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# The Effect of negative public news about celebrity endorsers on company related stock return

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### Abstract

This thesis focuses its attention on a noteworthy marketing advertising strategy: celebrity endorsers. In particular, the focus of this study is to define the effect that negative public news about celebrity endorsers have on stock returns of the company. There is a literature gap on this topic, due to that academics have not analyzed in one study more variables that can affect this relationship. Moreover, practitioners could really benefit from this kind of study thanks to several recommendations that have emerged.

After a literature research to find relevance and sustain for this study a conceptual framework and several theories (e.g. Meaning-Transfer-Model theory) create a good basis to start the empirical analysis. The first step of the analysis was the collection of secondary data, in a tenyear timeframe (2009-2019), through an information tool: Factiva. Afterwards, an event study and cross-sectional analysis were performed to give statistical reasoning to this study. The main effect resulted significant and several moderators were then studied to define which variables influenced this relationship. Three models were developed to give robustness to the study but only one, that considered the estimation window of 200 days, gave almost all significant results.

This thesis concludes with several findings. *First,* when a scandal regarding a celebrity endorser is released stock return will be negatively affected. *Second,* this relationship is influenced by Brand prior reputation and Firm (non)response. *Third,* according to those findings the literature gap is fulfilled and several path for future research are indicated (e.g. how influencer marketing affect stock return of a company). *Finally,* companies can use this study to define the way of reaction when such news are released, and the market is influenced.

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# Table of Contents

CHAPTER 1: Introduction	7
1.1 Relevance	7
1.2 Contribution to academic literature and practitioners	9
1.3 Research Questions and Focus of this study	11
CHAPTER 2: Literature Review	
2.1 Celebrity endorsers	
2.1.1 Celebrity endorsers history 2.1.2 Celebrity endorsers positive and negative effect as marketing strategy	13 13
2.2 Negative Public news about celebrity endorsers and its effect on stock return	
2.2.1 Celebrities' negative public news 2.2.2 News influence on stock return	15 15
2.4 Comparison with previous studies: an overview	16
CHAPTER 3: Theory	
3.1 Celebrity endorsers and financial theories	
3.2 Conceptual Model	21
3.3 Hypotheses of Main Effect	21
3.4 Hypothesis of moderating variables	22
3.5 Control Variables	25
CHAPTER 4: Methodology	27
4.1 Data collection	
4.1.1 Data base	
4.1.2 Event identification	
4.1.3 Operationalization of the variables	
4.2 The Sample	
4.3 Event Study	
4.4 Cross-Sectional Analysis	
CHAPTER 5: Results	
5.1 Results of Event Study	34
5.2 Cross-Sectional Regression Results	
5.2.1 Model fit	
5.2.2 Estimation Results	
5.2.3 Robustness of the study	

CHAPTER 6: Conclusions	
6.1 Discussion	40
6.2 Theoretical implications	40
6.3 Managerial implications	42
6.4 Limitations and Future Research	43
Appendix A: Factiva Algorithm	
Appendix B: List of Media Outlets	
Appendix C: Statistics table about the sample:	
Appendix D: Abnormal returns at 100 days subsequent to the release of the news with the value	e highest 73
Appendix E: STATA output	
Appendix F: Density Histograms	77

# **CHAPTER 1: Introduction**

## 1.1 Relevance

Nowadays consumers are exposed to a wide variety of ads (Thorson, 1990) that compete to grab consumers' attention (Till B., 1998). All over the world huge amounts of money are spent on advertising. For example, the US spends around 271,074 millions of dollars in advertising (Galbi, 2008). Companies can use different types of advertisements (i.e. Radio, e-mails and so on) to grab people attention; but one of the most well-established advertisement strategies from the late nineteenth century are celebrity endorsers (Erdogan Z. B., 1999). In the US celebrity endorsers were approximately in the 25% of the ads (Erdogan, Baker, & Tagg, 2001) (Shimp, 2000).

A celebrity endorser is "any individual who enjoys public recognition and uses this recognition on behalf of a consumer good by appearing with it in advertisement" (McCraken, 1989) and they can be considered as a brand alliance (Halonen-Knight & Hurmerinta, 2010). Celebrity endorsers are typically indented as: comedians, artists, actors, entertainers, musicians and athletes. (Friedman, Termini, & Washington, 1976). Using a celebrity endorser as an advertising strategy creates for the company unique communications and allows the firm to generate a real effect on consumers' attitude and firm related metrics (Ranjbarian, Shekarchizade, & Momeni, 2010). In line with these real-world developments there is a noteworthy body of literature that analyses the use of a celebrity endorser as advertising strategy. Those studies are based on the comparison with this kind of endorser and other types (i.e. Experts) and measure the effect of recall when a celebrity endorser was used in the advertisement in spite of other kind of endorsers (Ogilvy & Raphaelson, 1982) (Mowen & Brown, 1981). The results show that celebrity endorsers are the best kind of advertisers; Figure 1 gives an explanation of this.





From this results celebrity endorsers are nowadays considered a common strategy in marketing and their importance is mainly due to their ability of increasing attention of the consumers (Atkin & Block, 1983). In 2006, in the USA around 2-3 billion dollars were spent on celebrity endorsers' advertising (White, Goddard, & Nick, 2009). Such popularity in celebrity endorsements is not surprising if we analyze companies who engaged this kind of ads and their financial returns. For example, PepsiCo has attributed a 2% increase in global market share to the Spice Girls' endorsement (Ding, Molchanov, & Stork, 2011). Researches conducted in 1974 estimated that at least 17% of television spots used testimonials. This estimation has been validated and enlarged also from more recent researches (Rossiter & Percy, 1987), which testifies the emphasis posed on marketing research on the study of this kind of communication tool. The reason why celebrities' importance is increasing can be found in two main reasons. First, media outlets have increased in number and the same increase has occurred in the interest that media outlets have for celebrities (Giles, 1999). Second, the desire for fame results in emulation of this people and hence, more visibility is given to celebrities. In response to this trend, advertisers are becoming always more aware of celebrities' persuasive power and the number of celebrity endorsers is increased to the extent that it represents the most popular form of retail advertising (Choi & Rifon, 2007). With this increasing power of celebrity endorsers, academics<sup>1</sup> started to examine their effectiveness in consumer behavior, how positive is celebrity endorser's effect on some company's metrics (i.e. Customer lifetime value, Churn rate or stock return) and consumer perceptions.

According to Bashford's findings (Bashford, 2004), the usage of celebrities generate brand recall and recognition but this benefit extends to the positive influence on the company's financial performance; through increments of revenues, and positive ROI. However, while all the benefits of using celebrity endorsers are really appealing to companies, *it does not come without risks*. Indeed, negative publicity arising around the endorsers image is one of the greatest fears for brands. For example, immediately after Tiger Woods scandal Accenture's (one of the endorsed companies of Tiger Woods) stock price fell by 2.9 % (Knittel & Stango, 2014). This is the main reason why is of primary importance to define how a *negative* news regarding an endorser can impact the return of a company; highlighting the circumstances under which it can happen. In particular, according to several findings (White, Goddard, & Nick, 2009) the release of negative information about the celebrity endorsers can lead to a negative impact on the product itself. Hence, is necessary to link how this exposure to *negative information* about celebrity endorsers can lead to negative effect on stock return. Therefore,

<sup>&</sup>lt;sup>1</sup> (Agrawal & Kamakura, 1995) (Erdogan, Baker, & Tagg, 2001) (Bartz, Molchanov, & Stork, 2013)

this is the first research topic of this thesis: "How do negative public news about celebrity endorsers influence stock return of the company?".

In this study, for negative pubic news is intended any kind of scandal/negative information spread to convey facts that happened regarding the endorser (e.g. cheating, bankrupt, murders accusation, etc.). A news is that part of communication that let people to be informed of the changes around them in the world. The most important value of the news extends from the mere entertainment but is about its benefit in empowering the informed (What is the purpose of journalism?, 2019) (Journalism, 2007). Hence, people use news to seek unbiased and accurate information. One of human's basic impulse according to sociologists, economists and historians is that people want to engender their sense of control, confidence, security and know what happens beyond their simple direct experience. Mass media satisfy this human need (Xiang & Sarvary, 2007). Hence, public news is a powerful tool to inform people, companies and above all investors. Researchers in celebrity endorsers field has not given great consideration to the importance that media outlets can have in this topic. Hence, analyzing the possible effects arising from negative public news regarding the endorsers on stock return of the company could be really useful when companies have to decide whether to adopt this advertising strategy or not and maybe prevent from stock losses. There is evidence that stock returns fluctuations depend on public news (Chan, 2003) and according to Agrawal and Kamakura's findings, (Agrawal & Kamakura, 1995) Wall Street values the use of a celebrity endorser. A more detailed study conducted by them, showed that announcement of contracts between a firm and a new endorser by the press resulted in a 0.44% excess return (in term of stock price).

