

THE RISE AND FALL OF TIGER WOODS AND ITS
EFFECTS ON THE GOLF INDUSTRY AND
HIS SPONSORS' PERFORMANCE

by

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ABSTRACT

Tiger Woods is one of the greatest athletes of all time and his impact on the game of golf will be felt for generations. Woods has been the center of academic and nonacademic research, which mainly focuses on the significance of his endorsement of a certain company's products or services. Throughout my research I noticed that Woods' effect on the golf industry as a whole has not been sufficiently studied. The main purpose of this study is to attempt to understand the effect that Woods has had on the golf industry, but his impact on his major publicly traded sponsors are also analyzed. Mainly through the use of a multiple regression analysis along with other more qualitative research methods, it was discovered that Woods has had a significant impact on the health of the golf industry, but his effect on his major publicly traded sponsors is inconclusive. Although the results of this study are interesting, it is important to realize that this is preliminary research. More research is necessary, especially concerning Woods' effect on the golf industry, to understand Tiger Woods and the game of golf.

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INTRODUCTION

Tiger Woods is arguably one of the most controversial, and ironically, loved figures in sports. Since his professional debut at the Nissan Los Angeles Open on February 27th, 1992, he has taken the golf world by storm winning 80 Professional Golf Association (PGA) Tour events. Woods started to make a name for himself at the young age of 3 when he appeared on the show *That's Incredible* to showcase his superior golfing capabilities. By the time Woods turned 22, he had already won multiple PGA Tour tournaments and was named *Sports Illustrated* Sportsman of the Year. Just a year later, at the young age of 21, Woods won his first Masters Championship and cemented himself as the new face of golf. Woods' success not only attracted him a large fan base, but it also attracted many sponsors who were eager to endorse the young superstar. Nike [Ticker: NKE] was the first major public corporation to endorse Woods in 1996. Soon after, in 1999, Electronic Arts [NASDAQ: EA] signed Woods' to an endorsement deal that was valued at \$8 million a year. With that endorsement deal, EA created the Tiger Woods PGA Tour video game. In 2003, Accenture [NYSE: ACN] decided to make Woods the face of the company and in 2006 Proctor & Gamble [NYSE: PG] used Woods, Derek Jeter and Roger Federer to co-sponsor Gillette Razors. Finally, in 2007, Gatorade [NASDAQ: PEP] partnered with Woods' to introduce the Tiger Woods version of Gatorade that was nicknamed "Tigerade". The table below presents a list of Woods' sponsorship deals, as well as the annual value Woods was receiving from his sponsors¹.

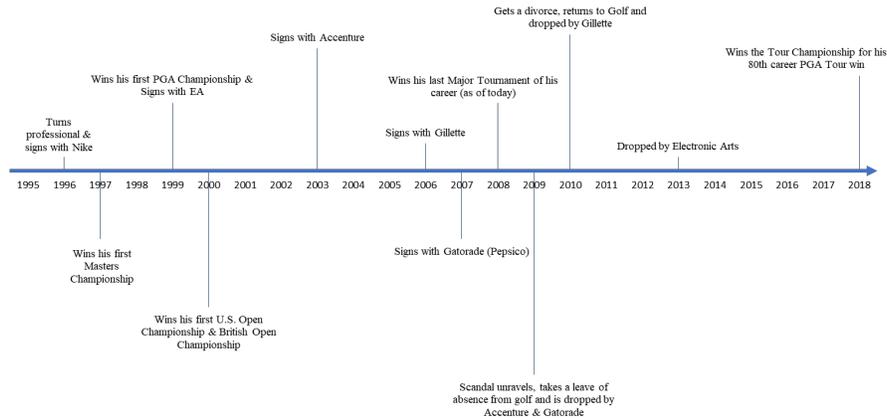
¹ Kelley. "What Are Tiger Woods' Current Endorsements?" ThoughtCo, ThoughtCo, 5 Oct. 2018, www.thoughtco.com/tiger-woods-endorsements-1566364.

Sponsor	Start Year	End Year	Annual Value (\$m)
Nike	1996	Present	10 to 30
Pepsico	2007	2009	20
Accenture	2003	2009	20
Proctor and Gamble	2006	2010	15
Electronic Arts	1999	2013	8

Due to the massive success for Woods on the golf course, it was a no brainer for these companies to sign endorsement deals with him. Up until November of 2009, Woods was flawless on the golf course and he was viewed as a down to earth family man by the general public. But, when the *National Enquirer* published a story claiming that Woods had been involved in extramarital affairs with multiple different women, while married to Swedish model Elin Nordegren, Woods' image started to falter. Throughout the next couple of weeks, various reports from magazines and news agencies such as People, ESPN, and US Weekly expanded on Woods' apparent immoral activities off of the golf course and it was evident that the *National Enquirer* piece published in November of 2009 started a full-blown scandal. On December 2nd, 2009, Woods released his first statement admitting to the allegations and apologizing to "all of those who have supported [him] over the years." A timeline of Tiger Woods' career that includes endorsement deal signing dates, major tournament victories, and major off course mistakes is presented below².

² "A Timeline of Tiger Woods' Career." USA Today, Gannett Satellite Information Network, 14 Apr. 2019, www.usatoday.com/story/sports/golf/2019/04/14/a-timeline-of-tiger-woods-career/39345179/.

Tiger Woods' Timeline



Although all of that is very interesting, the point of this study is not to explain Woods' cheating scandal in grotesque detail, or even discuss the impact that this scandal had on Woods himself, but rather uncover the impact that Woods' actions, on and off the course, have had on the golf industry, the major golf industry players, and his largest publicly traded sponsors. In the past, Woods has been a topic of research, especially when it comes to his impact on his largest sponsor, Nike. Although, at least in the world of academia, there hasn't been much research conducted on the impact that Woods' has had on the game of golf, the major industry players, and some of his other major sponsors. One major piece of Academic literature that I came across was a study done by Victor Stango and Christopher Knittel, professors of economics at the UC Davis School of Management, titled "Celebrity Endorsements, Firm Value and Reputation Risk: Evidence from the Tiger Woods Scandal." Stango and Knittel's study looked into the impact that the Woods Scandal had on his sponsor companies' shareholder wealth. Stango and Knittel did an event study that looked at the returns of Tiger Woods' publicly traded sponsors for a short period of time before, and after the news of his Scandal was released and determined that Woods cost

shareholders a collective \$12 billion during that short time period³. Even though this study was extremely interesting, it was conducted for a very short period of time and it didn't discuss the impact that the scandal might have had on the golf industry, specifically on companies that are not directly connected to Woods.

