<td>0.6909 T+1</td>
</tr>
<tr>
<td>1999/4/28</td>
<td>1.5453</td>
<td>1999/4/28</td>
<td>-0.87</td>
<td>2.4153 T+2</td>
</tr>
<tr>
<td>1999/4/29</td>
<td>-2.8261</td>
<td>1999/4/29</td>
<td>-0.6</td>
<td>-2.2261 T+3</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>2011/12/27</td>
<td>-0.1727</td>
<td>2011/12/27</td>
<td>0.01</td>
<td>-0.1827</td>
</tr>
<tr>
<td>2011/12/28</td>
<td>0</td>
<td>2011/12/28</td>
<td>-1.25</td>
<td>1.25</td>
</tr>
<tr>
<td>2011/12/29</td>
<td>0.0865</td>
<td>2011/12/29</td>
<td>1.07</td>
<td>-0.9835</td>
</tr>
<tr>
<td>2011/12/30</td>
<td>0</td>
<td>2011/12/30</td>
<td>-0.43</td>
<td>0.43</td>
</tr>
<tr>
<td>2012/1/3</td>
<td>1.3829</td>
<td>2012/1/3</td>
<td>1.55</td>
<td>-0.1671</td>
</tr>
<tr>
<td>2012/1/4</td>
<td>-2.046</td>
<td>2012/1/4</td>
<td>0.02</td>
<td>-2.066</td>
</tr>
<tr>
<td>2012/1/5</td>
<td>0.2611</td>
<td>2012/1/5</td>
<td>0.29</td>
<td>-0.0289</td>
</tr>
</tbody>
</table>

**ARI Equity**

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012/4/5</td>
<td>0.1281</td>
<td>2012/4/5</td>
<td>-0.06</td>
<td>0.1881</td>
<td>T-3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/4/9</td>
<td>-0.1919</td>
<td>2012/4/9</td>
<td>-1.14</td>
<td>0.9481</td>
<td>T-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/4/10</td>
<td>-1.0897</td>
<td>2012/4/10</td>
<td>-1.71</td>
<td>0.6203</td>
<td>T-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/4/11</td>
<td>0.8425</td>
<td>2012/4/11</td>
<td>0.74</td>
<td>0.1025</td>
<td>T0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/4/12</td>
<td>1.5424</td>
<td>2012/4/12</td>
<td>1.38</td>
<td>0.1624</td>
<td>T+1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/4/13</td>
<td>-1.3291</td>
<td>2012/4/13</td>
<td>-1.25</td>
<td>-0.0791</td>
<td>T+2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/4/16</td>
<td>1.4112</td>
<td>2012/4/16</td>
<td>-0.05</td>
<td>1.4612</td>
<td>T+3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

DAILY RAW RETURNS AND ABNORMAL RETURNS
– NON-HOSPITALITY

<table>
<thead>
<tr>
<th>BBY Equity</th>
<th>SPX Index</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
</tr>
<tr>
<td>2012/4/4</td>
<td>-2.5478</td>
<td>2012/4/4</td>
</tr>
<tr>
<td>2012/4/5</td>
<td>-1.3072</td>
<td>2012/4/5</td>
</tr>
<tr>
<td>2012/4/9</td>
<td>0</td>
<td>2012/4/9</td>
</tr>
<tr>
<td>2012/4/10</td>
<td>-5.872</td>
<td>2012/4/10</td>
</tr>
<tr>
<td>2012/4/11</td>
<td>3.0019</td>
<td>2012/4/11</td>
</tr>
<tr>
<td>2012/4/12</td>
<td>1.275</td>
<td>2012/4/12</td>
</tr>
<tr>
<td>2012/4/13</td>
<td>-0.8993</td>
<td>2012/4/13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EKDKQ Equity</th>
<th>SPX Index</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
</tr>
<tr>
<td>2011/12/22</td>
<td>0.8</td>
<td>2011/12/22</td>
</tr>
<tr>
<td>2011/12/23</td>
<td>9.5238</td>
<td>2011/12/23</td>
</tr>
<tr>
<td>2011/12/27</td>
<td>0</td>
<td>2011/12/27</td>
</tr>
<tr>
<td>2011/12/28</td>
<td>-5.0272</td>
<td>2011/12/28</td>
</tr>
<tr>
<td>2011/12/29</td>
<td>-0.8107</td>
<td>2011/12/29</td>
</tr>
<tr>
<td>2011/12/30</td>
<td>-0.0769</td>
<td>2011/12/30</td>
</tr>
<tr>
<td>2012/1/3</td>
<td>0.7698</td>
<td>2012/1/3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CSM Equity</th>
<th>SPX Index</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
</tr>
<tr>
<td>2011/6/14</td>
<td>1.1939</td>
<td>2011/6/14</td>
</tr>
<tr>
<td>2011/6/15</td>
<td>-1.6686</td>
<td>2011/6/15</td>
</tr>
<tr>
<td>2011/6/16</td>
<td>-0.0891</td>
<td>2011/6/16</td>
</tr>
<tr>
<td>2011/6/17</td>
<td>0.1407</td>
<td>2011/6/17</td>
</tr>
<tr>
<td>2011/6/20</td>
<td>0.6853</td>
<td>2011/6/20</td>
</tr>
</tbody>
</table>

83
<table>
<thead>
<tr>
<th></th>
<th>CHG_PCT_1D</th>
<th></th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/6/21</td>
<td>1.5314</td>
<td>2011/6/21</td>
<td>1.34</td>
<td>0.1914</td>
</tr>
<tr>
<td>2011/6/22</td>
<td>-0.7374</td>
<td>2011/6/22</td>
<td>-0.65</td>
<td>-0.0874</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/3/28</td>
<td>0.7673</td>
<td>2011/3/28</td>
<td>-0.27</td>
<td>1.0373</td>
</tr>
<tr>
<td>2011/3/29</td>
<td>4.0609</td>
<td>2011/3/29</td>
<td>0.71</td>
<td>3.3509</td>
</tr>
<tr>
<td>2011/3/30</td>
<td>-11.7073</td>
<td>2011/3/30</td>
<td>0.67</td>
<td>-12.3773</td>
</tr>
<tr>
<td>2011/3/31</td>
<td>-0.7735</td>
<td>2011/3/31</td>
<td>-0.18</td>
<td>-0.5935</td>
</tr>
<tr>
<td>2011/4/1</td>
<td>1.2806</td>
<td>2011/4/1</td>
<td>0.5</td>
<td>0.7806</td>
</tr>
<tr>
<td>2011/4/4</td>
<td>3.9032</td>
<td>2011/4/4</td>
<td>0.03</td>
<td>3.8732</td>
</tr>
<tr>
<td>2011/4/5</td>
<td>2.1164</td>
<td>2011/4/5</td>
<td>-0.02</td>
<td>2.1364</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/12/3</td>
<td>6.5491</td>
<td>2010/12/3</td>
<td>0.26</td>
<td>6.2891</td>
</tr>
<tr>
<td>2010/12/6</td>
<td>-1.5957</td>
<td>2010/12/6</td>
<td>-0.13</td>
<td>-1.4657</td>
</tr>
<tr>
<td>2010/12/7</td>
<td>-2.6426</td>
<td>2010/12/7</td>
<td>0.05</td>
<td>-2.6926</td>
</tr>
<tr>
<td>2010/12/8</td>
<td>-0.0617</td>
<td>2010/12/8</td>
<td>0.37</td>
<td>-0.4317</td>
</tr>
<tr>
<td>2010/12/9</td>
<td>-2.5926</td>
<td>2010/12/9</td>
<td>0.38</td>
<td>-2.9726</td>
</tr>
<tr>
<td>2010/12/10</td>
<td>0.507</td>
<td>2010/12/10</td>
<td>0.6</td>
<td>-0.093</td>
</tr>
<tr>
<td>2010/12/13</td>
<td>-0.3783</td>
<td>2010/12/13</td>
<td>0</td>
<td>-0.3783</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/3/12</td>
<td>1.722</td>
<td>2010/3/12</td>
<td>-0.02</td>
<td>1.742</td>
</tr>
<tr>
<td>2010/3/15</td>
<td>-0.9674</td>
<td>2010/3/15</td>
<td>0.05</td>
<td>-1.0174</td>
</tr>
<tr>
<td>2010/3/16</td>
<td>0.9768</td>
<td>2010/3/16</td>
<td>0.78</td>
<td>0.1968</td>
</tr>
<tr>
<td>2010/3/17</td>
<td>0.3869</td>
<td>2010/3/17</td>
<td>0.58</td>
<td>-0.1931</td>
</tr>
<tr>
<td>2010/3/18</td>
<td>0.8673</td>
<td>2010/3/18</td>
<td>-0.03</td>
<td>0.8973</td>
</tr>
<tr>
<td>2010/3/19</td>
<td>-2.1973</td>
<td>2010/3/19</td>
<td>-0.51</td>
<td>-1.6873</td>
</tr>
<tr>
<td>2010/3/22</td>
<td>0.8547</td>
<td>2010/3/22</td>
<td>0.51</td>
<td>0.3447</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>--------</td>
<td>------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>2009/9/29</td>
<td>-0.3484</td>
<td>2009/9/29</td>
<td>-0.22</td>
<td>-0.1284</td>
</tr>
<tr>
<td>2009/9/30</td>
<td>-1.3986</td>
<td>2009/9/30</td>
<td>-0.33</td>
<td>-1.0686</td>
</tr>
<tr>
<td>2009/10/1</td>
<td>-4.1962</td>
<td>2009/10/1</td>
<td>-2.58</td>
<td>-1.6162</td>
</tr>
<tr>
<td>2009/10/2</td>
<td>0.802</td>
<td>2009/10/2</td>
<td>-0.45</td>
<td>1.252</td>
</tr>
<tr>
<td>2009/10/5</td>
<td>3.7944</td>
<td>2009/10/5</td>
<td>1.49</td>
<td>2.3044</td>
</tr>
<tr>
<td>2009/10/6</td>
<td>0.2358</td>
<td>2009/10/6</td>
<td>1.37</td>
<td>-1.1342</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008/3/19</td>
<td>-4.4321</td>
<td>2008/3/19</td>
<td>-2.43</td>
<td>-2.0021</td>
</tr>
<tr>
<td>2008/3/20</td>
<td>7.8261</td>
<td>2008/3/20</td>
<td>2.39</td>
<td>5.4361</td>
</tr>
<tr>
<td>2008/3/25</td>
<td>2.1898</td>
<td>2008/3/25</td>
<td>0.23</td>
<td>1.9598</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008/3/5</td>
<td>0.0443</td>
<td>2008/3/5</td>
<td>0.52</td>
<td>-0.4757</td>
</tr>
<tr>
<td>2008/3/6</td>
<td>-1.6602</td>
<td>2008/3/6</td>
<td>-2.2</td>
<td>0.5398</td>
</tr>
<tr>
<td>2008/3/7</td>
<td>-2.4198</td>
<td>2008/3/7</td>
<td>-0.84</td>
<td>-1.5798</td>
</tr>
<tr>
<td>2008/3/10</td>
<td>-1.9954</td>
<td>2008/3/10</td>
<td>-1.55</td>
<td>-0.4454</td>
</tr>
<tr>
<td>2008/3/11</td>
<td>3.7543</td>
<td>2008/3/11</td>
<td>3.71</td>
<td>0.0443</td>
</tr>
<tr>
<td>2008/3/12</td>
<td>-1.2477</td>
<td>2008/3/12</td>
<td>-0.9</td>
<td>-0.3477</td>
</tr>
<tr>
<td>2008/3/13</td>
<td>0.0115</td>
<td>2008/3/13</td>
<td>0.51</td>
<td>-0.4985</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007/11/6</td>
<td>0.4808</td>
<td>2007/11/6</td>
<td>1.2</td>
<td>-0.7192</td>
</tr>
<tr>
<td>2007/11/7</td>
<td>-4.067</td>
<td>2007/11/7</td>
<td>-2.94</td>
<td>-1.127</td>
</tr>
<tr>
<td>2007/11/8</td>
<td>-0.9975</td>
<td>2007/11/8</td>
<td>-0.06</td>
<td>-0.9375</td>
</tr>
<tr>
<td>2007/11/12</td>
<td>-3.0504</td>
<td>2007/11/12</td>
<td>-1</td>
<td>-2.0504</td>
</tr>
<tr>
<td>2007/11/13</td>
<td>3.42</td>
<td>2007/11/13</td>
<td>2.91</td>
<td>0.51</td>
</tr>
<tr>
<td>All Equity</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>SPX Index</td>
<td>Date</td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
<td>------------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td></td>
<td>2006/9/14</td>
<td>0.2172</td>
<td>2006/9/14</td>
<td>-0.14</td>
</tr>
<tr>
<td></td>
<td>2006/9/15</td>
<td>0.2167</td>
<td>2006/9/15</td>
<td>0.27</td>
</tr>
<tr>
<td></td>
<td>2006/9/18</td>
<td>0.8483</td>
<td>2006/9/18</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>2006/9/19</td>
<td>-1.0226</td>
<td>2006/9/19</td>
<td>-0.22</td>
</tr>
<tr>
<td></td>
<td>2006/9/20</td>
<td>1.3498</td>
<td>2006/9/20</td>
<td>0.52</td>
</tr>
<tr>
<td></td>
<td>2006/9/21</td>
<td>-0.2795</td>
<td>2006/9/21</td>
<td>-0.54</td>
</tr>
<tr>
<td></td>
<td>2006/9/22</td>
<td>0.033</td>
<td>2006/9/22</td>
<td>-0.25</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PEP Equity</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>SPX Index</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006/7/14</td>
<td>-0.435</td>
<td>2006/7/14</td>
<td>-0.49</td>
<td></td>
<td>0.055 T-3</td>
</tr>
<tr>
<td></td>
<td>2006/7/17</td>
<td>0.7767</td>
<td>2006/7/17</td>
<td>-0.14</td>
<td></td>
<td>0.9167 T-2</td>
</tr>
<tr>
<td></td>
<td>2006/7/18</td>
<td>1.4933</td>
<td>2006/7/18</td>
<td>0.19</td>
<td></td>
<td>1.3033 T-1</td>
</tr>
<tr>
<td></td>
<td>2006/7/19</td>
<td>-0.8543</td>
<td>2006/7/19</td>
<td>1.86</td>
<td></td>
<td>-2.7143 T0</td>
</tr>
<tr>
<td></td>
<td>2006/7/20</td>
<td>-0.3032</td>
<td>2006/7/20</td>
<td>-0.85</td>
<td></td>
<td>0.5468 T+1</td>
</tr>
<tr>
<td></td>
<td>2006/7/21</td>
<td>0.4481</td>
<td>2006/7/21</td>
<td>-0.71</td>
<td></td>
<td>1.1581 T+2</td>
</tr>
<tr>
<td></td>
<td>2006/7/24</td>
<td>0.9401</td>
<td>2006/7/24</td>
<td>1.66</td>
<td></td>
<td>-0.7199 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RSH Equity</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>SPX Index</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2006/2/15</td>
<td>-1.5278</td>
<td>2006/2/15</td>
<td>0.35</td>
<td></td>
<td>-1.8778 T-3</td>
</tr>
<tr>
<td></td>
<td>2006/2/16</td>
<td>-2.4448</td>
<td>2006/2/16</td>
<td>0.73</td>
<td></td>
<td>-3.1748 T-2</td>
</tr>
<tr>
<td></td>
<td>2006/2/17</td>
<td>-8.0482</td>
<td>2006/2/17</td>
<td>-0.17</td>
<td></td>
<td>-7.8782 T-1</td>
</tr>
<tr>
<td></td>
<td>2006/2/21</td>
<td>-0.4193</td>
<td>2006/2/21</td>
<td>-0.33</td>
<td></td>
<td>-0.0893 T0</td>
</tr>
<tr>
<td></td>
<td>2006/2/22</td>
<td>1.4211</td>
<td>2006/2/22</td>
<td>0.75</td>
<td></td>
<td>0.6711 T+1</td>
</tr>
<tr>
<td></td>
<td>2006/2/23</td>
<td>1.0898</td>
<td>2006/2/23</td>
<td>-0.38</td>
<td></td>
<td>1.4698 T+2</td>
</tr>
<tr>
<td></td>
<td>2006/2/24</td>
<td>0.3593</td>
<td>2006/2/24</td>
<td>0.13</td>
<td></td>
<td>0.2293 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DAI GR Equity</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>SPX Index</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2005/7/26</td>
<td>-0.1117</td>
<td>2005/7/26</td>
<td>0.17</td>
<td></td>
<td>-0.2817 T-3</td>
</tr>
<tr>
<td></td>
<td>2005/7/27</td>
<td>1.4533</td>
<td>2005/7/27</td>
<td>0.46</td>
<td></td>
<td>0.9933 T-2</td>
</tr>
<tr>
<td></td>
<td>2005/7/28</td>
<td>9.2837</td>
<td>2005/7/28</td>
<td>0.56</td>
<td></td>
<td>8.7237 T-1</td>
</tr>
<tr>
<td></td>
<td>2005/7/29</td>
<td>0.7815</td>
<td>2005/7/29</td>
<td>-0.77</td>
<td></td>
<td>1.5515 T0</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>-----------</td>
<td>------------</td>
<td>----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005/8/1</td>
<td>0.9255</td>
<td>2005/8/1</td>
<td>0.09</td>
<td>0.8355</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005/8/2</td>
<td>2.3296</td>
<td>2005/8/2</td>
<td>0.71</td>
<td>1.6196</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005/8/3</td>
<td>-0.0242</td>
<td>2005/8/3</td>
<td>0.07</td>
<td>-0.0942</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HAV FP