## 1.2 Contribution to academic literature and practitioners

In recent years, interest among practitioners and academic is growing and this is unavoidable due to the huge growth in popularity of this form of advertising strategy. This dissertation will define guidance for managers when faced with the option of hiring a celebrity endorser and fill some literature gaps.

Research <sup>2</sup> is spread over different topics (i.e. celebrity endorser importance, their effect in stock prices, the negative effects over consumer perception) but a small amount of literature is devolved to how public scandals can influence stock return of the company. In particular, variables that can affect this relationship are missing. This study wants to fill the following gap: "*Do Gender, media coverage, brand prior reputation and firm (non)response affect the relationship between negative public news and company-related stock returns?*" Specifically, this thesis proves that negative public news about celebrity endorsers influence negatively the stock return of a brand and

<sup>&</sup>lt;sup>2</sup> (Till & Shimp, 1998) (White, Goddard, & Nick, 2009)

analyzes how this relationship is moderated by the endorser's gender, media coverage, brand prior reputation and firm (non)response. According to Ding et. Al (2011), several endorser's and firm's characteristics, such as gender, brand prior reputation and firm (non)response, can influence the returns of a company after the release of a news. Moreover, media outlets have the power to shape investors' decisions (Chan, 2003), so, the number of media reporting a news are important to consider in this study. These characteristics are the main reasons why these moderators are added in this study. Hence, the present research contributes to academics by providing a new perspective on how the stock market evaluates negative news about endorsers accounting for different moderating variables.

This thesis gives several contributions not only in literature but also for practitioners. When a brand makes a celebrity its spokesperson, the company places their brand image in the endorsers' hand. Hence, when the endorser creates a negative image for her/himself the company image will be affected too, mostly in terms of consumer attitudes and stock returns (Agrawal & Kamakura, 1995). Thus, is of primary relevance for a company to know how negative news about their testimonial can affect the stock return to prevent potential problems (e.g. sales loss, decrease in stock value). For companies is not easy to surely know how to react when a brand scandal occurs. And this can be seen from real-world examples; when O.J. Simpson was accused of the murdered of his wife and his wife's friend, his endorsed company tried to break all links with him (Till & Shimp, 1998). While, when Michael Jackson was accused of sexual involvement with children (1984) Pepsi did not stop its contract with the endorser (Gabor, M, & Wienner, 1987). Thus, an established path to travel down is not defined when a scandal break. Thus, companies should be aware, in advance, of what could happen when they use a celebrity as endorser, and they would need a guidance regarding if and how they can protect their brand. For example, when choosing a spokesperson, the company needs to be aware of the different kinds of characteristics the celebrity has, such as trustworthiness, credibility, and the ability to march up with the endorsed brand. Another aspect that companies should know about is any previous scandal that the celebrity has had. (Miciak & Shanklin, 1994). This aspect is important because it allows the firm to know in advance if the celebrity has the tendency to be involved in scandals.

Based on this analysis, companies will be more aware of the negative effect that can arise from negative public news about celebrity endorsers and defining established path when choosing the endorser. These paths can be entrusted to the best marketing companies or to some new platform (e.g. Spotted.com) developed to define some of the above-mentioned characteristics needed by an endorser.

## 1.3 Research Questions and Focus of this study

In conclusion, this study is going to give a precise answer to the following research questions:

- "How do negative public news about celebrity endorsers influence stock return of the company?"
- "Do Gender, Media Coverage, Firm (non)response and Brand Prior Reputation affect this relationship?"

An empirical study is used to discover how negative public news about celebrities' endorsers influence stock return. The analysis is restricted to U.S. firms listed on the U.S. stock market (e.g. NASDAQ, NYSE). The investigation relies on a sample of 49 celebrity endorsers scandals, across 2 industries (Fashion & Beauty and Beverages companies) and 27 brands.

The gathering of data has been conducted through a newspaper databank- Factiva- and the stock returns values from Yahoo finance database. After having defined each event an event study methodology has been used to conduct the analysis. This methodology allows to analyze how negative news about celebrity endorsers influence stock return of the company.

In conclusion, this thesis is structured as follows: Chapter 2 present the literature review to give relevance to the main topics. In Chapter 3, theoretical and conceptual framework are explained to sustain the main hypotheses of the study. Subsequently, in Chapter 4 data collection and methodology are discussed. Finally, in Chapter 5 and 6 results, discussion and managerial implications are explored.

# **CHAPTER 2: Literature Review**

In this chapter, the findings of previous research regarding negative public news about celebrity endorsers effect on consumers, stock return and relevant topics (e.g. company's reaction to negative news) are discussed. Furthermore, the connections between those topics are highlighted and create the basis for this study. The literature review provides the aim to sustain the main research questions of this study. *First,* celebrity endorsers will be defined and their effect on stock returns of a company will be highlighted. *Second,* the relationship between public news about the endorsers and stock return is explained. *Third,* a comparison with previous literature findings is provided.

From this academic perspective, the proofs of each arguments in the research question are given to enhance the basis for the research.

## 2.1 Celebrity endorsers

From a marketing *communication* perspective is of primary importance for companies to create and apply strategies that help them to gain a competitive advantage.<sup>3</sup> Hence, companies can design several strategies to create positive attitudes in consumers' minds. According to McCarthy (1964)<sup>4</sup> all the possible marketing activities can be classified in four main categories, that form the *marketing mix*: price, product, place and promotion. Where promotion is mainly about communication and publicity of a product<sup>5</sup>; and this study focuses its attention on this marketing aspect. To achieve companies' goal of creating positive effects in consumers' minds the usage of endorsers is widely spread to reach target customers. In literature different kinds of endorsers are identified (Schimmelpfenning, 2018) but only three of these are mainly used: the expert, the consumer type and celebrity (Friedman, Termini, & Washington, 1976). This last endorser type is the main focus of this study and thus, a definition of celebrity endorsers is provided:" Celebrity endorsers are well-known individuals that use their public recognition to advertise products or services" (McCraken, 1989).

Celebrity endorsement is one of the most popular way of marketing used to promote service and/or products for consumers<sup>6</sup>. Several researchers<sup>7</sup> have focused their study on this kind of advertising strategy and relevant information have emerged. In following section more details about celebrity endorsers are provided. In particular, celebrity endorsers history, their use as a marketing activity and finally, a review of what happens when the endorsers image change.

<sup>&</sup>lt;sup>3</sup> (Erdogan Z. B., 1999)

<sup>&</sup>lt;sup>4</sup> (McCarthy, 1964)

<sup>&</sup>lt;sup>5</sup> (Costabile, Ancarani, Keller, & Kotler, 2012)

<sup>&</sup>lt;sup>6</sup> (Agrawal & Kamakura, 1995)

<sup>&</sup>lt;sup>7</sup> (Choi & Rifon, 2007) (Erdogan Z. B., 1999) (Louie & R.L., 2001) (McCraken, 1989)

#### 2.1.1 Celebrity endorsers history

Celebrity endorsers as an advertisement strategy has an extensive history and the beginning date back to when Queen Victoria associated herself with the brand Cadbury Cocoa<sup>8</sup>. Until 1930s, the majority of endorsers were only athletes (i.e. Babe Ruth) but by the end of 1940s also movie stars, like Charlie Chaplin, increased their popularity. From 1960s when TV began in color the demand for entertainers and TV personalities increased till 1970s when one in eight commercials was featured with a celebrity (Erdogan Z. B., 1999). After all the success gained by this new form of advertising, since 1980s companies began to create products with celebrities and not only use them as advertising strategy (e.g. "Air Jordan" from Nike). From 1970s to 1990s the estimation of ads using celebrity endorsers have risen significantly. Indeed, in 1970s around 15% of marketing communication activities used celebrity endorsers while this strategy has reached 25% in 1990s (Erdogan Z. B., 1999). According to Shimp (1997)<sup>9</sup> by the beginning of 1990s one in five advertising used celebrity endorsers.