Another study by Timothy P. Derenger, titled "Examining the impact of celebrity endorsements across consumer segments: an empirical study of Tiger Woods' endorsement effect on golf equipment" discusses how having a golf product endorsed by Woods increases sales among novice golfers⁴. This was another interesting read, yet it failed to address the impact that Woods' had on his sponsors that don't necessarily product golf equipment and it also didn't address his impact on the entire golf industry. That is the gap that I am trying to fill with this study. I am attempting to uncover how Woods has impacted all of his major sponsors as well as the golf industry as a whole.

The specific research questions that I proposed at the onset of my research is as follows: What has been the effect of Tiger Woods on the golf industry? How has he impacted his sponsors as well as other industry incumbents? It is difficult to find a large organization these days that does not have a celebrity endorsement of any kind. It is also difficult to find a professional sport that doesn't have a major figurehead that is either active or retired. For example, basketball has LeBron James, tennis has Roger Federer, baseball has Derek Jeter, and soccer (fútbol) has Lionel Messi. It is relatively easy for a company to see the upside of having an A-list celebrity, like Kylie Jenner, Michael Jordan, or Brad Pitt promote its products and

³ Tiger Woods Scandal Cost Shareholders up to \$12 Billion. gsm.ucdavis.edu/news-release/tiger-woods-scandal-cost-shareholders-12-billion. Accessed 24 Sept. 2018.

⁴ Derdenger, Timothy P. "Examining the Impact of Celebrity Endorsements across Consumer Segments: an Empirical Study of Tiger Woods' Endorsement Effect on Golf Equipment." *Marketing Letters*, vol. 29, no. 2, 2018, pp. 123–136., doi:10.1007/s11002-018-9455-8.

services, but it is also common for companies to forget about the potential downside of an endorsement deal with any of these celebrities. For every corporation, nonprofit, or organization of any type that uses a celebrity sponsor to promote their products or services it is important to understand the positive and negative consequences that a celebrity sponsor can have on the reputation and bottom line of the company. And, if a celebrity is influential enough, it is possible that the entire industry could face potential damage.

Overall, the main purpose of this study is to uncover the impact, if any, that Woods has had on the golf industry and his major publicly traded sponsors; Nike, Gatorade (PepsiCo), Accenture, Gillette (Proctor & Gamble), and Electronic Arts. There is a plethora of articles, biographies, and studies about Woods. In this manuscript, it is my intention to synthesize the available research on Woods, his impact on golf, and his effect on his major sponsors. I will also discuss the research that I conducted, the results from my research, and the implications of the findings. Tiger Woods, whether you love him or not, is the face of golf and his impact is worth looking into.

LITERATURE REVIEW

When looking at the available literature on Tiger Woods, his scandal, and his impact on golf's business and the sport in general, I can lump my findings into three different categories. The first category of literature I came across is academic and practitioner studies directly related to Woods. These studies are focused on Woods impact to the financial performance of his sponsors, but mainly his impact on Nike's golf business. The second category of literature I came across was academic and practitioner studies indirectly related to Woods. For example, there are a plethora of studies and research papers that address the impact of celebrity endorsement and celebrity scandals, but these studies are not directly related to Woods. Even though the research conducted in these studies didn't directly address Woods, they helped me create a framework for how I addressed my research. The third, and final, category of literature that I used throughout my research was public press articles that discussed the impact that Woods had on the game of golf as well as some of his sponsors. While these are not formal pieces of literature, they gave a different viewpoint on how people in the press, especially the golf press, views Tiger Woods, his performance on the golf course, and his scandal. All three categories of literature that I came across provided a solid foundation that I based my research upon, and helped determine the direction to take in researching the effect Woods has had on his sponsors and the golf industry.

As mentioned above, Woods, being the biggest name in golf, has been a popular topic in academic literature, especially concerning his effect on Nike's golf business. A study by Kevin Chung, Timothy Derenger and Kannan Srinivasan, researches at the University of Wisconsin-Madison and Carnegie Mellon University, studied the sales and profits of golf equipment products endorsed by Tiger Woods. The study, titled "Economic Value of Celebrity

Endorsement: Tiger Woods' Impact on Sales of Nike Golf Balls," came to the conclusion that the Nike Golf ball experienced \$9.9 million and \$103 million in excess sales and profits because Woods was the athlete who endorsed the golf balls. The researchers, who used very complex techniques to isolate Woods' effect on golf ball sales, determined that Nike absorbed approximately 4.5 million new golf ball customers because of Woods. The study also mentioned that having a Woods endorsement lead to a price premium of 2.5%, compared to other products endorsed by other, similar, athletes. On top of all of that, the study mentioned that the investment that Nike made in Woods, a total of around \$181 million, was more than half recovered by the sale of golf balls alone. The study did not look at the effect that Woods had on other Nike golf products, but the researchers predicted that Nike easily recovered the entire amount of their investment in Woods if other product lines experienced similar results as Nike golf balls⁵. The researchers also addressed the impact of the scandal. After the scandal went public, Woods immediately lost endorsements deals with Accenture and Gatorade. A big question on everyone's mind at the time was "what will the relationship between Tiger Woods and Nike be like going forward?" Eventually, Nike decided to stay with Woods and according to the study, Nike made the correct move. The researchers estimated that if Nike dropped Woods, it would have lost around \$1.6 million in profits. A relatively small number relative to Nike's total profits, but still a material amount of profits for Nike's golf business.

Conversely, a study by Victor Stango and Christopher Knittel, professors at the University of California Davis' Graduate School of Management came to a conclusion that the Woods' immoral actions off of the golf course caused shareholders in some of his major publicly

⁵ Chung, Kevin Yc, et al. "Economic Value of Celebrity Endorsements: Tiger Woods' Impact on Sales of Nike Golf Balls." *Marketing Science*, vol. 32, no. 2, 2013, pp. 271–293., doi:10.1287/mksc.1120.0760.

traded sponsors to lose around \$12 billion in market value. The study, titled “Celebrity Endorsements, Firm Value and Reputational Risk: Evidence from the Tiger Woods Scandal” looked at the returns of Woods’ sponsors 10-15 days before and after the scandal became public knowledge. Stango and Knittel looked at Google search results relating to the Woods scandal and ascertained that the day-by-day losses of Woods’ sponsors correlated strongly to those google search results. They also discovered that while his sponsors each lost around 2% of their market values, his sponsor’s competitors experienced an equally positive change in market value that could indicate that another firm’s losses are the competitor’s gains. Also, the study noticed that firms who relied heavily on endorsements from celebrities and athletes other than Tiger Woods, also experienced a decline in market value that was closely correlated with the Google search results discussed earlier. This indicates that the Woods scandal caused the overall market’s viewpoint toward celebrity endorsements to turn negative. Overall, the conclusion of the study can be summarized by Stango who stated, “Our Analysis makes clear that while having a celebrity of Tiger Woods’ stature as an endorser has undeniable upside, the downside risk is substantial too”³.

