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Does an Academy Award affect Stock Return?

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Abstract

This study examines the affect of winning an Academy Award on the stock price of parent companies. On average, receiving an Oscar has no significant impact on the stock of parent companies during the few days surrounding the broadcast of the Academy Awards. The findings of this study introduce questions of external interference and possible limitations on this type of research. However, my study sheds light on future topics of investigation for analyzing the effects of televised award shows on the stock market.

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1. Introduction

This event study examines how winning an Academy Award affects the stock of parent companies. I predict that the parent companies of Oscar winners will see a significant positive return on their shares the next trading day following the broadcast of the Academy Awards. I think winning an award will increase investor confidence in parent companies by revealing that these companies increase firm value through the funding of the United States' most popular motion pictures.

There are only three observations that produced significant results in the entirety of this study. In 1993 Sony Corporation realized significant cumulative abnormal returns of 6.29%, in 2006 General Electric Company had significant returns of 4.15%, and in 2009 Comcast Corporation experienced well-above average cumulative abnormal returns of 18.41%. The average abnormal return over the event window for each of these observations resulted in values that greatly differed from their daily average return for the year that the significant observation took place; Sony, General Electric, and Comcast realized an annual average daily return of 0.17%, 0.04%, and 0.04%, respectively. Their average abnormal returns over the event window were 1.26%, 0.83%, and 3.68%, respectively. This seems to indicate that the event window does capture a period of noteworthy abnormal returns. External events at the time of these significant observations were analyzed to determine if the possibility of outside interference existed. Each company has a different structure that could account for a range of stock influxes during the event window, but there is no evidence that indicates the operations of these companies directly interfered with the experiment.

The findings of this study are quite varied, but the underlying trend reveals a negative cumulative abnormal return for the event window. The cumulative abnormal return of

Oscar-winning parent companies over the period of 1990 to 2009 is -0.31%; however, this value is not significant at the 5% level. Overall, there appears to be no impact on parent company returns for winning an Academy Award in the six categories included in this study: Best Actor, Best Supporting Actor, Best Actress, Best Supporting Actress, Best Director, and Best Picture.

Follow-up statistical tests were implemented to determine if any specific award caused a significant increase in a company's cumulative abnormal return over the course of the event or average abnormal return on the event date. A variable indicating if a film was of "blockbuster" status – grossing $100 million or more in box office revenue – before the Academy Awards and a multiple wins variable were also tested to see if the popularity of the film or number of wins had any significant impact on the stock of parent companies. These additional regressions produced no significant results at the 5% level. I predicted that the more prestigious categories, such as Best Picture or Best Actor, would indicate positive abnormal returns, but the tests show no change in parent company stock for any of the variables included in the follow-up analysis.

This study attempts to fill the gap that exists in research on televised award ceremonies. Extensive research has been done on a variety of broadcasted events, such as the Super Bowl, but there exists only limited examination of the effect award ceremonies has on the stock market. This type of research could be beneficial to entertainment companies. Investors might view awards as indicators of a company's success and use the information provided by award shows as a basis for their financial decisions. I found this possibility intriguing and decided to create an event study that measures the impact of winning an Academy Award on parent company's stock returns. Unfortunately, my study did not

produce the expected results, but it does provide a basis for further research focused on the field of award ceremonies. I hope future investigations will generate more telling information about the impact of these ceremonies on investor decisions.

From this point forward, the text includes five remaining sections. A literature review immediately follows the introduction and illustrates several articles that contributed to the creation of this study. The data section comes next and contains a description of the dataset, along with an analysis of the parent companies that supply the observations of the experiment. The subsequent methodology section outlines the structure of the event study and the statistical approach implemented for any calculations completed during the research process. The results section follows, describing the outcome of all tests conducted during this study. The last section consists of concluding statements, an analysis of possible limitations, and suggested future research.

2. Literature Review

The inspiration for this project was the recent Michelle Obama event study.[1] David Yermack examined the affect of Michelle Obama's clothing choices on the stock prices of apparel companies, and he calculated that one of the First Lady's trips to Europe in 2009 resulted in an approximate effect of $2.3 billion on the fashion industry. According to his study, Michelle Obama has a redistribution of value affect on the industry; the stock prices of the clothing companies she does not wear drops, while the firms responsible for the clothes she wears realize an increase in stock prices. The fact that one individual's clothing decisions – a person who has no direct connection to the world of fashion – could have such an impact on the fashion industry's stock returns is amazing. I became interested in

[1] Yermack, David. 2010. The Michelle Markup: The First Lady's Impact on Stock Prices of Fashion Companies. Stern School of Business, New York University. (Apr. 25): pp. 1-24.

researching what else the public is exposed to that impacts their investment decisions. I chose to look at the affects of televised award ceremonies. Broadcasted award ceremonies appeared to be an area that has yet to be extensively researched. In fact, the only article that focused on the market reaction to the Academy Awards was a study by Randy Nelson, Michael Donihue, Donald Waldman, and Calibraith Wheaton.

Nelson et al. conducted an event study to determine the box-office worth of an Academy Award.[2] They hoped to show that moviegoers use Oscar nominations as a cue for which films to view in theaters. Weekly box-office data was collected for both nominated and a sample of non-nominated films during the period of 1978-1987. The researchers attempted to value the effect of winning an Oscar on the market share of theaters, average revenue per screen, and probability of survival once the Academy Award nominations were announced. The authors used two main measurements: the percentage of total screens on which the film appeared (SHARE) and the average revenue per screen (ARPS). Several different models were implemented throughout the study to ensure the strength of the results.

The findings of the study were as the authors predicted – an overall increase in revenue following the announcement of Oscar nominations. A 'Best Supporting Actor/Actress' nomination had little statistical significance for both the SHARE and ARPS measurement. A 'Best Actor/Actress' nomination only shows a significant increase in the SHARE measurement, but a nomination for 'Best Picture' produced significant increases in both measurements.[3] With the 'Best Actor/Actress' and 'Best Picture' nominations increasing predicted box-office revenues by $476,617 and $4,799,118, respectively.[4]

[2] Nelson, Randy A. 2001. What's an Oscar worth? *Economic Inquiry* 39 (1) (01): 1-16.
[3] Nelson, Ibid, 6.
[4] Ibid, 15.

The duration of a film's stay in the Top 50 film category was also examined. Nelson et al. posed the hypothesis that a nomination could extend the length of time a film remained in theaters and cause a film that had disappeared from theaters to be released for a second time.[5] The results again agreed with the suggested hypothesis, but the more striking finding was the fact that it paid off to delay the release of the film. By waiting to release a film until the fourth quarter of the year, the film's revenues were $7,829,797 compared to only $673,082 for those released in the first quarter.[6] These results offer insight into the distribution methodologies of major movie corporations; if distribution companies were not previously aware of this large disparity in revenues, they could now take advantage of this information and delay the release of films, especially those which have a chance at an Oscar. The findings in this article are of value to the participants in the movie business, and "What's an Oscar Worth?" is one of the only articles that provides the industry with this type of market information on award ceremonies.

The other studies done on the Academy Awards do not reflect the type of research I undertake in my event study as closely as Nelson et al.'s article; however, it was interesting to see what researchers have done with the Academy Awards thus far. Donald Redelmeier and Sheldon Singh have completed two studies focused on how an Oscar impacts the lives of screenwriters and actors and actresses. In one study, they determine whether there is a correlation between success and longevity of award-winning screenwriters.[7]

For this article, information was collected on the winners and nominees for 'Best Original Screenplay' and "Best Adapted Screenplay' between the years of 1929-2001. The

[5] Nelson, Ibid, 9.
[6] Ibid, 16.
[7] Redelmeier, Donald A., and Sheldon M. Singh. 2001. Longevity of Screenwriters who win an Academy Award: Longitudinal Study. *BMJ: British Medical Journal* 323 (7327) (Dec. 22 - 29): pp. 1491-1496.

median age at time of death by 2001 was 68 years. According to this study, winners had shorter lives than nominees by 3.6 years.[8] The authors are sure to state that there are many factors that could contribute to this reduction in life for winning screenwriters with behavior being one of the most important factors. However, the article concludes that success may lead to worse health for some groups of individuals.

The finding of longevity in screenwriters is in stark contrast to that of the results from Redelmeier and Singh's second study. A total of 1649 Award-winning actors and actresses were analyzed; 762 of them being actors and actresses nominated for "Best Actor," "Best Actress," or "Best Supporting Actor/Actress" and 887 individuals were members of the same cast and of the same sex as the nominee.[9] The median age was 66 years old, and the life expectancy for winners was 3.9 years. If an individual won multiple times, there was an even more significant reduction in their death rate, increasing longevity by 6 years.[10] The article closes with the fact that increased longevity in celebrities may be partially explained by their success. With the contradicting results found in Redelmeier and Singh's articles, life expectancy must greatly vary with occupation, even within the same industry, such as the entertainment business.

Again, the two Redelmeier and Singh's articles do not present the type of information that will be discussed in my study, but these projects illustrate the possible research that can be based on the information provided by award ceremonies. The limited number of available studies on the Academy Awards also exhibits the lack of market research done in this area of

[8] Redelmeier, Ibid, 1494.
[9] Redelmeier, Donald A., and Sheldon M. Singh. 2001. Survival in Academy Award-Winning Actors and Actresses. *BMJ: British Medical Journal* 134 (10) (May 15): pp. 955-961. (958)
[10] Redelmeier, "Survival in Academy Award-Winning Actors and Actresses," Ibid, 961.

televised award shows. One award ceremony that does offer some literature on the market impact of its awards is the Grammy's.

Authors Mary Watson and N. Anand examine how the Grammy's came to influence the album sales of nominees and winners.[11] Watson and Anand were interested in answering the longtime question of, "Does a Grammy improve record sales?" In order to answer this question, the researchers collected album sales data for 'Best New Artist' nominees from the years 1970-1994. This included the artists' current album during the nomination and all subsequent albums during the stated time period. They only used new artist data because other artist could have increased their sales through previous recognition and other actions. Each artist's sales performance was evaluated by three variables – sales certified by RIAA (Recording Industry Association of America), the number of albums certified 'gold' or 'platinum' by RIAA, and the number of days their certified albums continued to sell.[12]

According to the article, 'Best New Artist' winners do sell more albums than nominees; winners sold 10.91 million units compared to nominees with only 5.4 million units in sales.[13] Since the empirical results were based on quantitative sales data, the study does not explain why the winners sold more albums than nominees, and the authors try to find other factors that attributed to artist's success following the Grammy's, such as interviews and magazine placement. Through the use of this alternative material, Watson and Anand show a Grammy Award is, in fact, a very useful and influential "promotional vehicle."[14]

An award can be viewed as a tool used to affect the decision of investors or consumers. This aspect of televised award ceremonies connects to the much broader field of

[11] Watson, Mary R., and N. Anand. 2006. Award Ceremony as an arbiter of Commerce and Canon in the Popular Music Industry. *Popular Music* 25 (1, Special Issue on Canonization) (Jan.): 41-56.
[12] Watson, Ibid, 50.
[13] Ibid.
[14] Ibid, 49.

advertising which utilizes instruments, such as television commercials or magazine ads, to influence the decision of consumers. The National Football League's Super Bowl seems to have become the pinnacle of advertising competition. Millions of dollars are spent on each 30-second advertising slot during the day of the Super Bowl, and today, even individuals who have no interest in football will watch the 'big game' just to see the commercials.

Authors Frank Fehle, Sergey Tsyplakov, and Vladimir Zdorovtsov investigated the market's reaction to the commercials of nineteen different Super Bowls over the years of 1969-2001.[15] They were interested in whether or not Super Bowl commercials affect investor behavior. If they were successful in finding a link between commercials and investors behavior, Fehle et al. planned to focus on two main topics: what type of investors were most influenced and whether the effects were short or long term.