Nowadays, celebrity endorsers advertising has become a common practice and the data provided before remained almost static through these years. By some literature and academics estimates from 19% to 25% of advertisements in the US relies on celebrity endorsers (Elberse & Verleun, The economic value of celebrity endorsements, 2012).

#### 2.1.2 Celebrity endorsers positive and negative effect as marketing strategy

Advertisement strategies that use a celebrity endorser have a positive effect for the company (Anderson, 1983) (Collins & Loftus, 1975). Celebrity endorsers as marketing strategy create brand awareness and define the personality of the brand. Moreover, among the main justifications for using endorsers the more exhaustive indicates that celebrities create a more credible ad and enhance recall and recognition that lead to positive returns for the firm (Friedman & Friedman, 1979) (Petty, Cacioppo, & Schumann, 1983). Using this kind of endorsers lead the consumer to positive feelings: *security*, since his/her idol is recommending the product, and *positive association to the product*. Those associations are based on associative learning principles which are based on the concept that memory is a network composed by various nodes which are connected by associative links. <sup>10</sup> In this study celebrities and firms represents two unconnected nodes that over time, through the endorsement process, become connected (Till & Shimp, 1998). Through this linkage feelings and/or meanings toward a celebrity are transferred to the endorsed product and thus, to the brand. Hence, the positive

<sup>&</sup>lt;sup>8</sup> Sherman, 1985.

<sup>&</sup>lt;sup>9</sup> (Shimp, 2000)

<sup>&</sup>lt;sup>10</sup> (Anderson, 1983) (Collins & Loftus, 1975)

associative link that consumers create between these two nodes results in higher evaluation of the product.

But what happens if the celebrity's image change? This study wants to deeply analyze this aspect and understand if negative public news of the celebrity will financially hurt the brand. According to the association network theory exposed before, the transfer of meanings/feelings from the celebrity to the brand can happen both in a positive and in a negative way. Thus, when the celebrity image negatively change, consumers may transfer negative feelings to the endorsed brand. According to Miciak and Shanklin (Miciak & Shanklin, 1994), when the image of an endorser becomes "tarnished by allegations of illicit, unethical, unusual or even slightly unconventional behavior" (Till & Shimp, 1998), this creates instantly problems for the endorsement. Several studies have shown that this will lead consumers to have a lower opinion of the celebrity and of the brand he/she is promoting (Till & Shimp, 1998) (Knittel & Stango, 2014). According to Bob Williams<sup>11</sup> companies are worrying more and more about endorser scandals. Until 2003, the level of fear about this topic for companies was one over a 10-point scale; today it's eight. Williams related this change to the Kobe Bryant accusation of sexual assault. After this episode advertisers began to look differently at celebrity endorsers, and the "A-list" celebrities lost its invincibility aura (Leetaru, 2019) and also academics started to give more attention to this topic. The negative behavior of the celebrity can lead to negative spillover effect, like lower evaluations of the endorsed brand or product (Till & Shimp, 1998) (White, Goddard, & Nick, 2009), which will results in lower profit and sales. Given practitioners and academic evidence of the positive effect of new endorsers' contract announcements on markets shares, sales and firms' stock prices, we should expect in the opposite way that negative news influence stock prices too (Ding, Molchanov, & Stork, 2011).<sup>12</sup>

## 2.2 Negative Public news about celebrity endorsers and its effect on stock return

This dissertation focuses on negative celebrity endorsers public news and the relative effect on company stock return. After having exposed who celebrity endorsers are and the effect that they have on consumers attitude, a definition of public news is provided. In particular, celebrity's negative public news definition and how news can influence an important company metric: stock return.

<sup>&</sup>lt;sup>11</sup> CEO of Burns Entertainment.

<sup>&</sup>lt;sup>12</sup> Is important to highlight that endorsements is not without costs, the main one are: endorsement fees, Tv ad costs and management expenses. Those costs can vary from fairly modest (i.e. £0.75 million paid to the Williams sisters by Avon) to more significant (£30 million paid to Dale Earnhardt Jr. by Sony)

#### 2.2.1 Celebrities' negative public news

*Public news* is information regarding current events; it is all that is available to people through different media channel such as: television, radio, newspaper etc. (Stephens M., 2006). People seek accurate and unbiased information according to the traditional view on news consumption. The development of mass media has emerged to satisfy the need of people to be constantly informed of what happens beyond their direct experience and it serves as the biggest channel for informing the citizens (Xiang & Sarvary, 2007) (Damstra & Bouker, 2018).

In this thesis, for *negative public news* is intended all the public information available to the public, released by media outlets, that regard a celebrity scandal (e.g. cheating, murder accusation, drug use, etc.). Differently, from the previous studies this study does not just focus on the basic relationship between news and stock return but on the relationship between negative news regarding a celebrity endorser and stock return. According to Fiske (Fiske, 1980) negative information is known to be more attention grabbing. Negative public news is spread in the marketplace and is known that this kind of information can be devastating for the company in terms of both loss in revenues and in market share (Ahluwalia, Burnkrant, & Rao Unnava, 2000) (Berger, Sorensen, & Rasmussen, 2010) (O' Connell, 2006) (Yabroff, 2006). When you belong to the show business you are exposed every day to the public, and people like to read negative news. According to a study conducted from Trussler and Soroka at McGill University in Canada (Trussler & Soroka, 2014), it has proven that people prefer bad news than good news on newspapers. This can be traced back to what the authors define "negativity effect" for which negative effects have a bigger effect at psychological and emotional level. When the information released is about negative topic the influence on evaluative judgements and belief is bigger than when the same amount of information is positive (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). This kind of evaluations have the same effect also in the consumer decision-making process (Reynolds & Darden, 1972). Such negative association are more difficult for practitioner to manage due to the rise of significance of social media (Solomon & al, 2009).

#### 2.2.2 News influence on stock return

Research has demonstrated how journalism influence public opinion and therefore the trend of markets (Goidel & Langley, 1995). So, known that economic news influence stock markets, this study wants to investigate if this relationship exists also for news regarding different kind of information (*i.e. public scandals*). Several authors highlight a connection between public news and stock return (Schumaker, Zhang, Huang, & Chen, 2012). Researchers have investigated the fluctuations of stock price related to news feed to analyze how much power information has on stock markets (Qing, et al., 2014) (Kim, 2003). As proven by Fama et. al (Fama, Fisher, Jensen, & Roll, 1969) stock market can be considered as "efficient" in the sense that stock prices adjust rapidly when news are released. For example, in 2001 The New York Times dedicated, on its Sunday edition, a large space to a specific biotech company and its progresses regarding cancer treatment. Actually, the information reported was not new but was released by a common information intermediary just after five months. Nonetheless, after the NYT article, the biotech company's share price increased from \$12 to \$85 the day after. This shows that financial markets react to news, as an effect of media coverage. So, media can really influence the dynamics of the behavior in investments, grabbing public attention (Bajo & Raimondo, 2018). An easy link can be made between celebrity endorsers news and its subsequent effect on stock return. Negative publicity can easily evolve into media firestorm due to that news (Hock & Raithel, 2019).

### 2.4 Comparison with previous studies: an overview

After having exposed the main topics of this dissertation- celebrity endorsers and the effect of public news on stock return– a comparison with previous analysis is exposed. In Table 1 an overview of existing literature is provided. In particular, studies about the impact that negative news about celebrity endorsers have on the endorsed companies and the analyzed moderators.