On the other hand, Matthew Hood, a professor of Finance and Economics at Texas State University – San Marcos, came to a different conclusion. Similar to Stango and Knittel’s study, Hood used the event study methodology to determine if the Woods scandal caused his sponsors to experience abnormal returns because of the reputational consequences of having Woods as an endorser of their products. Hood classified Woods’ main sponsors into two categories to help specify and pinpoint the results of his research. The first category is sports related sponsors: Nike (Nike Golf), Electronic Arts (Tiger Woods PGA Tour), and Gatorade. The second category of sponsors is sponsors unrelated to sports: AT&T, Accenture, and Proctor & Gamble. Compared to

Stango and Knittel's findings, Hood concluded that Woods' sponsors didn't "suffer a statistically significant negative cumulative abnormal return"⁶ This was an interesting find because two research papers that used a similar research methodology, came to complete opposite results.

Although not a piece of academic literature, an article by CNBC, titled "Tiger Woods effect brings huge impact on sales: Bridgestone Golf CEO", discusses a conversation with the former Bridgestone Golf CEO, Angel Ilagan, about having Woods endorse Bridgestone golf balls. Since Nike exited the Golf equipment business in 2016, Woods has had to look for new sponsors for his golf equipment and when it came to golf balls, Woods signed a deal with Bridgestone Golf. Ilagan mentioned that "[Tiger Woods'] endorsement alone increases our sales 30 percent, even if he's not playing." In 2016, the year this article was written, Bridgestone golf sold out of a year's worth of Woods' branded golf balls within 10 business days. Ilagan mentioned that if Woods starts to win some major tournaments "[Bridgestone Golf] is in a whole lot of trouble because we're not going to be able to make enough product" to sell to the massive influx of customers. Bridgestone CEO and CNBC give credit to Woods for increasing the popularity of the sport and increasing golf participation, especially younger children who may have been attracted to other sports if it were not for the success of Woods. A study by Nielsen came to the conclusion that Woods' presence increased golf viewership by 150 percent and raised badge demand by 20 percent⁷.

There is a lot off literature about Woods and his effect on the golf industry and his corporate sponsors. Golf is what it is today because of Woods and the attraction that he has

⁶ Hood, Matthew. "The Tiger Woods Scandal: a Cautionary Tale for Event Studies." *Managerial Finance*, vol. 38, no. 5, 2012, pp. 543–558., doi:10.1108/03074351211217850.

⁷ Angulo, Ingrid. "Tiger Woods Effect' Brings Huge Impact on Sales: Bridgestone Golf CEO." CNBC, CNBC, 5 Apr. 2018, www.cnbc.com/2018/04/05/tiger-woods-effect-brings-huge-impact-on-sales-bridgestone-golf-ceo.html.

brought to the sport. He has had a bigger effect on the sport of golf than Michael Jordan has had on basketball, than Derek Jeter has had on baseball, and Tom Brady has had on Football. When looking at Woods' effect on golf as an industry, there is not much academic research, but there are many press publications about Woods' effect on the game of golf and the golf industry. An article by Golf Digest, titled "What Golf Looked Like Before Tiger Woods Turned Pro And Changed The Game Forever," looked at the game of golf, specifically the PGA Tour, before Woods entered the profession. Before Woods turned professional, he already had three U.S. Amateur titles under his belt. The most by any golfer. Woods' professional debut was undoubtedly the "most anticipated announcement of a golfer turning pro, far greater than anything the game's two other most distinguished amateurs ever endured." If you are wondering, those other two amateurs are Bobby Jones and Jack Nicklaus. A large majority of the article talks about how professional golfers should thank Woods increasing the populating of the PGA Tour, and in turn, the prize money that professional golfers receive for winning PGA Tour events. In 1996, the PGA tour put on 44 events and the average total purse was \$1,529,545 and the average first-place check was \$263,241. On the other hand, in 2016, the PGA tour put on 46 events and the average total purse was \$6,926,087 and the average first-place check was \$1,258,861. This is an increase of 352 percent and 378 percent, respectively. The article credits Woods for bringing more and more sponsors, and money, to the tour and having dollars trickle "down to all players." The article found similar results when looking at total golfers in the U.S. and rounds played in the U.S. In 1996, there were 24.4 million active golfers and those golfers played a total of 429.7 million rounds. In 2006, when Woods was at his peak playing performance, there were 29.8

million active golfers and those golfers played a total of 501.3 million rounds. This is an increase of 16.7 percent and 22.1 percent, respectively⁸.

Media and communications companies love to talk about something called the “Tiger Effect.” The “Tiger Effect” is a term to describe how much of an impact Woods has on television ratings when he is competing in a televised professional tournament. An article by Forbes, titled “Does Tiger Woods Still Boost TV Ratings? Make That a Resounding Yes,” talks about this phenomenon. Woods did not compete in the 2017 Professional Golf Association (PGA) Championship, and that caused television ratings to suffer. But, in 2018, Woods returned to the PGA Championship and came in tied for second place. This made a huge impact on and off of the golf course. Ratings for the final round of the 2018 PGA championship skyrocketed compared to 2017. CBS drew its highest rating for the final round of the PGA championship in nearly 10 years. CBS averaged 6.1 metered-market household ratings and a 14 share, according to Nielsen, 69 percent better than 2017 Sunday average. Ratings for any tournament that Woods competes in, especially majors, see massive jumps simply because people love to watch Woods play. But, more importantly, people love to watch Woods win, especially at the biggest tournaments. When Woods doesn’t compete in televised tournaments, ratings suffer, and average golf fans tend to not follow the sport nearly as much as they would if Woods was competing. Also, if Tiger becomes absent from a tournament, his competition, ironically, suffers as well because almost every brand related to golf suffers when Woods is unable to compete. Woods raises the amount the players can earn from sponsorships. Before Woods, professional athletes were not making much money at all from sponsorships, but Woods raised the bar and many

⁸ Herrington, Ryan. What Golf Looked Like Before Tiger Woods Turned Pro And Changed The Game Forever. www.golfdigest.com/story/what-golf-looked-like-before-tiger-woods-turned-pro-and-changed-the-game-forever. Accessed 24 Sept. 2018.

players make most of their money due to corporate sponsorships. Woods is one of the greatest players of all time and his competition view him as a double-edged sword. They don't like playing against him, but they can't play without him. Woods can be viewed as the golf industry's biggest business driver, but he can also serve as the golf industry's biggest handicap⁹.