The study contained information on 894 commercials and a total of 348 different businesses.[16] After each commercial was categorized by the various study-specific qualities, such as apparent company recognition, stock data was collected for each of firm. The event date was the Monday after each Super Bowl aired, the event window was 20-trading days after each game, and the estimation window was 250-trading days before the 20-day window preceding the game.[17] Abnormal returns were found for those firms who were easily identified by their ads and increased with the number of firm-specific commercials that appeared during the Super Bowl. Fehle, Tsyplakov, and Zdorovtsov were also able to show that small investors were the ones whose investing decisions were influenced the most by Super Bowl advertisements and that these returns last for a significant period after the game

[15] Fehle, Frank, Sergey Tsyplakov, and Vladimir Zdorovtsov. 2005. Can Companies influence Investor Behaviour through Advertising? Super Bowl Commercials and Stock Returns. *European Financial Management* 11 (5) (11): pp. 625-47.
[16] Fehle, Ibid, 630.
[17] Ibid, 634.

was broadcasted. Research on advertising has been quite extensive over the years, and Fehle et al.'s study illustrates the type of examination done on advertising.

Karen Machleit, Chris Allen, and Thomas Madden have also contributed to this field of academia and attempted to explain "how affect producing ads can influence repeat purchasing for mature brands."[18] They realized most research in this field had focused on the effects of ads on those consumers new to a brand, not whether the ad had any sway over the familiar consumer. Of course, if they were to be successful in showing that ads have no effect on repeat buyers, then mature brand advertising is economically inefficient and the product itself is responsible for capturing the repeat consumer. However, the authors were careful to acknowledge that advertising for mature brands is "designed more to entertain than to communicate product benefits."[19]

Commercials for Pepsi Cola and Levi's 501 blue jeans were chosen as the test stimuli. These commercials were placed within a 15-minute game show program to ensure the nature of the real experiment was masked. The previous exposure to these commercials was measured, and well above 75% of participants said that they had at least seen each commercial once before. Brand interest – the base level of approachability, inquisitiveness, openness, or curiosity an individual has about a brand – and other test variables were measured through the use of a questionnaire on the day of the initial viewing and voluntary follow-up meeting four weeks later. [20]

According to Machleit, Allen, and Madden's findings, brand interest should be the dominant focus of mature brand advertising. The authors were forthcoming with several

[18] Machleit, Karen A., Chris T. Allen, and Thomas J. Madden. 1993. The Mature Brand and Brand Interest: An Alternative Consequence of Ad-Evoked Affect. *The Journal of Marketing* 57 (4) (Oct.): 72-82.
[19] Machleit, Ibid, 72.
[20] Ibid, 73.

limitations of their research and state that without further empirical study of brand interest, they do not think offering detailed marketing advice is the outcome of their research. The results of this experiment were not, in a sense, groundbreaking, but rather, a gateway for further examination, and the authors end the article's discussion section with the statement, "the possible relevance of brand interest for evaluating ad effectiveness does merit brief consideration," implying the importance of extended research in this area.[21]

Research on advertising can be very beneficial to the marketing strategies of mature brands for it can create a renewed since of intrigue for an existing product or increase the appeal of an unknown brand. The two articles on advertising demonstrate the detailed research completed in that field. Hopefully one day this type of in-depth research will also be focused on the world of televised award ceremonies, like the Oscars. When constructing this literature review, I realized a large area of research has yet to be explored. Specifically, with the lack of available texts and studies involving the Academy Awards, there seems to be a hole surrounding this award ceremony. I plan to fill part of this gap with my research on the returns to parent companies of Academy Award winners. I believe my study will contribute to the ongoing efforts to explain the market's reaction to award winners and how investors' financial decisions are based on the information provided by televised events.

3. Data Composition

I compiled a database of Academy Award winners from 1990 to 2010. In total, there were 120 wins observed during the time period of this study. I gathered all award information from the Academy Awards website: The Official Academy Awards Database.[22] I chose this time period because it includes the most up-to-date investing techniques and was

[21]Machleit, Ibid, 79.
[22] Academy Awards Database: http://awardsdatabase.oscars.org/ampas_awards

a period of innovation in the film industry. The information I collected from the Academy Awards database includes the categories of Best Actor, Best Supporting Actor, Best Actress, Best Supporting Actress, Best Director, and Best Picture. Appendix 1. E lists all category winners for the duration of the study. The six awards above are the categories that I expect to have the greatest influence on the decision-making process of investors. They also seem to be the categories that receive the most media coverage.

There are quite a few interesting statistics about the award data included in this event study. Over the study's twenty year span, there were only four directors whose films earned them a Best Director award, but did not go on to win the award for Best Picture. These films were Ang Lee's *Brokeback Mountain* in 2005, Roman Polanski's *The Pianist* in 2002, Steven Soderbergh's *Traffic* in 2000, and Steven Spielberg's *Saving Private Ryan* in 1998. Clint Eastwood was the only director to win multiple Best Picture Awards over this time period for his 1992 film *Unforgiven* and his 1994 film *Million Dollar Baby*. Eastwood also appeared in the Best Picture films he directed, and two other award-winning directors played a part in their movies as well. In 1995, Mel Gibson starred in *Braveheart*, and in 1990, Kevin Costner played the lead role of *Dances with Wolves*. Both actor/directors won the Best Director Award, and their films also took home the award for Best Picture which is quite an achievement. Except for Mel Gibson, the roles these actor/directors portrayed earned them a nomination for Best Actor – Eastwood being nominated for both films he directed and starred in. However, neither one received an award in that category.

The three individuals mentioned above – Kevin Costner, Mel Gibson, and Clint Eastwood – were able to win an award in multiple of the six categories analyzed in this study; the only other person to achieve this feat besides a director in the past twenty years is

Kevin Spacey. His role in the 1999 Best Picture film, *American Beauty*, won him the award for Best Actor. Prior to this success, he won the Best Supporting Actor Award in 1995 for the character he portrayed in *The Usual Suspects*. There were only two other actors and one actress that were able to win multiple awards over the span of this event study. Hilary Swank won a Best Actress award for her roles in two Best Picture award-winning films *Million Dollar Baby* and *Boys Don't Cry* in 2004 and 1999, respectively. Sean Penn achieved his multiple awards in the Best Actor category for the part he played in the 2008 film *Milk* and the 2003 film *Mystic River*. The third actor to accomplish the feat of multiple wins in the same category is Tom Hanks. The characters he portrayed in the 1994 film *Forrest Gump* and 1993 film *Philadelphia* earned him the award of Best Actor. Tom Hanks is also the only individual over the past twenty years – out of all six categories – to win an award two years in a row. For a comprehensive list of the awards and nominations that an actor, actress, director, or film has achieved since the commencement of the Academy Awards, please visit the Official Academy Awards Database website.

The United States theatrical distribution information was collected for each observation during the twenty year time period. The U.S. distribution company was used because the study only focuses on the reaction of domestic markets. I chose the theatrical distribution, since other forms of distribution, such as home video or DVD, may take place long after the Academy Award broadcast. The Internet Movie Database provided the distribution and parent company information for each film.[23] With the data, I created a summary of parent companies and the number of winners or nominations they received in annual tables like the one found at Appendix 1. A. Once all of the preliminary information

[23] Internet Movie Database: http://www.imdb.com

was organized, I went through each observation and made several exclusions to narrow my original sample selection.

Sample Selection

Observations were excluded if the parent company information was not available; this omission includes any number of wins the firm may have had during a single year. The company that was ruled out the most for this reason is currently known as NBCUniversal, LLC. Any wins from this company before the year 2002 are not included in my event study. Information on exactly who benefited from Universal Pictures winning an Academy Award during the period of 1990-2001 was not available. Universal Pictures was its own entity for some years prior to 1990, but had several changes in ownership, including such companies as the Canadian spirits company Seagram's. The constant change of ownership is why the exclusions were made. It is also important to note that NBCUniversal has split ownership; General Electric owns 49% of the company, and Comcast owns the remaining 51%. Both General Electric and Comcast are listed as parent companies in this study. The stock data were separated for these two firms, but they were denoted with the same event date if NBCUniversal film won an award.

Companies were only counted as one observation per year, even if they won awards in multiple categories. This was the source of several exclusions from the original data sample. However, a follow-up test does take the number of wins into consideration in order to see if there is an impact on the returns of those companies who did receive multiple awards in a single year. Further exclusions were made based on the fact that some firms are privately owned. The Weinstein Company and DreamWorks Pictures are examples of privately owned entertainment companies. Since the stock data for these firms are not

public, it was not possible to include them in this study. The last omissions were made when collecting the stock data for all of the included parent companies.

I accessed the Wharton Research Data Services and used the CRSP, the Center for Research in Security Prices, database to gather daily stock data for each observation.[24] Data was collected for the year before and the year of the Oscars for the parent companies in the final sample. This data included the holding period returns for the companies' value-weighted returns including distributions. A table of the final sample selection is located at Appendix 1. B. Appendix 1. C includes a list of the companies that represent at least one observation in the study.

The table at Appendix 1. C also provides the total number of wins achieved by each company over the duration of the study. The company that had the most wins in one year (of the six categories I measure) was a three way tie at four of the six different award categories: The Walt Disney Company, Time Warner, and Orion Pictures Corporation. The latter of the three companies listed is not included in my study, but both Walt Disney and Time Warner achieved four wins in a single year two different times in the twenty year period. For those individuals who are curious which movies accumulated these awards, Appendix 1. D lists the year, company, movie, and which categories were won.

Parent Company Description

The nature and structure of the companies included in the study varies greatly. Of the nine companies that are included in the final sample selection of this event study, I would label four as conglomerate-type businesses – The Walt Disney Company, NBCUniversal's General Electric Company and Comcast Corporation, and Sony Corporation. These companies are placed in the conglomerate category for they have many business segments

[24] Wharton Research Data Services: https://wrds-web.wharton.upenn.edu/wrds/

that are not directly related to the entertainment and media industry as the other firms in the event study. It is important to identify the conglomerates of this study because their other endeavors may affect the company's stock price during the time of the event window. I will now give a brief overview of the structure of each company included in this study. All firm-specific information was found online at the individual company's official website.

The composition of NBCUniversal, LLC, provides the best example of how the structure of a company may limit the effects of one specific event on the stock price of an entire company. Two companies share ownership of this United States film distributor. General Electric Company has ownership rights over 49% of the company; Comcast Corporation owns the remaining 51% with the majority interest in the company.[25] Since NBCUniversal is almost divided in half, both split-ownership companies are included in this study. It is difficult to tell if one side of the company realizes the effects of the Academy Awards over the other, and the structures of the two owner firms supply the additional possibility of outside interference during this event study.

As its own entity, NBCUniversal has a large focus in the television broadcasting industry, including several successful channels such as Bravo, Oxygen, E! Entertainment, and Syfy. Focus Features is one of NBCUniversal's main movie production and distribution companies, and this company appeared multiple times when all of the Academy Award nomination and win data was gathered. The company also has complete ownership over the Universal Studios Hollywood theme park and a 50% ownership stake in the Universal Orlando Resort. These theme parks are based on the films that Universal Studios has produced and distributed over the years. A fairly recent example of how the parks are based on successful NBCUniversal productions is *The Wizarding World of Harry Potter* that

[25] NBCUniversal Website: http://www.nbcuni.com/about-us/

opened at Islands of Adventure in June 2010. Although NBCUniversal's focal point is the entertainment business, its parent companies General Electric Company and Comcast are not centered on this industry.