Study	Main Topic	Period	Empirical design	Firm (non) response to the scandal	Endorsers' Gender	Media Coverage	Brand Prior reputation
Bartz et. al 2013	Negative returns when a negative news is release; bigger when media coverage is high.	1986- 2011	Event study (obs=93)	V	×	√	×
Berger et. al (2010)	Negative news about a celebrity endorser lead to positive stock returns	2001- 2003	Several different studies	×	×	×	×
Hood 2012	Tiger Woods scandal has not led endorsed companies to statistically negative returns.	2009	Event study (obs=6)	×	×	×	×
Knittel and Stango 2014	Tiger Woods scandal has led to big loss in stock returns of endorsed companies.	2009	Event study (obs=7)	×	×	×	×
Louie et. al 2001	Negative effect on company returns depend on both negative news and if the endorser is blameworthy.	1980- 1994	Survey (obs=128)	√	×	×	×
Hock and Raithel 2017	Negative returns depend on negative news about the endorsers and for different firm response to the scandal the effect can be bigger or smaller	1988- 2016	Event study (obs=230)	J	×	×	×
This study 2019	Negative returns depend on the release of negative public news about the endorser and this relationship is moderated by several moderators (e.g. firm (non)response, endorser's gender, media coverage and brand prior reputation)	2009- 2019	Event study (obs=49)	V	1	V	✓

Table 1. Contribution to Literature on Negative Celebrity Endorser news and Stock Returns

Different researches (Donaton, 2002) (Gabor, M, & Wienner, 1987) (Berger, Sorensen, & Rasmussen, 2010) sustain that negative news released around a celebrity endorser may lead to positive stock returns. According to Donaton's (2002) idea "any publicity is a good publicity". This means that even if a negative news around a celebrity endorser is released an increase in revenues is expected anyway. In support of this idea there is Gabor and Wienner study which states that celebrity scandals can lead the company to have positive stock return (Gabor, M, & Wienner, 1987). In line with those findings also another study, which is the one included in the Table, conducted by Berger et. Al (2010) sustained that negative news about a celebrity endorser can lead to positive stock returns thanks to an increase of product awareness. Indeed, in their study they pointed out several examples to prove with real-world statistics their idea. First, after a review from a food and beverages website, a wine that was described as smelling like "dirty socks", saw its sales increase by 5% 13. Second, After the release of the movie Borat, that clearly made fun of the country of Kazakhstan, the holiday website "Hotel.com" reported a 300% increase in request for that country <sup>14</sup>. However, these findings pointed out that if some negative news is released around a particular event the returns are not surely negative. Thus, differently from this study, the main focus of the above-mentioned analysis is not on negative news about a celebrity endorser but about any kind of event. This is the main reason why other literature is provided to clarify what actually happens when a negative news around a celebrity is released.

In contrast with these previous findings, other studies (Bartz, Molchanov, & Stork, 2013) (Knittel & Stango, 2014) (Louie & Obermiller, 2012) have been developed that stated that negative public news about celebrity endorsers generate a negative effect on stock returns. Hence, there is lack of clear evidence in this topic and it can be attributed to the fact that negative aspects of celebrity endorsements are matched by positive ones (e.g. better advertising communication). This dissertation wants to provide a definite answer to what really happens when a negative news is released. In particular, this study wants to define two aspects differently from previous studies:

- Support the idea that when a negative news is released the stock return will be negatively affected.
- Address an important gap: include several moderators in this study- gender, firm (non)response, media coverage and brand prior reputation- that prior research has disregarded.

<sup>&</sup>lt;sup>13</sup> (O' Connell, 2006)

<sup>&</sup>lt;sup>14</sup> (Yabroff, 2006)

This study is the first one to perform such a detailed and extensive analysis. Previous research has mostly analyzed one single negative event. For example, Hood (2012)<sup>15</sup> and Knittel & Stango (2014)<sup>16</sup> studies have only focused on the Tiger Woods scandal and how it negatively affected the endorsed companies. Hood (2012) did not find a statistically significant negative returns after the event took place. On the other hand, Knittel & Stango (2014) found out that the Tiger Woods scandal negatively influenced the endorsed companies.

Moreover, Louie et. Al (2001)<sup>17</sup> work analyzed market reaction after a negative news release, about a celebrity endorser, and found out a negative relationship. However, in contrast to this study they focused on if the celebrity was blameworthy or not. In particular, they pointed out that companies should dissociate with endorsers that have high level of blame for the negative event and on the other side associate with the endorsers that have low level of blame for the negative events.

Finally, Hock and Raithel (2017)<sup>18</sup> analyzed a different perspective: how the firm's reaction to the negative news affected the company returns. From their study it emerged that depending on if the company react, the type of reaction (e.g. stop the endorsement deal, apologize, etc.) and on the timing of reaction, stock returns are affected by the negative news' release. They have identified and defined the conditions under which the stock market punish the company when a negative news is released. Firms have more negative returns when they (i) continue the contract with a high-blame endorser, (ii) continue the contract with the endorser whose scandal is related to his/her real occupation, (iii) suspend the contract with the endorser that has a high match-up (fit) the endorsed product/brand, and (iv) suspend an endorser that has apologized.

A notable exception with the above-mentioned studies, is the interesting analysis of Bartz et al. (2013)<sup>19</sup>. Their analysis focuses on how celebrities' misbehavior influences stock returns. In particular, they found out negative and statistically significant abnormal returns around the release of negative news about the endorsers. Differently from the current dissertation, the "news" aspect is not mainly considered and not all the moderators provided in this dissertation are analyzed (e.g. Bartz et. Al considered only firm (non)response and media coverage). Moreover, they analyzed a different time period (1986-2011) than the one used in this analysis (2009-2019). Finally, the data collection of their work was based on Google and Yahoo researches differently from this study that used Factiva database. Indeed, the research

<sup>&</sup>lt;sup>15</sup> (Hood, 2012)

<sup>&</sup>lt;sup>16</sup> (Knittel & Stango, 2014)

<sup>&</sup>lt;sup>17</sup> (Louie & R.L., 2001)

<sup>&</sup>lt;sup>18</sup> (Hock & Raithel, 2019)

<sup>&</sup>lt;sup>19</sup> (Bartz, Molchanov, & Stork, 2013)

engines that they used can generate more biases due to the presence of fake news in the web. While, the current dissertation has done the data collection with a professional information tool that report only proved information.

In conclusion, as can be seen from this comparison, this thesis provides a new and different point of view in this topic. In the next chapter more theories and literature findings are provided at sustain of the main hypothesis of this analysis.

# **CHAPTER 3: Theory**

This chapter focuses its attention in the theoretical and conceptual framework of this thesis. Several theories are exposed to define the main focus of this study and to create the basis of the hypotheses of this research. This chapter first gives the main theories on which this investigation relies on and provides a conceptual framework. Then, the hypotheses of both the main effect and moderating variables are provided and theory in support is explained.

## 3.1 Celebrity endorsers and financial theories

This investigation relies on two theories: one about *celebrity endorsers* and one about how event surrounding celebrity endorsers *influence stock returns*.

Theory regarding celebrity endorsement is the *Theory of cultural meaning transfer (MTM)* modified by Louie et. Al. (Seno & Lukas, 2007) (McCraken, 1989). This theory explains the importance of a celebrity endorser for a company and how the use of this kind of advertising can affect some aspects regarding the company; in particular stock return. It is based on McCraken (1989) studies who posits that there is a model that transfer the positive attitudes that the consumers have on the celebrity to the product endorsed. The same transfer can happen also for negative opinions and this occurs when the celebrity is involved in a somehow unfavorable event (Louie & R.L., 2001). Hence, according to this last aspect in line with the MTM theory: the negative attitudes that a consumer has on the celebrity (due to its involvement in an unfavorable event) are transferred to the product. According to this theory, when a celebrity endorser is involved in an unfavorable event, consumers transfer their negative opinion from the endorser to the product itself. This will lead in less sales, lower returns and investors negative opinion of the brand (Louie, Kulik, & Jacobson, 2001).

Furthermore, this study relies on a theory that surround the financial part of a company: *Efficient Market Theory*. According to Efficient Market Theory, (i) market prices reflect all available and relevant information and (ii) when new information is available to the public stock prices instantly change (Fama, Fisher, Jensen, & Roll, 1969). Thus, when a news is released on the market investors can immediately reflect their opinion on the considered company. This theory is shared by Agrawal and Kamakura (1995) findings that explain and prove the existence of the impact of some behavioral aspects on stock return. According to their analysis, for behavioral aspects are intended news regarding celebrity endorsers. Hence, when a news regarding a celebrity is released stock returns will immediately reflect investors opinion. Indeed, in their study they have proven that announcement of contracts between a firm and a new endorser by the press resulted in a 0.44% excess return for a company.

## 3.2 Conceptual Model

According to the two main theories exposed before; a conceptual model is developed in Figure 2. This framework shows the main relationship, moderators and control variables included in this analysis. In the next chapters further theories that sustain this model are discussed to clarify the expected results of the main effect and moderation effect.



Figure 2- Conceptual framework

# 3.3 Hypothesis of Main Effect

*"Negative public news about celebrity endorsers"* is the independent variable while *"company-related stock return"* is the dependent variable, this study proves the relationship between those two variables. This main relationship is sustained by the theories explained before: MTM and Efficient Market Theories. Moreover, those theories are extended and aligned with this study thanks to Agrawal and Kamakura (1995) findings.