There is also a lot of academic studies that, although not directly related to Woods, show the impact of celebrity endorsement on companies and industries. For example, a study by Anita Elberse, of the Harvard Business School, and Jeroen Verleun, of Barclays Capital, titled "The Economic Value of Celebrity Endorsements," looked into the pay-off of celebrities endorsing a company's products. Instead of looking at stock returns, like many academic studies have done, Elberse and Verleun look at the impact on sales, which they believe is a more important metric when looking at whether or not a celebrity is worth paying to endorse a company's business. The study found that a positive celebrity endorsement can increase sales on a relative and absolute basis, and it did mention that stock returns can experience an increase. But an interesting piece of this study was that overtime, the sales of company products endorsed by a certain celebrity increase at a declining rate¹⁰. This shows that a celebrity endorsement can be useful at increasing sales for a specific period of time, but it also proves that a celebrity endorsement is not beneficial into perpetuity. These findings can be used to show the potential impact that Woods has on companies like Nike, PepsiCo, Accenture, Proctor & Gamble, and Electronic Arts after signing an endorsement deal with Woods.

⁹ Fitzgerald, Toni. Does Tiger Woods Still Boost TV Ratings? Make That A Resounding Yes. 13 Aug. 2018, www.forbes.com/sites/tonifitzgerald/2018/08/13/does-tiger-woods-still-boost-tv-ratings-make-that-a-resounding-yes/#1091ddd54005. Accessed 24 Sept. 2018.

¹⁰ Elberse, Anita, and Jeroen Verleun. "The Economic Value of Celebrity Endorsements." *Journal of Advertising Research*, vol. 52, no. 2, 2012, pp. 149–165., doi:10.2501/jar-52-2-149-165.

Another interesting piece of literature, by Sean Silverthorne, of the Harvard Business School, talks about the 'Flutie Effect.' The paper, titled "Diagnosing the 'Flutie Effect' on College Marketing," discusses how Boston College experienced a large upswing in admissions after "Doug Flutie threw a last-second Hail Mary pass that was miraculously caught for a game-winning touchdown." The major point of this study is to show how the success of a certain college's sports program can increase the admissions to that college. This was interesting because this also can be compared to the effect that the success of Woods has had on the game of golf. A lot of research, like the studies mentioned above, talk about the phenomenon of when Woods is playing well the game of golf, and the business of golf, is doing well. Golf participation and golf viewership increase when Woods is playing just like the admissions for Boston College increased when Doug Flutie threw a miracle of a pass to win a big game in it's final seconds¹¹.

Many of these different pieces of literature discuss the importance of Woods to the golf industry, but they also make it aware that the mistakes that Woods has made in the past have been very detrimental. The research presented above points to the "Tiger Effect" being a real thing and it shows that the golfing world, and Woods' sponsors, should be aware of Woods. There is a lot to learn from the consequences that were brought about from the Woods Scandal.

¹¹ "Diagnosing the 'Flutie Effect' on College Marketing." HBS Working Knowledge, 29 Apr. 2013, hbswk.hbs.edu/item/diagnosing-the-flutie-effect-on-college-marketing.

RESEARCH METHODOLOGY AND RESULTS

My research came down to three major questions. Does Tiger Woods have an effect on the golf industry's performance? Does Tiger Woods have an effect on the stock price returns of the major public companies that are involved in the Golf Industry. And finally, Does Tiger Woods have an effect on his sponsors financial performance. Before I conducted any research, I hypothesized that Tiger Woods' performance on the course, as well as his actions off the course, had a material impact on the game of golf as well as the major industry players. But when it comes to his publicly traded sponsors (Nike, PepsiCo, Accenture, Proctor & Gamble, Electronic Arts) I didn't think that Woods has had a significant effect on the performance of those companies.

Before diving into my research, it was tough to decide on the methodology I would choose to uncover the effect that Woods has had on the golf industry and his sponsors. I came across various potential approaches, both qualitative and quantitative. But, the majority of my research was focused around a multiple regression analysis. A multiple regression analysis is an extension of a simple linear regression. It is a very common predictive model that is used to explain the relationship between one dependent variable and two or more independent variables¹². It can be explained by the following equation:

$$y = a + b_1X_1 + b_2X_2$$

where:

- y = Predicted value of y
- a = Estimated intercept
- b₁ = The slope for variable X₁
- b₂ = The slope for variable X₂

¹² Multiple Linear Regression, Yale University, www.stat.yale.edu/Courses/1997-98/101/linmult.htm.

The simplest form of a multiple regression analysis has one dependent variable and two independent variables, which is the model that I used for my research. There are many uses of a multiple regression analysis. It can be used to identify how a dependent variable changes when independent variables are changed, similar to a forecast. For example, a multiple regression analysis can be used to predict the change in exam grades for every one-hour increase (or decrease) in hours studied and every one-point increase (or decrease) in IQ. Multiple regression analysis may also be used to predict future values and trends. It can help answer a question like, “If I study for nine hours, and my IQ is 110, what can I expect to score on my next exam?”. And last, but certainly not least, a multiple regression analysis is very useful for identifying how strong the relationship is between the dependent variable and the independent variables. It can uncover whether or not a change in the independent variables had an impact on the dependent variables. Obviously, if a change in one or both of the independent variables caused a large change in the dependent variable, there is evidence to say that there is a strong relationship between the dependent and independent variables¹³. As you can see, a multiple regression analysis has so many useful applications, but my reasoning behind choosing a multiple regression analysis as my predicative model is because I wanted to uncover if there is a strong relationship between Woods’ public perception & his golf performance and the performance of the golf industry, as well as his major publicly traded sponsors. Specifically, I tried to test whether or not Woods’ public perception and his tournament wins have had an effect on the stock price returns of the major golf industry players, the United States golf participation rate, major tournament television ratings, major tournament television viewers, and the stock price returns of his major publicly traded sponsors.

¹³ “What Is Multiple Linear Regression?” Statistics Solutions, www.statisticssolutions.com/what-is-multiple-linear-regression/.