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005/6/15</td>
<td>1.2712</td>
<td>2005/6/15</td>
<td>0.22</td>
<td>1.0512</td>
</tr>
<tr>
<td>2005/6/16</td>
<td>2.5105</td>
<td>2005/6/16</td>
<td>0.36</td>
<td>2.1505</td>
</tr>
<tr>
<td>2005/6/17</td>
<td>-0.2041</td>
<td>2005/6/17</td>
<td>0.5</td>
<td>-0.7041</td>
</tr>
<tr>
<td>2005/6/20</td>
<td>-2.2495</td>
<td>2005/6/20</td>
<td>-0.07</td>
<td>-2.1795</td>
</tr>
<tr>
<td>2005/6/21</td>
<td>-0.8368</td>
<td>2005/6/21</td>
<td>-0.2</td>
<td>-0.6368</td>
</tr>
<tr>
<td>2005/6/22</td>
<td>-0.211</td>
<td>2005/6/22</td>
<td>0.02</td>
<td>-0.231</td>
</tr>
<tr>
<td>2005/6/23</td>
<td>-1.2685</td>
<td>2005/6/23</td>
<td>-1.08</td>
<td>-0.1885</td>
</tr>
</tbody>
</table>

BA Equity

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005/3/3</td>
<td>3.8336</td>
<td>2005/3/3</td>
<td>0.03</td>
<td>3.8036</td>
</tr>
<tr>
<td>2005/3/4</td>
<td>1.6719</td>
<td>2005/3/4</td>
<td>0.96</td>
<td>0.7119</td>
</tr>
<tr>
<td>2005/3/7</td>
<td>-0.137</td>
<td>2005/3/7</td>
<td>0.26</td>
<td>-0.397</td>
</tr>
<tr>
<td>2005/3/8</td>
<td>-0.2573</td>
<td>2005/3/8</td>
<td>-0.48</td>
<td>0.2227</td>
</tr>
<tr>
<td>2005/3/9</td>
<td>-0.6879</td>
<td>2005/3/9</td>
<td>-1.02</td>
<td>0.3321</td>
</tr>
<tr>
<td>2005/3/10</td>
<td>0.3983</td>
<td>2005/3/10</td>
<td>0.19</td>
<td>0.2083</td>
</tr>
<tr>
<td>2005/3/11</td>
<td>-0.8451</td>
<td>2005/3/11</td>
<td>-0.76</td>
<td>-0.0851</td>
</tr>
</tbody>
</table>

MMC Equity

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004/10/20</td>
<td>3.4025</td>
<td>2004/10/20</td>
<td>0.04</td>
<td>3.3625</td>
</tr>
<tr>
<td>2004/10/21</td>
<td>-0.2809</td>
<td>2004/10/21</td>
<td>0.26</td>
<td>-0.5409</td>
</tr>
<tr>
<td>2004/10/22</td>
<td>7.8068</td>
<td>2004/10/22</td>
<td>-0.97</td>
<td>8.7768</td>
</tr>
<tr>
<td>2004/10/25</td>
<td>-1.3811</td>
<td>2004/10/25</td>
<td>-0.08</td>
<td>-1.3011</td>
</tr>
<tr>
<td>2004/10/26</td>
<td>9.2733</td>
<td>2004/10/26</td>
<td>1.49</td>
<td>7.7833</td>
</tr>
<tr>
<td>2004/10/27</td>
<td>-0.6235</td>
<td>2004/10/27</td>
<td>1.29</td>
<td>-1.9135</td>
</tr>
<tr>
<td>2004/10/28</td>
<td>-1.6382</td>
<td>2004/10/28</td>
<td>0.18</td>
<td>-1.8182</td>
</tr>
</tbody>
</table>

VOD Equity

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
</table>

87
| THC Equity | | SPX Index | | Abnormal Return |
|---|---|---|---|
| Date | CHG_PCT_1D | Date | CHG_PCT_1D | Abnormal Return |
| 2003/5/22 | -0.6329 | 2003/5/22 | 0.92 | -1.5529 T-3 |
| 2003/5/23 | -0.9554 | 2003/5/23 | 0.14 | -1.0954 T-2 |
| 2003/5/27 | 3.7942 | 2003/5/27 | 1.96 | 1.8342 T-1 |
| 2003/5/28 | 4.3371 | 2003/5/28 | 0.18 | 4.1571 T0 |
| 2003/5/29 | -0.4157 | 2003/5/29 | -0.38 | -0.0357 T+1 |
| 2003/5/30 | -0.477 | 2003/5/30 | 1.47 | -1.947 T+2 |
| 2003/6/2 | -0.1198 | 2003/6/2 | 0.35 | -0.4698 T+3 |

| EP Equity | | SPX Index | | Abnormal Return |
|---|---|---|---|
| Date | CHG_PCT_1D | Date | CHG_PCT_1D | Abnormal Return |
| 2003/2/7 | -2.381 | 2003/2/7 | -1.01 | -1.371 T-3 |
| 2003/2/10 | 5.6911 | 2003/2/10 | 0.76 | 4.9311 T-2 |
| 2003/2/11 | -9.2308 | 2003/2/11 | -0.81 | -8.4208 T-1 |
| 2003/2/12 | -22.6695 | 2003/2/12 | -1.27 | -21.3995 T0 |
| 2003/2/13 | -5.4795 | 2003/2/13 | -0.16 | -5.3195 T+1 |
| 2003/2/18 | -3.3413 | 2003/2/18 | 1.95 | -5.2913 T+3 |

