

DO HEADLINE EVENTS INVOLVING SPONSORED
FIGURES IMPACT A COMPANY'S
EQUITY VALUE?

by

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ABSTRACT

This study focused on returns for publicly-traded companies who engaged in sponsorships and whether those sponsorships impacted the public's confidence in the companies' operational success and therefore the companies' financial performance. To determine how the public reacted to certain events, financial markets stood as a proxy for the public's perception of corporations and the changes associated with certain events. This event study examined the stock returns of corporations before and after the events using certain windows of time to determine whether or not the market believed the events had any bearing on the companies' fundamental values.

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INTRODUCTION

Over the last decade, the U.S. and the world have experienced strong economic growth. Because economic growth has continued to increase, consumers across the globe have increased their level of discretionary spending. This rise in discretionary spending has increased the importance of consumers casting their votes to indicate their product preference. Consumers have become increasingly brand-focused and have further found ways to distinguish products from one and other, a goal which sponsorships in past accomplish. The U.S. culture of consumption has allowed sponsorships to become more than an advertising vehicle; rather, sponsorships have become a source of entertainment. Through social media, digital marketing, and product advertisements, companies have engrained sponsorships in the U.S. culture.

As the sponsored athletes and personalities have become more visible in consumers' daily routines, sponsored individual have increasingly begun to be associated as part of the brand itself. The level of visibility seems to be twofold. Some of the growth in sponsorship prevalence is attributable to increased investments in sponsorships that seem to yield higher financial performance, and the high degree of digitalization in consumers' daily routines can largely explain the pervasiveness of sponsored content. With the connectivity of instantaneous news and data, a sponsored individual's actions draw media attention for both personal and professional relationships. In some extreme cases, as when the sponsored individual experiences a major, negative public event, the corporation must frantically react to mitigate damage to its reputation. Furthermore, as society has grown more technologically connected, so has the desire for instantaneous news. Certain actions, albeit small, by the sponsored individual create the potential for serious negative impacts to the company's sales, reputation, and value negatively.

In the last decade, corporations who have pursued a high degree of corporate social responsibility have received accolades. Thus, when a company undertakes a sponsorship, it is entrusting the sponsored individual to bolster the company's brand, rather than just maintain the company's current brand equity. This responsibility delegated to the sponsored individual has only aided in the potential for corporations to receive further public criticism when sponsorships exhibit a lapse in ethical decision-making. The new social microscope focused on corporations has taken the sponsored individuals under its lens as well. Many of the noteworthy, public issues with sponsored individuals are attributable to the constant, rigorous expectations that come with technology policing the actions of corporations and the sponsored individual's daily actions. Negative events that the media has uncovered have at times led to several public and messy sponsorship divorces. Companies are certainly aware of what a sponsorship means and of the effects it can have on their brands as a whole. Thus, companies that have invested in a sponsorship that has shown a lapse in judgement, they have felt the liability that sponsorships can cause. At times, companies have not reacted quickly or effectively enough, therefore garnering backlash in the form of decreased sales or customer perception because of the sponsored individual's actions.

Much of the previous academic research on sponsorship examines the financial implications of marketing and partnerships in a broad manner. The research often examines the marketing campaigns of major brands with a new product launch or strategic partnership, primarily focusing on the customer's retention of the marketing. Moreover, much of the past research addresses the challenges and successes of different marketing strategies and their effects on a product's popularity, but much of the past research does not dive deeper into how these marketing campaigns have affected a company's value. The academic community has not

researched sponsorships' and marketing's impact on valuation adequately, while numerous research articles have been published a companies' products and marketing strategies. This lack of research on sponsorships and its impact on valuation is one of the major research voids in academia.

The lack of research on the effects of sponsorship dollars affecting a company's value is apparent in that the vast majority of sponsorship research do not account of financial markets or valuation. Several research studies have been conducted to see what sponsorships have done to expand the market share of the company, grow sales, or marketing's impact on a company's margin, but seldom has a study explored what sponsorships have contributed to the valuation of the company. The existing research stops short of analyzing what changes in sales and profitability mean for the valuation of the company, by using financial markets as an indicator of the change in a company's fundamental valuation.

This study is relevant because it will bridge this gap in determining the true effects of sponsorship dollars for a company. A company's financial statements serve as the primary tool for fundamental financial analysis. Therefore, if markets are efficient, then the change in the stock price of the company is the market putting a price on a company's relative positioning, change in financial performance, and growth potential moving forward. While academics can speculate as to what impact marketing dollars have on a company's sales or market share, financial markets serve as a definitive way to pool countless investors who have analyzed a uniform set of data and its impact on a company's relative change in fundamental value. Using financial markets as a means of evaluating the effect of sponsorship dollars on a company's value enables this study to have a wider data pool of qualified opinions on changes in valuation, accurately connects the sponsorship dollars spent to the change in the company's valuation, and

builds upon the large amount existing research that analyzes the link between sponsorships and consumers' perceptions. This thesis seeks to examine the impact of sponsorship dollars on the equity value of a company when positive and negative events occur comparing changes in a company's stock price with the positive and negative events of the company's sponsorships.

Financial markets are volatile and sometimes overreact to certain events in the broader marketplace. Recently, many publicly-traded corporations have received criticism and pressure from investors to reduce expenses, one of which is advertising. Sponsorship dollars indeed constitute an expense, and in some cases a major one. This study aims to analyze whether sponsorship dollars are a value-add to a company or if the sponsorship dollars add little to the financial performance of a company, instead presenting the company with a needless liability for the actions of their sponsorship. While there have been numerous events studies involving a multitude of corporate events, few event studies have researched sponsorships, and fewer still have researched sponsorships and their effects on a company's value.

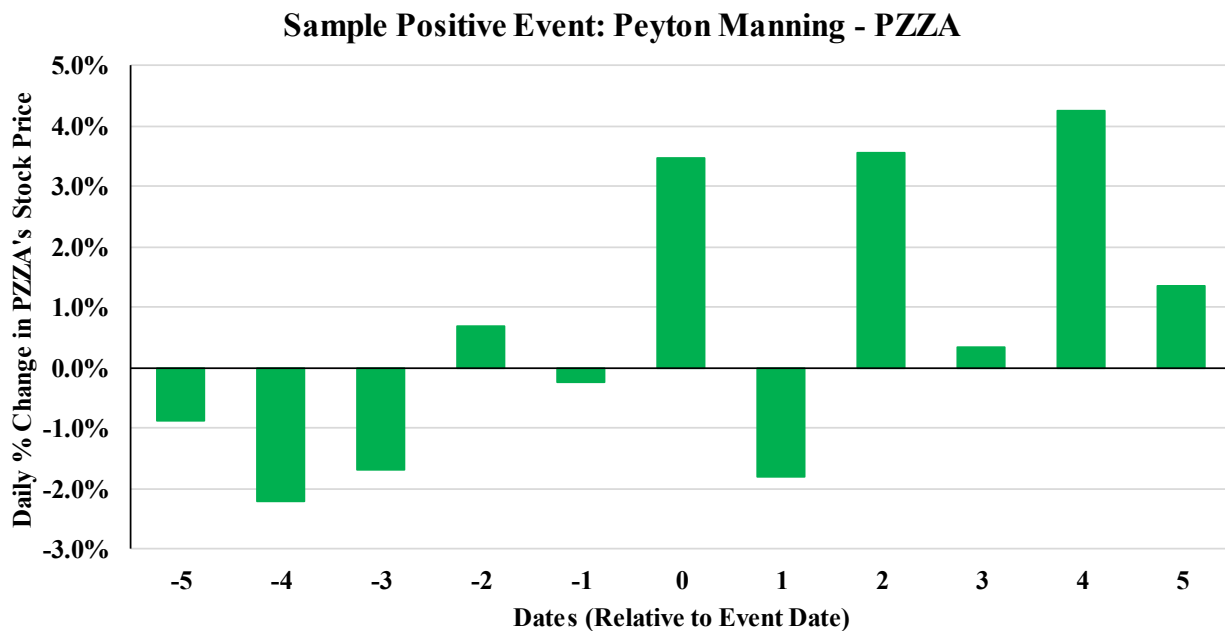
Selected Sample Individual Security Events – POSITIVE