To use a multiple regression analysis, it is necessary to have quantifiable data, which is where I ran into some trouble. It was simple quantifying Woods' wins, but what was really hard for me was determining how to quantify Woods' public perception. I came across various different measures of Woods' public perception and I decided to use Woods' Favorability Rating as a proxy for his public perception. The Favorability rating is just like an approval rating for the President. SAGE Research Methods describes a favorability rating as a "statistical indicator that is produced from data that typically are gathered in political polls. These ratings indicate whether the public's overall sentiment toward a politician is favorable (positive), unfavorable (negative), or neutral"¹⁴. The Gallop Poll conducts a favorability rating, but not just for politicians. It has Favorability Ratings for almost any major athlete or celebrity that you can think of, Tiger Woods included¹⁵.

THE GOLF INDUSTRY:

First, I'd like to turn the attention to the Golf Industry. The golf industry consists of many parts, ranging from real estate to facility operations. As mentioned above, for the purpose of this study, I decided to look at major tournament television ratings and major tournament television viewers, the United States golf participation rate (which is just how many people in the United States are actively playing golf) and Golf Equipment sales because I felt that these would be the most relevant industry metrics to Woods and they are some of the largest sub-sectors of the golf industry. On top of that, I also thought it would be interesting to look at some of the major public companies that are involved in the golf industry and study whether or not Tiger Woods has an

¹⁴ "Favorability Ratings." Sage Research Methods, methods.sagepub.com/reference/encyclopedia-of-survey-research-methods/n180.xml.

¹⁵ Gallup, Inc. "Favorability: People in the News." Gallup.com, news.gallup.com/poll/1618/favorability-people-news.aspx.

effect on these industry incumbents. The major industry incumbents, and their market capitalization values, are listed in the table below.

		 <i>Ingersoll Rand.</i>		
129.4B	33.5B	25.2B	47.1B	1.5B

As mentioned above, Nike is a massive sports equipment and apparel company, and up until 2016 Nike sold golf equipment, specifically golf clubs and golf balls¹⁶. Eaton Corporation, which is probably the most diverse company that I came across during my research, is involved in a lot of different business activities, but they manufacture one of the most popular golf grips in the game, the Golf Pride Grip¹⁷. Ingersoll Rand, a company that also has a multitude of different business lines, is one of the, if not the largest, manufacturer of golf carts and golf course maintenance equipment¹⁸. Adidas is also a major apparel and sports equipment company, and up until 2017, they owned Taylor Made Golf. Taylor Made is one of the most popular golf equipment companies in the world and they represent a large majority of the PGA tour players¹⁹. Finally, the purest public golf company I came across was Callaway, which is one of the largest golf equipment and golf apparel providers in the world²⁰.

¹⁶ “NKE / Nike, Inc. 10-K (Annual Report) - July 25, 2018.” Fintel.io, fintel.io/doc/sec-nke-nike-10k-2018-july-25-17944.

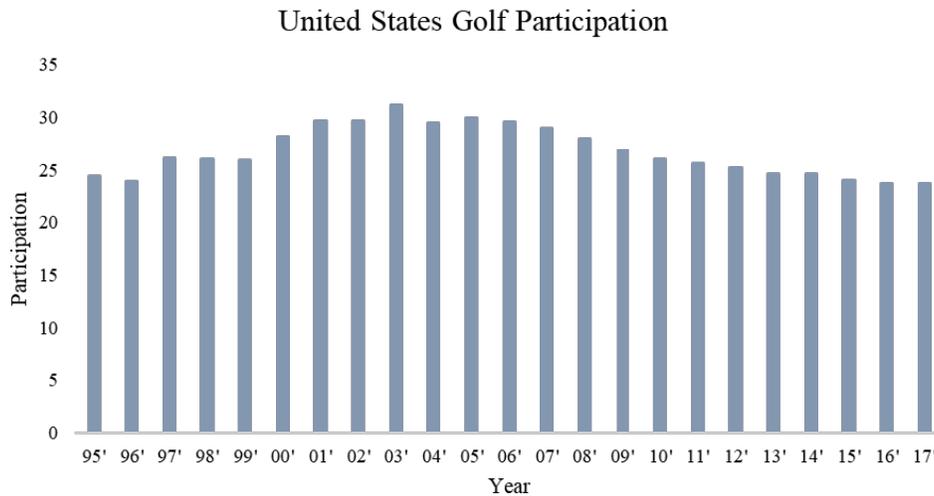
¹⁷ “Eaton Corporation Annual Report.” Eaton, 5 Mar. 2019, www.eaton.com/us/en-us/company/investor-relations/investor-toolkit/financial-reports/2017-annual-report.html.

¹⁸ “Ingersoll Rand Plc - Investors - Financial Information - SEC Filings.” Ingersoll Rand, ir.ingersollrand.com/investors/financial-reports/sec-filings/default.aspx.

¹⁹ “Adidas GB 2018: Annual Report 2018.” Adidas GB 2018: Annual Report 2018, report.adidas-group.com/.

²⁰ “Callaway Golf Company.” SEC FILING | Callaway Golf Form 10-K, services.corporate-ir.net/SEC.Enhanced/SecCapsule.aspx?c=68083&fid=4008705.

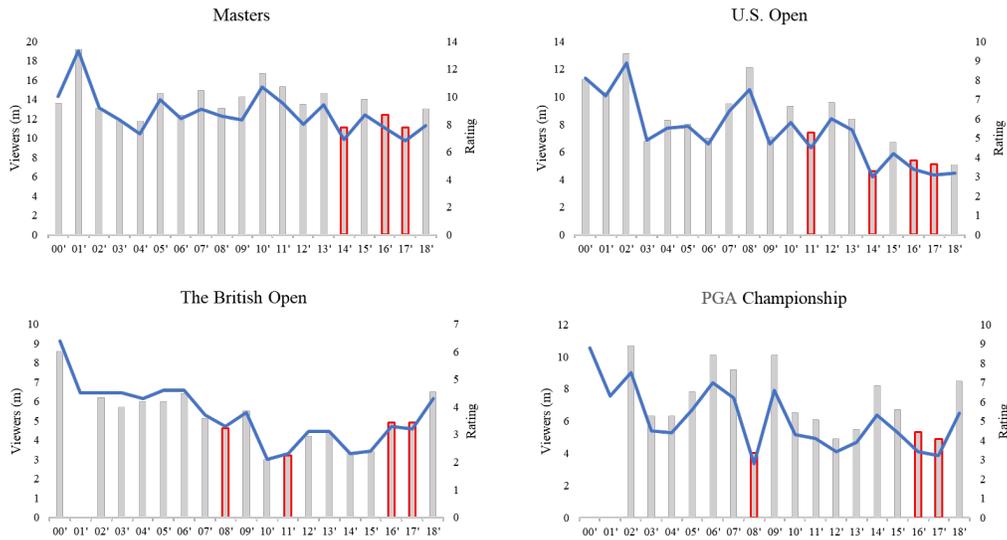
Moving onto to the results, the first predicted value that I looked at was United States Golf Participation²¹. The graph below shows the trend of U.S. golf participation since 1995.