Given that a transfer of negative attitude from the celebrity endorser to the endorsed product (when the celebrity is involved in a scandal) exists -MTM theory- and that when new information is released stock prices immediately change- Efficient Market theory- it is possible to make a linkage from the Independent to the Dependent variable of this study. So, when a negative public news about a celebrity endorser is released the company related stock return will be influenced. Relying on those two theories and on Agrawal and Kamakura elaboration of this theories the main hypothesis is developed. Findings of Agrawal and Kamakura (Agrawal & Kamakura, 1995) prove that news about celebrities give abnormal returns in terms of stock returns. Indeed, a connection between the two above-mentioned theories and Agrawal and Kamakura findings support that celebrity endorsers news impact the returns of a company. In this study an important aspect needs to be detected: if the effect, depending on the news (positive/negative), is negative or positive.

Reports of misbehavior of celebrity endorsers are increasingly becoming more frequent and are deteriorating both the endorser's image and stock return of the company (Hock & Raithel, 2019). Hence, when misbehavior information is released on the marketplace the stock return of the company will be negatively influenced. In support of these findings there are several studies, such as Bartz et. Al (2013)<sup>20</sup> and Louie et. Al (2001)<sup>21</sup>, that sustain that when a negative news is released around a celebrity endorser the related stock returns of the company are negatively affected.

The two main theories, MTM and Efficient Market theory -that support the (i)existence of a transfer between the endorser attitudes and the endorsed product evaluation by consumers and investors, and (ii) that news released are immediately reflected in stock markets- and these literature findings give the basis for the following hypothesis:

*H1*: Negative public news about celebrity endorsers affects negatively the stock return of the company.

## 3.4 Hypotheses of moderating variables

In this study the relationship between the Dependent and the Independent Variable is moderated by several moderating variables: gender of the endorser, the firm (non)response to the celebrity negative news, the brand prior reputation and media coverage.

According to Ding et. Al (2011)<sup>22</sup> study, several characteristics of the endorser and the firm itself influence company stock returns after a news announcement. In the current analysis, for endorser characteristic is intended the endorser's gender. Moreover, for firm characteristics are intended: firm (non)response to the negative news and the brand prior reputation. Finally, another moderating variable is media coverage which is included due to its relevant effect on stock returns thanks to its power of shaping investors decisions<sup>23</sup>.

Gender of the endorser. Two theories explain the role of gender in consumer evaluation: *Psychological research on Gender* and *Impression Management theory*. Psychological research state

<sup>&</sup>lt;sup>20</sup> (Bartz, Molchanov, & Stork, 2013)

<sup>&</sup>lt;sup>21</sup> (Louie, Kulik, & Jacobson, 2001)

<sup>&</sup>lt;sup>22</sup> (Ding, Molchanov, & Stork, 2011)

<sup>&</sup>lt;sup>23</sup> (Chan, 2003) (Giles, 1999)

that men and women held to several stereotypical standards (Banaji, 1996) and that woman may be more easily associated with advocating higher ethical standards (Kahn, 1992). The expectancy violation theory (Jussim, Coleman, & Lerch, 1989), which is a result of psychological research and Impression Management theory, suggests that people who violate expectations will be judged more harshly than who do not. This theory, hence, predicts that different negative behaviors are rated more extremely when the violation is unexpected, and according to the previous stereotypical standard theory, this judgment would be more unexpected for women than for men(Smith, Power, & Suarez, 2005). Hence, people process the negative news differently depending on the celebrity endorser's gender. According to those assumptions the second hypothesis of this study is the following: H2: If the celebrity endorser is a male the negative effect will be weaker than when the endorser is a

female.

**Media coverage.** Media coverage is the second moderator of this study and is connected to the visibility of the company. More precisely, it indicates the number of media outlets that report a celebrity endorser negative news. Media outlets (e.g. newspapers, magazines, etc.) play an important role in spreading news to a broad audience, in particular to investors<sup>24</sup>. According to a study conducted by Fang and Peress (2009), news regarding stock markets events influence stock returns of companies. In particular, their findings support the idea that stock returns of companies involved in some events earn more if they are not covered by media, while if the media report more news about a particular company returns will be lower in the future. Thus, a relationship between media coverage and stock return is proven and according to that this variable has been included in this analysis. In particular, this variable has been introduced taking into account Ding et al. (2011) findings. Their results pointed out the degree of dissemination of a news play a role in the predictability of "post-event" returns. In line with their findings, other theories were taken into account in particular the one from Bartz et al. (2013) findings. According to Bartz et al. (2013), events that receive greater media attention results in a stronger negative reaction in terms of stock returns. Thus, the following hypothesis is exposed:

*H3:* If media coverage is high the effect of negative public news about the endorser on negative stock return will be higher.

<sup>&</sup>lt;sup>24</sup> (Fang & Peress, 2009).

**Brand prior reputation.** Brand reputation represents the extent to which a firm is worthy of respect and esteem (Weiss, Anderson, & MacInnis, 1999). According to Roberts & Dowling (2002)<sup>25</sup> reputation reflects how external stakeholders value the firm as worthy or not to invest in.

Brand prior reputation nowadays is a very valuable and vulnerable aspect of the company. One of the main norms of reputation management is the need of steady vigilance. Hence, is really important to consider this aspect and understand how reputation can be defined. Reputation comprehend social responsibility, ethics, workplace, quality of services and products and financial performance (Ronald, 2004). In particular, when focusing on the financial aspect is really important to highlight how enduring reputations companies rely on the emotional bond between a brand and its stakeholders (Ronald, 2004). Hence, in this dissertation is really important to account for this variable and define what happens to companies that own a good reputation when a negative news about the celebrity endorser is released.

In this investigation, a brand is considered to have a high reputation if it is listed on The Fortune 500, a list published by Fortune newspaper each year which classifies the first 500 companies based on their financial performance. According to Brown (Brown, 1998) stock market investors reward more companies with high reputation (i.e. both in social and financial performance). In the same way if the reputation of a brand is high the effect of the negative news spread around the company will be weaker than if the company has not a high prior reputation. This is because reputation "protects" the company from negative consequences. Based on this assumption the fourth hypothesis is developed:

*H4*: If the company is considered with high reputation the negative effect on stock return based on the negative public news about the celebrity endorser will be weaker.

**Firm (Non)Response to celebrity scandal.** Firm (non)response to celebrity's negative public news affects stock return of the company (Louie, Kulik, & Jacobson, 2001) (Bartz, Molchanov, & Stork, 2013). Negative endorsers public news is very different from other company crises like product recalls. Indeed, firms are responsible for a defective product but not for the endorser's misbehavior. This gives the firm the opportunity to distance themselves from the negative publicity. Depending on the reaction of the company, different stock returns outcomes are expected. For example, if the celebrity is directly responsible for the negative news (i.e. irresponsible tweet) an apology from that celebrity generates higher returns.

<sup>&</sup>lt;sup>25</sup> (Roberts & Dowling, 2002)

From a study conducted by Hock and Raithel (2019)<sup>26</sup> it emerged that depending on the kind of negative public news the company should take different actions. Based on these different actions, different returns are gained. According to Hock and Raithel findings, the different actions that the company can take into account are: (i) let the endorser to apologize, (ii) use the right time to make a decision, and (iii) stop the endorsement deal. In this thesis this last action represents one the moderators. In particular, depending on if the company stop the endorsement or not, after the release of a negative news, different stock returns outcomes are expected.

Firm reactions to negative public news of their celebrity spokesperson might increase the relevance of the event and attract unnecessary attention to it, thus lead to negative stock market effects. (Hock & Raithel, 2019). Firms can believe that the tarnished reputation of an endorsers, hence his/her image damage, is only temporary and suspend the contract of the endorsers before it ends may only lead to more an unstable situation. Moreover, keeping the endorser leads to reassurance for investors that make them feel that the firm is stable (Hock & Raithel, 2019).

Hence, immediately firing the endorser may lead to negative effects for the firm's stock returns. For example, according to Chung et al. (Chung, Derdenger, & Srinivasan, 2013) the decision of Nike to not stop the endorsement with Tiger Woods, after a cheating scandal about him was released, preserved the company about US\$ 3.5 million in revenue. Based on Hock's study introducing a variable that explains if the brand stopped or not the endorsement is of primary importance and the following hypothesis is defined:

*H5*: If the company stops the endorsement deal after the spread of the negative news the stock return will be negatively affected.