<p>| TWSTY Equity | | SPX Index | | Abnormal Return |
|---|---|---|---|
| Date | CHG_PCT_1D | Date | CHG_PCT_1D | Abnormal Return |
| 2002/7/29 | 0 | 2002/7/29 | 5.41 | -5.41 T-3 |
| 2002/7/30 | 14.2857 | 2002/7/30 | 0.42 | 13.8657 T-2 |
| 2002/7/31 | 0 | 2002/7/31 | 0.98 | -0.98 T-1 |
| 2002/8/1 | -25 | 2002/8/1 | -2.96 | -22.04 T0 |
| 2002/8/2 | 40 | 2002/8/2 | -2.31 | 42.31 T+1 |
| 2002/8/5 | -28.5714 | 2002/8/5 | -3.43 | -25.1414 T+2 |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002/5/6</td>
<td>-6.0976</td>
<td>2002/5/6</td>
<td>-1.93</td>
<td>-4.1676 T-3</td>
</tr>
<tr>
<td>2002/5/7</td>
<td>-45.4545</td>
<td>2002/5/7</td>
<td>-0.3</td>
<td>-45.1545 T-2</td>
</tr>
<tr>
<td>2002/5/10</td>
<td>0</td>
<td>2002/5/10</td>
<td>-1.68</td>
<td>1.68 T+1</td>
</tr>
<tr>
<td>2002/5/13</td>
<td>0</td>
<td>2002/5/13</td>
<td>1.86</td>
<td>-1.86 T+2</td>
</tr>
<tr>
<td>2002/5/14</td>
<td>22.2222</td>
<td>2002/5/14</td>
<td>2.11</td>
<td>20.1122 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001/10/25</td>
<td>2.8643</td>
<td>2001/10/25</td>
<td>1.37</td>
<td>1.4943 T-3</td>
</tr>
<tr>
<td>2001/10/26</td>
<td>0.8475</td>
<td>2001/10/26</td>
<td>0.41</td>
<td>0.4375 T-2</td>
</tr>
<tr>
<td>2001/10/29</td>
<td>-2.7011</td>
<td>2001/10/29</td>
<td>-2.38</td>
<td>-0.3211 T-1</td>
</tr>
<tr>
<td>2001/10/30</td>
<td>-0.987</td>
<td>2001/10/30</td>
<td>-1.72</td>
<td>0.733 T0</td>
</tr>
<tr>
<td>2001/10/31</td>
<td>1.9938</td>
<td>2001/10/31</td>
<td>0</td>
<td>0 T+1</td>
</tr>
<tr>
<td>2001/11/1</td>
<td>-0.4887</td>
<td>2001/11/2</td>
<td>0.29</td>
<td>-0.7787 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000/9/26</td>
<td>-0.4464</td>
<td>2000/9/26</td>
<td>-0.82</td>
<td>0.3736 T-3</td>
</tr>
<tr>
<td>2000/9/28</td>
<td>5.8824</td>
<td>2000/9/28</td>
<td>2.22</td>
<td>3.6624 T-1</td>
</tr>
<tr>
<td>2000/9/29</td>
<td>6.5972</td>
<td>2000/9/29</td>
<td>-1.49</td>
<td>8.0872 T0</td>
</tr>
<tr>
<td>2000/10/2</td>
<td>-3.9088</td>
<td>2000/10/2</td>
<td>-0.02</td>
<td>-3.8888 T+1</td>
</tr>
<tr>
<td>2000/10/3</td>
<td>3.3898</td>
<td>2000/10/3</td>
<td>-0.68</td>
<td>4.0698 T+2</td>
</tr>
<tr>
<td>2000/10/4</td>
<td>-0.6557</td>
<td>2000/10/4</td>
<td>0.55</td>
<td>-1.2057 T+3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000/7/3</td>
<td>0.3446</td>
<td>2000/7/3</td>
<td>1.03</td>
<td>-0.6854 T-3</td>
</tr>
<tr>
<td>2000/7/5</td>
<td>0</td>
<td>2000/7/5</td>
<td>-1.59</td>
<td>1.59 T-2</td>
</tr>
<tr>
<td>2000/7/6</td>
<td>-12.9121</td>
<td>2000/7/6</td>
<td>0.72</td>
<td>-13.6321 T-1</td>
</tr>
<tr>
<td>Date</td>
<td>RELHQ Equity</td>
<td>SPX Index</td>
<td>Date</td>
<td>MAT Equity</td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>-----------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>2000/7/7</td>
<td>-1.8927</td>
<td>2000/7/7</td>
<td>1.53</td>
<td>-3.4227</td>
</tr>
<tr>
<td>2000/7/10</td>
<td>-1.2862</td>
<td>2000/7/10</td>
<td>-0.22</td>
<td>-1.0662</td>
</tr>
<tr>
<td>2000/7/11</td>
<td>-0.6515</td>
<td>2000/7/11</td>
<td>0.36</td>
<td>-1.0115</td>
</tr>
<tr>
<td>2000/7/12</td>
<td>1.9672</td>
<td>2000/7/12</td>
<td>0.81</td>
<td>1.1572</td>
</tr>
</tbody>
</table>

**RELHQ Equity**

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000/5/1</td>
<td>4.5455</td>
<td>2000/5/1</td>
<td>1.09</td>
<td>3.4555</td>
</tr>
<tr>
<td>2000/5/2</td>
<td>2.1739</td>
<td>2000/5/2</td>
<td>-1.5</td>
<td>3.6739</td>
</tr>
<tr>
<td>2000/5/3</td>
<td>-4.2553</td>
<td>2000/5/3</td>
<td>-2.16</td>
<td>-2.0953</td>
</tr>
<tr>
<td>2000/5/4</td>
<td>0</td>
<td>2000/5/4</td>
<td>-0.39</td>
<td>0.39</td>
</tr>
</tbody>
</table>

**MAT Equity**

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000/2/10</td>
<td>-4.6512</td>
<td>2000/2/10</td>
<td>0.36</td>
<td>-5.0112</td>
</tr>
<tr>
<td>2000/2/14</td>
<td>6.4327</td>
<td>2000/2/14</td>
<td>0.2</td>
<td>6.2327</td>
</tr>
<tr>
<td>2000/2/15</td>
<td>-3.8462</td>
<td>2000/2/15</td>
<td>0.87</td>
<td>-4.7162</td>
</tr>
<tr>
<td>2000/2/16</td>
<td>1.1429</td>
<td>2000/2/16</td>
<td>-1.03</td>
<td>2.1729</td>
</tr>
<tr>
<td>2000/2/17</td>
<td>-2.8249</td>
<td>2000/2/17</td>
<td>0.04</td>
<td>-2.8649</td>
</tr>
<tr>
<td>2000/2/18</td>
<td>-2.907</td>
<td>2000/2/18</td>
<td>-3.04</td>
<td>0.133</td>
</tr>
</tbody>
</table>

**HUM Equity**

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999/7/30</td>
<td>-7.9365</td>
<td>1999/7/30</td>
<td>-0.92</td>
<td>-7.0165</td>
</tr>
<tr>
<td>1999/8/2</td>
<td>-1.1494</td>
<td>1999/8/2</td>
<td>-0.05</td>
<td>-1.0994</td>
</tr>
<tr>
<td>1999/8/3</td>
<td>-4.6512</td>
<td>1999/8/3</td>
<td>-0.44</td>
<td>-4.2112</td>
</tr>
<tr>
<td>1999/8/4</td>
<td>-1.8293</td>
<td>1999/8/4</td>
<td>-1.27</td>
<td>-0.5593</td>
</tr>
<tr>
<td>1999/8/5</td>
<td>2.4845</td>
<td>1999/8/5</td>
<td>0.64</td>
<td>1.8445</td>
</tr>
<tr>
<td>1999/8/6</td>
<td>-1.8182</td>
<td>1999/8/6</td>
<td>-1.02</td>
<td>-0.7982</td>
</tr>
<tr>
<td>1999/8/9</td>
<td>-0.6173</td>
<td>1999/8/9</td>
<td>-0.19</td>
<td>-0.4273</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>----------</td>
<td>------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>1999/7/13</td>
<td>-1.2788</td>
<td>1999/7/13</td>
<td>-0.4</td>
<td>-0.8788 T-3</td>
</tr>
<tr>
<td>1999/7/14</td>
<td>2.0725</td>
<td>1999/7/14</td>
<td>0.33</td>
<td>1.7425 T-2</td>
</tr>
<tr>
<td>1999/7/15</td>
<td>-1.5228</td>
<td>1999/7/15</td>
<td>0.82</td>
<td>-2.3428 T-1</td>
</tr>
<tr>
<td>1999/7/16</td>
<td>2.0619</td>
<td>1999/7/16</td>
<td>0.65</td>
<td>1.4119 T0</td>
</tr>
<tr>
<td>1999/7/19</td>
<td>-1.2626</td>
<td>1999/7/19</td>
<td>-0.78</td>
<td>-0.4826 T+1</td>
</tr>
<tr>
<td>1999/7/20</td>
<td>-1.023</td>
<td>1999/7/20</td>
<td>-2.17</td>
<td>1.147 T+2</td>
</tr>
<tr>
<td>1999/7/21</td>
<td>-3.3592</td>
<td>1999/7/21</td>
<td>0.16</td>
<td>-3.5192 T+3</td>
</tr>
</tbody>
</table>
Appendix D

DAILY RAW RETURNS AND ABNORMAL RETURNS

– HOSPITALITY 7 DAYS

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/8/5</td>
<td>0.9492</td>
<td>2011/8/5</td>
<td>-0.06</td>
<td></td>
<td>1.0092</td>
</tr>
<tr>
<td>2011/8/9</td>
<td>4.6888</td>
<td>2011/8/9</td>
<td>4.74</td>
<td></td>
<td>-0.0512</td>
</tr>
<tr>
<td>2011/8/10</td>
<td>-2.1871</td>
<td>2011/8/10</td>
<td>-4.42</td>
<td></td>
<td>2.2329</td>
</tr>
<tr>
<td>2011/8/12</td>
<td>0.255</td>
<td>2011/8/12</td>
<td>0.53</td>
<td></td>
<td>-0.275</td>
</tr>
<tr>
<td>2011/8/15</td>
<td>0.3699</td>
<td>2011/8/15</td>
<td>2.18</td>
<td></td>
<td>-1.8101</td>
</tr>
<tr>
<td>2011/8/16</td>
<td>-0.1728</td>
<td>2011/8/16</td>
<td>-0.97</td>
<td></td>
<td>0.7972</td>
</tr>
<tr>
<td>2011/8/17</td>
<td>0.9577</td>
<td>2011/8/17</td>
<td>0.09</td>
<td></td>
<td>0.8677</td>
</tr>
<tr>
<td>2011/8/18</td>
<td>-2.16</td>
<td>2011/8/18</td>
<td>-4.46</td>
<td></td>
<td>2.3</td>
</tr>
<tr>
<td>2011/8/19</td>
<td>1.8923</td>
<td>2011/8/19</td>
<td>-1.5</td>
<td></td>
<td>3.3923</td>
</tr>
<tr>
<td>2011/8/22</td>
<td>0.6076</td>
<td>2011/8/22</td>
<td>0.03</td>
<td></td>
<td>-1.7053</td>
</tr>
<tr>
<td>2011/8/23</td>
<td>2.0169</td>
<td>2011/8/23</td>
<td>3.43</td>
<td></td>
<td>T-7</td>
</tr>
<tr>
<td>2011/8/24</td>
<td>0.6702</td>
<td>2011/8/24</td>
<td>1.31</td>
<td></td>
<td>T-6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/8/24</td>
<td>1.4493</td>
<td>2011/8/24</td>
<td>-0.6</td>
<td></td>
<td>0.1393</td>
</tr>
<tr>
<td>2011/8/26</td>
<td>0.211</td>
<td>2011/8/26</td>
<td>1.51</td>
<td></td>
<td>-1.299</td>
</tr>
<tr>
<td>2011/8/29</td>
<td>5.0526</td>
<td>2011/8/29</td>
<td>2.83</td>
<td></td>
<td>2.2226</td>
</tr>
<tr>
<td>2011/8/30</td>
<td>-1.002</td>
<td>2011/8/30</td>
<td>0.23</td>
<td></td>
<td>T-4</td>
</tr>
<tr>
<td>2011/8/31</td>
<td>-1.417</td>
<td>2011/8/31</td>
<td>0.49</td>
<td></td>
<td>T-3</td>
</tr>
<tr>
<td>2011/9/1</td>
<td>1.6427</td>
<td>2011/9/1</td>
<td>-1.19</td>
<td></td>
<td>T-2</td>
</tr>
<tr>
<td>2011/9/2</td>
<td>-1.6162</td>
<td>2011/9/2</td>
<td>-2.53</td>
<td></td>
<td>2.8327</td>
</tr>
<tr>
<td>2011/9/6</td>
<td>0.8214</td>
<td>2011/9/6</td>
<td>-0.74</td>
<td></td>
<td>T+1</td>
</tr>
<tr>
<td>2011/9/7</td>
<td>2.8513</td>
<td>2011/9/7</td>
<td>2.86</td>
<td></td>
<td>T-2</td>
</tr>
</tbody>
</table>