When Peyton Manning won Super Bowl 50 in February 2016, he cemented himself as one of the greatest quarterbacks in the history of the National Football League (NFL). Prior to his victory, Peyton Manning was the noteworthy sponsored individual of Papa John's International, Inc. (PZZA). While PZZA had made great use of its future Hall-of-Famer over the course of the NFL season, leading up to Super Bowl 50 PZZA relied on Peyton Manning even more. Since its front man would be receiving enormous amounts of attention for his competing in Super Bowl 50, and the importance of Super Bowl 50 to his career, PZZA understood that his connection to the PZZA brand presented an attractive opportunity. Manning had become PZZA's main sponsored individual in October 2012, and with this sponsorship, PZZA announced that

Manning had purchased 21 PZZA franchises in the Denver Area (Papa John's International, Inc., 2012). PZZA's Chief Marketing Officer, Andrew Virga, said of Manning: "He's the kind of partner we're looking for, not only in marketing but in business" (McIntyre, 2012). Such a statement by Virga displays that Manning's connection to the PZZA brand was very prominent indeed.

Manning and the Denver Broncos would go on to win Super Bowl 50, and immediately following the Broncos' victory, Manning was seen celebrating with John Schnatter, founder and CEO of PZZA, a celebration which *The Washington Post* described the two as having "tenderly embraced" (Harwell, 2016).

The following day, February 8, 2016 (the first trading day since the event), PZZA's stock price would return +3.48%, compared to the S&P 500's return of -1.48% for the same day.



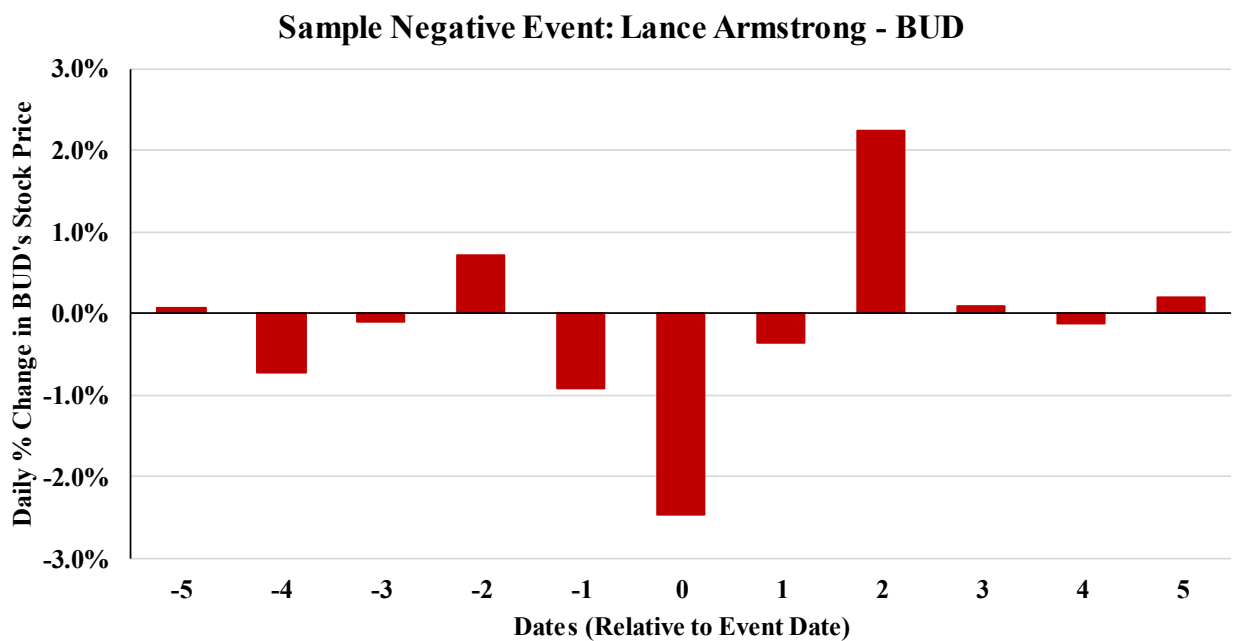
Selected Sample Individual Security Events – NEGATIVE

Lance Armstrong is one of the most famous and infamous athletes of all time. He has been viewed as heroic for defeating cancer, winning the Tour de France seven consecutive times, and becoming arguably sports' posterchild for doping. Anheuser-Busch (BUD) agreed to sponsor Armstrong in October 2009. Originally, the sponsorship seemed to be the perfect marriage. BUD had branded Michelob Ultra as "The Superior Light Beer" and "The Ultra Life," in which BUD had portrayed Michelob Ultra as an action-packed "enjoying life to the fullest" mindset. While Armstrong had not won the Tour de France since 2005, he was still a prominent figure in both cycling and sports in general. BUD had chosen a perfect time for its sponsorship of Armstrong. Armstrong had recovered from breaking his right collarbone in March 2009, and even more recently had announced that the 2010 Tour de France (the following year's race) would be his last (Macur, 2009).

While Armstrong had been repeatedly accosted with a variety of cheating allegations over nearly a decade, nothing seemed substantive until on October 10, 2012, the United States Anti-Doping Agency (USADA) released a 1,000-page report detailing the extent of Armstrong's doping. When Armstrong first signed with BUD, he told the Associated Press, "The key word is we tried to be authentic... You don't want to be in a place where you're putting your name or face or likeness in any old thing that comes along and whispers in your ear" (Fredrix, 2009). Armstrong was right about being selective about who a company should elect to sponsor, but he was not the one who should have exercised caution. One week later Nike (NKE) would cease their sponsorship / partnership with Armstrong, and end their relationship with the Livestrong brand. Shortly after NKE's announcement BUD would follow suit and end their sponsorship with Armstrong. CNBC reported that Armstrong started October 17 with "11 sponsors listed on

his website, LanceArmstrong.com. By 6 p.m. Eastern Time, all but three would renounce their relationship with the legendary cyclist” (Rotunno, 2012). October 17, 2012, would mark the beginning of Lance Armstrong’s fall from grace and the ending of the public’s infatuation with the once invincible cyclist.