### 3.5 Control Variables

This study also controls for three factors: Company type, Firm size and Multiple endorsements. Controlling for variables that are constant through the experiment is important to get the investigation free of biases.

**Company Type.** This control explains if the company is in the Fashion and Beauty industry or in the Beverages industry. According to Ding et al.  $(2011)^{27}$  Fashion and Beauty industry is the sector with more endorsers in the market. This aspect may influence the main relationship due to that more events may appear in this category instead of in Beverages sector. Thus, if in the sample there are more companies in the Fashion and Beauty industries the negative effect is expected to be bigger, because more events are reported.

<sup>&</sup>lt;sup>26</sup> (Hock & Raithel, 2019)

<sup>&</sup>lt;sup>27</sup> (Ding, Molchanov, & Stork, 2011)

**Firm size.** The size of the company is considered to influence the main relationship of this study. In particular, large companies benefit more from celebrity endorsers news compared to small companies (Ding, Molchanov, & Stork, 2011). This means, that if a positive news is released large companies will benefit more in terms of stock returns but if the news is negative the company will be more negatively affected. This theory is also confirmed by Clark et al. (2002)<sup>28</sup> and Cornwell et al (2001)<sup>29</sup> that found that firm size statistically influences the main relationship taken in consideration in this analysis.

**Multiple endorsements.** According to Ding et al.  $(2011)^{30}$  whether the celebrity endorses only one firm or more than one is an important aspect to consider when an analysis on how celebrity endorsers news impact stock returns is performed. Moreover, according to Tripp et al.  $(1994)^{31}$  multiple brand endorsements by the same celebrity endorser reduce the credibility of the endorser itself and lead to negative consumers evaluation and negative returns. Moreover, according to their study the liability of the endorser increases for any action that he/she takes. Hence, celebrities that endorse more than one product are seen as more responsible when a negative event takes place. Thus, it is expected that abnormal returns are more negative when the firm engage a celebrity that has multiple endorsements.

<sup>&</sup>lt;sup>28</sup> (Clark, Cornwell, & Pruitt, 2002)

<sup>&</sup>lt;sup>29</sup> (Cornwell, Pruitt, & Van Ness, 2001)

<sup>&</sup>lt;sup>30</sup> (Ding, Molchanov, & Stork, 2011)

<sup>&</sup>lt;sup>31</sup> (Tripp & Carlson, 1994)

# **CHAPTER 4: Methodology**

In this chapter the collection of the secondary data, the sample, the descriptive statistics of the main variables and the methodology are explained to give a clear overview of how this study has gained several findings. Defining each variable is of particular importance for the research and to gain a clearer framework. What needs to be detected is what effect negative public news about celebrity endorsers (Independent Variable) have on the company-related stock return (Dependent variable); and how this relationship is mediated by gender, media coverage, brand prior reputation and firm (non)response to the event.

## 4.1 Data collection

#### 4.1.1 Data base

The first step of the research is to gather relevant data that will be analyzed in this thesis. From an initial sample of 1,5000 companies, this study used only those that are traded on the U.S. stock market (i.e. NASDAQ, NYSE) and then a specific subset of these companies relevant for this topic was defined.

The main industries used for this analysis are Fashion & Beauty and Beverages companies. According to literature (Schimmelpfenning, 2018) (Friedman & Friedman, 1979)Fashion and Beauty industries, and all their relevant subset of sectors such as apparel and shoes, hair products, skincare, clothing stores and personal care, are the one those most used by celebrity endorsers<sup>32</sup>. To enlarge the sample size, Beverages companies are also added, especially nonalcoholic ones, which is an industry that is growing with the use of celebrity endorsers (Bragg, Miller, Elizee, Dighe, & Elbel, 2016). Furthermore, other academic support is given to these industries. Indeed, according to literature<sup>33</sup> these kinds of industries use the most celebrity endorsers because of their low differentiability in performance and functionality (e.g. a Burberry t-shirt has the same functionality of a Tommy Hilfiger t-shirt). Moreover, according to several real-worlds statistics (Ritwika, 2018), the industries that used the most celebrity endorsers from 2013 to 2017 are Fashion and Beauty and Beverages companies. Decisions made by these two industry can be traced to several studies that have analyzed the relationship between endorsement contracts announcement and stock return (Agrawal & Kamakura, 1995) (Farrell, Karels, & McClatchey, 2000). After having defined the industry sectors, which included 230 brands, the subsequent argument, is to detect celebrity endorsers for each brand in the finite years of this study: 2009-2019. Approximately 200 celebrities were defined. The following step is the event identification in which through Factiva one or more event

<sup>&</sup>lt;sup>32</sup> (celebrity endorsers, s.d.).

<sup>&</sup>lt;sup>33</sup> (Friedman & Friedman, 1979) (Belch & Belch, 2013) (Carroll, 2009)

for each brand is defined. Factiva is a research and business information tool that provides access to different kind of sources, around 32000, such as journals, newspapers, magazines, television, etc.

#### 4.1.2 Event identification

To identify the event of this study a newspaper databank, Factiva, is used. With this tool the aim of the study's collection was to find with a defined algorithm and several filters, an event for each of the brand defined in the previous step. An *event* is meant to denote any negative news/scandal (i.e. aggression, cheating, bankrupt, etc.) spread across a celebrity endorser at the time of its activity for the indicated brand. The *event day* is the date when the news was firstly reported.

After some trial and error, an algorithm to search in Factiva has been developed. The algorithm<sup>34</sup> included a celebrity name (for each brand in the relevant years) and several keywords (e.g. murder, dept, car crash, etc.). Furthermore, several filters were added. *First*, the search focuses only on the more relevant and reliable media sources in the U.S. as the New York times or Washington Post<sup>35</sup>. *Second*, the time period goes from 1 January 2009 to 1 April 2019. *Third*, headline and lead paragraph filter were added to easily find the key words inserted in the algorithm relevant for the topic. The algorithm provided both relevant and irrelevant articles for the analysis. However, only the articles about the scandal of the celebrity when he/she endorsed each specific brand was included in the sample.

#### 4.1.3 Operationalization of the variables

After having found all relevant articles regarding the events, a new spreadsheet was created to collect further information; such as, event identification, short explanation, date of the events, the moderators and control variables. The relationship tested is between negative public news about celebrity endorsers and company related stock return. Stock return is captured by the abnormal stock market changes (AR) due to the release of the news. Data regarding stock returns were collected through Yahoo Finance Database for each company. Negative public news of the celebrity endorser is captured by the presence or not of the news on Factiva database. Moreover, to test this relationship different moderators that could affect the firms' value are considered:

- Gender of the endorser. Dummy variable with 0 indicating female and 1 for male.
- Media coverage; determined by the total number of media that report the event.
- Brands' prior reputation. If the company, in the year before the event took place, is listed on the Fortune 500 ranking is considered as with prior reputation. A dummy variable is then

<sup>&</sup>lt;sup>34</sup> See the Appendix A for the algorithm and further clarifications.

<sup>&</sup>lt;sup>35</sup> See Appendix B for the complete list of media outlets.

created to explain this moderator. In particular, 0 indicates a brand with no prior reputation (not listed on the Fortune list) and 1 for brands considered with a prior reputation (listed on the list).

- Firm (non) response; determined by if the company stopped, or not, the endorsement deal after the negative news was released. Dummy variable is created; 0 if the brand continues the endorsement or 1, if the brand stops it.

Finally, the study controls for three variables:

- Company sector; dummy variable for the industry sector. Fashion and Beauty Industry=1 and Beverages=0
- Firm size; has been measured by multiplying the volume with the open price of the date of the event.
- Multiple endorsements; is a variable that considers if the endorser endorses more than one product at the same time. It is been measured by creating a dummy variable, where 0 indicate an endorser with only one endorsement deal while 1 an endorser with more than just one deal.