WEN Equity

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/8/6</td>
<td>0.3693</td>
<td>2011/8/6</td>
<td>0.3693</td>
<td></td>
<td>0.1393</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/8/24</td>
<td>1.4493</td>
<td>2011/8/24</td>
<td>-0.6</td>
<td></td>
<td>0.1393</td>
</tr>
<tr>
<td>2011/8/26</td>
<td>0.211</td>
<td>2011/8/26</td>
<td>1.51</td>
<td></td>
<td>-1.299</td>
</tr>
<tr>
<td>2011/8/29</td>
<td>5.0526</td>
<td>2011/8/29</td>
<td>2.83</td>
<td></td>
<td>2.2226</td>
</tr>
<tr>
<td>2011/8/30</td>
<td>-1.002</td>
<td>2011/8/30</td>
<td>0.23</td>
<td></td>
<td>T-4</td>
</tr>
<tr>
<td>2011/8/31</td>
<td>-1.417</td>
<td>2011/8/31</td>
<td>0.49</td>
<td></td>
<td>T-3</td>
</tr>
<tr>
<td>2011/9/1</td>
<td>1.6427</td>
<td>2011/9/1</td>
<td>-1.19</td>
<td></td>
<td>T-2</td>
</tr>
<tr>
<td>2011/9/2</td>
<td>-1.6162</td>
<td>2011/9/2</td>
<td>-2.53</td>
<td></td>
<td>2.8327</td>
</tr>
<tr>
<td>2011/9/6</td>
<td>0.8214</td>
<td>2011/9/6</td>
<td>-0.74</td>
<td></td>
<td>T+1</td>
</tr>
<tr>
<td>2011/9/7</td>
<td>2.8513</td>
<td>2011/9/7</td>
<td>2.86</td>
<td></td>
<td>T-2</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>----------</td>
<td>------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>2011/9/8</td>
<td>-2.3762</td>
<td>2011/9/8</td>
<td>-1.06</td>
<td>-1.3162</td>
<td></td>
</tr>
<tr>
<td>2011/9/9</td>
<td>-2.2312</td>
<td>2011/9/9</td>
<td>-2.67</td>
<td>0.4388</td>
<td></td>
</tr>
<tr>
<td>2011/9/12</td>
<td>1.4523</td>
<td>2011/9/12</td>
<td>0.7</td>
<td>0.7523</td>
<td></td>
</tr>
<tr>
<td>2011/9/13</td>
<td>-0.6135</td>
<td>2011/9/13</td>
<td>0.91</td>
<td>-1.5235</td>
<td></td>
</tr>
<tr>
<td>2011/9/14</td>
<td>1.8519</td>
<td>2011/9/14</td>
<td>1.35</td>
<td>0.5019</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/7/6</td>
<td>-2.2609</td>
<td>2010/7/6</td>
<td>-2.8009</td>
<td>T-7</td>
</tr>
<tr>
<td>2010/7/7</td>
<td>1.808</td>
<td>2010/7/7</td>
<td>-1.322</td>
<td>T-6</td>
</tr>
<tr>
<td>2010/7/8</td>
<td>0.5223</td>
<td>2010/7/8</td>
<td>-0.4177</td>
<td>T-5</td>
</tr>
<tr>
<td>2010/7/9</td>
<td>2.4422</td>
<td>2010/7/9</td>
<td>1.7222</td>
<td>T-4</td>
</tr>
<tr>
<td>2010/7/12</td>
<td>0.634</td>
<td>2010/7/12</td>
<td>0.564</td>
<td>T-3</td>
</tr>
<tr>
<td>2010/7/13</td>
<td>3.8306</td>
<td>2010/7/13</td>
<td>2.2906</td>
<td>T-2</td>
</tr>
<tr>
<td>2010/7/14</td>
<td>-0.8252</td>
<td>2010/7/14</td>
<td>-0.8052</td>
<td>T-1</td>
</tr>
<tr>
<td>2010/7/15</td>
<td>0.6118</td>
<td>2010/7/15</td>
<td>0.4918</td>
<td>T0</td>
</tr>
<tr>
<td>2010/7/16</td>
<td>-3.2839</td>
<td>2010/7/16</td>
<td>-0.4039</td>
<td>T+1</td>
</tr>
<tr>
<td>2010/7/19</td>
<td>-0.1258</td>
<td>2010/7/19</td>
<td>-0.7258</td>
<td>T+2</td>
</tr>
<tr>
<td>2010/7/20</td>
<td>2.7953</td>
<td>2010/7/20</td>
<td>1.6553</td>
<td>T+3</td>
</tr>
<tr>
<td>2010/7/21</td>
<td>-0.343</td>
<td>2010/7/21</td>
<td>0.937</td>
<td>T+4</td>
</tr>
<tr>
<td>2010/7/22</td>
<td>4.646</td>
<td>2010/7/22</td>
<td>2.396</td>
<td>T+5</td>
</tr>
<tr>
<td>2010/7/23</td>
<td>0</td>
<td>2010/7/23</td>
<td>-0.82</td>
<td>T+6</td>
</tr>
<tr>
<td>2010/7/26</td>
<td>2.1142</td>
<td>2010/7/26</td>
<td>0.9942</td>
<td>T+7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/12/13</td>
<td>1.0486</td>
<td>2010/12/13</td>
<td>0</td>
<td>1.0486</td>
</tr>
<tr>
<td>2010/12/14</td>
<td>-0.8491</td>
<td>2010/12/14</td>
<td>0.09</td>
<td>-0.9391</td>
</tr>
<tr>
<td>2010/12/15</td>
<td>-1.4272</td>
<td>2010/12/15</td>
<td>-0.51</td>
<td>-0.9172</td>
</tr>
<tr>
<td>2010/12/16</td>
<td>0.3861</td>
<td>2010/12/16</td>
<td>0.62</td>
<td>-0.2339</td>
</tr>
<tr>
<td>2010/12/17</td>
<td>0.7692</td>
<td>2010/12/17</td>
<td>0.08</td>
<td>0.6892</td>
</tr>
<tr>
<td>2010/12/20</td>
<td>-4.8664</td>
<td>2010/12/20</td>
<td>0.25</td>
<td>-5.1164</td>
</tr>
<tr>
<td>2010/12/21</td>
<td>0.3009</td>
<td>2010/12/21</td>
<td>0.6</td>
<td>-0.2991</td>
</tr>
<tr>
<td>2010/12/22</td>
<td>1.5</td>
<td>2010/12/22</td>
<td>0.34</td>
<td>1.16</td>
</tr>
<tr>
<td>2010/12/23</td>
<td>-1.5764</td>
<td>2010/12/23</td>
<td>-0.16</td>
<td>-1.4164</td>
</tr>
<tr>
<td>2010/12/27</td>
<td>1.8018</td>
<td>2010/12/27</td>
<td>0.06</td>
<td>1.7418</td>
</tr>
<tr>
<td>2010/12/28</td>
<td>0.3933</td>
<td>2010/12/28</td>
<td>0.08</td>
<td>0.3133</td>
</tr>
<tr>
<td>2010/12/29</td>
<td>0.6856</td>
<td>2010/12/29</td>
<td>0.1</td>
<td>0.5856</td>
</tr>
<tr>
<td>2010/12/30</td>
<td>0</td>
<td>2010/12/30</td>
<td>-0.15</td>
<td>0.15</td>
</tr>
</tbody>
</table>