Of the two controlling companies of NBCUniversal, Comcast Corporation is the more entertainment driven business. Comcast claims to be one of the largest high-speed internet and telephone services providers.[26] With the majority stake in NBCUniversal, they have a claim on all of NBCUniversal's media ventures, even if Comcast is not directly involved in any stage of the development process of projects, like motion pictures. This could create problems for investors who want to invest in NBCUniversal, but do not know if their money should go to Comcast or General Electric. The internet and communications industries are also not directly linked to movie business, yet anyways. These industries are closely related, but investing in a company with a focus on communications, such as telephone services, does not mean you are also investing in the film industry.

In a recent development as of late 2009, Comcast made a bid to buy NBCUniversal from General Electric. According to an article of the New York Times, news of the negotiations between partial owners of NBCUniversal – Comcast and General Electric Company – was publicized in September 2009, but apparently these companies were deliberating for the previous seven months.[27] General Electric Company finally accepted Comcast's in December of 2009; however, this deal was not approved by the government until January 2011.[28] The timing of this announcement only allows for a possible impact on

[26] Comcast Website: http://www.comcast.com/Corporate/About/PressRoom/CorporateOverview/CorporateOverview.html

[27] Arango, Tim. "G.E. Makes It Official: NBC Will Go to Comcast." *The New York Times*. Media & Advertising. December 3, 2009. http://www.nytimes.com/2009/12/04/business/media/04nbc.html.

[28] Shields, Tom and Jeff Bliss. "Comcast Wins U.S. Approval to Buy NBC Universal From GE for $13.8 Billion" *Bloomberg*. News. January 18, 2011. http://www.bloomberg.com/news/2011-01-18/comcast-nbc-universal-deal-said-to-be-near-u-s-fcc-approval.html.

the last year of this study's dataset, 2010 (the Academy Awards ceremony for 2009 films). This declaration of intent to purchase could affect both Comcast Corporation and General Electric Company.

General Electric Company, commonly referred to as GE, is further removed from the motion picture business. The company comprises of a large number of businesses in numerous industries. The statement on their online information page exemplifies how diverse the company is, "GE is a global infrastructure, finance, and media company taking on the world's toughest challenges. From everyday light bulbs to fuel cell technology, to cleaner, more efficient jet engines, GE has continually shaped our world with groundbreaking innovations for over 130 years."[29] The diversity of this company has many advantages, but it causes problems for my study. I want to measure only the reactions of those investors who use the Academy Awards as a cue for which companies to invest in. If they feel their money will not go into the production of future motion pictures, these investors may not want to put their funds into companies like GE. However, if investors view winning an Academy Award as a sign of a firm making wise funding decisions, then the aforementioned issue may not be a problem; the investor would still put their money into General Electric even though they are not strictly an entertainment business.

The Walt Disney Company does not pose as many possible difficulties for investor decisions as the structure of NBCUniversal; however, the company has large stakes in markets other than the film industry. Disney divides itself into four business segments: media networks, parks and resorts, studio entertainment, and consumer products.[30] The media network and consumer products divisions are what lead me to classify Walt Disney as

[29] General Electric Company Website: http://www.ge.com/company/
[30] The Walt Disney Company Website: http://corporate.disney.go.com/corporate/overview.html

a conglomerate-type company. Networks such as the Disney Channel, ABC Family, ESPN Inc., and SOAPnet are all controlled by the Walt Disney Company. Even though television networks offer a similar service to consumers as the movie industry, they are not fully intertwined with motion pictures.

The consumer products sector of The Walt Disney Company has grown into one of their largest endeavors. The creation of the Disney Store – a store that sells only Disney merchandise – shows the significance of this product market to the Disney Company. However, this merchandising focus could be advantageous for investors, especially those who choose to invest in companies of award-winning films. If a company releases films that are successful enough for stores to sell merchandise based solely on those movies, another source of profit for their investors has been created. The main motion picture companies controlled by Disney actually appeared numerous times throughout the data collection process for this study. Miramax Films, the entertainment branch of Disney responsible for the company's more serious motion pictures, dominated the nominations for the six categories included in the study during the mid-1990 to early 2000's, and if Disney had a win during this period, Miramax Films was usually the U.S. distributor behind the award-winning film.

On the corporate information page of Sony Corporation's official website, there is almost nothing stated about their role in the film industry.[31] In fact, the list of their major products only includes the categories: audio, video, televisions, information and communications, semiconductors, and electronic components. Sony Corporation primarily focuses on the electronics industry, like the creation of the PlayStation gaming console, not motion pictures. One must look at the website for their United States subsidiary – Sony USA

[31] Sony Corporation Website: http://www.sony.net/SonyInfo/CorporateInfo/

or Sony Corporation of America – to find information on their involvement in the entertainment business.[32] The major motion picture companies of Sony Corporation are Columbia Pictures, TriStar Pictures (which is now consolidated into Columbia TriStar Motion Picture Group), and Sony Picture Classics. Sony Picture Classics is much like Miramax films of Disney; they focus on films that are not as mainstream as other Academy Award pictures with many being foreign language films. Both Columbia Pictures and Sony Picture Classics have films that are observations for the Sony Corporation in this study.

Since the remaining companies are more directly focused on the entertainment industry, I will give a short description of each without the problems that may arise from their business operations, as done above, starting with Lions Gate Entertainment Corporation (commonly referred to as just Lionsgate). Artisan Entertainment – a production and distribution company – was one of the most prevalent Lionsgate Companies in the dataset. Along with motion pictures, Lionsgate also produces television series, including the successful "Mad Men," "Weeds," and "South Park" series. The Lionsgate information page made a point to state, "Lionsgate has earned 55 Academy Award® nominations and 10 Oscar® wins over the past 10 years, more than any other independent studio."[33] This shows that film companies value their Academy Award statistics and want the public to recognize the importance of their wins and nominations.

News Corporation almost placed into the conglomerate-type category for this study. The company is strictly an entertainment driven company, but it is heavily involved in the television component of the entertainment industry.[34] Their portfolio includes channels such

[32] Sony Corporation of America Website: http://www.sony.com/SCA/outline/pictures.shtml
[33] Lions Gate Entertainment Corporation Website: http://investors.lionsgate.com/phoenix.zhtml?c=62796&p=irol-homeprofile
[34] News Corporation Website: http://www.newscorp.com/

as the National Geographic Channel and a variety of FOX channels, ranging from news to sports. It was interesting to discover that News Corporation also has a stake in the once dominant social network Myspace, but even more so that this company, along with Disney and NBCUniversal, have partnered together to create Hulu.com. According to the News Corporation website, Hulu is "the leading online video site helping people find and enjoy the world's premium video content when, where and how they want it."[35] I found it intriguing that three of the companies included in this study have teamed-up to work on a single project. The main motion picture element of News Corporation is 20th Century Fox. However, the smaller independent film branch, Fox Searchlight Pictures is also included in the dataset.

CBS Inc. serves as a single observation of this study, and this win – for Best Supporting Actress – was in 1990. A description of today's structure of CBS Inc. is not relevant for the data analyzed in this study. However, to provide a little information, the win was through their motion picture company Paramount (now a Viacom company). CBS is still one of the largest broadcasting companies, but during the early 1990's, they were a frontrunner of the entertainment business. The highly competitive nature of the movie business seems to have limited the current success of CBS's film companies since their current motion picture company CBS Films did not appear at any stage of the event study.[36]

Viacom is actually a spin-off from CBS, Inc., taking place in the early 1970's. The two companies were reunited in 2000 when Viacom merged with CBS Corporation, but this joint-venture did not last long. The companies soon parted ways only five years later in 2005. As mentioned above, Viacom owns Paramount Pictures, and this film company is Viacom's main contributor to the motion picture industry. Other Viacom distribution

[35] News Corporation Website: http://www.newscorp.com/operations/other.html#
[36] CBS Corporation Website: http://www.cbscorporation.com/ourcompany.php?id=11

companies include Paramount Vantage, MTV Films, and Nickelodeon Films. The Viacom website describes the focus of the company by stating, "Fueled by our world-class brands, Viacom serves an ever-growing population of kids, tweens, teens and adults who want their favorite media and entertainment, 24/7."[37] Like many of the other firms in this study, Viacom also partakes in the televised entertainment world, and their focus on the younger generation is shown through their networks, such as MTV, VH1, Nickelodeon, and COMEDY CENTRAL.

The last parent company of the study is Time Warner, Inc. The main film company of Time Warner is Warner Bros. Entertainment, and this company is responsible for the majority of the Time Warner observations in this study.[38] The other key operation of Time Warner is the Turner Broadcasting System. However, the point of Time Warner's history that needs to be brought to attention for the analysis of this study is the merger between AOL and Time Warner that took place in 2000. This merger is an example of a possible source of problems for this event study. The AOL – Time Warner merger is labeled as one of the worst mergers in history. In the book, *Deals from Hell: M&A Lessons That Rise Above the Ashes*, author Robert F. Bruner states:

> The merger of America Online (AOL) and Time Warner in 2001 offered two superlatives; the biggest deal to date and possibly the most notorious. Nearly $200 billion in market value evaporated in the months following the announcement of the deal. CEOs and other senior executives of both companies resigned early or were fired. Alleged accounting chicanery triggered a government investigation. Disaffected shareholders launched class action lawsuits. And eventually the AOL name was expunged from the corporate moniker.[39]

This catastrophe takes place right in the middle of the event study's time period, and one of the award observations actually lists AOL Time Warner as the parent company. Outside

[37] Viacom Website: http://www.viacom.com/aboutviacom/Pages/default.aspx
[38] Time Warner Website: http://www.timewarner.com/our-company/about-us/
[39] Bruner, Robert F. *Deals From Hell: M&A Lessons That Rise Above the Ashes.* Hoboken, New Jersey: John Wiley & Sons, Inc., 2005. (265)

events, like mergers, can skew the results of event studies because they cause different pressures on the decision-making process of investors besides the specific one being observed in the event study. However, even with the inclusion of AOL Time Warner's historic failure, the results of this study should not be significantly affected. All of the firms in this study are part of the entertainment business, including the digital segment of the entertainment industry, and had a stake in the internet bubble that also occurred during this study (which happens to be one of the causes for the AOL Time Warner disaster). Each company would have been affected by the negative consequences of the crash in this market. With the affects of the internet market crash, most likely, having an even distribution among media companies, I do not feel any of the data from a specific company should be excluded for reasons connected to this incident.

Additional Analysis

Even though there are limitations from certain company characteristics as those listed above, the study is fairly complete. There are no missing values or problems within the information that constitutes as this event study's dataset. All 60 observations have a complete event and estimation window. To partially resolve the problems of limited information and insufficient results that can arise from such a small sample of observations, I decided to run a number of follow-up statistical tests. The variables used for these additional regressions included the six award categories, a multiple win variable, and a "blockbuster" variable (blockbuster meaning if a film had grossed over $100 million at the box office). The results from the initial tests – abnormal returns on day 0, cumulative abnormal returns for the period [-1, 1], and cumulative abnormal returns for the period [-2, 2] – were the other data utilized for the additional investigations. The outcomes of these tests were analyzed in order to

determine if any relationship existed between winning a certain category, winning multiple awards, or not being a "blockbuster" before the Academy Awards were aired and the stock returns of Oscar-winning parent companies.