Variables	Description	Source N		Mean	Max	Min	SD	
Dependent Variable								
Stock return	Stock returns of companies	Yahoo	49	0016	.0398	0369	.0125	
	traded in the US	Finance						
Moderators								
Gender of the endorser	Dummy	Coded	49	.7959	1	0	.4072	
Media Coverage	Number of newspapers that	Factiva	49	6.0816	31	1	5.9436	
	report the endorser's scandal							
Brand Prior Reputation	Dummy	Fortune 500	49	.3061	1	0	.4657	
		List "Most						
		admired						
		brads"						
Firm (non)response	Dummy	Coded	49	.5102	1	0	.5051	
Control variable								
Company Sector	Dummy	Coded	49	.8163	1	0	.3912	
Firm Size	Market value of equity:	Author's	49	3.54e+1	1.69e+1	1.38e+1	3.43e+1	
	Open price x Volume	computatio						
		n						
Multiple endorsements	Dummy	Coded	49	.4286	1	0	.5	

Table 2 provides some statistics of the measures used in this study.

## Table 2. Measures Descriptive Statistics

Furthermore, in this analysis based on Sorescu et. Al research (Sorescu, Warren, & Ertekin, 2017) no confounding events are identified. According to their findings eliminating confounding

events may be unnecessary for event studies. Precisely, reducing an already small sample may lead to a failure in detecting abnormal returns, especially in the case when those events contribute significantly to the company value (Sorescu, Warren, & Ertekin, 2017).

# 4.2 The Sample

The study has 49 *events;* with 27 *brands* analyzed from the initial sample of 230 brands. This analysis focuses on the endorsers' events. Thus, a brand can be repeated more than once. In Appendix<sup>36</sup> some statistics are given regarding celebrities and brands used in the study. The reduction of the sample is due to two different aspects:

- Some brands do not use celebrity endorsers as an advertising strategy. This is due to different reasons; first, the rise of influencer marketing is destroying the celebrity image as an advertiser (Farin, 2018). Second, endorsers may be risky and after many of the scandal brands prefer to not use them as an advertising strategy.
- Some celebrities have not done any scandal. So, no negative news is reported around them.
- Yahoo Finance Data in some cases did not report the returns of the company for the needed time period because those companies were not already traded in the US stock market.

# 4.3 Event Study

An event study examines stock price movements regarding several corporate events, which can be both voluntary (e.g. new product introduction) or non-voluntary (i.e. announcements made by media news or other entities) (Sorescu, Warren, & Ertekin, 2017). This methodology is widely used in different disciplines (e.g. finance, business strategy, etc.) and in particular in *marketing* (Horsky & Swyngedouw, 1987). When news are reported about a celebrity endorser, investors may make different judgments about the future profit impact of the firm, and these judgments are then reflected on the stock returns. This is why, measuring abnormal returns of celebrity endorsers' scandal when endorsing a particular brand enable us to see how this news affect the financial performance of the company. Moreover, event study methodology is the prevalent procedure in studies that examine the effect of celebrity endorsers on stock returns (Bartz, Molchanov, & Stork, 2013).

The event study methodology measures the magnitude of the effect that an event has on the profitability of a company related to that event (Agrawal & Kamakura, 1995). According to Fama et. Al (Fama, Fisher, Jensen, & Roll, 1969), underlying an event study methodology, there is the hypothesis of efficient markets. This theory assesses that the stock price of a company reflects all the

<sup>&</sup>lt;sup>36</sup> See Appendix C

information about the future and current firm's earnings. This is why stock prices are seen as reliable indicator of a firm's value and the related stock return as well. This study focuses on stock returns, in particular on abnormal returns (that are the change in stock price after it has been adjusted for some changes due to general market changes) which help to examine whether any event has any impact on the firm's value.

The Event and Estimation window. In an event study, the most important information to identify is the focal event. In this analysis, the focal event is the first article reporting the negative news about the celebrity endorser. Afterwards, the following step is to settle the timing of the event.  $T_2$  is the date of each event. The *estimation window* represents the time period that preceded the event itself, which is used to calculate returns under normal conditions, which goes from  $T_0$  to  $T_1$ . The estimation window considered in this analysis comprehend three different time periods: 200 days, 100 days and 14 days to deeply analyze which effect is bigger. According to MacKinlay (1997)<sup>37</sup> the estimation window that gives better significant results is 120 days, hence the analysis of three different time frames can give robustness to the study. The *event window* is the time frame in which the reaction of the stock market is expected. It covers the day before the event ( $t_1$ ), the day of the event ( $T_2$ ) and the day after it happened ( $t_2$ )- (-1;1). This study leaves out calculations 7 days from the estimation window because in those days' investors can already be aware of the news and more fluctuations in the stock market may be present. In figure 3, the Event and Estimation window is graphically explained.



Figure 3- Schematization of Event and Estimation Window<sup>38</sup>

<sup>&</sup>lt;sup>37</sup> (Mackinlay, 1997)

<sup>&</sup>lt;sup>38</sup> (Elberse, The power of star: Do star actors drive the success of movies?, 2007)

**Normal and Abnormal returns.** This study uses the Mean-adjusted Model where Abnormal returns (AR) are given by the following formula:

$$AR_{it} = R_{it} - (\bar{R}_{it})$$

With  $R_{it}$  the average actual returns, hence the return of observation *i* in the event window. And  $\bar{R}_{it}$  the average expected returns, if the event did not take place (closing price of the current day over closing price of the day before minus 1). According to the Mean-adjusted Model, abnormal returns of observations *i* on period *t* are described as the difference between the average returns of the event window ( $R_{it}$ ) and the estimation window ( $\bar{R}_{it}$ ). In the present case, those are the measure of the variations in shareholder wealth associated with each news related to negative news about celebrity endorsers, which is for each negative news *i* and period *t*.

In the Appendix D, some of the events with the highest AR are reported.

**Estimation and procedure.** To conclude, in order to be able to use Abnormal Returns, their significance also need to be tested. The null hypothesis H<sub>0</sub>:  $\bar{R}_{it}$ =0 (negative news about celebrity endorsers has a positive effect on stock returns) is tested against the alternative H<sub>1</sub>:  $\bar{R}_{it} \neq 0$  (negative news about celebrity endorsers negative impact on stock returns).

## 4.4 Cross-Sectional Analysis

The cross-sectional analysis uses a linear regression, to sort out the existence of a causal effect of an independent variable (or more than one) on a dependent variable at a certain point of time. Built on the results of the event study, the magnitude of the impact of the release of the negative news is measured using a cross-sectional analysis. The abnormal return (AR) is the dependent variable in this analysis. A regression model tests the effects and measure the effect of the different moderators and control variables on abnormal returns. In particular, Abnormal returns have a regressive effect on the identified moderators and control variables. Here, the regression model used is explained:

(2)  

$$AR_{it} = \beta_0 + \beta_1 Gender + \beta_2 MediaCoverage + \beta_3 Brand Prior Reputation + \beta_4 Firm (non)Response + \beta_5 Company type + \beta_6 Firm size + \beta_7 Multiple endorsements + \varepsilon_i$$

The dependent variable is the AR<sub>it</sub>, abnormal stock return for each i event and t different time period.  $\beta_0$  is the intercept which measures the average daily AR after the initial negative event becomes public. Finally,  $\varepsilon_i$  is the error associated with the event.

# **CHAPTER 5: Results**

# 5.1 Results of Event Study

This analysis begins with providing information about the significance of the dependent variable: Abnormal Returns. The study wants to prove that  $H_0 \neq H_1$  where  $H_0$  states that "Negative public news about celebrity endorsers affects positively on the stock returns of the company". The other argument  $H_1$ , states that: "Negative public news about celebrity endorsers affects negatively stock returns of the company". As stated in the event study paragraph in the Methodology section this study uses an Event Window that takes the day before the event, the day after the event and the date of the event itself with three different estimation windows to define which model works best for this analysis. Table 3 shows the basic results from the standard t-test over the abnormal returns from the event study.

		AR 200days	AR100days			AR14 days	
Event Window	N	Mean	t	Mean	t	Mean	t
(-1;1)	49	00268**	-2.5782	00285***	-2.7860	00278**	-2.3920

Notes: \*\*\* p<0.01, \*\*p<0.05

Table 3. Models' significance

The study has developed three different models, taking into consideration a fixed event window (-1;1) and a varying estimation window (200, 100 and 14 days).

The three models show that there is *significant evidence* that negative news results in a negative impact on stock return; as can be easily seen, for all the models demonstrate a negative result. The one sample t-test reveals that the abnormal returns are statistically significant, hence different from zero. The level of significance varies depending on the estimation window taken into consideration. For the Abnormal returns that consider an estimation window of 200 and 14 days there is a significance at a 5% level; while, for AR that consider the estimation window of 100 days there is a greater significance at 1% level (p=0.0076). The evidence that the most significant result comes from the estimation window of 100 days sustain the assumption made by MacKinlay (Mackinlay, 1997) that the typical size of the estimation window should be 120 days when using the constant mean return model.