SHO Equity

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/12/13</td>
<td>1.0486</td>
<td>2010/12/13</td>
<td>0</td>
<td>1.0486</td>
</tr>
<tr>
<td>2010/12/14</td>
<td>-0.8491</td>
<td>2010/12/14</td>
<td>0.09</td>
<td>-0.9391</td>
</tr>
<tr>
<td>2010/12/15</td>
<td>-1.4272</td>
<td>2010/12/15</td>
<td>-0.51</td>
<td>-0.9172</td>
</tr>
<tr>
<td>2010/12/16</td>
<td>0.3861</td>
<td>2010/12/16</td>
<td>0.62</td>
<td>-0.2339</td>
</tr>
<tr>
<td>2010/12/17</td>
<td>0.7692</td>
<td>2010/12/17</td>
<td>0.08</td>
<td>0.6892</td>
</tr>
<tr>
<td>2010/12/20</td>
<td>-4.8664</td>
<td>2010/12/20</td>
<td>0.25</td>
<td>-5.1164</td>
</tr>
<tr>
<td>2010/12/21</td>
<td>0.3009</td>
<td>2010/12/21</td>
<td>0.6</td>
<td>-0.2991</td>
</tr>
<tr>
<td>2010/12/22</td>
<td>1.5</td>
<td>2010/12/22</td>
<td>0.34</td>
<td>1.16</td>
</tr>
<tr>
<td>2010/12/23</td>
<td>-1.5764</td>
<td>2010/12/23</td>
<td>-0.16</td>
<td>-1.4164</td>
</tr>
<tr>
<td>2010/12/27</td>
<td>1.8018</td>
<td>2010/12/27</td>
<td>0.06</td>
<td>1.7418</td>
</tr>
<tr>
<td>2010/12/28</td>
<td>0.3933</td>
<td>2010/12/28</td>
<td>0.08</td>
<td>0.3133</td>
</tr>
<tr>
<td>2010/12/29</td>
<td>0.6856</td>
<td>2010/12/29</td>
<td>0.1</td>
<td>0.5856</td>
</tr>
<tr>
<td>2010/12/30</td>
<td>0</td>
<td>2010/12/30</td>
<td>-0.15</td>
<td>0.15</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>---------</td>
<td>------------</td>
<td>---------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>2010/12/31</td>
<td>0.4864</td>
<td>2010/12/31</td>
<td>-0.02</td>
<td>0.5064 T+6</td>
</tr>
<tr>
<td>2011/1/3</td>
<td>2.7106</td>
<td>2011/1/3</td>
<td>1.13</td>
<td>1.5806 T+7</td>
</tr>
<tr>
<td>2007/3/22</td>
<td>-1.2023</td>
<td>2007/3/22</td>
<td>-0.03</td>
<td>-1.1723 T-7</td>
</tr>
<tr>
<td>2007/3/23</td>
<td>-0.4716</td>
<td>2007/3/23</td>
<td>0.11</td>
<td>-0.5816 T-6</td>
</tr>
<tr>
<td>2007/3/26</td>
<td>0.2904</td>
<td>2007/3/26</td>
<td>0.1</td>
<td>0.1904 T-5</td>
</tr>
<tr>
<td>2007/3/27</td>
<td>-0.9448</td>
<td>2007/3/27</td>
<td>-0.62</td>
<td>-0.3248 T-4</td>
</tr>
<tr>
<td>2007/3/28</td>
<td>-0.4769</td>
<td>2007/3/28</td>
<td>-0.8</td>
<td>0.3231 T-3</td>
</tr>
<tr>
<td>2007/3/29</td>
<td>0.3246</td>
<td>2007/3/29</td>
<td>0.37</td>
<td>-0.0454 T-2</td>
</tr>
<tr>
<td>2007/3/30</td>
<td>-0.077</td>
<td>2007/3/30</td>
<td>-0.12</td>
<td>0.043 T-1</td>
</tr>
<tr>
<td>2007/4/2</td>
<td>4.5798</td>
<td>2007/4/2</td>
<td>0.26</td>
<td>4.3198 T0</td>
</tr>
<tr>
<td>2007/4/3</td>
<td>2.9785</td>
<td>2007/4/3</td>
<td>0.93</td>
<td>2.0485 T+1</td>
</tr>
<tr>
<td>2007/4/4</td>
<td>1.4605</td>
<td>2007/4/4</td>
<td>0.11</td>
<td>1.3505 T+2</td>
</tr>
<tr>
<td>2007/4/5</td>
<td>-1.1008</td>
<td>2007/4/5</td>
<td>0.3</td>
<td>-1.4008 T+3</td>
</tr>
<tr>
<td>2007/4/9</td>
<td>-1.9692</td>
<td>2007/4/9</td>
<td>0.06</td>
<td>-2.0292 T+4</td>
</tr>
<tr>
<td>2007/4/10</td>
<td>-1.1499</td>
<td>2007/4/10</td>
<td>0.26</td>
<td>-1.4099 T+5</td>
</tr>
<tr>
<td>2007/4/11</td>
<td>-0.6037</td>
<td>2007/4/11</td>
<td>-0.66</td>
<td>0.0563 T+6</td>
</tr>
<tr>
<td>2007/4/12</td>
<td>-0.0296</td>
<td>2007/4/12</td>
<td>0.62</td>
<td>-0.6496 T+7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006/1/20</td>
<td>-2.9662</td>
<td>2006/1/20</td>
<td>-1.83</td>
<td>-1.1362 T-7</td>
</tr>
<tr>
<td>2006/1/23</td>
<td>-1.1804</td>
<td>2006/1/23</td>
<td>0.18</td>
<td>-1.3604 T-6</td>
</tr>
<tr>
<td>2006/1/24</td>
<td>3.1853</td>
<td>2006/1/24</td>
<td>0.24</td>
<td>2.9453 T+5</td>
</tr>
<tr>
<td>2006/1/25</td>
<td>-0.1781</td>
<td>2006/1/25</td>
<td>-0.17</td>
<td>-0.0081 T-4</td>
</tr>
<tr>
<td>2006/1/26</td>
<td>0.1487</td>
<td>2006/1/26</td>
<td>0.72</td>
<td>-0.5713 T-3</td>
</tr>
<tr>
<td>2006/1/27</td>
<td>-3.5926</td>
<td>2006/1/27</td>
<td>-0.78</td>
<td>-4.3726 T-2</td>
</tr>
<tr>
<td>2006/1/30</td>
<td>-3.8497</td>
<td>2006/1/30</td>
<td>0.12</td>
<td>-3.9697 T-1</td>
</tr>
<tr>
<td>2006/1/31</td>
<td>-2.6586</td>
<td>2006/1/31</td>
<td>-0.4</td>
<td>-2.2586 T0</td>
</tr>
<tr>
<td>2006/2/1</td>
<td>0.6581</td>
<td>2006/2/1</td>
<td>0.19</td>
<td>0.4681 T+1</td>
</tr>
<tr>
<td>2006/2/2</td>
<td>-0.948</td>
<td>2006/2/2</td>
<td>-0.91</td>
<td>-0.038 T+2</td>
</tr>
<tr>
<td>2006/2/3</td>
<td>0.9901</td>
<td>2006/2/3</td>
<td>-0.54</td>
<td>1.5301 T+3</td>
</tr>
<tr>
<td>2006/2/6</td>
<td>0.7843</td>
<td>2006/2/6</td>
<td>0.08</td>
<td>0.7043 T+4</td>
</tr>
<tr>
<td>2006/2/7</td>
<td>2.0104</td>
<td>2006/2/7</td>
<td>-0.81</td>
<td>2.8204 T+5</td>
</tr>
<tr>
<td>2006/2/8</td>
<td>0.89</td>
<td>2006/2/8</td>
<td>0.87</td>
<td>0.02 T+6</td>
</tr>
<tr>
<td>2006/2/9</td>
<td>-1.7958</td>
<td>2006/2/9</td>
<td>-0.15</td>
<td>-1.6458 T+7</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>2005/1/12</td>
<td>-3.5484</td>
<td>2005/1/12</td>
<td>0.4</td>
<td>-3.9484</td>
</tr>
<tr>
<td>2005/1/13</td>
<td>-1.8952</td>
<td>2005/1/13</td>
<td>-0.86</td>
<td>-1.0352</td>
</tr>
<tr>
<td>2005/1/14</td>
<td>-0.9091</td>
<td>2005/1/14</td>
<td>0.6</td>
<td>-1.5091</td>
</tr>
<tr>
<td>2005/1/18</td>
<td>10.2064</td>
<td>2005/1/18</td>
<td>0.97</td>
<td>9.2364</td>
</tr>
<tr>
<td>2005/1/19</td>
<td>-4.6826</td>
<td>2005/1/19</td>
<td>-0.95</td>
<td>-3.7326</td>
</tr>
<tr>
<td>2005/1/20</td>
<td>-0.5459</td>
<td>2005/1/20</td>
<td>-0.78</td>
<td>0.2341</td>
</tr>
<tr>
<td>2005/1/21</td>
<td>-0.7684</td>
<td>2005/1/21</td>
<td>-0.64</td>
<td>-0.1284</td>
</tr>
<tr>
<td>2005/1/24</td>
<td>-3.208</td>
<td>2005/1/24</td>
<td>-0.35</td>
<td>-2.858</td>
</tr>
<tr>
<td>2005/1/25</td>
<td>1.1429</td>
<td>2005/1/25</td>
<td>0.4</td>
<td>0.7429</td>
</tr>
<tr>
<td>2005/1/26</td>
<td>0.678</td>
<td>2005/1/26</td>
<td>0.48</td>
<td>0.198</td>
</tr>
<tr>
<td>2005/1/27</td>
<td>-1.6835</td>
<td>2005/1/27</td>
<td>0.04</td>
<td>-1.7235</td>
</tr>
<tr>
<td>2005/1/28</td>
<td>-1.1416</td>
<td>2005/1/28</td>
<td>-0.27</td>
<td>-0.8716</td>
</tr>
<tr>
<td>2005/1/31</td>
<td>1.3857</td>
<td>2005/1/31</td>
<td>0.85</td>
<td>0.5357</td>
</tr>
<tr>
<td>2005/2/1</td>
<td>-2.164</td>
<td>2005/2/1</td>
<td>0.69</td>
<td>-2.854</td>
</tr>
<tr>
<td>2005/2/2</td>
<td>-2.2119</td>
<td>2005/2/2</td>
<td>0.32</td>
<td>-2.5319</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004/10/4</td>
<td>-0.36</td>
<td>2004/10/4</td>
<td>0.32</td>
<td>-0.68</td>
</tr>
<tr>
<td>2004/10/5</td>
<td>0.8077</td>
<td>2004/10/5</td>
<td>-0.06</td>
<td>0.8677</td>
</tr>
<tr>
<td>2004/10/6</td>
<td>1.1596</td>
<td>2004/10/6</td>
<td>0.67</td>
<td>0.4896</td>
</tr>
<tr>
<td>2004/10/7</td>
<td>-1.8549</td>
<td>2004/10/7</td>
<td>-1</td>
<td>-0.8549</td>
</tr>
<tr>
<td>2004/10/8</td>
<td>0.6371</td>
<td>2004/10/8</td>
<td>-0.75</td>
<td>1.3871</td>
</tr>
<tr>
<td>2004/10/11</td>
<td>0.8863</td>
<td>2004/10/11</td>
<td>0.2</td>
<td>0.6863</td>
</tr>
<tr>
<td>2004/10/12</td>
<td>0.4811</td>
<td>2004/10/12</td>
<td>-0.23</td>
<td>0.7111</td>
</tr>
<tr>
<td>2004/10/13</td>
<td>-0.8118</td>
<td>2004/10/13</td>
<td>-0.73</td>
<td>-0.0818</td>
</tr>
<tr>
<td>2004/10/14</td>
<td>0.2938</td>
<td>2004/10/14</td>
<td>-0.93</td>
<td>1.2238</td>
</tr>
<tr>
<td>2004/10/15</td>
<td>3.5154</td>
<td>2004/10/15</td>
<td>0.45</td>
<td>3.0654</td>
</tr>
<tr>
<td>2004/10/18</td>
<td>1.6778</td>
<td>2004/10/18</td>
<td>0.53</td>
<td>1.1478</td>
</tr>
<tr>
<td>2004/10/19</td>
<td>0.0199</td>
<td>2004/10/19</td>
<td>-0.97</td>
<td>0.9899</td>
</tr>
<tr>
<td>2004/10/20</td>
<td>-0.0994</td>
<td>2004/10/20</td>
<td>0.04</td>
<td>-0.1394</td>
</tr>
<tr>
<td>2004/10/21</td>
<td>0.9948</td>
<td>2004/10/21</td>
<td>0.26</td>
<td>0.7348</td>
</tr>
<tr>
<td>2004/10/22</td>
<td>-1.2214</td>
<td>2004/10/22</td>
<td>-0.97</td>
<td>-0.2514</td>
</tr>
</tbody>
</table>
2003/10/21  -0.9576  2003/10/21  0.13  -1.0876  T-7
2003/10/22  -3.0387  2003/10/22  -1.5  -1.5387  T-6
2003/10/23  0.4274  2003/10/23  0.33  0.0974  T-5
2003/10/24  -0.7943  2003/10/24  -0.47  -0.3243  T-4
2003/10/27  1.6586  2003/10/27  0.22  1.4386  T-3
2003/10/28  1.0127  2003/10/28  1.52  -0.5073  T-2
2003/10/29  0.8076  2003/10/29  0.13  0.6776  T-1
2003/10/30  -4.6961  2003/10/30  -0.11  -4.5861  T0
2003/10/31  -2.2319  2003/10/31  0.36  -2.5919  T+1
2003/11/3   -0.2668  2003/11/3   0.79  -1.0568  T+2
2003/11/4   -0.6837  2003/11/4  -0.54  -0.1437  T+3
2003/11/5   -0.2694  2003/11/5  -0.14  -0.1294  T+4
2003/11/6   2.0408  2003/11/6   0.59  1.4508  T+5
2003/11/7   2       2003/11/7  -0.46  2.46     T+6
2003/11/10  0.173   2003/11/10 -0.58  0.753    T+7