The peak for U.S. Golf participation was in 2003, just a year after Woods completed the double grand slam. Something that I initially didn't think would be so was that since 2005, U.S. Golf Participation has been on a steady decline, but the most rapid drop in U.S. Golf participation during the decline stage was from 2009 to 2010, just a year after the scandal. In 2013, 2014, 2015, and 2016 there was definitely declining U.S. Golf participation, but it slowed compared to the decline experienced in the years prior. In 2017, there was also a slight uptick in golf participation. It would be interesting to see the data for 2018, but the National Golf Foundation (NGF), the firm responsible for collecting this data, has not released their 2018 industry report. The specific results of my regression analysis will be discussed later on in this section after I address the other dependent predicted values.

²¹ Golf Industry Report 2018 Edition. National Golf Foundation, 2018, pp. 1–14, Golf Industry Report 2018 Edition.

The next couple of predicted values that I looked at were Major Tournament television ratings and viewers. Golf has four major tournaments held each year: the Masters, the U.S. Open, the British Open, and the PGA Championship.



The bars that are highlighted in Red show the years that Woods did not compete²². The graph that presents the results of the PGA Championship, specifically the years 2007 - 2009 and 2018, is very interesting. Woods did not compete in the tournament in 2008 and there is definitely a huge drop in viewers and television ratings. On the other hand, the 2018 PGA Championship experienced the highest number of viewers and ratings since 2009. In 2018 Tiger Finished in second place, his best major finish since he won the 2008 U.S. Open. This is a very anecdotal example, but this anomaly can be found throughout the years at all of the different major tournaments. In 2000, Woods won his first British open and completed the career grand slam, only the fifth player to ever accomplish this amazing feat. The 2001 Masters was the Master's that Woods won four major tournaments in a row, only the second player to ever do so. In 2002,

²² "Major Golf TV Ratings Hub." Sports Media Watch, 14 Aug. 2018, www.sportsmediawatch.com/major-golf-ratings-historical-masters-us-open-british-pga-championship-tiger-woods/.

Woods completed the career double grand slam with a win at the U.S. Open. In 2008, Tiger Woods won the U.S. Open in an 18-hole playoff with a broken back. And, in 2018, Woods finished in the top 10 at the British Open and tied for second at the PGA Championship, which were his best finishes since the 2008 U.S. Open at Torrey Pines when he finished in first place. The charts above show that when Woods is playing well, and even when he is just playing, television rating and television viewers tend to go up.

I discussed golf participation, television ratings, and golf viewership, but the other predicted values that I researched were golf equipment sales and stock price returns for the major golf industry players that I discussed earlier on in this manuscript. Below, I present the specific results of my multiple regression analysis. It is important to focus on the R Square (coefficient of determination) and Significance F columns.

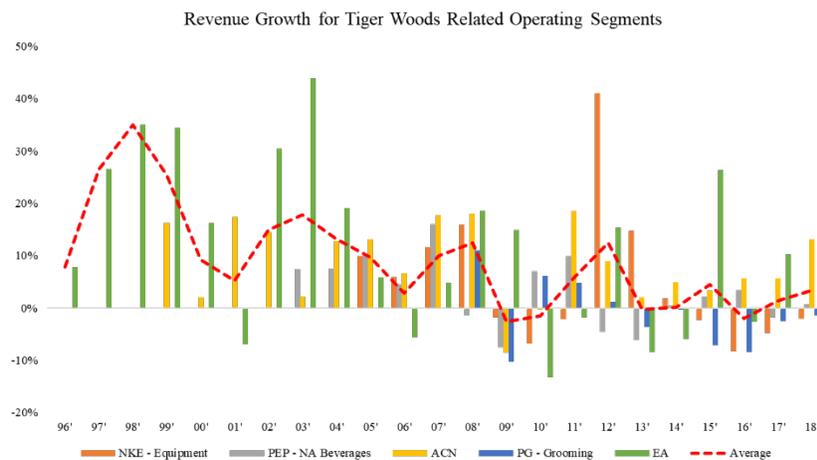
<i>Independent variables: Favorability Rating & Wins; y-variable: TV Ratings or Viewers</i>				
	Correlation	R Square	Standard Error	Significance F
TV Ratings	0.785	61.546%	0.752	0.000
Viewers	0.564	31.829%	0.939	0.056
<i>Independent variables: Favorability Rating & Wins; y-variable: Participation or Equipment Sales</i>				
	Correlation	R Square	Standard Error	Significance F
Participation	0.864	74.676%	1.329	3.4E-05
Equipment Sales	0.286	8.179%	2.618	0.711
<i>Independent variables: Favorability Rating & Wins; y-variable: Participation or Equipment Sales</i>				
	Correlation	R Square	Standard Error	Significance F
NKE	0.222	4.910%	0.231	0.668
ELY	0.182	3.317%	0.230	0.763
IR	0.523	27.341%	0.325	0.078
ETN	0.230	5.302%	0.278	0.647
ADDYY	0.400	15.979%	0.364	0.419
Industry	0.471	22.181%	0.295	0.134

My results indicate that Woods’ public perception and his performance on the golf course definitely has had an impact on major tournament television ratings, golf viewership, and U.S. golf participation, as shown by the coefficient of determination. But I cannot come to the same conclusion when it comes to golf equipment sales and the stock price returns of the major

publicly traded golf companies. The coefficient of determination is low for both predicted values and it is also important to mention that the Significance F column points out that the tests are not statistically significant. So in this case, it is impossible to come to a clear conclusion just by looking at the numbers alone. The low coefficient of determination for stock returns didn't surprise me, but I believe the reason for the statistically insignificant golf equipment sales results is because I did not have enough data to conduct a sound test. I only had golf equipment sales data dating back to 2007.