The following day, October 18, 2012 (the first trading day following the event), BUD’s stock price would return -2.46%, compared to the S&P 500’s return of -0.24% for the same day.



LITERATURE REVIEW

Companies enter into sponsorships for a reason. Cornwell and Maignan noted that, “the primary goal of sponsorship is to generate positive attitudes toward companies that sponsor” (1998). The intention of the sponsorship is to achieve a higher return from the sponsorship than their initial investment, whether it be directly from increased sales or improved public perception; the end goal is better financial results. Corporations are regularly considering new sponsorships, and are seeking to donate to / sponsor events, so much so that one academic research study stated, “No matter their size, firms experience regular and sometimes overwhelming numbers of requests to sponsor sports, events, charities, the arts, and individuals” (Cornwell, 2008). The endless opportunities for sponsorship place the onus of the company to choose a sponsorship that is a wise investment. However, the corporate belief that corporate sponsorships almost always add value is flawed. While at times sponsorships may not yield a higher return than the cost of the sponsorship itself, an even greater cost can result if the sponsorship experiences negative events. A good example of how sponsorships are capable of negatively affecting a company’s value is the Olympics.

Farrell and Frame conducted a study in 1997 that analyzed the profitability and abnormal returns for corporations that elected to sponsor the 1996 Atlanta Olympics. By examining different companies and their marketing mixes, Farrell and Frame were able to compare Olympic sponsoring companies’ changes in stock price before and after the companies made their Olympic sponsorship announcements. Farrell and Frame concluded that companies’ increasing their level of sponsorship involvement has driven up the fees demanded by the event. Farrell and Frame’s results indicated that those companies that announced their sponsoring of the 1996 Atlanta Olympics experienced negative, abnormal returns around the time of announcement of

Olympic sponsorship agreements, which could potentially be attributable to those companies' obligations to make large future payments for those sponsorship fees.

As many companies have elected to increase their level of involvement with Olympic sponsorships, such as Coca-Cola, the fees charged by the Olympic organization have grown (Farrell & Frame, 1997). Farrell and French allege that many corporate sponsorships lack the necessary visibility from the consumer and that the sponsorship agreements may at times be too short-term focused (1997). Addressing the possibility of long-term corporate sponsorships' potential for financial viability, Farrell and French state:

Anecdotal evidence suggests that long-term Olympic partnerships may be more value-enhancing due to the learning curve associated with optimally tying products to the Games, as well as the accumulation of goodwill. In fact, some worldwide sponsors (such as Coca-Cola, Eastman-Kodak, and Visa International) have had long-standing relationships with the Olympic Games and are continuously promoting their involvement. In essence, these firms have integrated Olympic sponsorship into their long-term marketing strategies (Farrell & Frame, 1997).

Many sponsorships exist for extended periods. One would assume that these sponsorships experience longevity because the company deems the sponsorship beneficial and financially effective. Moreover, because companies consistently utilize sponsorships, companies must have a means of measuring the results and analyzing the sponsorship's impact on their financial success. This, therefore, leads one to conclude that companies have the tools in place to determine the extent of sponsorship's financial impact to their company, whether positive or negative. While logic would tell one that companies are not blindly gambling on their sponsorship investments, some research seems to indicate that companies may not be doing their

full due diligence on their sponsorship investments. In fact, some research has noted that several companies have developed a quasi-groupthink mentality when it comes to sponsorships.

Some academic research seems to indicate that some companies have elected to pursue sponsorships simply because they have seen other companies continually invest in sponsorships. Therefore, some companies operate under the belief that other companies investing in sponsorships is effectively an affirmation that sponsorships constitute a wise investment, rather than adequately examining the financial results attributable to their own sponsorships. Tony Meenaghan discusses the lack of corporations conducting analysis on the performance of their sponsorships, by saying, “Research budgets for performance evaluation are frequently inadequate or nonexistent and sponsorship decision makers are cognizant of their lack of adequate performance measurement while equally aware of increased demands for greater accountability” (Meenaghan, 2011). This statement by Meenaghan appears to indicate that little to none of the sponsorship budget is allocated to accurately assess whether the sponsorship itself is a profitable investment. Therefore, the inadequate level of resources allocated to sponsorship performance assessment raises questions about the effectiveness of sponsorships in general.

Cornwell, Weeks, and Roy conducted a study in 2008 that aimed to measure the effectiveness of sponsorships within a marketing context. The study analyzed how consumers perceive the sponsorship and examined the effectiveness of the sponsorship in a variety of contexts, particularly by analyzing the consumer’s memory. What makes a sponsorship effective is more than just seeing the branded product or a particular person adoring the product; the sponsorship must make a lasting impact. The goal of the sponsorship is to directly alter the consumer’s preference or to influence the consumer’s decision-making, consciously or subconsciously. Cornwell, Weeks, and Roy stressed that while much of the past academic

research centered on how a single sponsorship influences the consumer, there remains a need for further research on how multiple sponsorships interact together.

It would appear that companies do not place restrictions on the other companies their sponsored individual is further sponsored, so long as the additional sponsorships' business do not compete with one and other. Yet, when the same sponsored individual begins to represent more than one company, the companies begin to compete for a single sponsored individual's ability to affect consumers. Moreover, the interactions between an individual's multiple sponsors begins to greatly impact the consumer's memory. As Cornwell, Weeks, and Roy state, "one must also recognize that this approach might reduce sponsor distinctiveness; thus, empirical research is needed" (2005). This statement supports the idea that one sponsored individual having several, different companies' sponsorships may distort the effects of each individual sponsorship. Much of the extant academic research analyzes sponsorships' effectiveness on a consumer's decisions, but little of it addresses companies' sponsoring the same individual and the impacts of a sponsored individual having more than one sponsorship agreement.

When a corporation decides an individual is a suitable person to represent their brand, there is a process to assess the individual's success, notoriety, and relatedness to the company. However, making this decision is no mean feat. One study describes the decision and investment criteria well when it says, "In this era of accountability, intense challenges exist for corporate sponsors to choose both the right sponsorship partner—and invest valuable marketing resources at the appropriate level to realize a return for the sponsor's investment" (Jensen & Cobbs, 2014). If the individual far exceeds the required threshold in several of these metrics, then other companies in all likelihood will consider similar investments in the same individual. One study said of the importance of companies investing in their sponsorships, "The notion of

‘sponsorship-linked marketing’ accentuates the fact that the marketing communication value of the sponsorship is null unless the sponsor actively promotes the relationship established with the organizer of a special event or activity” (Cornwell & Maignan, 1998). Of the three components important for the sponsored individual to possess, the relatedness portion is the only component that the company is able to change through its sponsorship strategy. One research study, in *The International Journal of Advertising* states about the relatedness of sponsorships, “Sponsors, as mentioned earlier, may be similar to the event either in terms of functionality or image. But it is obvious that, in the real world, the classification cannot be so clear and absolute” (Poon & Prendergast, 2006). In fact, the relatedness component is paramount to a company’s sponsorship strategy.