4. Methodology

In order to determine whether winning an Academy Award had any effect on the stock returns of a film's parent company, I constructed an event study. The structure of this event study was organized in the standard form of many other such experiments, using the basic market model for my regressions:[40]

$$R_{it} = \alpha_i + \beta_i \times rm_t + \varepsilon_{it}$$

R_{it} is the return on company *i*'s stock on day *t*, rm_t is the market return on day *t*, and ε_{it} is the error term for the individual company *i* on day *t*. The event date for this study was set as the first trading day following the broadcast of the Academy Awards. This was typically a Monday; however, from the years 1990 to 1998, the event date fell on a Tuesday. Starting in 1999, the Oscars were aired on a Sunday and have been ever since. The event window was set at a length of five days, capturing the two trading days prior to the event date and the two days thereafter. I chose this event window in order to determine if there was any market anticipation or information leakage before the event. The estimation window was set at a length of fifty days prior to the five days before the event date. This estimation window length was used because it provided information for the two months preceding the Academy Awards, but was not too far away from the event as to include a large amount of outside occurrences. I applied different event and estimation windows to my study, but the results

[40] For more information on the structure of an event study, see:
MacKinlay, A. Craig. 1997. Event Studies in Economics and Finance. *Journal of Economic Literature* 35 (1) (March): pp. 13-39. (Pg. 18: Market Model)

were almost identical across all variations of window length. The event window of 5 days and the estimation window of 50 days are the measurements I decided to analyze.

Through the initial tests of my study the abnormal returns and cumulative abnormal returns were gathered for the individual firms that captured each event date. An abnormal return is the difference between a company's realized return and the expected return calculated by the regression. The calculation for abnormal returns on day 0 is shown below:[41]

$$\underset{\text{Return}}{\text{Abnormal}} \quad = \quad \underset{\text{Return}}{\text{Actual}} \quad - \quad \underset{\text{Return}}{\text{Expected}}$$

$$AR_0 = r_{i,0} - E(r_{i,0})$$

Once the abnormal returns were calculated, their significance was determined, and the results from these tests were analyzed. Further regressions were constructed using the data provided from these initial assessments.

Every observation of the study was coupled with a variable for each award category included in this study – Best Actor, Best Supporting Actor, Best Actress, Best Supporting Actress, Best Director, and Best Picture. A variable for companies that won multiple awards in these six categories was created, and there was also a variable for whether or not the movie was a "blockbuster" before the Academy Awards aired. The variable categories were assigned a binary coefficient of one or zero. One was given to those companies that had won an award in that category, and a zero was given to those who had not. The multiple award and "blockbuster" variables were also constructed as indicator variables, and a one was allotted to those companies that had won multiple awards and to those companies that were not of "blockbuster" status on each specific event date. The multiple win category was established as an indicator variable because the affect on a company's stock returns that would result from each additional win was assumed to follow a linear trend. The

[41] MacKinlay, Ibid.

construction of the blockbuster variable was somewhat subjective since the definition of a blockbuster is an empirical question in itself. A movie was defined as a blockbuster if it had earned more than $100 million at the box office. This $100 million estimate was discounted by an annual 2% inflation for each year preceding 2011 to ensure an accurate measurement of the defined blockbuster requirement. Appendix 2. A lists the Best Picture films included in this study and the film's box office gross before the Academy Awards were broadcasted. Appendix 2. B contains a discount table of the $100 million equivalents for each year.

It is important to note that the variable was assigned a one if it had not grossed the $100 million blockbuster requirement before the air date of the Academy Awards. The release date was not taken into consideration for this variable which may slightly skew the results. However, only four out of the twenty Best Picture films were no longer showing in theaters at the time of the Academy Awards. The information pertaining to the blockbuster variable was also found at the Internet Movie Database website, and the weekly box office totals originated from the online database Box Office Mojo.[42] An example of how these variables were organized can be found at Appendix 2. C.

Separate regressions were run for each observation in the study consisting of one dependent and one independent variable. Three different dependent variables were tested, including the abnormal returns on day 0, the cumulative abnormal returns for the period [-1, 1], and the cumulative abnormal returns for the period [-2, 2]. A final regression was run for each dependent variable that encompassed all eight independent variables. These follow-up tests were implemented to determine whether any correlation existed between certain awards and positive or negative returns to parent companies. I hoped to find a relationship between

[42] Box Office Mojo: http://www.boxofficemojo.com/

winning a prestigious award, such as Best Picture, and positive abnormal returns to the film's parent company.

5. Results

The study's test on the event window period produced an average abnormal return on the event date of 0.198%, but the data shows a decline in the average abnormal return on the day following the event date with an increase in the return for the next day, as shown in Appendix 3. A. A table is included along with the graph to show the exact average abnormal returns on each date of the event window, see Appendix 3. B. This trend is puzzling because there is no explanation for the dip in returns on the subsequent trading day after the event. The total average abnormal return proved to be -0.063%. However, these results were not significant at the 5% level which makes it difficult to interpret the overall outcome of this study.

Since there were positive average abnormal returns on day 0 of the event window, I created a histogram of the event date to illustrate the distribution of the results: Appendix 3. C. The interval of [-0.25, 0.00] measured in percentages, had the highest frequency of seven observations out of sixty. The majority of the observations were in the interval of [-1.50, 1.50]; only seventeen of the sixty companies observed abnormal returns outside of this interval on the date of the event. Thirty-one of sixty companies had positive average abnormal returns on the event date, but since the majority of these observations were not significant, it is not possible to infer that the study resulted in positive average abnormal returns for the event date.

The outcome of the cumulative abnormal return test was very similar to that of the average abnormal return analysis for the period of the event window. The same N-shape

pattern can be seen in the cumulative abnormal return graph of the event window, Appendix 3. D. However, unlike the average abnormal return, the cumulative return just barely reached above zero into the positive return region. On the date of the event, the cumulative abnormal return was 0.0006%, resulting with a total cumulative abnormal return of -0.0626% for the event window. A table is included with the cumulative graph that shows the exact total for each of the five days of the event, Appendix 3. E. The total cumulative abnormal return for the entire event study – the main result of this event study – which is the average of all sixty observation's 5-day cumulative abnormal return was -0.3132%. The outcome of this analysis was not as expected. I predicted there to be an overall positive cumulative abnormal return for the event window. However, this -0.3132% return is relatively close to zero, totaling not even a half of a percent abnormal return. This value is not significant at the 5% level with a t-statistic of only - 0.5764, see Appendix 3. F for a summary of total event study statistics.

I created a histogram for the cumulative abnormal return for the [-2, 2] day window to see if there was any trend or clustering of the return data: Appendix 3. G. However, there appears to be an even distribution among the cumulative abnormal returns for the event window, ranging from -11.17% to 18.41% return. The majority of CAR values fell between -8% and 8% with only three observations outside of this interval. The highest frequency was over the [2.00, 2.25] and [0.00, 0.25] percent intervals both with four firms out of sixty in each category. Unlike the average abnormal return totals for the event date, the cumulative abnormal returns did not have a majority of positive observations. There were only twenty-seven of the sixty cumulative abnormal returns that were above a 0% return.

Significant Observations

The only significant results of the entire study were the cumulative abnormal returns for three companies, meaning only 5.00% of the observations in this study were significant. The Sony Corporation had a cumulative abnormal return of 6.29% for 1993. General Electric experienced significant cumulative abnormal returns of 4.15% in 2006. Comcast realized the last significant abnormal returns in 2009 with a cumulative abnormal return of 18.41%. Appendix 3. H documents these significant observations. Appendix 3. I summarizes the awards that were won in each significant year, see Data 1. A for the films and recipients of these awards. There was no overlap between the awards won by the three significant observations, and one interesting point about these statistics is the fact GE and Comcast did not produce significant cumulative abnormal returns in the same year. This seems to indicate that the conglomerate nature of these companies might have affected the results of this study.

General Electric and Comcast should have been almost equally affected by an NBCUniversal win in the same year, since ownership of the company is close to even: 51% and 49%, respectively. The official company website of both General Electric and Comcast do not indicate which owner has more involvement with or control over NBCUniversal. However, I assume that Comcast may have been the chief overseer of the shared company. I make this assumption based on their intention to purchase complete ownership rights of NBCUniversal in 2009. This happens to be the same year that Comcast realized significant cumulative abnormal returns for the event window of this study. It may be possible that Comcast took these abnormal returns as a sign that NBCUniversal was a profitable investment for the company – NBCUniversal is the sole motion picture branch of Comcast Corporation. This assumption seems even more probable since the negotiations for the

Comcast takeover supposedly started the month after the Academy Awards took place in 2009. However, assuming Comcast had more control over NBCUniversal makes it difficult to interpret the study's findings of significant cumulative abnormal returns for General Electric Company in 2006.

General Electric's significant observation was considerably lower than the other two firms. Other observations of the study had returns well above or below those of General Electric, yet were not significant. Lions Gate Entertainment Corporation had a cumulative abnormal return of -11.17% over the event window in 1999 and even General Electric had a return of -8.43% in 2009, but neither were significant values. This means GE must have experienced comparatively low returns on average during the time period of the event study in 2006; for example, Lions Gate Entertainment Corporation had a cumulative abnormal return of 5.49% for their 2006 observation of the study that was not significant. According to the company overview provided by the 2006 list of Fortune 500 companies, General Electric's profits had decreased 2.8% since 2004.[43]

One outside event that could have accounted for this low level return could be the purchases GE made during 2006. Zenon Environmental, a water filtration technology firm, was purchased by General Electric in 2006.[44] Smiths Aerospace was in the process of being acquired by GE in this year.[45] If the market considered these acquisitions as not in the best interest of the company's shareholders, either of these deals could account for the decrease in GE stock. An interesting graph found in the 2009 annual report for General Electric

[43] "Fortune 500: 2006" *Fortune.* CNNMoney.com. April 17, 2006. http://money.cnn.com/magazines/fortune/fortune500/snapshots/561.html
[44] Ramalho, Kimberly. 2010. "Water & Power Technologies." *GE Power & Water.* http://www.gewater.com/pdf/Fact%20Sheets_Cust/Americas/English/FS1576EN.pdf
[45] Kennedy, Rick, Deb Case, and Jennifer Villarreal. "GE Completes Acquisition of Smiths AeroSpace." *GE Aviation*. May 7, 2007. http://www.geaviationsystems.com/News/Archive/2007/GE-Aviatio/index.asp

Company illustrates that 2006 was the year that GE stock started to noticeably underperform the S&P 500.[46] An adaptation of this graph can be found at Appendix 3. J. The spread between the market index and value of GE stock indicates that 2006 was not the best year for General Electric (and of course, the onset of the financial crisis then began and the graph depicts how GE continued to do worse as the market fell over the next few years). However, according to this same annual report, 2006 was the 2nd best year based on net income from their portion of NBCUniversal between the years 2005 – 2009.[47] This could be one indication that the study did measure an impact for the year that NBCUniversal received an Academy Award.

Comcast Corporation also offers evidence that their Academy Award win may be the cause of some residual profits realized in their significant observation year. After the Oscars took place, Comcast announced they would stream 2009 Academy Award winning films and nominated films in HD – high definition – on their On Demand cable network.[48] Even though these movies were offered after the event window of this study, Comcast found a way to incorporate their win into the other facets of their company. It may be possible that investors took this into consideration when the NBCUniversal film won; investors might have realized that the complementary parts of Comcast's business could capitalize on its win.

During the year of Sony Corporation's significant observation, the company was developing its subsidiary Sony Computer Entertainment, Inc. This company became responsible for Sony's consumer-based computer entertainment products.[49] Even though

[46] General Electric 2009 Annual Report, pg 117. http://www.ge.com/ar2009/pdf/ge_ar_2009.pdf
[47] General Electric 2009 Annual Report, pg 34. http://www.ge.com/ar2009/pdf/ge_ar_2009.pdf
[48] "Comcast is Offering 2009 Academy-Award Favorites *Slumdog Millionaire*, *Milk*, and Many Others On Demand and in HD" *Comcast Press Releases*. April 20, 2009. http://www.comcast.com/About/PressRelease/PressReleaseDetail.ashx?PRID=858
[49] Bloomberg Businessweek Company Information: Sony Computer Entertainment Inc http://investing.businessweek.com/research/stocks/private/snapshot.asp?privcapId=2524001

public information on this company is limited because it is a privately owned firm, Sony Computer Entertainment appears to have done well over the years, releasing products such as the PlayStation 2, PSP, and the newest PlayStation 3. Investors could have viewed the creation of this subsidiary as a large profit potential for the parent company. Taking the successful track record of Sony Computer Entertainment into consideration, the 1993 investors may have been correct. The development of Sony's subsidiary offers an example of how external events may have caused an increase in the stock price of Sony Corporation and affected the results of this study.