TIGER WOODS' SPONSORS:

Now I want to turn to more of the Sponsor specific findings that I uncovered during my research. Ideally, what I would have liked to have done was determine the return on investment that companies experienced from sponsoring Woods, but the specific data I would need to get to determine the return on investment of Woods is publicly available. For example, it would be great to obtain more detailed financials from his sponsors and see if I could determine an ROI for those numbers, but as of right now, that isn't possible. Below I present a chart that shows the sales of different operating segments that are related to Woods and his endorsed products²³.



²³ "Filings & Forms." SEC Emblem, 15 Jan. 2014, www.sec.gov/edgar.shtml.

It was really hard to determine whether or not Woods had an impact, if any, on his sponsors' performance, but it can't be argued that Woods gave his sponsors exposure and visibility, especially to golf fans around the world that they would not have gotten otherwise. This is can be summarized perfectly from a quote by Gene Buwick, the Vice President of Wilson's Tennis Division. "No company should expect an endorsement investment to come back in terms of added sales. Rather, the success of endorsement should be judged in terms of the visibility and exposure the celebrity would give to the company's product and the company itself"²⁴.

There are also some other factors that I considered when determining whether or not Woods had a major impact on his sponsors. Three of his major publicly traded sponsors basically built a product line on the back of Woods. Nike would not have ever created a golf business if it were not for the success of Woods. Gatorade created a whole new line of Tiger Woods branded Gatorade dubbed "Tigerade", and Electronic Arts created their first major golf video game called Tiger Woods PGA Tour in 2000. All of these products, and product lines, represent significant investments to Woods' Sponsors, and show how big of a deal he was to his sponsors. I also want to point out how many times the name "Tiger Woods" has been mentioned in his sponsors S.E.C. filings, earnings conference calls and investor presentations. "Tiger Woods" is mentioned 163 different times by Nike, 4 times by PepsiCo, 3 times by Accenture, one time by Proctor & Gamble, and 376 different times by Electronic Arts²³. That is a total of 547 different times which is an astronomical amount for someone to be mentioned in company materials, let alone a golfer, and I think it shows that investors are aware of Woods. It also gives an indication that the companies do believe that Woods is, or was, an important aspect of their business.

²⁴ Harrington, Kevin. "Save Your Money: Celebrity Endorsements Not Worth The Cost." Forbes, Forbes Magazine, 31 Jan. 2014, www.forbes.com/sites/kevinharrington/2014/01/31/save-your-money-celebrity-endorsements-not-worth-the-cost/#71a7deb324f3.

Below, I present the specific results of my multiple regression analysis. Again, it is important to focus on the R Square (coefficient of determination) and Significance F columns.

<i>Independent variables: Favorability Rating & Tournament Wins; y-variable: Stock Price Returns</i>				
	Correlation	R Square	Standard Error	Significance F
NKE	0.222	4.910%	0.231	0.668
PEP	0.328	10.773%	0.137	0.402
ACN	0.174	3.021%	0.240	0.795
PG	0.206	4.252%	0.118	0.706
EA	0.252	6.358%	0.442	0.591

My results indicate that Tiger Woods' public perception and his performance on the course do not seem to impact his sponsors stock returns much at all, and it is also important to note that these results are statistically insignificant so it's hard to determine the effect that Woods' has on his sponsors stock price returns. If these results were statistically significant, they would be consistent with my hypothesis.

Even though these results could be classified as a failure, I do think it is important to look at the effect that Woods has had on his sponsors more holistically. That is why I wanted to look at the investment's companies have made because of Woods and the amount of times his name was mentioned in company materials. I believe that these findings were important because they go beyond just looking at the stock price and look into how companies, and investors were thinking about Woods.

DISCUSSION & IMPLICATIONS

The results of my research were close to, but not exactly, what I expected at the onset of this study. Woods is undoubtedly the biggest name in the world of golf and some of my findings indicate that he has a large impact on the golf industry as a whole. It appears that Woods has had a significant influence, positive and negative, on the health of the golf industry throughout the entirety of his career. My findings indicate that more people seem to play golf, and watch golf, when Woods is participating. When Woods is winning, now that's a whole different story. When Woods is in contention, especially at major tournaments, television ratings and golf viewership are at all-time highs. This has still been the case even after the scandal in 2009. This scandal obviously hurt Woods' reputation, but people seem to only care about Woods' performance on the course. The fans have nearly turned a blind eye to his immoral actions. When Woods is not playing well, or not playing at all, like the 2008 PGA Championship, the golf industry tends to suffer. Woods appears to be good for the game of golf. He makes a sport, that was once viewed as boring and only for the rich old men, exciting and something that people want to be a part of. Overall, there seems to be a fairly strong relationship between Woods and the health of the golf industry, as shown by the results of my multiple regression analysis the other, more qualitative factors, discussed throughout the study.

On the other hand, when it comes to the performance of his sponsors, specifically their stock price returns, the results are inconclusive. As mentioned earlier, the multiple regression analysis employed in my research turned up with statistically insignificant results. Concluding based off of these results would be incorrect. So far, I cannot say that Woods has any effect on the performance of his sponsors due to my results. The results of this study prove that I need to test the impact that Woods' had on his sponsors in a different way, which brings up a major

limitation of the study. There is not enough data to conduct a multiple regression analysis to test the effect that Woods' had on his sponsors stock price returns. Also, the stock price of a company is influenced by many factors and it was hard to determine how to control all the other factors to pinpoint the effect that Woods' had on the returns. For example, the scandal happened in 2009, which is the year after the great recession. Controlling for the great recession and other market phenomena was something that I failed to do effectively.

Although there are trends in the data that indicate that Woods has an impact on the golf industry, rather than his sponsors, it must be made aware that these findings are still preliminary, and more research needs to be done on this topic. In the future, I need to find a better way to control the data that I am using, and it is necessary to employ more methods to determine Woods impact on both the industry, as well as his sponsors. I believe that the qualitative approaches to my research and my multiple regression analysis were good starting points for this topic, but more needs to be done to determine a more accurate conclusion on the impact that Woods had had on the world of golf.

Something that I would like to do in the future, if I can find the necessary data, is to do a return on investment analysis for a Woods endorsement deal. To do this correctly, I would need the dollar amount that companies spent, and the dollar amount the companies received, on an endorsement deal with Woods. For example, Electronic Arts created the Tiger Woods PGA Tour video game and if there was publicly available information that disclosed the financial performance specifically for the Tiger Woods PGA Tour video game, those figures could be used to run a return on investment analysis. The same goes for Gatorade and Nike. Gatorade, for example, released a line of its Gatorade sports drink that was branded with Woods face on the bottle. If there was detailed financial information on Woods' version of Gatorade it would be

relatively easy to conduct an initial return on investment analysis for a Woods endorsement deal with Gatorade. This is something that could be done with all celebrities who endorse a company's products and it could put hard numbers to whether or not a certain endorsement deal is adding firm value.