Regardless of how initially related the sponsorship is to the consumer, the sponsorship must deepen the link between the sponsored individual and the consumer, thereby connecting the sponsoring company to the consumer. Chingching Chang says in regards to sponsorship effectiveness, “A primary objective of sponsorship and CRM is to increase awareness of the association between the cause and the sponsor, usually accomplished with advertising and media coverage” (Chang, 2012). This statement by Chang shows that companies are indeed aware of the connection between the sponsorship and the consumer, and that a large portion of a company’s advertising budget is used to enhance this connection. Additionally, it is important to understand that the degree of connection between the consumer and the sponsored individual stems from the relationship between the sponsored individual and the company. This connection between the company and the sponsored individual, and the sponsored individual and the consumer must appear authentic. One study in the *Journal of Advertising* summarized the importance of the connection between the sponsor and the sponsorship when it stated,

“relevantly paired sponsors and sponsees can prompt a greater persuasion than irrelevant sponsors and sponsees” (Rodgers, 2003).

Cornwell, Pruitt, and Clark conducted a study in 2005 on sponsorships among major sports organizations and whether having the title as the “official sponsor” affected the companies’ value. In their event study, the authors analyzed the announcement of a company’s product as the “official product” for five of the major U.S. sports leagues that were “ball and stick” sports and the impact the announcement had on the sponsoring company’s stock price before and after the announcement (2005).

Addressing the concerns of Cornwell, Weeks, and Roy, official sponsorships allow the sponsoring company to know that their product will be the only one with the label “official product” for a certain kind of product in that particular U.S. sports league. This label gives the sponsoring company a degree of certainty when it is looking at the competitive landscape for a single U.S. sports league. Cornwell, Pruitt, and Clark concluded that the announcement of a corporation’s product as the “official product” led to the corporation’s stock price experiencing a positive abnormal return, an increase in shareholder wealth, and a mean increase in stock valuations of \$257 million. The authors further noted that, “investors perceive companies with smaller product market shares as having more to gain from official sports sponsorships than those holding more dominant positions” (Cornwell, Pruitt, & Clark, 2005). This study’s findings supported the claim that the status of the product influences the sponsoring company’s stock price returns in a positive abnormal manner. Finally, this study may address some of the issues that Cornwell later addressed in her subsequent study, *Sponsorship-Linked Marketing: Opening the Black Box*, as the company’s product receiving the title of “official” differentiates the company’s products from those of competitors.

Since not all companies' products are labeled as the "official" product, some companies may seek to blur this ability for consumers to distinguish from the true "official" product. One study claims that some companies seek association with an event, despite these companies not being "official" sponsors. Kelly, Cornwell, Coote, and McAlister published a study examining some of these companies who seek association despite lacking a title, in which they labeled some of these companies "ambushers." Additionally, the study also said of the battle between official sponsors and ambushers:

While advertising often 'uses news' to connect to meaningful events, sponsorship contracts create a special category of advertisers that have official rights to event affiliation. In fact, sponsorship-linked marketing creates two special categories of advertiser: those officially linked to the event and those that seek association with the event but have no legitimate link (i.e. 'ambushers') (Kelly, Cornwell, Coote, & McAlister, 2012).

This excerpt from the study shows that once one company's sponsorship earns a distinction from some of the competing company's sponsorships, some companies find ways to blur the distinction.

One study that analyzed sponsorship effectiveness examined results of sponsorships for companies that had sponsored more than one individual. The results indicated that this decision affected the companies' overall results attributable to sponsorships. An excerpt from the study stated, "Consumers confer a benefit onto events sponsored by one goodwill-oriented firm, and adding a second sponsor dilutes benefits normally obtained from consumers inferring a goodwill sponsorship motive" (Ruth & Simonin, 2006). These issues with the official status of a sponsorship and competing companies striving to blur a competing company's product distinction are an indication that at times the sponsorship itself is not as important as the

consumer's perception. Dean sheds light on the importance of sponsorships, goodwill, and public perception in a 2002 study "Event sponsorships resulted in a significant enhancement of corporate community relations" (Associating the Corporation with a Charitable Event through Sponsorship: Measuring the Effects on Corporate Community Relations). Finally, when one is considering the consumer's perception, it is important to take into account the consumer's overall level of brand familiarity with both the company's product and the products in the broader industry.

Carrilat, Lafferty, and Harris conducted a study in 2005 on sponsorships and the sponsoring corporation's degree of consumer brand familiarity. When a corporation undertakes a sponsorship investment, it does so in the hope that its financial performance or public perception will improve. While at times the company may realize both of these sponsorship objectives, there is no guarantee that either of these sponsorship objectives may materialize. The building block for both of these metrics is brand familiarity. To garner brand familiarity, part of the sponsorship investment itself may be making consumers aware of the existence of a certain type of a product, before the company begins pushing its own, company-specific product.

In a research study on sponsorship awareness over time, authors, Walraven, Bijmolt, and Koning state, "When a sponsor aims to reach non-brand users with its sponsorship, it needs to invest more in the creation of sponsorship awareness than it would for a sponsorship directed at existing users of the brand" (Walraven, Bijmolt, & Koning, 2014). This excerpt supports the idea that the sponsorship is partly intended to increase broad industry or product awareness, thus showing that the level of familiarity consumers have with the product or industry is critical for the company to understand when making decisions regarding sponsorships.

For a sponsorship to be successful, the consumer must not only notice it, but the consumer must also retain the memory or experience of seeing the sponsorship. The consumer's ability to recall the sponsorship is what ultimately will affect the consumer's decision-making. The consumer's degree of brand familiarity influences when the consumer initially notices the sponsorship and the consumer's ability to recall their reaction to the sponsorship. Carrilat, Lafferty, and Harris's study showed "the effects of sponsorship on attitudes and purchase intentions were greater for low familiarity sponsoring brands than for high familiarity sponsoring brands" (Carrilat, Lafferty, & Harris, 2005). Their research demonstrates that the level of brand familiarity a corporation has prior to investing in a sponsorship materially impacts the realization from their sponsorship. Moreover, this study may indicate that a high degree of sponsorship in an industry is dilutive to the overall effects of sponsorships in that industry. Therefore, once sponsorships have collectively educated the consumer about the different brands in the industry, increasing brand familiarity, then do sponsorships yield diminishing returns? The results are mixed. In fact, some research seems to support the claim that consumers already being familiar with a company's brand, through its logo, may limit a sponsorships effectiveness.

One study that examined sponsorships in Division I college basketball says, "sponsors could expect limited (or even no) sponsorship effects in terms of increasing brand attitude by only brand/logo exposure when their brands are well known and familiar to sports fans" (Lee & Pedersen, 2011). In other words, companies with which the consumer is already familiar may have less of an ability to influence the consumer through sponsorships. Collectively, it appears that the degree of familiarity the consumer has with an industry or company-specific product has some bearing on the realization of sponsorships, with a higher degree of initial brand familiarity appearing to negatively affect the realization of the sponsorship. Moreover, when making

assumptions about consumers' perceptions or reactions, it is important to remember that human reactions and emotions are unpredictable. In fact, human emotion can also influence event sponsors' judgment (Wang & Kyriaki, 2013). Human emotions are always a factor when assessing the results of sponsorships and are nearly impossible to isolate or to adjust for in scientific research.