Whether the market was influenced by outside events or the investors took a particular interest in the Academy Awards during the years of significant observations, the returns measured for these three companies during the event window of this study were not close to average. The average daily returns for each year that a significant observation took place – 1993 for Sony, 2006 for GE, and 2009 for Comcast – is considerably lower than the average abnormal return for the event window (See Appendix 3. K). On average, Sony was realizing a daily return of 0.1653%, but their average abnormal return during the event window was 1.2587%. The difference was not quite as drastic for General Electric with an average return of 0.0387% and an average abnormal return for the event window of 0.8292%. However, Comcast had a daily average return of only 0.0446%, and during the event window of this study, the company realized an average abnormal return of 3.6818%. Even though this positive influence on the stock of Comcast was measured during the event period of 2009, it is difficult to interpret these significant observations, especially when comparing just three results to the outcome of the study as a whole.

The graphs of the cumulative abnormal returns for the event window of all three significant observations show no real correlation between the shape of their trend lines and that of the overall cumulative abnormal return graph for the study (See Appendix 3: L, M, and N). The graphs for Sony and Comcast show a decreasing trend of cumulative abnormal returns, and General Electric's graph depicts a positive slope for the cumulative abnormal returns during its significant observation. No real assumptions can be made for the whole study based on three data points, and it is even more difficult to interpret these results when the significant events do not reflect the overlying trend for cumulative abnormal returns found in the study.

Additional Analysis

All values produced by the follow-up statistical tests were not significant – view the summary statistics for the average abnormal returns on the event date, cumulative abnormal returns for the period [-1, 1], and the cumulative abnormal returns for the event window [-2, 2] located at Appendix 3: O, P, and Q, respectively. The highest R-squared value of the study was produced by the all inclusive regression on the cumulative abnormal returns for the [-1, 1] window: 0.1051; this means only 10.51% of the variation in the cumulative abnormal returns for that window was explained by the changes in test variables. However, this all inclusive regression did not have the highest Adjusted R-squared value of all additional regressions. It did have the highest Adjusted R^2 value of the three all inclusive tests of -0.0353, but this negative value indicates that there are variables included in this regression that do not help to predict the outcome of the test. The Best Actress variable from the regression on abnormal returns for the event date produced the highest Adjusted R^2 of the study: 0.0128. Since this value is still considerably low, it further emphasizes that the Best

Actress variable does not offer an explanation for a parent company's abnormal returns. I provide an overview of the results produced by the additional tests, but it is important to keep in mind these results do not affect the dependent variables of this study and all coefficients can be equated to zero, since there was no evidence of significance.

The variable for an award in the Best Actor category resulted in a negative coefficient for all regressions. The Best Actor variable was the only variable that produced a negative coefficient for all three trials. The majority of the coefficients produced from the three tests were negative with thirty-three negative results out of forty-eight coefficients, excluding the intercept. A significant negative coefficient would imply that if a company won the variable award, they would actually realize a decrease in their stock price, and this is the complete opposite of the hypothesis stated at the beginning of the study – winning an award will result in positive abnormal returns for a parent company. However, the coefficients generated in this study were typically not close to significance at the 5% level.

Some variables did produce fairly large coefficients, even though they were not significant. The variables that had coefficient greater than an absolute value of 2% were the Best Actor and Best Actress variables of the regression on the cumulative abnormal returns for days [-1, 1] with values of -2.33% and -2.23%, respectively, and all eight variables of the regression on the cumulative abnormal returns for the event window, except the Best Picture award variable, were above an absolute value of 2%. The Best Director variable reached -3.31%, but the only positive coefficients of this regression were the multiple wins and blockbuster variables with values of 2.69% and 2.10%, respectively. These positive coefficients of around 2-3% were the type of results I was expecting to find from running the additional regressions on the event study dataset. The all inclusive variable regressions that

produced the highest coefficients generated the significance test statistics closest to being significant at the 5% level as well. The individual variable closest to significance was the Best Actor variable in the cumulative abnormal regression for the period [-1, 1] around the event date, having a coefficient of -2.33% with a t-statistic of -1.94% and p-value of 0.058.

One variable produced positive coefficient results across all regressions, except the three all inclusive regressions: the Supporting Actress award variable. However, there does not seem to be a reasonable explanation for why this Supporting Actress variable would have positive results while none of the other award variables did, especially those that tend to carry more prestige for companies, like Best Picture. Since this variable was not even close to being significant, t-test values of 0.18, 0.19, 0.26 and p-values of 0.860, 0.851, 0.798 for the individual variable regressions, there is no need to dwell on this fact for any amount of time. It is of more interest to examine a variable that had five out of the six possible coefficients result in positive values – the blockbuster variable. Even though the results were not significant (a table of p-values and t-test statistics is included at Appendix 3. R), they provide a good example of the t-test and p-value statistics that were realized across all of the regressions.

The blockbuster variable was established based on the idea that investors may be more willing to invest in those companies whose films had not grossed a significant amount of money before the Academy Awards, yet still managed to win the Best Picture Award at the Oscars. Over the event study's twenty year period only eight films qualified for "non-blockbuster" status (see Appendix 2. A for more details on the blockbuster variable films). I was hoping to find results that supported the possible investing rationale of being impressed by the success of a film that was not as well-known and considering the Oscar win a huge

achievement for its parent company, showing that the parent company knows how to make wise decisions when funding projects that may be off the radar. Of the eight Best Picture winners that had not grossed the $100 million equivalent amount by the Academy Awards, six of them were still in theaters. Of these six films, after the award was announced five of them went on to gross over their respective $100 million equivalent before exiting theaters, Appendix 3. S. For example, in 1993, *Schindler's List* – a non-blockbuster film before the Oscars – grossed a total of 34.49% above its equivalent value while in theaters. With five of the six films that were still in theaters at the time of the awards going on to become blockbusters after winning the Best Picture Award, there appears to be revenue generated for the parent companies of these smaller films from the announcement of the Best Picture Award; however, the regression on the blockbuster variable did not produce any significant values that would explain this revenue as a result of winning an Oscar.

The other non-award variable – the multiple win category – produced varying and some counterintuitive results. Four of the six possible coefficients were negative. I was expecting to see significant positive abnormal returns for this variable, meaning an increase in a company's return if they were successful in more than one of the six award categories chosen for this study. The only regression that realized an increase in abnormal returns close to what I expected for the multiple win variable was the all inclusive regression for the entire event window, producing a coefficient of 2.69%. Unfortunately, all results for the multiple award variable were also not significant.

6. Conclusion

This study was constructed based on the hypothesis that winning an Academy Award in one of the six major categories presented at the Oscars would produce positive abnormal

returns for the parent company of the award-winning film. However, this was not the outcome of the study. Almost all of tests conducted generated values that were not significant. Only three of the sixty observations included in this study significant produced significant cumulative abnormal returns over the event window at the 5% level. These results are difficult to interpret, and it is also hard to determine if there were high levels of outside interference that may have skewed the results. Overall, I conclude there are two possible explanations for the findings of this event study – one where the lack of significance is to be expected and one where the lack of significance indicates a cause for concern.

First, investors may have anticipated the results of the Academy Awards well before the actual broadcast of the show. These predictions would have been included into their previous investment decisions, and there is no residual to what has already been anticipated. This conclusion means investors must be quite good at predicting Oscar winners; however, this also poses problem for the study as a whole, finding no significant results amplifies the fact that there were problems with the study. Parent companies should have been realizing positive abnormal returns through the event window if investors based part of their earlier decisions on the predictions they made. From the lack of significant findings, this conclusion does not appear to be supported by the results of my study.

The outcome of this experiment could also be interpreted as, on the margin, there are no additional cash flows to Academy Award-winning companies immediately following the Oscar broadcast. Under this conclusion, parent companies would not realize any significant returns from winning an award. The lack of significant results is not as problematic because if there are no cash flows for winning an award, there is nothing to measure. This explanation is plausible because only a small number of observations were significant in the

original cumulative abnormal returns test – three out of sixty – and no further significant results were found.

I do not think it is possible to determine which conclusion best fits the results of this event study. The second option where winning an award has no effect on the market price of parent companies' stock does not seem feasible, but I do not fully support the idea that investors incorporate their predictions into their investment plan before the Oscars actually take place. The best interpretation appears to be a third option that combines the two conclusions laid out above. Some investors may form predictions when the Academy Award nominees are announced – typically four weeks before the ceremony's broadcast – and include these predictions into their investment decisions. This conclusion follows Randy Nelson, et al.'s article "What's an Oscar Worth?" which illustrates that people use Oscar nominations as cues for which movies to view in theaters.[50] Investors may do the same, using the nominee announcements as an indicator for which company to fund instead of waiting to see which films win the awards as my study suggests. The second conclusion would be combined in such a way that states winning an Oscar in the award categories of Best Supporting Actor or Best Supporting Actress would not produce significant abnormal returns for the film's parent company. However, even if the combination of the outlined conclusions provides a better explanation for this study's results, another experiment would need to be constructed in order to test this new hypothesis.

Limitations

The results of this study are difficult to interpret because of the plethora of possible conclusions, but even more so for the many limitations on the project. One of the main implications of this study was the limited sample selection. Almost half of the observations

[50] Nelson, Ibid.

had to be removed from the original dataset. When constructing this experiment, I had planned to include nominations which would have meant a significant increase in the number of observations. However, after further deliberation I realized the study could not include nominee information for what I intended to measure with my analysis. Since winners are also nominated, it was not possible to differentiate between those companies who had just been nominated and those who won an award. Many companies were nominated for a number of different films within a given year, but only won an award for a single film that year. For example in 2006, Viacom had *Dreamgirls* nominated for Best Supporting Actor and Best Supporting Actress; *Babel* with two nominations for Best Supporting Actress and a nomination for Best Director and Best Picture; and *Letters from Iwo Jima* nominated for Best Director and Best Picture. However, the only award Viacom won that year was Best Supporting Actress. There would be no way to distinguish the affects of winning an award and being nominated for the other films.

The timeline of this event also includes the beginning of our current recession. The market as a whole has preformed below par for the past few years, starting around the end of 2007. The existing conditions have taken a toll on the economy, and it seems firms across a variety of industries would have had difficulty realizing any significant positive returns during this period. The study's results from these years could reflect the poor investing climate and not the actual effect of winning an award that would be realized in a healthy market environment. However, it was not possible to cut those years from the study, since the dataset already faced the restraint of a diminished size.

Outside interference was also a large limitation, especially for those firms labeled as conglomerate-type businesses that partake in a wide range of industries. There was no

thorough way to fully reduce the possibility of peripheral events affecting the stock of the parent companies included in this study. Interference is a problem for most event studies; it is difficult to form a question well enough to measure just the result of a specific event. The stock market is interconnected to a degree that makes it near impossible to eliminate all outside interference. This results in studies that may measure not only the affects of an event, such as winning an Academy Award, but also the influence of other company decisions or incidents.

Future Research

I would like to see future research build upon this study; my first suggestion would be to expand the study's timeline to see if there is any change in the outcome. Parent company data may be difficult to find for the early years of the Academy Awards, but I think a larger dataset would produce more significant results. As stated above, alternative tests are possible if stock data is compiled for Academy Award nominees, but what the test plans to measure would have to be clearly defined. A study could calculate the difference in returns between those companies that are just nominated for an award and those film's that go on to win an Oscar. This experiment would try to determine if winning an award has a greater affect on parent company stock than just being nominated for an award.