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRI Equity</td>
<td></td>
<td>SPX Index</td>
<td></td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>2003/9/15</td>
<td>2.8598</td>
<td>2003/9/15</td>
<td>-0.38</td>
<td>3.2398</td>
</tr>
<tr>
<td>2003/9/16</td>
<td>0</td>
<td>2003/9/16</td>
<td>1.43</td>
<td>-1.43</td>
</tr>
<tr>
<td>2003/9/17</td>
<td>-0.5381</td>
<td>2003/9/17</td>
<td>-0.33</td>
<td>-0.2081</td>
</tr>
<tr>
<td>2003/9/18</td>
<td>1.3977</td>
<td>2003/9/18</td>
<td>1.33</td>
<td>0.0677</td>
</tr>
<tr>
<td>2003/9/19</td>
<td>-0.4002</td>
<td>2003/9/19</td>
<td>-0.32</td>
<td>-0.0802</td>
</tr>
<tr>
<td>2003/9/22</td>
<td>-1.6518</td>
<td>2003/9/22</td>
<td>-1.3</td>
<td>-0.3518</td>
</tr>
<tr>
<td>2003/9/23</td>
<td>-0.8171</td>
<td>2003/9/23</td>
<td>0.61</td>
<td>-1.4271</td>
</tr>
<tr>
<td>2003/9/24</td>
<td>-2.1968</td>
<td>2003/9/24</td>
<td>-1.91</td>
<td>-0.2868</td>
</tr>
<tr>
<td>2003/9/25</td>
<td>-12.2602</td>
<td>2003/9/25</td>
<td>-0.61</td>
<td>-11.6502</td>
</tr>
<tr>
<td>2003/9/26</td>
<td>-1.92</td>
<td>2003/9/26</td>
<td>-0.64</td>
<td>-1.28</td>
</tr>
<tr>
<td>2003/9/29</td>
<td>1.8488</td>
<td>2003/9/29</td>
<td>0.98</td>
<td>0.8688</td>
</tr>
<tr>
<td>2003/9/30</td>
<td>1.4415</td>
<td>2003/9/30</td>
<td>-1.05</td>
<td>2.4915</td>
</tr>
<tr>
<td>2003/10/1</td>
<td>1.0526</td>
<td>2003/10/1</td>
<td>2.23</td>
<td>-1.1774</td>
</tr>
<tr>
<td>2003/10/2</td>
<td>-1.7708</td>
<td>2003/10/2</td>
<td>0.2</td>
<td>-1.9708</td>
</tr>
<tr>
<td>2003/10/3</td>
<td>1.5907</td>
<td>2003/10/3</td>
<td>0.94</td>
<td>0.6507</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPKI Equity</td>
<td></td>
<td>SPX Index</td>
<td></td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>2003/7/24</td>
<td>0.669</td>
<td>2003/7/24</td>
<td>-0.71</td>
<td>1.379</td>
</tr>
<tr>
<td>2003/7/25</td>
<td>-15.6417</td>
<td>2003/7/25</td>
<td>1.74</td>
<td>-17.3817</td>
</tr>
<tr>
<td>2003/7/28</td>
<td>2.5279</td>
<td>2003/7/28</td>
<td>-0.22</td>
<td>2.7479</td>
</tr>
<tr>
<td>Date</td>
<td>FRRG Equity</td>
<td>CHG_PCT_1D</td>
<td>SPX Index</td>
<td>CHG_PCT_1D</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>------------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>2003/7/29</td>
<td>0.6881</td>
<td>2003/7/29</td>
<td>-0.73</td>
<td>1.4181</td>
</tr>
<tr>
<td>2003/7/30</td>
<td>-1.7084</td>
<td>2003/7/30</td>
<td>-0.18</td>
<td>-1.5284</td>
</tr>
<tr>
<td>2003/7/31</td>
<td>1.4484</td>
<td>2003/7/31</td>
<td>0.29</td>
<td>1.1584</td>
</tr>
<tr>
<td>2003/8/1</td>
<td>1.0851</td>
<td>2003/8/1</td>
<td>-1.03</td>
<td>2.1151</td>
</tr>
<tr>
<td>2003/8/4</td>
<td>-1.1299</td>
<td>2003/8/4</td>
<td>0.27</td>
<td>-1.3999</td>
</tr>
<tr>
<td>2003/8/5</td>
<td>0.9143</td>
<td>2003/8/5</td>
<td>-1.77</td>
<td>2.6843</td>
</tr>
<tr>
<td>2003/8/6</td>
<td>-0.3398</td>
<td>2003/8/6</td>
<td>0.17</td>
<td>-0.5098</td>
</tr>
<tr>
<td>2003/8/7</td>
<td>-0.4545</td>
<td>2003/8/7</td>
<td>0.73</td>
<td>-1.1845</td>
</tr>
<tr>
<td>2003/8/8</td>
<td>-0.1712</td>
<td>2003/8/8</td>
<td>0.36</td>
<td>-0.5312</td>
</tr>
<tr>
<td>2003/8/11</td>
<td>0.1144</td>
<td>2003/8/11</td>
<td>0.31</td>
<td>-0.1956</td>
</tr>
<tr>
<td>2003/8/12</td>
<td>0.514</td>
<td>2003/8/12</td>
<td>1</td>
<td>-0.486</td>
</tr>
<tr>
<td>2003/8/13</td>
<td>-0.6818</td>
<td>2003/8/13</td>
<td>-0.64</td>
<td>-0.0418</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>PZZI Equity</th>
<th>CHG_PCT_1D</th>
<th>SPX Index</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002/9/24</td>
<td>-16.6667</td>
<td>2002/9/24</td>
<td>-1.73</td>
<td>-14.9367</td>
<td>T-7</td>
</tr>
<tr>
<td>2002/9/26</td>
<td>36.8421</td>
<td>2002/9/26</td>
<td>1.82</td>
<td>35.0221</td>
<td>T-5</td>
</tr>
<tr>
<td>2002/9/30</td>
<td>-19.2308</td>
<td>2002/9/30</td>
<td>-1.46</td>
<td>-17.7708</td>
<td>T-4</td>
</tr>
<tr>
<td>2002/10/1</td>
<td>-23.8095</td>
<td>2002/10/1</td>
<td>4</td>
<td>-27.8095</td>
<td>T-3</td>
</tr>
<tr>
<td>2002/10/2</td>
<td>25</td>
<td>2002/10/2</td>
<td>-2.36</td>
<td>27.36</td>
<td>T-2</td>
</tr>
<tr>
<td>2002/10/3</td>
<td>-20</td>
<td>2002/10/3</td>
<td>-1.08</td>
<td>-18.92</td>
<td>T-1</td>
</tr>
<tr>
<td>2002/10/7</td>
<td>0</td>
<td>2002/10/7</td>
<td>-1.91</td>
<td>1.91</td>
<td>T0</td>
</tr>
<tr>
<td>2002/10/8</td>
<td>0</td>
<td>2002/10/8</td>
<td>1.69</td>
<td>-1.69</td>
<td>T+1</td>
</tr>
<tr>
<td>2002/10/10</td>
<td>25</td>
<td>2002/10/10</td>
<td>3.5</td>
<td>21.5</td>
<td>T+2</td>
</tr>
<tr>
<td>2002/10/11</td>
<td>25</td>
<td>2002/10/11</td>
<td>3.91</td>
<td>21.09</td>
<td>T+3</td>
</tr>
<tr>
<td>2002/10/14</td>
<td>-20</td>
<td>2002/10/14</td>
<td>0.73</td>
<td>-20.73</td>
<td>T+4</td>
</tr>
<tr>
<td>2002/10/16</td>
<td>-20</td>
<td>2002/10/16</td>
<td>-2.41</td>
<td>-17.59</td>
<td>T+5</td>
</tr>
<tr>
<td>2002/10/17</td>
<td>0</td>
<td>2002/10/17</td>
<td>2.23</td>
<td>-2.23</td>
<td>T+6</td>
</tr>
<tr>
<td>2002/10/18</td>
<td>31.25</td>
<td>2002/10/18</td>
<td>0.59</td>
<td>30.66</td>
<td>T+7</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>-----------</td>
<td>------------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>2002/8/21</td>
<td>1.8812</td>
<td>2002/8/21</td>
<td>1.27</td>
<td>-0.4788 T-1</td>
<td></td>
</tr>
<tr>
<td>2002/8/22</td>
<td>1.069</td>
<td>2002/8/22</td>
<td>1.41</td>
<td>2.469 T0</td>
<td></td>
</tr>
<tr>
<td>2002/8/26</td>
<td>-6.25</td>
<td>2002/8/26</td>
<td>0.75</td>
<td>-7.66 T+2</td>
<td></td>
</tr>
<tr>
<td>2002/8/27</td>
<td>0</td>
<td>2002/8/27</td>
<td>-1.39</td>
<td>2.27 T+3</td>
<td></td>
</tr>
<tr>
<td>2002/8/29</td>
<td>8</td>
<td>2002/8/29</td>
<td>-0.01</td>
<td>9.39 T+5</td>
<td></td>
</tr>
<tr>
<td>2002/8/30</td>
<td>-1.4815</td>
<td>2002/8/30</td>
<td>-0.19</td>
<td>0.3285 T+6</td>
<td></td>
</tr>
</tbody>
</table>

APPB Equity

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001/7/26</td>
<td>-4.5285</td>
<td>2001/7/26</td>
<td>1.04</td>
<td>-5.5685 T-7</td>
</tr>
<tr>
<td>2001/7/27</td>
<td>-3.3463</td>
<td>2001/7/27</td>
<td>0.24</td>
<td>-3.5863 T-6</td>
</tr>
<tr>
<td>2001/7/30</td>
<td>2.0168</td>
<td>2001/7/30</td>
<td>-0.11</td>
<td>2.1268 T-5</td>
</tr>
<tr>
<td>2001/7/31</td>
<td>-0.1647</td>
<td>2001/7/31</td>
<td>0.56</td>
<td>-0.7247 T-4</td>
</tr>
<tr>
<td>2001/8/1</td>
<td>0.7261</td>
<td>2001/8/1</td>
<td>0.39</td>
<td>0.3361 T-3</td>
</tr>
<tr>
<td>2001/8/2</td>
<td>-0.0983</td>
<td>2001/8/2</td>
<td>0.4</td>
<td>-0.4983 T-2</td>
</tr>
<tr>
<td>2001/8/3</td>
<td>-0.492</td>
<td>2001/8/3</td>
<td>-0.52</td>
<td>-0.882 T-1</td>
</tr>
<tr>
<td>2001/8/6</td>
<td>-2.2742</td>
<td>2001/8/6</td>
<td>-1.14</td>
<td>-2.6742 T0</td>
</tr>
<tr>
<td>2001/8/7</td>
<td>-7.2513</td>
<td>2001/8/7</td>
<td>0.33</td>
<td>-6.7313 T+1</td>
</tr>
<tr>
<td>2001/8/8</td>
<td>0.1818</td>
<td>2001/8/8</td>
<td>-1.73</td>
<td>1.3218 T+2</td>
</tr>
<tr>
<td>2001/8/9</td>
<td>0.5445</td>
<td>2001/8/9</td>
<td>-0.01</td>
<td>0.2145 T+3</td>
</tr>
<tr>
<td>2001/8/10</td>
<td>0</td>
<td>2001/8/10</td>
<td>0.57</td>
<td>1.73 T+4</td>
</tr>
<tr>
<td>2001/8/13</td>
<td>1.1191</td>
<td>2001/8/13</td>
<td>0.09</td>
<td>1.1291 T+5</td>
</tr>
<tr>
<td>2001/8/14</td>
<td>3.2131</td>
<td>2001/8/14</td>
<td>-0.38</td>
<td>2.6431 T+6</td>
</tr>
<tr>
<td>2001/8/15</td>
<td>-0.3459</td>
<td>2001/8/15</td>
<td>-0.73</td>
<td>-0.4359 T+7</td>
</tr>
</tbody>
</table>