METHODOLOGY

This event study utilized the Wharton Research Data Services Database to find a security and portfolio's expected returns, actual returns, beta, and abnormal returns as well as the historical returns of the market for both an estimation window and event period. Brown and Warner define an event study as "the impact of a particular types of firm-specific events on the prices of the affected firm's securities" (Measuring Security Price Performance, 1980). The first major consideration when conducting an event study is what constitutes an event that should be included in the study. This study sought to include well-known events, in which the sponsoring company was publicly traded, and the event was directly attributable to the actions of the sponsored individual.

While events involving sponsored individuals occur countless times in a given day, the magnitude of the event is a key consideration when assessing the impact the event could potentially have on a company's value. Many events that had a high probability of affecting a company's value were excluded for a variety of reasons, including but not limited to: changes in management; merger & acquisition-related news; earnings releases; or other major, company-specific events that at times could distort the impact of the isolated event and its impact on the company's value. Moreover, the sponsored individuals in the study were chosen to be included only if the sponsorship was one of their main endorsements, as opposed to a sponsorship that is barely associated with the individual, and if the company was very connected to the individual.

The association between both the sponsored individual and the company is important because companies that are extremely large with numerous product lines, business segments, and sponsorships dilutes the importance of a single sponsorship to the company, thus limiting the importance of an event involving the sponsored individual to the company. Some academic

research claims that sponsorships cannot influence purchasing behavior due to their limited size ability to limited ability to persuade; therefore, extremely large companies with sponsors whose professions, identities, or lifestyles are unrelated to the products they are sponsoring were excluded from this study (McDonald, 1991). The next step in this study was deciding whether a reasonable person would classify the event as positive or negative. For example, while a company dropping a sponsored individual following a very negative event may help with public perception, it would not be appropriate to classify the event itself as positive. Moreover, the correct way to analyze such events would be to analyze each situation separately and to determine if the event was positive or negative. Additionally, when the negative event first occurred involving the sponsored individual the event would be classified as a negative event, assuming the event would negatively influence the company, and when the company acted on the event, by either discontinuing or affirming their relationship with the sponsored individual, this express or implied action would be treated as a separate event, regardless of whether the second event was positive or negative. After these considerations and parameters, this study elected to use an event study as a means to determine whether an event contributed to a security or portfolio of securities experiencing an abnormal return, and if an abnormal return did in fact occur, what the abnormal return of the security or portfolio of securities was during certain periods.

This particular event study sought to use the Market Model as the method for determining whether an event caused the individual stocks or portfolios in the study to exhibit abnormal returns. Since event studies assume that markets are efficient and unbiased, this methodology is able to derive what the change in price was to the market's expectation from a single event.

Furthermore, once the abnormal returns were calculated, they were analyzed to determine whether the abnormal returns were statistically significant.

The Market Model, which stems from Fama & French's Capital Asset Pricing Model ("CAPM"), adjusts for the stock or portfolios' beta and the return experienced by the market during the time period being studied (Fama & French, 2004).

$$E(R_i) = \hat{\alpha}_i + \hat{\beta}_i * R_M$$

$E(R_i)$ = the expected return on the security

$\hat{\alpha}_i$ = alpha, an intercept estimated by the equation.

$\hat{\beta}_i$ = beta, the market sensitivity of the security

R_M = the return on the market

Where $\hat{\alpha}_i$ and $\hat{\beta}_i$ are calculated from the estimation window, which is prior to the event date (Brown & Warner, Using Daily Stock Returns, 1985).

The Market Model uses the historical returns to calculate the abnormal returns of a security or a portfolio of securities. To conduct this analysis, the Market Model requires that one collects the security or portfolio's returns a few days prior to the event date, "Day Zero." These "normal" historical returns are used to derive the security or portfolio's historical beta. By regressing the historical returns of the security or portfolio to that of the market during the same period, one can calculate the historical beta of the security or portfolio. Once the historical beta has been determined from the event window, the Market Model can be employed to determine if abnormal returns did in fact occur. Abnormal returns are calculated as Actual Returns minus Expected Returns as shown on the following page:

$$\text{Abnormal Returns} = (R_i) - E(R_i)$$

Where (R_i) represents the actual return on the security and where $E(R_i)$ is defined above.

Estimation Window

The Market Model begins with an estimation window. The estimation window was selected to find what constitutes the expected / normal returns for the security or portfolio. For this event study, the estimation window assumptions were:

End Before Event Date (EST): -46

Minimum Estimation Length (MINESTN): 80

Maximum Estimation Length (ESTLEN): 255

This means that the event required 80 days of returns, 46 days prior to the event. Therefore, the company must have been public for 126 trading days prior to the event occurring. This distinction between a calendar day and trading day is important. The event itself may have occurred on a weekend or a holiday, but the event date used in the study would be the first trading day for the security for the event itself, Day Zero.

Event Date

When deciding what should be classified as the event date for calculating abnormal returns, there are several decisions to consider. First, the more important part of deciding the event date is deciding when the market became aware of the event, thus when the market would price in the event. Therefore, the event date, Day Zero, indicates the first day the market had a chance to react to the event. Second, is determining whether the event was a single event or if it was multiple events. This becomes tricky in deciding whether subsequent events were reactionary, or standalone, as multiple close events can distort the return results. Finally, it is

important to use event dates that fall on trading days. Thus, the event date, Day Zero, should be determined to see when the market became aware of the news of the event, and if the day the market became on a non-trading day, then the event date, Day Zero, was the first trading day that followed.

Event Period

The next step in the event study is deciding what constitutes the event period. Since the estimation window and the event period are separate components in the Market Model equation, this study does not allow two separate periods to overlap, so that the security or portfolio's beta and expected return would be separate from the actual return experienced during the event period.

This study elected to use an event period of 30 days before the event to 30 days after the event, which is represented as $[-30, 30]$ and the event date, Day Zero, for all events, thus analyzing the daily returns for the security or portfolio for each of those 61 trading days. However, building on the assumption that markets are efficient and unbiased, specific alternative windows closer to Day Zero were used to further analyze whether abnormal returns occurred during periods closer to the day of the event. All of the estimation windows, event periods, and additional event windows were the same for both the positive portfolio, negative portfolio, and individual security analysis.

The Market Model adjusts its returns for both the market's returns and the stock or portfolio's beta, when determining whether the stock or portfolio experienced abnormal returns. Additionally, the Market Model is mathematically able to determine what the abnormal return of the event is for the stock or portfolio by subtracting the market's expected return from the actual return.

One of the key benefits of using multiple event windows to assess whether abnormal returns to did occur is that multiple windows are able to show the earliness or delay in the market receiving information, as well as the market's lag in determining how the new information impacted the company's value. Moreover, in the context of using multiple windows for a portfolio of securities, the multiple windows reduce broader market movements which enables the returns from the portfolio to solely event-specific.