Further research on award ceremonies can benefit those companies that aim at winning an Academy Award. Not only does an Oscar provide a level of prestige, but with studies like this one, companies would know how much profit to expect from winning an award. My study demonstrates only one of the possible questions that have yet to be answered surrounding the Academy Awards. The world of televised award ceremonies remains wide open for future research and investigation.

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Appendix

1. A Table of 2010 Summary Statistics

This table summarizes the wins and nominations each parent company received at the 2010 Academy Awards that aired February 27, 2011 and exemplifies how the initial data collection was organized.

2010		
27-Feb-11		
Companies	**Wins**	**Nominations**
Lions Gate Entertainment Corporation		5
Viacom	2	9
Sony Corporation		4
News Corporation	1	5
The Weinstein Company	3	6
Time Warner		2
NBCUniversal		3
The Walt Disney Company		1

1. B Table of Sample Selection

The table shows the original sample size and the exclusions made during the sample selection process. There were originally 120 firms, but half of the observations were cut due to reasons such as no available stock data for privately owned companies or an individual company received multiple awards during the Oscars ceremony. This table also includes an addition to the sample size from the split ownership of NBCUniversal between General Electric Company and Comcast Corporation, resulting in a final sample size of 60 observations.

Observation	Number of firms
Original Sample Size	120
Addition from NBCUniversal Split	4
Total Additions	4
No Parent Company Information	19
Multiple Wins	32
Private Company	13
Total Exclusions	64
Final Sample Selection	**60**

1. C Parent Company Observation Statistics

This table illustrates the distribution of observations among the nine parent companies included in the study. Time Warner, Inc. and The Walt Disney Company comprised the majority of the sixty observations with thirteen wins each. General Electric Company and Comcast Corporation have partial ownership of NBCUniversal, and both parent companies are listed as separate observations in this study.

Company Name	Total Number of Wins
CBS Inc.	1
NBCUniversal, LLC.	(4)
– Comcast Corp.	4
– General Electric Co.	4
Lions Gate Entertainment Corp.	4
News Corp.	6
Sony Corp.	10
Time Warner Inc.	13
Viacom Inc.	5
The Walt Disney Co.	13
Total	**60**

1. D Parent Companies that achieved the Most Oscars in a Single Year

This table lists the companies that won the most Academy Awards in a single year during the period of 1990-2010 and also the Oscars they won in that respective year. The Walt Disney Company, Time Warner, and Orion Pictures Corporation tied with a total of four wins each at one awards ceremony; however, Orion Pictures is a privately owned corporation and does not appear in the sample selection of this study.

Year	Company Name	Movie Title	Best Actor	Best Supporting Actor	Best Actress	Best Supporting Actress	Best Director	Best Picture
2007	The Walt Disney Co	*There Will Be Blood*	X					
		No Country for Old Men		X			X	X
2004	Time Warner	*Million Dollar Baby*		X	X		X	X
2003	Time Warner	*Mystic River*	X	X				
		The Lord of the Rings: The Return of the King					X	X
1998	The Walt Disney Co	*Life is Beautiful*	X					
		Shakespeare in Love			X	X		X
1991	Orion Pictures Corp	*The Silence of the Lambs*	X		X		X	X

1. E Category Winners 1990-2010

All winners of the six categories included in this study are listed in the table. The winners of 2010 are not included in the study. The 2011 stock data was not yet available, but since it was the most up-to-date Academy Awards, I chose to include it these summary statistics.

Year	Best Actor	Best Actress	Best Supporting Actor	Best Supporting Actress	Best Director	Best Picture
2010	Colin Firth	Natalie Portman	Christian Bale	Melissa Leo	Tom Hooper	*The King's Speech*
2009	Jeff Bridges	Sandra Bullock	Christoph Waltz	Mo'Nique	Kathryn Bigelow	*The Hurt Locker*
2008	Sean Penn	Kate Winslet	Heath Ledger	Penélope Cruz	Danny Boyle	*Slumdog Millionaire*
2007	Daniel Day-Lewis	Marion Cotillard	Javier Bardem	Tilda Swinton	Joel Coen & Ethan Coen	*No Country for Old Men*
2006	Forest Whitaker	Helen Mirren	Alan Arkin	Jennifer Hudson	Martin Scorsese	*The Departed*
2005	Philip S. Hoffman	Reese Witherspoon	George Clooney	Rachel Weisz	Ang Lee	*Crash*
2004	Jamie Foxx	Hilary Swank	Morgan Freeman	Cate Blanchett	Clint Eastwood	*Million Dollar Baby*
2003	Sean Penn	Charlize Theron	Tim Robbins	Renée Zellweger	Peter Jackson	*The Lord of the Rings: The Return of the King*
2002	Adrien Brody	Nicole Kidman	Chris Cooper	Catherine Zeta-Jones	Roman Polanski	*Chicago*
2001	Denzel Washington	Halle Berry	Jim Broadbent	Jennifer Connelly	Ron Howard	*A Beautiful Mind*
2000	Russell Crowe	Julia Roberts	Benicio Del Toro	Marcia Gay Harden	Steven Soderbergh	*Gladiator*
1999	Kevin Spacey	Hilary Swank	Michael Caine	Angelina Jolie	Sam Mendes	*American Beauty*
1998	Roberto Benigni	Gwyneth Paltrow	James Coburn	Judi Dench	Steven Spielberg	*Shakespeare in Love*
1997	Jack Nicholson	Helen Hunt	Robin Williams	Kim Basinger	James Cameron	*Titanic*
1996	Geoffrey Rush	Frances McDormand	Cuba Gooding, Jr.	Juliette Binoche	Anthony Minghella	*The English Patient*
1995	Nicolas Cage	Susan Sarandon	Kevin Spacey	Mira Sorvino	Mel Gibson	*Braveheart*
1994	Tom Hanks	Jessica Lange	Martin Landau	Dianne Wiest	Robert Zemeckis	*Forrest Gump*
1993	Tom Hanks	Holly Hunter	Tommy Lee Jones	Anna Paquin	Steven Spielberg	*Schindler's List*
1992	Al Pacino	Emma Thompson	Gene Hackman	Marisa Tomei	Clint Eastwood	*Unforgiven*
1991	Anthony Hopkins	Jodie Foster	Jack Palance	Mercedes Ruehl	Jonathan Demme	*The Silence of the Lambs*
1990	Jeremy Irons	Kathy Bates	Joe Pesci	Whoopi Goldberg	Kevin Costner	*Dances With Wolves*

2. A Best Picture Films and Blockbuster Box Office Gross Revenue Statistics

The table displays all Best Pictures award winners from 1990 to 2010 and the amount each film grossed at the U.S. box office while in theaters. The highlighted films are those that were not of "blockbuster" status at the time the Academy Awards aired, grossing less than the equivalent of $100 million in today's terms. The films that were out of theaters by the date of the Academy Awards are marked with a double star (**). Only thirteen out of the twenty-one films displayed above were part of the blockbuster regression. The other films were productions of privately owned companies or excluded from the study for a different reason; the year 2010 was not included in the event study, since the stock data was not yet available for 2011. These omitted observations are indicated by a carrot (^).

Year	Event Date	Film	Gross ($)
2010	27-Feb-11	*The King's Speech*^	114,231,030
2009	7-Mar-10	*The Hurt Locker***^	12,647,089
2008	22-Feb-09	*Slumdog Millionaire*	98,354,395
2007	24-Feb-08	*No Country for Old Men*	64,291,179
2006	25-Feb-07	*The Departed*	131,805,297
2005	5-Mar-06	*Crash***	53,382,847
2004	27-Feb-05	*Million Dollar Baby*	64,851,738
2003	29-Feb-04	*The Lord of the Rings: The Return of the King*	364,115,612
2002	23-Mar-03	*Chicago*	134,014,534
2001	24-Mar-02	*A Beautiful Mind*^	154,704,651
2000	25-Mar-01	*Gladiator*^	186,870,377
1999	26-Mar-00	*American Beauty*^	108,468,063
1998	21-Mar-99	*Shakespeare in Love*	73,192,745
1997	23-Mar-98	*Titanic*	494,514,331
1996	24-Mar-97	*The English Patient*	63,154,818
1995	25-Mar-96	*Braveheart*	73,512,126
1994	27-Mar-95	*Forrest Gump*	318,434,225
1993	21-Mar-94	*Schindler's List*^	59,849,473
1992	29-Mar-93	*Unforgiven***	74,681,912
1991	30-Mar-92	*The Silence of the Lambs***^	130,719,208
1990	25-Mar-91	*Dances With Wolves*^	139,106,936

2. B 2010 $100 Million Discounted Equivalents

The table shows the dollar amounts that are equivalent to $100 million in 2010. This information was used to determine if a film was of blockbuster status before the Academy Awards broadcast. The annual inflation rate was estimated to be 2%.

Blockbuster Discount Table				
Annual Inflation Rate: 2%				
2010: $100,000,000				
2009	2008	2007	2006	2005
98,039,216	96,116,878	94,232,233	92,384,543	90,573,081
2004	2003	2002	2001	2000
88,797,138	87,056,018	85,349,037	83,675,527	82,034,830
1999	1998	1997	1996	1995
80,426,304	78,849,318	77,303,253	75,787,502	74,301,473
1994	1993	1992	1991	1990
72,844,581	71,416,256	70,015,937	68,643,076	67,297,133

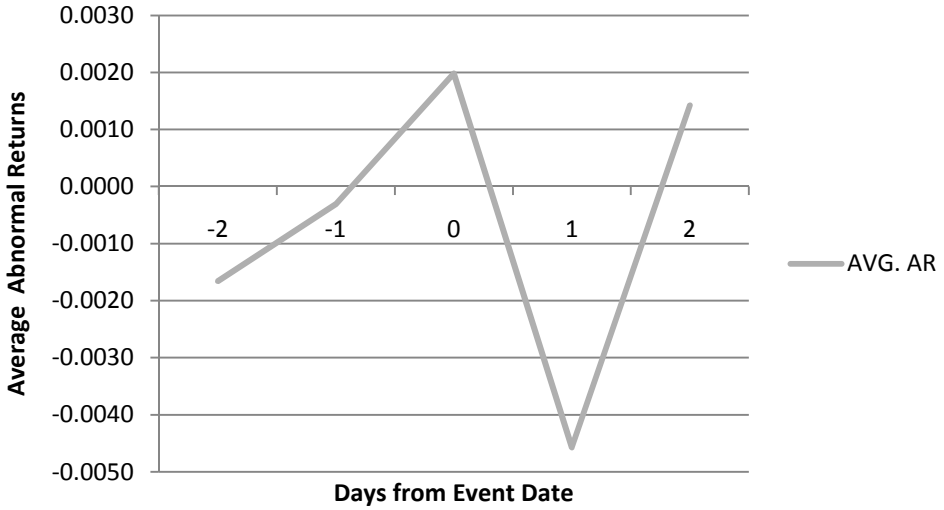
2. C Additional Test Variables

This table illustrates how the information for the follow-up regressions was organized. All variables were structured as indicator variables: one indicating a win and zero signifying a loss. For the multiple win variable, a one indicated multiple awards for that parent company in a single year. A one for the blockbuster variable meant the parent company won the Best Picture category that year, but the film did not reach the $100 million equivalent before the Academy Awards broadcast.

event_date	comnam	actor	actress	sup_actor	sup_actress	picture	director	multi_win	blockbuster
25feb2008	DISNEYWALT CO	1	0	1	0	1	1	1	1

3. A Average Abnormal Return for Each Day of the Event Window

The graph shows the daily average abnormal return for all sixty observations over the event window. The table located at 3. B contains the exact values that are represented in this chart.