LUB Equity

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000/9/29</td>
<td>-1.1628</td>
<td>2000/9/29</td>
<td>-1.49</td>
<td>0.3272 T-6</td>
</tr>
<tr>
<td>2000/10/2</td>
<td>-3.5294</td>
<td>2000/10/2</td>
<td>-0.02</td>
<td>-3.5094 T-5</td>
</tr>
<tr>
<td>2000/10/3</td>
<td>1.2195</td>
<td>2000/10/3</td>
<td>-0.68</td>
<td>1.8995 T-4</td>
</tr>
<tr>
<td>2000/10/4</td>
<td>0</td>
<td>2000/10/4</td>
<td>0.55</td>
<td>-0.55 T-3</td>
</tr>
<tr>
<td>2000/10/5</td>
<td>0</td>
<td>2000/10/5</td>
<td>0.14</td>
<td>-0.14 T-2</td>
</tr>
<tr>
<td>2000/10/6</td>
<td>0</td>
<td>2000/10/6</td>
<td>-1.9</td>
<td>-0.55 T-1</td>
</tr>
<tr>
<td>2000/10/9</td>
<td>-3.6145</td>
<td>2000/10/9</td>
<td>-0.49</td>
<td>-3.7545 T0</td>
</tr>
<tr>
<td>2000/10/10</td>
<td>0</td>
<td>2000/10/10</td>
<td>-1.07</td>
<td>1.9 T+1</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>2000/10/11</td>
<td>0</td>
<td>2000/10/11</td>
<td>-1.62</td>
<td>0.49</td>
</tr>
<tr>
<td>2000/10/12</td>
<td>-8.75</td>
<td>2000/10/12</td>
<td>-2.55</td>
<td>-7.68</td>
</tr>
<tr>
<td>2000/10/13</td>
<td>-4.1096</td>
<td>2000/10/13</td>
<td>3.34</td>
<td>-2.4896</td>
</tr>
<tr>
<td>2000/10/16</td>
<td>-1.4286</td>
<td>2000/10/16</td>
<td>0.03</td>
<td>1.1214</td>
</tr>
<tr>
<td>2000/10/17</td>
<td>4.3478</td>
<td>2000/10/17</td>
<td>-1.79</td>
<td>1.0078</td>
</tr>
<tr>
<td>2000/10/18</td>
<td>9.7222</td>
<td>2000/10/18</td>
<td>-0.58</td>
<td>9.6922</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000/9/7</td>
<td>-6.25</td>
<td>2000/9/7</td>
<td>0.69</td>
<td>-6.94</td>
</tr>
<tr>
<td>2000/9/8</td>
<td>-13.3333</td>
<td>2000/9/8</td>
<td>-0.53</td>
<td>-12.8033</td>
</tr>
<tr>
<td>2000/9/11</td>
<td>-5.7692</td>
<td>2000/9/11</td>
<td>-0.35</td>
<td>-5.4192</td>
</tr>
<tr>
<td>2000/9/12</td>
<td>8.1633</td>
<td>2000/9/12</td>
<td>-0.49</td>
<td>8.6533</td>
</tr>
<tr>
<td>2000/9/14</td>
<td>-1.1812</td>
<td>2000/9/14</td>
<td>-0.27</td>
<td>9.0593</td>
</tr>
<tr>
<td>2000/9/18</td>
<td>-5.0847</td>
<td>2000/9/18</td>
<td>-1.45</td>
<td>-4.8147</td>
</tr>
<tr>
<td>2000/9/19</td>
<td>-3.5714</td>
<td>2000/9/19</td>
<td>1.07</td>
<td>-2.5514</td>
</tr>
<tr>
<td>2000/9/20</td>
<td>-1.8519</td>
<td>2000/9/20</td>
<td>-0.59</td>
<td>-0.4019</td>
</tr>
<tr>
<td>2000/9/21</td>
<td>1.8868</td>
<td>2000/9/21</td>
<td>-0.16</td>
<td>0.8168</td>
</tr>
<tr>
<td>2000/9/22</td>
<td>1.8519</td>
<td>2000/9/22</td>
<td>-0.02</td>
<td>2.4419</td>
</tr>
<tr>
<td>2000/9/25</td>
<td>-1.8182</td>
<td>2000/9/25</td>
<td>-0.67</td>
<td>-1.6582</td>
</tr>
<tr>
<td>2000/9/26</td>
<td>-5.5556</td>
<td>2000/9/26</td>
<td>-0.82</td>
<td>-5.5356</td>
</tr>
<tr>
<td>2000/9/27</td>
<td>0</td>
<td>2000/9/27</td>
<td>-0.04</td>
<td>0.67</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999/5/13</td>
<td>-1.3841</td>
<td>1999/5/13</td>
<td>0.26</td>
<td>-1.6441</td>
</tr>
<tr>
<td>1999/5/14</td>
<td>-2.1053</td>
<td>1999/5/14</td>
<td>-2.18</td>
<td>0.0747</td>
</tr>
<tr>
<td>1999/5/17</td>
<td>-1.0753</td>
<td>1999/5/17</td>
<td>0.13</td>
<td>-1.2053</td>
</tr>
<tr>
<td>1999/5/18</td>
<td>0.7246</td>
<td>1999/5/18</td>
<td>-0.46</td>
<td>1.1846</td>
</tr>
<tr>
<td>1999/5/19</td>
<td>0</td>
<td>1999/5/19</td>
<td>0.82</td>
<td>-0.82</td>
</tr>
<tr>
<td>1999/5/20</td>
<td>2.8777</td>
<td>1999/5/20</td>
<td>-0.4</td>
<td>3.2777</td>
</tr>
<tr>
<td>1999/5/21</td>
<td>0.8741</td>
<td>1999/5/21</td>
<td>-0.64</td>
<td>0.0541</td>
</tr>
<tr>
<td>1999/5/24</td>
<td>-2.4263</td>
<td>1999/5/24</td>
<td>-1.78</td>
<td>-2.0263</td>
</tr>
<tr>
<td>1999/5/25</td>
<td>-3.3748</td>
<td>1999/5/25</td>
<td>-1.7</td>
<td>-2.7348</td>
</tr>
<tr>
<td>1999/5/26</td>
<td>-4.9632</td>
<td>1999/5/26</td>
<td>1.59</td>
<td>-3.1832</td>
</tr>
<tr>
<td>1999/5/27</td>
<td>-0.3868</td>
<td>1999/5/27</td>
<td>-1.79</td>
<td>1.3132</td>
</tr>
<tr>
<td>1999/5/28</td>
<td>1.7476</td>
<td>1999/5/28</td>
<td>1.59</td>
<td>0.1576</td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Date</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>----------</td>
<td>------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>1999/4/15</td>
<td>-1.1236</td>
<td>1999/4/15</td>
<td>-0.42</td>
<td>-0.7036 T-7</td>
</tr>
<tr>
<td>1999/4/16</td>
<td>-1.8182</td>
<td>1999/4/16</td>
<td>-0.29</td>
<td>-1.5282 T-6</td>
</tr>
<tr>
<td>1999/4/21</td>
<td>2.8169</td>
<td>1999/4/21</td>
<td>2.29</td>
<td>0.5269 T-3</td>
</tr>
<tr>
<td>1999/4/22</td>
<td>2.5114</td>
<td>1999/4/22</td>
<td>1.7</td>
<td>0.8114 T-2</td>
</tr>
<tr>
<td>1999/4/23</td>
<td>1.1136</td>
<td>1999/4/23</td>
<td>-0.14</td>
<td>-1.1764 T-1</td>
</tr>
<tr>
<td>1999/4/26</td>
<td>-1.1013</td>
<td>1999/4/26</td>
<td>0.24</td>
<td>-2.8013 T0</td>
</tr>
<tr>
<td>1999/4/27</td>
<td>0.8909</td>
<td>1999/4/27</td>
<td>0.2</td>
<td>1.0309 T+1</td>
</tr>
<tr>
<td>1999/4/28</td>
<td>1.5453</td>
<td>1999/4/28</td>
<td>-0.87</td>
<td>1.3053 T+2</td>
</tr>
<tr>
<td>1999/4/29</td>
<td>-2.8261</td>
<td>1999/4/29</td>
<td>-0.6</td>
<td>-3.0261 T+3</td>
</tr>
<tr>
<td>1999/4/30</td>
<td>-0.2237</td>
<td>1999/4/30</td>
<td>-0.57</td>
<td>0.6463 T+4</td>
</tr>
<tr>
<td>1999/5/3</td>
<td>-1.1211</td>
<td>1999/5/3</td>
<td>1.46</td>
<td>-0.5211 T+5</td>
</tr>
<tr>
<td>1999/5/4</td>
<td>4.5351</td>
<td>1999/5/4</td>
<td>-1.67</td>
<td>5.1051 T+6</td>
</tr>
<tr>
<td>1999/5/5</td>
<td>0.8677</td>
<td>1999/5/5</td>
<td>1.15</td>
<td>-0.5923 T+7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Date</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999/4/16</td>
<td>2.7778</td>
<td>1999/4/16</td>
<td>-0.29</td>
<td>3.0678 T-6</td>
</tr>
<tr>
<td>1999/4/19</td>
<td>-0.6757</td>
<td>1999/4/19</td>
<td>-2.24</td>
<td>1.5643 T-5</td>
</tr>
<tr>
<td>1999/4/20</td>
<td>1.0204</td>
<td>1999/4/20</td>
<td>1.29</td>
<td>-0.2696 T-4</td>
</tr>
<tr>
<td>1999/4/21</td>
<td>0.6734</td>
<td>1999/4/21</td>
<td>2.29</td>
<td>-1.6166 T-3</td>
</tr>
<tr>
<td>1999/4/22</td>
<td>2.3411</td>
<td>1999/4/22</td>
<td>1.7</td>
<td>0.6411 T-2</td>
</tr>
<tr>
<td>1999/4/26</td>
<td>2</td>
<td>1999/4/26</td>
<td>0.24</td>
<td>0.3 T0</td>
</tr>
<tr>
<td>1999/4/27</td>
<td>2.7778</td>
<td>1999/4/27</td>
<td>0.2</td>
<td>2.9178 T+1</td>
</tr>
<tr>
<td>1999/4/28</td>
<td>2.3847</td>
<td>1999/4/28</td>
<td>-0.87</td>
<td>2.1447 T+2</td>
</tr>
<tr>
<td>1999/4/29</td>
<td>0.6211</td>
<td>1999/4/29</td>
<td>-0.6</td>
<td>0.4211 T+3</td>
</tr>
<tr>
<td>1999/5/3</td>
<td>-0.3086</td>
<td>1999/5/3</td>
<td>1.46</td>
<td>0.5614 T+4</td>
</tr>
<tr>
<td>1999/5/4</td>
<td>-1.2422</td>
<td>1999/5/4</td>
<td>-1.67</td>
<td>-0.6722 T+6</td>
</tr>
<tr>
<td>1999/5/5</td>
<td>1.2579</td>
<td>1999/5/5</td>
<td>1.15</td>
<td>-0.2021 T+7</td>
</tr>
<tr>
<td>MHGC Equity</td>
<td>CHG_PCT_1D</td>
<td>SPX Index</td>
<td>CHG_PCT_1D</td>
<td>Abnormal Return</td>
</tr>
<tr>
<td>-------------</td>
<td>------------</td>
<td>-----------</td>
<td>------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Date</td>
<td></td>
<td>Date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007/9/11</td>
<td>-0.7202</td>
<td>2007/9/11</td>
<td>1.36</td>
<td>-2.0802 T-7</td>
</tr>
<tr>
<td>2007/9/12</td>
<td>1.2835</td>
<td>2007/9/12</td>
<td>0</td>
<td>1.2835 T-6</td>
</tr>
<tr>
<td>2007/9/13</td>
<td>4.6832</td>
<td>2007/9/13</td>
<td>0.84</td>
<td>3.8432 T-5</td>
</tr>
<tr>
<td>2007/9/14</td>
<td>0.1579</td>
<td>2007/9/14</td>
<td>0.02</td>
<td>0.1379 T-4</td>
</tr>
<tr>
<td>2007/9/19</td>
<td>3.3609</td>
<td>2007/9/19</td>
<td>0.61</td>
<td>3.8709 T-1</td>
</tr>
<tr>
<td>2007/9/20</td>
<td>1.0505</td>
<td>2007/9/20</td>
<td>-0.67</td>
<td>-1.8695 T0</td>
</tr>
<tr>
<td>2007/9/21</td>
<td>0.5446</td>
<td>2007/9/21</td>
<td>0.46</td>
<td>-0.0654 T+1</td>
</tr>
<tr>
<td>2007/9/24</td>
<td>0.3939</td>
<td>2007/9/24</td>
<td>-0.53</td>
<td>1.0639 T+2</td>
</tr>
<tr>
<td>2007/9/25</td>
<td>5.1496</td>
<td>2007/9/25</td>
<td>-0.03</td>
<td>4.6896 T+3</td>
</tr>
<tr>
<td>2007/9/26</td>
<td>2.7052</td>
<td>2007/9/26</td>
<td>0.54</td>
<td>3.2352 T+4</td>
</tr>
<tr>
<td>2007/9/27</td>
<td>-0.0908</td>
<td>2007/9/27</td>
<td>0.39</td>
<td>-0.0608 T+5</td>
</tr>
<tr>
<td>2007/9/28</td>
<td>-1.1364</td>
<td>2007/9/28</td>
<td>-0.3</td>
<td>-1.6764 T+6</td>
</tr>
<tr>
<td>2007/10/1</td>
<td>1.7011</td>
<td>2007/10/1</td>
<td>1.33</td>
<td>1.3111 T+7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OEH Equity</th>
<th>CHG_PCT_1D</th>
<th>SPX Index</th>
<th>CHG_PCT_1D</th>
<th>Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td></td>
<td>Date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011/6/28</td>
<td>6.0878</td>
<td>2011/6/28</td>
<td>1.29</td>
<td>4.7978 T-7</td>
</tr>
<tr>
<td>2011/6/29</td>
<td>-0.3763</td>
<td>2011/6/29</td>
<td>0.83</td>
<td>-1.2063 T-6</td>
</tr>
<tr>
<td>2011/6/30</td>
<td>1.5109</td>
<td>2011/6/30</td>
<td>1.01</td>
<td>0.5009 T-5</td>
</tr>
<tr>
<td>2011/7/1</td>
<td>4.186</td>
<td>2011/7/1</td>
<td>1.44</td>
<td>2.746 T-4</td>
</tr>
<tr>
<td>2011/7/5</td>
<td>-0.5357</td>
<td>2011/7/5</td>
<td>-0.13</td>
<td>-0.4057 T-3</td>
</tr>
<tr>
<td>2011/7/6</td>
<td>0.7181</td>
<td>2011/7/6</td>
<td>0.1</td>
<td>0.6181 T-2</td>
</tr>
<tr>
<td>2011/7/7</td>
<td>0.713</td>
<td>2011/7/7</td>
<td>1.05</td>
<td>0.843 T-1</td>
</tr>
<tr>
<td>2011/7/8</td>
<td>-3.6283</td>
<td>2011/7/8</td>
<td>-0.7</td>
<td>-3.7283 T0</td>
</tr>
<tr>
<td>2011/7/11</td>
<td>-5.2342</td>
<td>2011/7/11</td>
<td>-1.81</td>
<td>-6.2842 T+1</td>
</tr>
<tr>
<td>2011/7/12</td>
<td>-0.969</td>
<td>2011/7/12</td>
<td>-0.44</td>
<td>-0.269 T+2</td>
</tr>
<tr>
<td>2011/7/13</td>
<td>1.0763</td>
<td>2011/7/13</td>
<td>0.31</td>
<td>2.8863 T+3</td>
</tr>
<tr>
<td>2011/7/14</td>
<td>-5.7115</td>
<td>2011/7/14</td>
<td>-0.67</td>
<td>-5.2715 T+4</td>
</tr>
<tr>
<td>2011/7/15</td>
<td>2.2587</td>
<td>2011/7/15</td>
<td>0.56</td>
<td>1.9487 T+5</td>
</tr>
<tr>
<td>2011/7/18</td>
<td>-2.008</td>
<td>2011/7/18</td>
<td>-0.81</td>
<td>-1.338 T+6</td>
</tr>
<tr>
<td>2011/7/19</td>
<td>3.4836</td>
<td>2011/7/19</td>
<td>1.63</td>
<td>2.9236 T+7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TAST Equity</th>
<th>SPX Index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>CHG_PCT_1D</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td>2011/12/20</td>
<td>5.8986</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2011/12/21</td>
<td>2.611</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2011/12/22</td>
<td>-0.4241</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2011/12/23</td>
<td>-1.3629</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2011/12/27</td>
<td>-0.1727</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2011/12/28</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2011/12/29</td>
<td>0.0865</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2011/12/30</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/1/3</td>
<td>1.3829</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/1/4</td>
<td>-2.046</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/1/5</td>
<td>0.2611</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/1/6</td>
<td>-2.9514</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/1/9</td>
<td>-0.805</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/1/10</td>
<td>0.3607</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>2012/1/11</td>
<td>0.0898</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix E