Even though this study focuses on the impact Woods has on the golf industry and his sponsors, it can be viewed as a proxy for other celebrity endorsements. As mentioned earlier, the results of this study indicate that Woods has had an impact on the golf industry, but I can't conclude the same for his major publicly traded sponsors. If someone were to get to the level of stardom that Woods has experienced throughout his career, that person has the potential to make impacts on their respective industry and companies that they endorse. Even though my initial findings didn't conclude that Woods has made a significant impact on his sponsors, companies need to be aware that a celebrity endorsement can expand their product lines, bring brand exposure, and potentially increase firm value. But it is also important to realize that celebrities can also take actions that can be detrimental to a company's brand reputation. Out of the five major companies discussed in this study, only Nike has kept a relationship with Woods. Largely due to his 2009 scandal.

Executive management, especially the Chief Financial Officer and the Chief Marketing officer, need to determine the positives and negatives of an endorsement deal and determine whether or not the investment is worth the risk. Reward always comes with risk and just like investing in a company bears investment risk, investing in a person bears an equal amount, if not more, investment risk. Companies that currently employ celebrities and athletes as sponsors need to reevaluate the risk that an endorsement deal can bring. One wrong deal, with the wrong person, can cause major issues related to product investments and brand reputation. Companies

like Accenture, PepsiCo, Electronic Arts, and Proctor & Gamble all came to the decision that a connection with Woods was bad for business and their investment into Woods was not adding value to their organizations. Gatorade and Electronic Arts were forced to stop producing products related to Woods and it is likely that their investments failed, although that cannot be concluded be for certain.

Nike on the other hand came to a different conclusion. Woods played different roles with all of the companies that he sponsored and sticking with Woods or abandoning Woods was obviously a decision made on a case by case basis. Companies like these should look at their current endorsement deals and determine if the risks are worth the reward. Companies don't have complete control over their endorsers, but endorsers can cause issues for companies at the click of a button.

When it comes to having an impact on an entire industry, the case of Woods is pretty rare. My findings do indicate that an individual, even a man that hits a white ball for a living, can cause drastic changes in an industry. In my opinion, this is more relevant for professional sports organizations. Professional sports organizations like Major League Baseball (MLB), the National Football League (NFL) and the National Basketball Association (NBA), rather than entire industries, could look at Woods the same way that they look at Bryce Harper, Tom Brady and Lebron James. All three of the athletes mentioned are at the top of their respective sports and are viewed as advocates for their sports. Organizations like the MLB, the NFL and the NBA all rely on their players to generate revenues and cover expenses. Players are just like employees. They need to be paid well, taken care of, and watched over. If a player makes a mistake, just as if an employee makes a mistake, it can cause the organization to look bad and reputational damage can be impossible to avoid. Woods has changed golf forever and his actions, both on and off the

course, have had an impact on golf and especially the PGA Tour. Companies, industries, and even professional sports organizations need to keep track of all stakeholders because every stakeholder, no matter if it's a large organization or simply a professional golfer, can positively and negatively make an impact.

CONCLUSION

Tiger Woods is the biggest name in golf and may even be the biggest name in professional sports. He has undoubtedly changed the way people play, watch, and enjoy the sport and his legacy will live on for generations. Woods' career on the course has been nearly perfect, but his reputation off the course has been quite different. In the world of academic research, few people have tried to understand the effect that Woods has had on the game of golf, let alone the companies who sponsor him. This manuscript has attempted to take a holistic approach into understanding Tiger Woods and his impact on the business side of golf. My research has accomplished two things. It opens the door for additional studies to be done and it provides a high-level understanding of Woods' impact on the golf industry as a whole, something other studies have failed to capture. Studies like mine have looked at the impact that Woods has had on his sponsors, particularly stock price performance, but I have yet to come across a paper that addresses how important Woods is to golf and the capability he has to shape the future direction of the industry. Companies that use Woods for marketing purposes are targeting golfers, so for that reason it is important for those companies to understand the golf industry and the different factors that can help or hurt its future potential.

Although I tried, my research is not error free. In this paper, I do address the impact that Woods has had on the companies that sponsor him, but the results of the multiple regression analysis, which looked at company and industry specific data, show that the health of the golf industry has a fairly strong relationship to Woods' public perception and on course performance. When it comes Woods' impact on his sponsors, I am unable to come to a conclusion, and it has made me realize that I need to approach studying Woods' effect on his sponsors in a different manner. After finishing my research, I believe that looking at stock price returns as a

performance indicator for these companies is ineffective when looking at the impact of Woods. The focus should have been on the actual return on investment that companies were receiving from a deal with Woods. But, as I mentioned earlier, this would be difficult to study, and some creativity would need to be involved. Ultimately, I think that my research on Woods' impact on his sponsors performance was a failure and more needs to be done to come to even a preliminary conclusion. I am disappointed in this result and determined to find a better way to understand Woods and his connection to sponsor performance.

The results of my research, specifically concerning Woods' impact on the golf industry, do not prove anything, but rather show that more research should be done on the topic to further understand the link between the results and reality. The industry specific results give a good indication of what might be so, but more digging needs to be done to fully grasp the relationship between Tiger Woods and the performance of the golf industry. In my study, I focused on U.S. golf participation, television ratings, television viewership and equipment sales. But, there are other segments of the golf industry that I failed to explore. For example, real estate and golf course development are major sub-sectors of the golf industry and it would be interesting to attempt to understand whether or not Woods had an impact on these subsectors. It's also important to note that I plan on taking a more qualitative approach in the future. When looking at Woods' effect on the different industry metrics mentioned above, I mainly focused on obtaining quantitative results. I think I failed to look into more qualitative data that could have potentially provided valuable insights for my research. In the future, I would like to dive deeper into researching Woods' connection to the performance of the golf industry because there is much more than needs to be done.

Additionally, the results of this study can be extended to other celebrities, companies and industries. Just because this study is focused solely on Woods, doesn't mean that its results can't make a connection to other celebrities and athletes. It is rare to find an industry or company that doesn't have a connection to a celebrity endorsement and the "Tiger Effect" can be thought of as a good proxy for understanding celebrities direct and indirect impacts on company and, in rare cases, industry performance. In conclusion, Tiger Woods is a legend among men and his actions both on and off the golf course will be felt for generations to come.

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