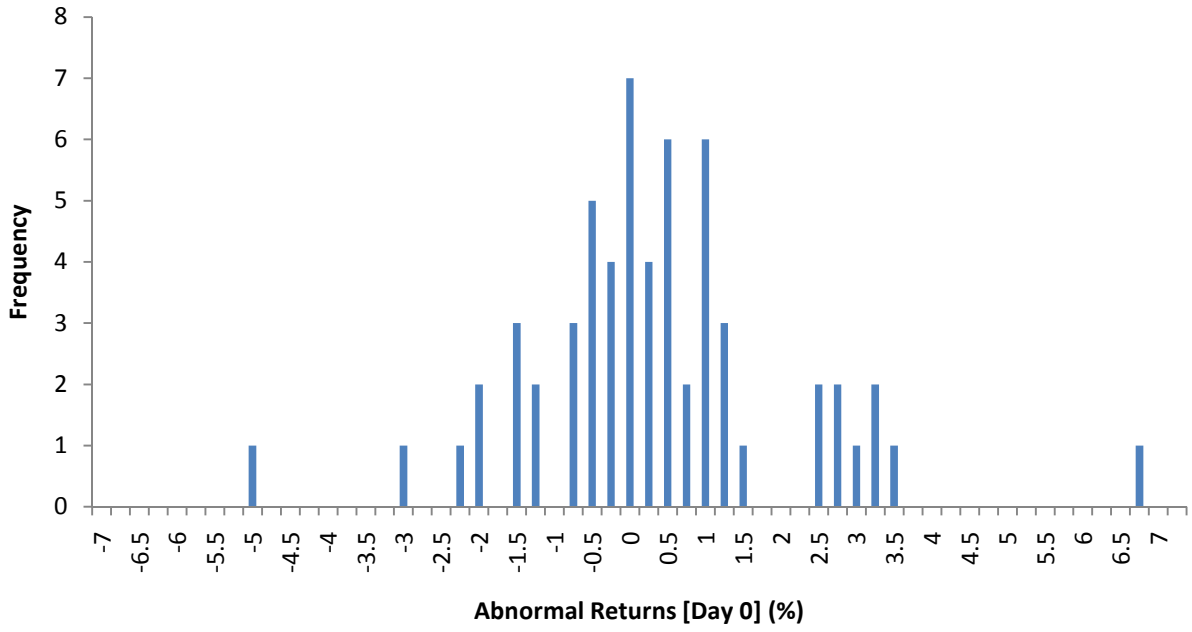
3. B Average Abnormal Returns for the Event Window

This table lists the daily average abnormal return for all sixty observations over the event window of the study. The total average abnormal return is also included.

Day	Average Abnormal Return (%)
-2	-0.1659707
-1	-0.0305748
0	0.1984690
1	-0.4573080
2	0.1421685
Total Average Abnormal Return (%)	
-0.0626432	

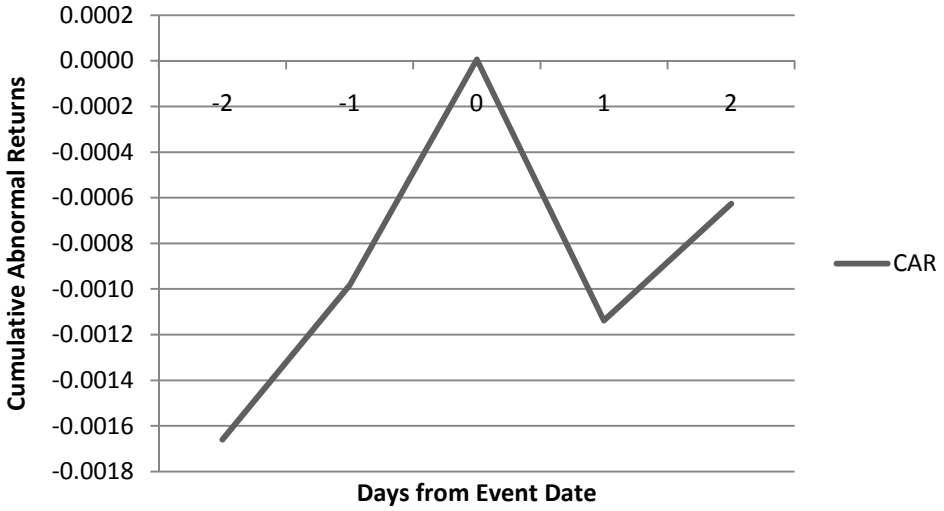
3. C Average Abnormal Returns on the Event Date

The histogram displays the distribution of average abnormal returns for all sixty observations on the event date of the study – the next trading day following the Academy Awards broadcast. The range with the highest frequency of seven out of the sixty observations was the [-0.25, 0.00] category.



3. D Cumulative Abnormal Return for the Event Window

The graph illustrates the cumulative abnormal return of the sixty observations of this study over the event window. Table 3. E contains the exact values for the five days represented on this chart.



3. E Cumulative Abnormal Returns for the Event Window

This table summarizes the cumulative abnormal returns of all sixty observations over the event window of the study.

Day	Cumulative Abnormal Return (%)
-2	-0.1659707
-1	-0.0982728
0	0.0006412
1	-0.1138461
2	-0.0626432

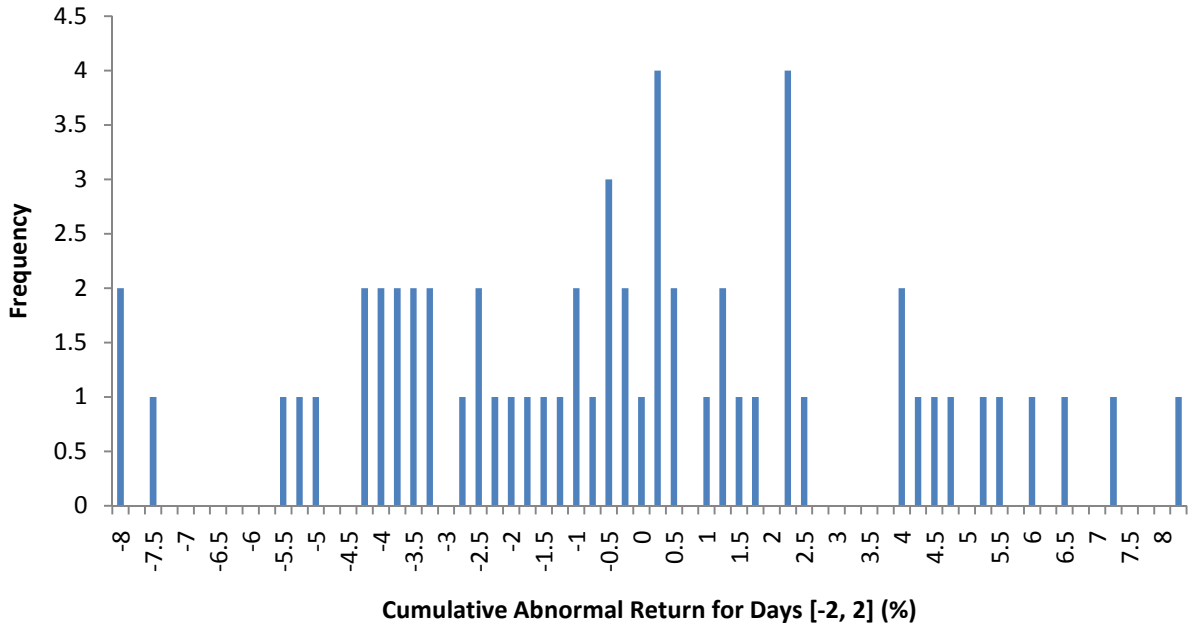
3. F Event Study Statistics

The table displays the statistics for the entire event study. The total cumulative abnormal return for all sixty observations over the event window and the corresponding variance and t-test statistic are shown.

Number of Observations	Total Cumulative Abnormal Return (%)	Variance	T-Test Statistic
60	-0.31322	0.0017714	-0.5764494

3. G Cumulative Abnormal Returns for the Event Window

This histogram shows the distribution of cumulative abnormal returns of all sixty observations over the event window of this study. No overlying trend appears in the data, but the majority of observations were negative. The range with the highest frequency is a tie between the [0.00, 0.25] and [2.00, 2.25] categories with four observations each.



3. H Significant Cumulative Abnormal Returns

The table displays the three observations of this study that were significant at the 5% level. The cumulative abnormal return and t-test statistic is shown for the 1993 Sony Corporation, 2006 General Electric Company, and 2009 Comcast Corporation observations.

Event Date	Company Name	CAR (%)	T-Test Statistic
03/30/93	Sony Corp	6.2935	2.3018
03/06/06	General Electric Co	4.1461	2.8474
02/23/09	Comcast Corp	18.4091	4.5765

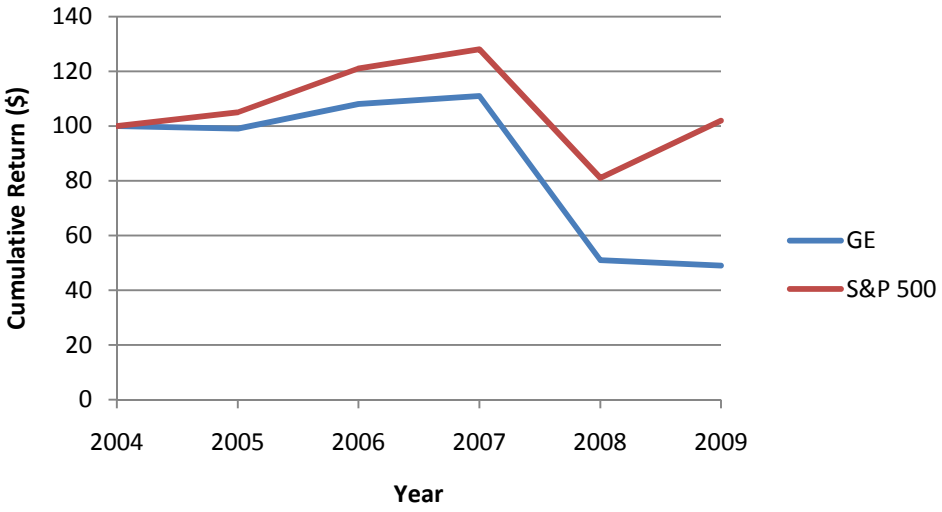
3. I Significant Observation Awards

This table summarizes the awards each parent company won during their respective significant observation years. There was no overlap of the awards achieved by each company and the categories Supporting Actress and Best Picture do not account for a significant observation win.

Event Date	Company Name	Actor	Supporting Actor	Actress	Supporting Actress	Director	Picture
03/30/93	Sony Corp			X			
03/06/06	General Electric Co		X			X	
02/23/09	Comcast Corp	X					

3. J Financial Performance Comparison between General Electric and S&P 500

The chart compares the financial performance of the Standard & Poor's 500 Stock Index and the stock of General Electric Company and shows the difference in outcomes if $100 was invested in each company on December 31, 2004 and measured annually for the following five year period. All quarterly dividends were reinvested, and the total cumulative dollar returns represent the value these investments would have December 31, 2009. This graph is an adaptation of the "Comparison of Five-Year Cumulative Return among GE, S&P 500, and Dow Jones Industrial Average" graph found in the 2006 Annual Report of General Electric Company. The table displays the exact dollar values of each investment during the five year period.