Portfolio Considerations

This study elected to separately analyze abnormal returns in two different buckets: a portfolio of securities that had positive events and a portfolio of securities that had negative events. This decision was made for a variety of reasons. The first reason that this study selected to analysis the returns in these different buckets because positive events and negative events should, in theory, impact the market in inverse ways, as positive events should affect the company's fundamental value in a positive way and negative events should affect the company's fundamental value in a negative way. Since, the events were treated as separate events, this decision allowed the study to accurately determine if the portfolios affected the collection of companies' fundamental values in a way that a reasonable person would anticipate. The other rationale behind the decision to focus on the portfolios of events was to diversify away some broader firm-specific movements through portfolio diversification. While this study does compare firm-specific events, it is important to note that the returns of the portfolios should just be those returns that are solely comprised of selected firm-specific events through diversification, rather than diversifying away the results the study aims to analyze.

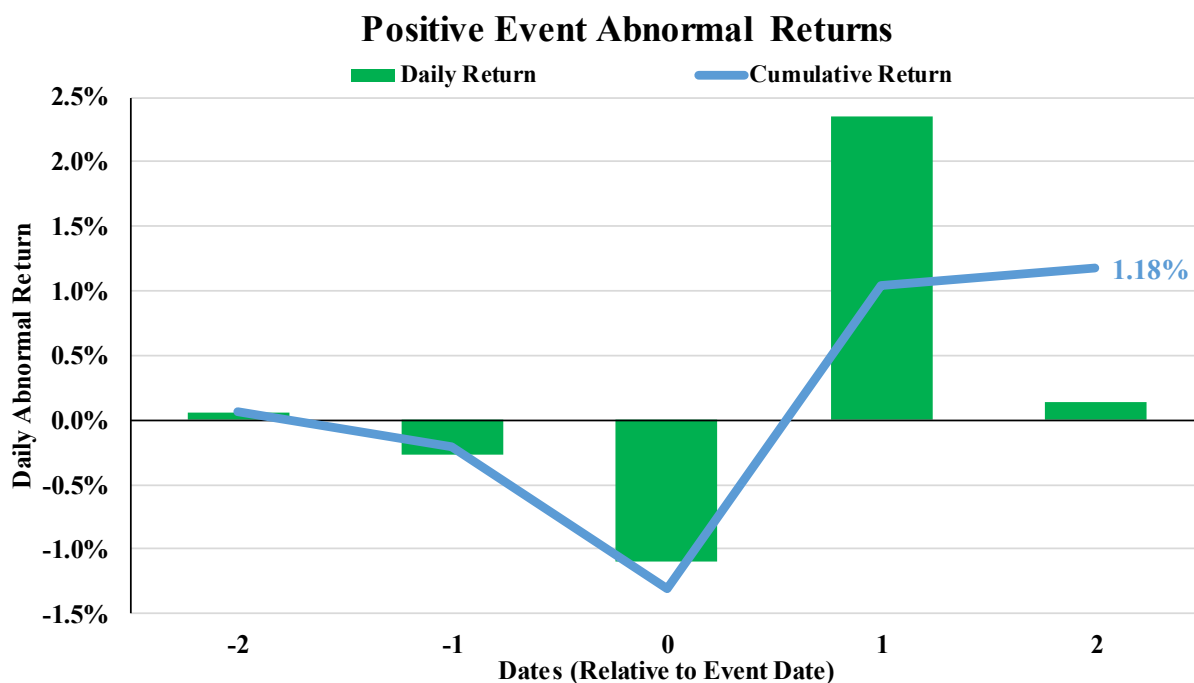
RESULTS

The results from an event study are as much of a critique of the event study assumptions and methodology as they are analysis of abnormal returns from the study itself. Additionally, the results of the event study have the potential to yield drastically different results if a single day's return are elected to be included or excluded in the security or portfolio's estimation window or event period. Brown and Warner noted that when interpreting the results of event studies, "Results are critically dependent on the assumption that the precise time at which the abnormal performance occurs is known with certainty" (1980). This statement by Brown and Warner shows that the assumptions made for the estimation window, event period, and event date are what ultimately drive the results, for if the event date was inaccurately presumed to fall after the market was aware of the event, then the security's stock price should in theory already represent the company's fundamental value post-catalyst. Finally, it would be expected that if the event were to cause the security or portfolio to experience abnormal returns, that the abnormal returns would be closer to the event date, or Day Zero; therefore, this event study focused more on the returns that were closer to Day Zero. If in fact the security or portfolio experienced abnormal returns prior to the assumed Day Zero, then it poses the question whether there had been leakage prior to the formal announcement / assumed release of information, or whether the assumed abnormal return prior to Day Zero was the market pricing in the information before it was widely known or formally released. This early release of information impacting a company's stock price prior to the information being widely known or available is known as information leakage.

The results were analyzed in several different groups so that the results would be comparable, thorough, and accurate. The three different sets of data were individual securities, a portfolio of positive events, and a portfolio of negative events. The portfolio of positive and

negative events were analyzed separately because they are expected to move inversely of one and other, and if the results were compared together, than the findings would yield an accurate set of data to prove anything. One would broadly assume that positive events would typically be positive for the security or portfolio's value, and that negative events would typically be negative for the security or portfolio's value.

Positive Portfolio Data



The positive portfolio data experienced nine days of abnormal returns at a confidence interval of at least 90% using the Generalized Sign Z non-parametric test and fourteen days of abnormal returns at a confidence interval of at least 90% using the Patell Z parametric test during the event period +/- 30 days [-30, +30]. Of the Generalized Sign Z's nine statistical significant abnormal returns for the period [-30, +30], only two of those returns were positive abnormal returns. Of the Patell Z's fourteen statistical significant abnormal returns for the period [-30, +30], only five of those returns were positive abnormal returns. The majority of statistically significant abnormal returns occurred prior to the event date (for both the Generalized Sign Z

non-parametric test and for the Patell Z parametric test, despite the major swings in positive and negative daily abnormal returns. The relatively small number of days with statistically significant positive abnormal returns supports the notion that positive events involving notable sponsored figures may not affect a company's stock price in a positive way on a daily basis.

However, when analyzing the positive portfolio data with an event window greater than one day, the positive portfolio data seems to yield an interesting result. The positive portfolio data experienced statistically significant positive abnormal returns for the event date and the three days that followed. For the first day, the event date $[0, 0]$, the positive portfolio experienced an abnormal return of +2.35%. This abnormal return was statistically significant at a 90% confidence interval using the Generalized Sign Z non-parametric test and was 99% statistically significant using the Patell Z parametric test.

For the event window that included the event date and the following day $[0, +1]$, the positive portfolio experienced an abnormal return of +2.48%. This abnormal return was statistically significant at a 90% confidence interval using the Generalized Sign Z non-parametric test and was 95% statistically significant using the Patell Z parametric test.

For the event window that included the event date and the two following days $[0, +2]$, the positive portfolio experienced an abnormal return of +3.24%. This abnormal return was statistically significant at a 90% confidence interval using the Generalized Sign Z non-parametric test and was 95% statistically significant using the Patell Z parametric test.