CUMULATIVE ABNORMAL RETURNS – HOSPITALITY 7 DAYS

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Security Identifier</th>
<th>Announcement Date</th>
<th>Cumulative Abnormal Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>McDonald’s</td>
<td>MCD</td>
<td>Aug 16, 2011</td>
<td>8.128</td>
</tr>
<tr>
<td>Wendy’s</td>
<td>WEN</td>
<td>Sep 2, 2011</td>
<td>0.3711</td>
</tr>
<tr>
<td>Darden</td>
<td>DRI</td>
<td>July 15, 2010</td>
<td>3.7556</td>
</tr>
<tr>
<td>Sunstone Hotel Investors Inc.,</td>
<td>SHO</td>
<td>Dec 22, 2010</td>
<td>-1.1466</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>HOT</td>
<td>Apr 2, 2007</td>
<td>0.718</td>
</tr>
<tr>
<td>Vail Resorts Inc</td>
<td>MTN</td>
<td>Jan 31, 2006</td>
<td>-6.8725</td>
</tr>
<tr>
<td>Krispy Kreme Doughnuts Inc</td>
<td>KKD</td>
<td>Jan 24, 2005</td>
<td>-10.2456</td>
</tr>
<tr>
<td>Starbucks</td>
<td>SBUX</td>
<td>Oct 13, 2004</td>
<td>9.296</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>HOT</td>
<td>Oct 30, 2003</td>
<td>-5.0884</td>
</tr>
<tr>
<td>Darden Restaurants Inc</td>
<td>DRI</td>
<td>Sep 24, 2003</td>
<td>-12.5439</td>
</tr>
<tr>
<td>Pizza Inn Inc</td>
<td>PZZI</td>
<td>Aug 22, 2002</td>
<td>37.2038</td>
</tr>
<tr>
<td>Applebee's International Inc</td>
<td>APPB</td>
<td>Aug 6, 2001</td>
<td>-11.5998</td>
</tr>
<tr>
<td>Luby's Inc</td>
<td>LUB</td>
<td>Oct 9, 2000</td>
<td>-6.7281</td>
</tr>
<tr>
<td>CKE Restaurants</td>
<td>CKR</td>
<td>Sep 18, 2000</td>
<td>-16.4576</td>
</tr>
<tr>
<td>Starwood Hotels &amp; Resorts</td>
<td>HOT</td>
<td>May 24, 1999</td>
<td>-4.0026</td>
</tr>
<tr>
<td>Brinker International Inc</td>
<td>EAT</td>
<td>Apr 26, 1999</td>
<td>-1.314</td>
</tr>
<tr>
<td>CBRL Group Inc</td>
<td>CBRL</td>
<td>Apr 26, 1999.</td>
<td>8.1744</td>
</tr>
<tr>
<td>Morgans hotel group</td>
<td>MHGC</td>
<td>Sep 20, 2007</td>
<td>13.1991</td>
</tr>
<tr>
<td>Orient-Express Hotels</td>
<td>OEH</td>
<td>July 8, 2011</td>
<td>-1.2386</td>
</tr>
<tr>
<td>Carrols Restaurant</td>
<td>TAST</td>
<td>Dec 31, 2011</td>
<td>-1.9715</td>
</tr>
</tbody>
</table>
### Appendix F

**RAW RESULT OF T-TEST FOR DAILY CAR**

<table>
<thead>
<tr>
<th></th>
<th>CAR(T-3)</th>
<th>0</th>
<th>CAR(T-2)</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>-14.5881</td>
<td>0</td>
<td>Mean</td>
<td>12.02357</td>
</tr>
<tr>
<td><strong>Variance</strong></td>
<td>299.0872</td>
<td>0</td>
<td>Variance</td>
<td>269.4838</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>27</td>
<td>27</td>
<td>Observations</td>
<td>27</td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>#DIV/0!</td>
<td>Pearson Correlation</td>
<td>0.212298</td>
<td></td>
</tr>
<tr>
<td><strong>Hypothesized Mean Difference</strong></td>
<td>0</td>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>df</strong></td>
<td>26</td>
<td>df</td>
<td>26</td>
<td>df</td>
</tr>
<tr>
<td><strong>t Stat</strong></td>
<td>-4.3831</td>
<td>t Stat</td>
<td>3.450323</td>
<td></td>
</tr>
<tr>
<td><strong>P(T&lt;=t) one-tail</strong></td>
<td>8.56E-05</td>
<td>P(T&lt;=t) one-tail</td>
<td>0.000962</td>
<td></td>
</tr>
<tr>
<td><strong>t Critical one-tail</strong></td>
<td>1.705618</td>
<td>t Critical one-tail</td>
<td>1.705618</td>
<td></td>
</tr>
<tr>
<td><strong>P(T&lt;=t) two-tail</strong></td>
<td>0.000171</td>
<td>P(T&lt;=t) two-tail</td>
<td>0.001924</td>
<td></td>
</tr>
<tr>
<td><strong>t Critical two-tail</strong></td>
<td>2.055529</td>
<td>t Critical two-tail</td>
<td>2.055529</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>CAR(T-1)</th>
<th>0</th>
<th>CAR(T0)</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>-10.5017</td>
<td>0</td>
<td>Mean</td>
<td>6.584189</td>
</tr>
<tr>
<td><strong>Variance</strong></td>
<td>47.15249</td>
<td>0</td>
<td>Variance</td>
<td>17.24414</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>27</td>
<td>27</td>
<td>Observations</td>
<td>27</td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>#DIV/0!</td>
<td>Pearson Correlation</td>
<td>#DIV/0!</td>
<td></td>
</tr>
<tr>
<td><strong>Hypothesized Mean Difference</strong></td>
<td>0</td>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>df</strong></td>
<td>26</td>
<td>df</td>
<td>26</td>
<td>df</td>
</tr>
<tr>
<td><strong>t Stat</strong></td>
<td>-7.94677</td>
<td>t Stat</td>
<td>8.23879</td>
<td></td>
</tr>
<tr>
<td><strong>P(T&lt;=t) one-tail</strong></td>
<td>1E-08</td>
<td>P(T&lt;=t) one-tail</td>
<td>5.07E-09</td>
<td></td>
</tr>
<tr>
<td><strong>t Critical one-tail</strong></td>
<td>1.705618</td>
<td>t Critical one-tail</td>
<td>1.705618</td>
<td></td>
</tr>
<tr>
<td><strong>P(T&lt;=t) two-tail</strong></td>
<td>2E-08</td>
<td>P(T&lt;=t) two-tail</td>
<td>1.01E-08</td>
<td></td>
</tr>
<tr>
<td><strong>t Critical two-tail</strong></td>
<td>2.055529</td>
<td>t Critical two-tail</td>
<td>2.055529</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CAR(T+1)</td>
<td></td>
<td>CAR(T+2)</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------</td>
<td>-------</td>
<td>------------------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>4.497537</td>
<td>0</td>
<td>14.87467</td>
<td>0</td>
</tr>
<tr>
<td>Variance</td>
<td>40.72232</td>
<td>0</td>
<td>91.79861</td>
<td>0</td>
</tr>
<tr>
<td>Observations</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>#DIV/0!</td>
<td></td>
<td>#DIV/0!</td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>26</td>
<td></td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>3.662186</td>
<td></td>
<td>t Stat</td>
<td>8.066982</td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>0.00056</td>
<td></td>
<td>P(T&lt;=t) one-tail</td>
<td>7.56E-09</td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.705618</td>
<td></td>
<td>t Critical one-tail</td>
<td>1.705618</td>
</tr>
<tr>
<td>P(T&lt;=t) two-tail</td>
<td>0.001121</td>
<td></td>
<td>P(T&lt;=t) two-tail</td>
<td>1.51E-08</td>
</tr>
<tr>
<td>t Critical two-tail</td>
<td>2.055529</td>
<td></td>
<td>t Critical two-tail</td>
<td>2.055529</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>CAR(T+3)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>14.58896</td>
<td>0</td>
</tr>
<tr>
<td>Variance</td>
<td>190.8515</td>
<td>0</td>
</tr>
<tr>
<td>Observations</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>#DIV/0!</td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>5.487295</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>4.67E-06</td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.705618</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) two-tail</td>
<td>9.33E-06</td>
<td></td>
</tr>
<tr>
<td>t Critical two-tail</td>
<td>2.055529</td>
<td></td>
</tr>
</tbody>
</table>