	2004	2005	2006	2007	2008	2009
GE	100	99	108	111	51	49
S&P 500	100	105	121	128	81	102

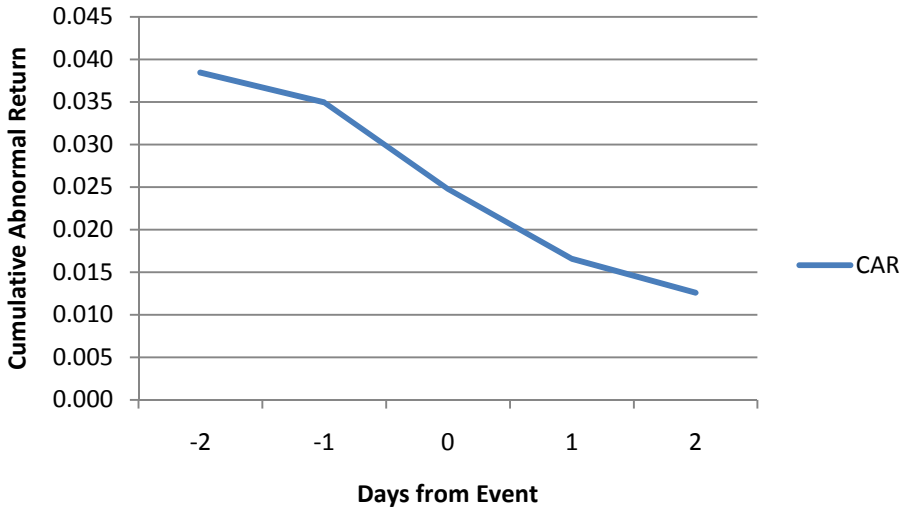
3. K Significant Observation Annual Average Daily Return and Average Abnormal Returns for the Event Window

This table shows the annual average daily return and the average abnormal returns for the event window of the three significant observations of the study.

Company Name	Year	Annual Average Return (%)	Event Window Average Abnormal Return (%)
Sony Corporation	1993	0.1653	1.2587
General Electric Company	2006	0.0387	0.8292
Comcast Corporation	2009	0.0446	3.6818

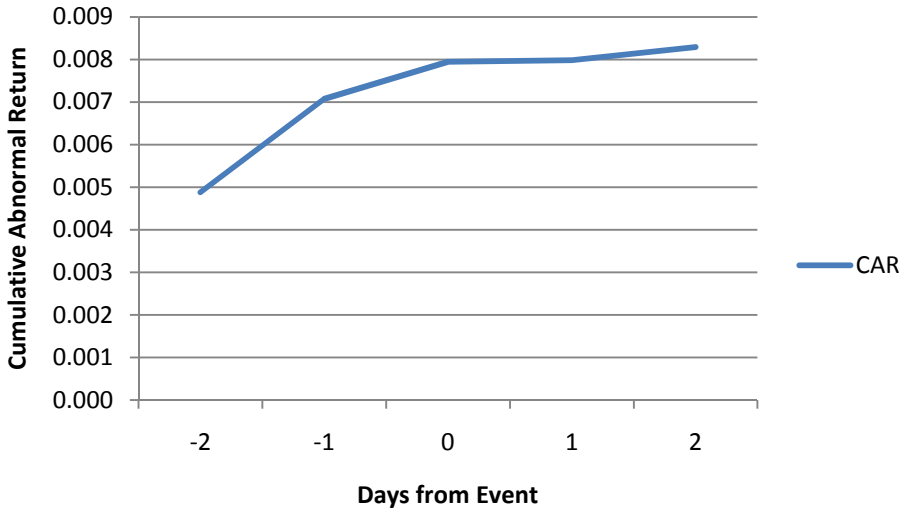
3. L 1993 Sony Corporation Cumulative Abnormal Return for the Event Window

The chart displays the cumulative abnormal return over the event window of this study for the 1993 Sony Corporation significant observation.



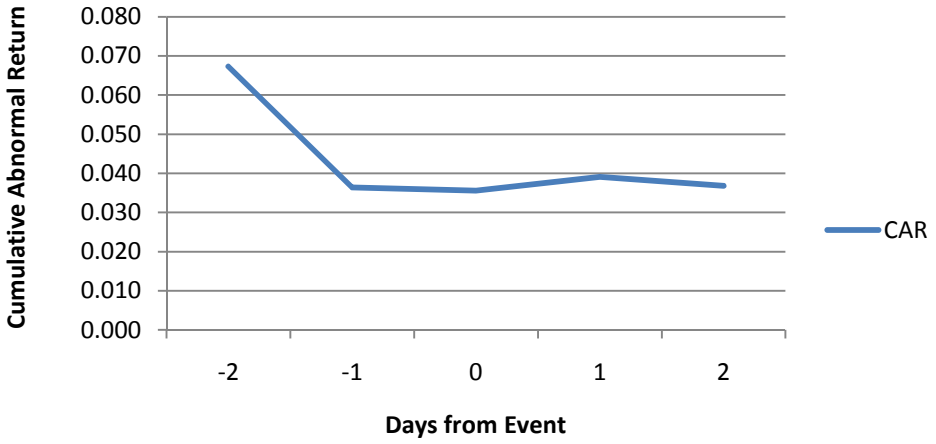
3. M 2006 General Electric Company Cumulative Abnormal Return for the Event Window

The chart shows the cumulative abnormal return over the event window of this study for the 2006 General Electric Company significant observation.



3. N 2009 Comcast Corporation Cumulative Abnormal Return for the Event Window

The chart displays the cumulative abnormal return over the event window of this study for the 2009 Comcast Corporation significant observation.



3. O Summary Statistics for the Additional Regression on the Abnormal Returns on the Event Date

This table contains all coefficients and standard error terms for the variables of each additional regression ran on the abnormal returns realized by the sixty observations of this study on the event date. The coefficient and standard error term of the intercept and adjusted r-squared of each regression are also included.

Dependent Variable: Abnormal Returns on Event Date									
Regressor	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Best Actor	-0.0049 (0.0049)								-0.0079 (0.0074)
Supporting Actor		0.0015 (0.0052)							-0.0020 (0.0073)
Best Actress			-0.0072 (0.0055)						-0.0103 (0.0080)
Supporting Actress				0.0009 (0.0048)					-0.0038 (0.0082)
Best Director					-0.0005 (0.0054)				-0.0008 (0.0107)
Best Picture						-0.0017 (0.0055)			-0.0046 (0.0103)
Multiple Wins							-0.0044 (0.0047)		-0.0019 (0.0102)
Blockbuster								-0.0007 (0.0076)	0.0056 (0.0111)
Intercept	0.0034 (0.0027)	0.0016 (0.0027)	0.0036 (0.0025)	0.0017 (0.0028)	0.0021 (0.0026)	0.0023 (0.0026)	0.0037 (0.0029)	0.0021 (0.0024)	0.0094 (0.0070)
Summary Statistics									
Adj. R^2	-0.0004	-0.0158	0.0128	-0.0167	-0.0171	-0.0157	-0.0016	-0.0171	-0.0716
n	60	60	60	60	60	60	60	60	60

3. P Summary Statistics for the Additional Regression on the Cumulative Abnormal Returns for the Period [-1, 1] around the Event Date

This table contains all coefficients and standard error terms for the variables of each additional regression ran on the cumulative abnormal returns realized by the sixty observations of this study over the period [-1, 1] around the event date. The coefficient and standard error term of the intercept and adjusted r-squared of each regression are also included.

Dependent Variable: Cumulative Abnormal Returns [-1, 1]									
Regressor	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Best Actor	-0.0100 (0.0081)								-0.0233 (0.0120)
Supporting Actor		-0.0060 (0.0085)							-0.0196 (0.0119)
Best Actress			-0.0060 (0.0091)						-0.0223 (0.0130)
Supporting Actress				0.0015 (0.0080)					-0.0181 (0.0134)
Best Director					0.0013 (0.0089)				-0.0158 (0.0173)
Best Picture						0.0053 (0.0091)			-0.0047 (0.0167)
Multiple Wins							-0.0028 (0.0077)		0.0133 (0.0162)
Blockbuster								0.0087 (0.0125)	0.0189 (0.0180)
Intercept	0.0001 (0.0045)	-0.0013 (0.0044)	-0.0016 (0.0042)	-0.0034 (0.0046)	-0.0032 (0.0043)	-0.0041 (0.0042)	-0.0018 (0.0048)	-0.0038 (0.0040)	0.0179 (0.0114)
Summary Statistics									
Adj. R^2	0.0085	-0.0085	-0.0097	-0.0166	-0.0169	-0.0113	-0.0150	-0.0089	-0.0353
n	60	60	60	60	60	60	60	60	60

3. Q Summary Statistics for the Additional Regression on the Cumulative Abnormal Returns for the Event Window

This table contains all coefficients and standard error terms for the variables of each additional regression ran on the cumulative abnormal returns realized by the sixty observations of this study over the event window. The coefficient and standard error term of the intercept and adjusted r-squared of each regression are also included.

Dependent Variable: Cumulative Abnormal Returns [-2, 2]									
Regressor	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Best Actor	-0.0081 (0.0126)								-0.0257 (0.0188)
Supporting Actor		-0.0155 (0.0130)							-0.0327 (0.0186)
Best Actress			0.0026 (0.0141)						-0.0217 (0.0205)
Supporting Actress				0.0032 (0.0123)					-0.0241 (0.0210)
Best Director					-0.0043 (0.0137)				-0.0331 (0.0272)
Best Picture						0.0037 (0.0141)			-0.0048 (0.0263)
Multiple Wins							-0.0020 (0.0119)		0.0269 (0.0254)
Blockbuster								0.0081 (0.0193)	0.0210 (0.0282)
Intercept	-0.0007 (0.0069)	0.0010 (0.0067)	-0.0037 (0.0066)	-0.0042 (0.0071)	-0.0021 (0.0066)	-0.0039 (0.0066)	-0.0024 (0.0074)	-0.0039 (0.0061)	0.0224 (0.0178)
Summary Statistics									
Adj. R^2	-0.0101	0.0071	-0.0166	-0.0161	-0.0155	-0.0160	-0.0167	-0.0142	-0.0735
n	60	60	60	60	60	60	60	60	60

3. R Blockbuster Variable Statistics

The table displays statistics for the blockbuster variable of each regression ran during the follow-up tests of the study, consisting of the regression on the average abnormal returns on the event date, cumulative abnormal return for the period [-1, 1] around the event date, and the cumulative abnormal return for the event window. The t-test and p-value statistics for each blockbuster variable are also included.

Regression	**Individual Variable Regression (%)**	**Individual T-Test**	**Individual P-Value**	**All Inclusive Variable Regression (%)**	**All Inclusive T-Test**	**All Inclusive P-Value**
Abnormal Return Day 0	-0.07	-0.10	0.92	0.56	0.51	0.61
Cumulative Abnormal Return [-1, 1]	0.87	0.69	0.49	1.89	1.05	0.30
Cumulative Abnormal Return [-2, 2]	0.81	0.42	0.68	2.10	0.74	0.46

3. S Films that achieved Blockbuster Status after the Academy Awards Ceremony

This table contains the total box office gross revenue values of the five Best Picture films that went on to reach blockbuster status after the Academy Awards broadcast. The films listed received an indicator value of 1 for the follow-up regressions of the study, meaning they were not of blockbuster status at the time of the Oscars ceremony. However, these films exceeded their $100 million equivalent after receiving the Best Picture Award at the Academy Awards in their respective years, and the amount by which they surpassed their $100 million equivalent is also displayed in the table. See Appendix 2. B for the summary of equivalent values for the period of 1990 to 2010.

Year	Film	Total Domestic Box Office Gross ($)	Gross Above $100 million Equivalent (%)
2004	*Million Dollar Baby*	100,422,786	13.09
1998	*Shakespeare in Love*	100,241,322	27.13
1996	*The English Patient*	78,651,430	3.78
1995	*Braveheart*	75,609,945	1.76
1993	*Schindler's List*	96,045,248	34.49