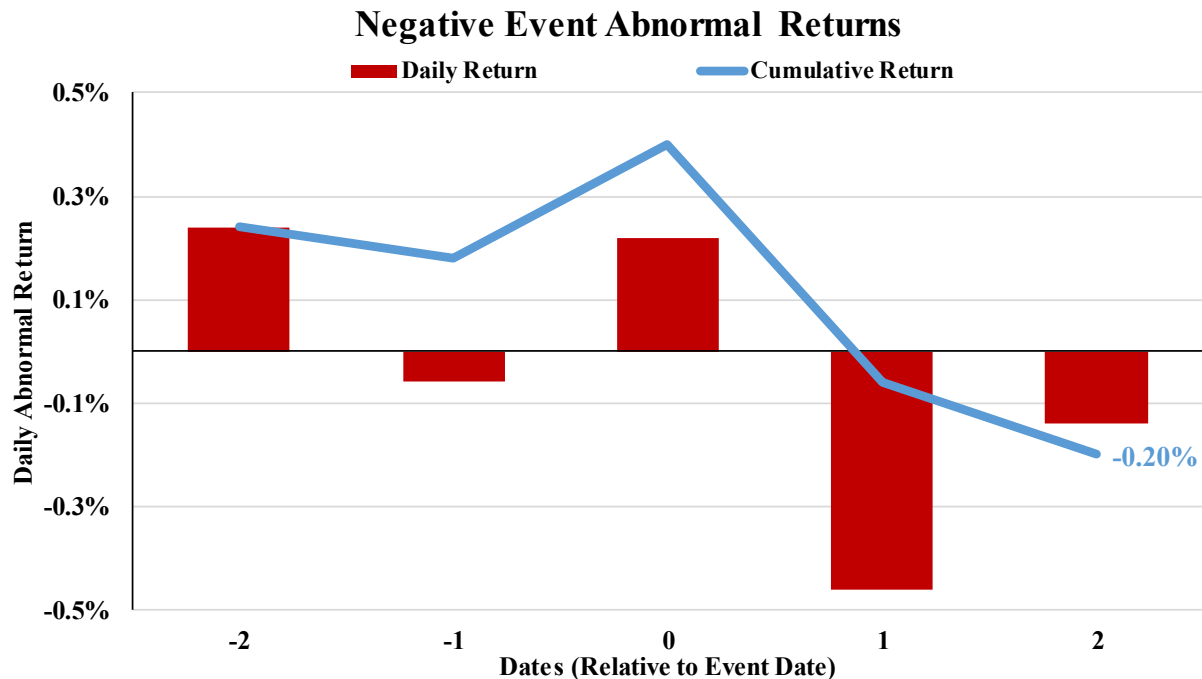
For the event window that included the event date and the two following days $[0, +3]$, the positive portfolio experienced an abnormal return of +3.49%. This abnormal return was statistically significant at a 90% confidence interval using the Generalized Sign Z non-parametric test and was 95% statistically significant using the Patell Z parametric test.

For the event window that included the event date and the two following days $[0, +4]$, the positive portfolio experienced an abnormal return of +4.10%. This abnormal return was not statistically significant using the Generalized Sign Z non-parametric test and was 95% statistically significant using the Patell Z parametric test.

During a multiple day period that begins on the event date, positive events may affect a company's value in a statistically significant abnormal manner.

As the "Positive Event Abnormal Returns" chart shows during the period $[-2, 0]$, the Positive Portfolio experienced negative cumulative abnormal returns leading up to the event date. Yet, the day $[-1, +1]$ that followed the event date experienced an abnormal return greater than +2.0%, and a cumulative abnormal return greater than +1.0%. Moreover, the final day $[+2, +2]$ for the period shown in the "Positive Event Abnormal Returns" chart experienced a statistically significant abnormal return using the Generalized Sign Z non-parametric test, despite the last day's return only being +0.25%. Yet during the five-day period $[-2, +2]$, the total cumulative abnormal return was +1.18%. Moreover, during the three-day period $[0, +2]$, the cumulative abnormal return was +1.39%, and the two-day period $[+1, +2]$ return was +2.49%. These results clearly support the theory that positive events do positively impact a company's value, especially in the first few days following the event date.

Negative Portfolio Data



The negative portfolio data experienced thirteen days of abnormal returns at a confidence interval of at least 90% using the Generalized Sign Z non-parametric test and eleven days of abnormal returns at a confidence interval of at least 90% using the Patell Z parametric test during the Event Period +/- 30 days [-30, +30]. Of the Generalized Sign Z's thirteen statistically significant abnormal returns for the period [-30, +30], only seven of those returns were negative abnormal returns. Of the Patell Z's eleven statistically significant abnormal returns for the period [-30, +30], only five of those returns were negative abnormal returns.

When analyzing the negative portfolio data, it appears that those abnormal returns that were significant during the entire period, +/- 30 days from the event date [-30, +30], seem evenly dispersed between pre- and post-event date, using both the Generalized Sign Z non-parametric test and the Patell Z parametric test. The largest cluster of statistically significant abnormal returns (both positive and negative) seems to have occurred within +/- 15 days from the event date [-15, +15], using both the Generalized Sign Z non-parametric test and the Patell Z

parametric test. The negative portfolio data, especially during this ten-day period, seems to strongly suggest that negative events involving key sponsored individuals negatively impacted the negative portfolio's data.

However, when analyzing the negative portfolio data with an event window greater than one day, the negative portfolio data yields a result that is seemingly contrary to the positive portfolio data. The negative portfolio data experienced statistically significant negative abnormal returns for five individual days during the period $[0, +9]$, according to the Generalized Sign Z test, whereas the Patell Z test had three individual days of statistically significant negative abnormal returns for the same period.

The chart on the previous page entitled "Negative Event Abnormal Returns" shows a five-day period, $[-2, +2]$. For first three days of the period $[-2, 0]$, the negative portfolio data experienced relatively large swings in its daily abnormal return. Furthermore, until the day following the event date $[+1, +1]$, the cumulative abnormal return for the period $[-2, 0]$ were surprisingly $+0.40\%$, which is a typical of negative events. Yet, on the day that immediately followed the event date, $[+1, +1]$, the daily abnormal return was -0.46% . On $[+1, +1]$ the negative portfolio data would end with a cumulative abnormal negative return of -0.06% for the period $[-2, +1]$. The last day $[-2, -2]$ of the five-day period $[-2, +2]$, shown in the chart "Negative Event Abnormal Returns," also had a negative daily abnormal return of -0.14% , which would make the cumulative abnormal return for the total five-day period $[-2, +2]$ total -0.20% .

DISCUSSION

The results of this study seem to indicate that both positive and negative events can impact the value of a company. For both the positive and negative portfolios, the daily return on the event date seemed to move inversely to what one would expect to occur on the event date, Day Zero. Even more interesting than the event date not yielding a logical result is the fact that on [+1, +1], the day following the event, the most extreme logical abnormal returns occurred. One would expect that on the first trading day following the event date the market would have its reaction, rather than waiting for the subsequent trading day. A way to rationalize these results is that the market pools and analyzes all known, relevant pieces of information before acting in a way that impacts a company's value. Therefore, on the event date the market could be conducting further research on the magnitude of the event and any other applicable data points before buying or selling the security.

While this study sought to only include events where no other major, company-specific events occurred during the event period, it is hard to separate all events that the market uses when determining on a company's fundamental value. Moreover, at times events can occur for one company that the market uses as a data point when pricing the fundamental value for another company. Events such as these make it exceedingly difficult to choose events, where all events that have the potential to impact a company's value outside of the event involving the sponsored individual are removed.

Corporations' takeaways from this study do not lie in the numbers. While this study's data yielded negative results for negative events, and positive results for positive events, broadly speaking this study does not speak for all corporate sponsorships. Companies should be cognizant that sponsorships have the potential to impact their value, thus companies should have

a legal contract in place to protect against a sponsored individual acting in a negative manner. Having a clause in place to protect against negative events, or to compensate a company for a sponsored individual's negative actions will challenge the sponsored individual to self-govern their behavior in a manner that is aligned with the company's goals. Moreover, another way to align a company's sponsored individual could be to compensate the sponsored individual in the form of stock options, ensuring the financial success of the company is dependent on the sponsored individual's actions, and the sponsorships compensation is dependent on the company's success.

Another takeaway from this study is that companies should have crisis management procedures outlined to mitigate negative events if they occur. While a sponsored individual may strive to act in an ethical manner, a negative event could still occur that would negatively impact the sponsoring company. Thus, if the sponsoring company does actively seek out strong sponsorships, negative events may still occur. By having a crisis management plan in place, companies are prepared to minimize the downside of negative events and protect the firm's market value. Regardless of the protocol the company elects to implement to combat negative events involving its sponsored individuals, the company must be poised to act agilely. This study shows that sponsorships can influence companies' values, and if companies are not actively conducting quality due diligence on their sponsored individuals and implementing quick-acting crisis management programs, they can fall victim to negative events involving their sponsored individuals to the detriment of the companies' market values.

REFERENCES

- Brown, Stephen J and Jerold B. Warner. "Measuring Security Price Performance." *Journal of Financial Economics Volume 8* (1980): 205-258. Document.
- Brown, Stephen J and Jerold B. Warner. "Using Daily Stock Returns." *Journal of Financial Economics Volume 14* (1985): 3-31. Document.
- Carrillat, François A, Barbara A Lafferty and Eric A Harris. "Investigating sponsorship effectiveness: Do less familiar brands have an advantage over more familiar brands in single and multiple sponsorship arrangements?" *Journal of Brand Management* (2005). Document.
- Chang, C. (2012). The effectiveness of advertising that leverages sponsorship and cause-related marketing: A contingency model. *International Journal of Advertising*, 31(2), 317-338.
- Cornwell, T. B. (2008). State of the Art and Science in Sponsorship-Linked Marketing. *Journal of Advertising*, 37(3), 41-55.
- Cornwell, T. B., & Maignan, I. (1998). An International Review of Sponsorship Research. *Journal of Advertising*, 27(1), 1-21.
- Cornwell, T. B., Pruitt, S. W., & Clark, J. M. (2005). The Relationship Between Major-League Sports' Official Sponsorship Announcements and the Stock Prices of Sponsoring Firms. *Journal of the Academy of Marketing Science*. Volume 33, No. 4, 401-412.
- Cornwell, T. B., Weeks, C. S., & Roy, D. P. (2005). Sponsorship-Linked Marketing: Opening the Black Box. *Journal of Advertising* vol. 34, no. 2, 21-42.
- Dean, D. H. (2002). Associating the Corporation with a Charitable Event through Sponsorship: Measuring the Effects on Corporate Community Relations. *Journal of Advertising*, 31(4), 77-87.

- Fama, Eugene F and Kenneth R. French. "The Capital Asset Pricing Model: Theory and Evidence." *Journal of Economic Perspectives—Volume 18, Number 3* (2004): 25-46.
<http://www-personal.umich.edu/~kathrynd/JEP.FamaandFrench.pdf>.
- Farrell, Kathleen Anne and Scott W. Frame. "The Value of Olympic Sponsorships: Who is Capturing the Gold?" *Journal of Market Focused Management* (1997): 171-182.
Document.
- Fredrix, Emily. "Lance Armstrong to be spokesman for Michelob Ultra." *The Associated Press via The San Diego Tribune* (2009). <http://www.sandiegouniontribune.com/sdut-us-lance-armstrong-michelob-100609-2009oct06-story.html>.
- Harwell, Drew. "The real story of Peyton Manning's weird love for Budweiser, Papa John's and Gatorade." *The Washington Post* 8 February 2016.
https://www.washingtonpost.com/news/the-switch/wp/2016/02/08/the-real-story-of-peyton-mannings-weird-love-for-budweiser-papa-johns-and-gatorade/?utm_term=.e24641eb4483.
- Jensen, J. A., & Cobbs, J. B. (2014). Predicting Return on Investment In Sport Sponsorship. *Journal of Advertising Research*, 54(4), 435-447.
- Kelly, S. J., Cornwell, T. B., Coote, L. V., & McAlister, A. R. (2012). Event-related advertising and the special case of sponsorship-linked advertising. *International Journal of Advertising* 31(1), 15-37
- Lee, S., & Pedersen, P. M. (2011). Measuring sponsorship effects in intercollegiate sport: An examination of Division I basketball. *Journal of Sponsorship Volume 4 Number 4*, 391-401.

- Macur, Juleit. "Armstrong Says He Will Return for 2010." *The New York Times* (2009).
<http://www.nytimes.com/2009/07/22/sports/cycling/22tour.html>.
- McDonald, C. (1991). Sponsorship and the Image of the Sponsor. *European Journal of Marketing*, 25(11).
- McIntyre, Brian. "Peyton Manning to own 21 Papa John's pizza locations in Denver area." *The Associated Press via Yahoo Sports* 26 October 2012.
<http://sports.yahoo.com/blogs/shutdown-corner/peyton-manning-own-21-papa-john-pizza-locations-161513833--nfl.html>.
- Meenaghan, T. (2011). Mind the gap in sponsorship measurement. *Admap*, 34-36.
- Papa John's International, Inc. "PEYTON MANNING SCORES A TOUCHDOWN AS NEWEST PAPA JOHN'S FRANCHISEE." 26 October 2012. *Papa John's International, Inc. Web site*. <http://ir.papajohns.com/releasedetail.cfm?releaseid=716522>. 01 04 2017.
- Poon, D. T., & Prendergast, G. (2006). A new framework for evaluating sponsorship opportunities. *International Journal of Advertising* 25(4), 471-487.
- Rodgers, S. (2003). The Effects of Sponsor Relevance on Consumer Reactions to Internet Sponsorships. *Journal of Advertising*, 32(4), 67-76.
- Rotunno, Tom. "Armstrong Loses Eight Sponsors in a Day." *CNBC Consumer Nation* 18 October 2012. <http://www.cnn.com/id/49462583>.
- Ruth, J. A., & Simonin, B. L. (2006). The Power of Numbers: Investigating the Impact of Event Roster Size in Consumer Response to Sponsorship. *Journal of Advertising* 35(4), 7-20.
- Walraven, M., Bijmolt, T. H., & Koning, R. H. (2014). Dynamic Effects of Sponsoring: How Sponsorship Awareness Develops Over Time. *Journal of Advertising* 43(2), 142-154.

Wang, R. T., & Kyriaki, K. (2013). I want to buy more because I feel good: the effect of sport-induced emotion on sponsorship. *International Journal of Sports Marketing & Sponsorship*, 15(1), 57-71.