The significance of these results shows that when a negative news about a celebrity endorser is released the effect on the returns of the company will be negative. This results in the rejection of  $H_0$  and acceptation of  $H_1$ : "Negative public news about celebrity endorsers affects negatively the stock return of the company".

## 5.2 Cross-Sectional Regression Results

After having demonstrated the significance of the main model and the subsequent existence of a negative relationship between negative news about celebrity endorsers and stock returns a crosssectional regression is performed.

#### 5.2.1 Model fit

For each estimation window, the study has run a different regression which includes moderating and control variables.

R-squared measures how well the regression model adapts to the studied data. In other words, it shows how well data points fit the regression line. Adjusted  $R^2$  indicates the same but it *adjusts* for the number of terms in the model. The value of  $R^2$  goes from 0 to 1, the closer this number to 1 the higher the fit of the model. The  $R^2$  and Adj  $R^2$  in those models are not particularly high as can be seen in Table 4. This may be due to two different aspects. *First,* scandals regarding a celebrity endorser may affect people singularly depending on the attitude that investors have on the celebrity involved in the scandal. Hence, depending on the endorser itself (e.g. Tiger Woods, Selena Gomez, etc.), stock markets react differently. *Second,* this model is missing some important variables that can influence the model as for example whether the endorser and the endorsed product match up. However, the study continues to analyze the different variables given the fact that in literature studies regarding celebrity endorsers (e.g. Elberse & Verelun 2012)<sup>39</sup> show that the  $R^2$  of their study is not so big.

	AR 200days	AR 100days	AR14days
<i>R-squared</i>	0.2563	0.2216	0.2568
Adj R-squared	0.1293	0.0887	0.1299

#### Table 4- Models R-squared and Adj R-squared.

After having defined the fit of the models, the next part provides a more detailed analysis of each variable in the regression line.

<sup>&</sup>lt;sup>39</sup> (Elberse & Verleun, The economic value of celebrity endorsements, 2012)

#### 5.2.2 Estimation Results

The study considers significant each regressor with a p value lower than .05 and thus, when the Confidence Interval does not include zero. For each model there are different results that are exposed in more detail in the Appendix<sup>40</sup> where all the results are reported. A summary of the main findings of the cross-sectional analysis are reported (Table 5). For each model, the table shows the estimates and the standard errors of the variables. Furthermore, in the notes that follow the table significance value are indicated.

	Model 1		Model 2		Model 3	
Coefficient of	Estimate	SE	Estimate	SE	Estimate	SE
$\beta_0$ Intercept	00469	.00402	00584	.00434	00777	.00483
$\beta_1$ Gender	00171	.00278	00211	.00268	00290	.00309
$\beta_2$ Media Coverage	.00012	.00017	.00021	.00016	.00025	.00019
$\beta_3$ Brand Prior Reputation	.00686***	.00246	.00611**	.00247	.00715**	.00274
$\beta_4$ <i>Firm (non) response</i>	00489**	.00229	00408	.00228	00468	.00255
$eta_5$ Company type	.00276	.00305	.00300	.00319	.00464	.00355
$eta_6$ Firm size	-1.70e-1	3.18e-1	5.57e-1	3.20e-1	3.10e-1	3.46e-1
$\beta_7$ Multiple endorsements	00469	.00402	.00226	.00213	.00249	.00234

Notes: \*\*\* p<0.01, \*\*p<0.05

Table 5. Main findings from Cross-sectional analysis

Before explaining, the main findings of the study, a recap of the moderation hypotheses is done:

*H2: If the celebrity endorser is a male, the negative effect will be weaker than when the endorser is a female.* 

H3: If media coverage is high, the negative effect of negative public news about the endorser on stock return will be higher.

*H4: If the company is considered with well-regarded reputation, the negative effect on stock return based on the negative public news about the celebrity endorser will be weaker.* 

H5: If the company stops the endorsement deal after the spread of the negative news, the stock return will be negatively affected.

<sup>&</sup>lt;sup>40</sup> See Appendix E for STATA output.
**Model 1 (AR 200 days).** In this model there are two significant variables that sustain H<sub>4</sub> and H<sub>5</sub>. The first significant variable is *Brand prior reputation* (F=2.02, p=0.008). If the company is considered to have a good reputation even after the spread of the negative news, the abnormal returns will be positively affected with a coefficient ( $\beta$ ) of 0.00686. Hence, the negative news will be attenuated by the reputation owned by the company. This value indicates that the reputation of the company will increase the negative AR of 0.6%. In other words, the negative abnormal returns value will be smaller if the company is considered to have a prior reputation.

The second one is *Firm (non)response* (F=2.02, p=0.039) with a coefficient ( $\beta$ ) of -.00489 meaning that if the brand stops the endorsement deal (response) the abnormal returns will be negatively affected. AR will decrease of -0.0489 each time the firm stops the endorsement contract after a negative news is spread. Precisely, considering negative AR (according to main hypothesis) the Firm response of ending the contract with the endorser will lead to an increase of almost 5%.

Thus, considering both the variables the Firm (non)response influence on abnormal returns results bigger that Brand prior reputation variable.

 $H_2$  and  $H_3$  are rejected, so it is possible to say that Gender of the endorser and Media Coverage are not significant, and they do not influence the main relationship of this study.

Model 2 (AR 100 days). In this model, there is just one significant variable: Brand Prior Reputation. Hence, hypothesis H<sub>4</sub> is confirmed (F=1.67, p=0.018). This result means that when a company is considered to have a good reputation the negative effect on stock return, by the released of the news, will be attenuated of a coefficient ( $\beta$ ) of .00611. This effect is quite consistent considering also the value of the abnormal returns. In this case AR will increase of +0.6%.

For what concern the other three moderating variables, they are not proven. Hence, in this model just one variable affects the main relationship.

**Model 3 (AR14 days).** Again, in this last model there is only one significant variable: Brand prior reputation (F = 2.02, p = 0.013). Thus, H<sub>4</sub> is confirmed sustaining that for each increment in this variable value AR will increase of 0.00075 ( $\beta$ ). In this model Brand prior reputation has not a big impact due to its small coefficient. Indeed, when a company is considered to have a good prior reputation the AR negativity will be attenuated just of a +0.07%.

As in Model 2, only one variable is statistically significant while the other three moderating variables do not influence the main relationship of this analysis.

In conclusion, according to the three models the variable that is always significant is Brand Prior reputation. Thus, it is important that companies take account of this variable when deciding the hiring or not any endorser. Furthermore, if the company possesses a good reputation in the public's eye, regardless of the celebrity involvement in the scandal, the impact of the negative news on AR will be attenuated. Managers, hence, should consider in advance the company's reputation and decide if the strategy of hiring an endorser is worthwhile or not.

Furthermore, there are two variables that are not significant in none of the models: Gender and Media Coverage. Hence, it can be affirmed that those two variables do not affect the relationship between celebrity endorsers' negative news and stock returns of a company. These variables of no significance may be due to the fact that the standard deviation is too close to the mean in both cases.

Moreover, investors do not take into account the Gender of the endorser as a reason why it can affect their response to negative news. The main argument that can explain why media coverage is not significant is that the standard deviation is too close to the mean (SD= 5.9436, M=6.0816). In statistical terms, when the standard deviation is close to the mean - no reliable conclusions can be made.

Effects of Control Variables. There are also three control variables that are included in the model: Company type, Firm size and Multiple endorsements. None of the three-control variables are significant, hence they do not affect the main relationship. This means that is not fundamental to account for those variables when this relationship is analyzed. Furthermore, it can be pointed out that the effect that celebrity endorsers' negative public news has on company-related stock returns is not influenced by Company type, Firm size and Multiple endorsements.

#### 5.2.3 Robustness of the study

This study subjects all findings to three alternative models to ensure an unbiased and generalizable point estimates. The analysis considered three time periods to have a bigger overview of how, and most importantly, when the proven effect is bigger. To give robustness to the study, those three-time periods are added to sustain the main hypothesis of a negative effect on stock returns after the release of a negative news about a celebrity endorser. With all the three models, indeed, the study finds a total significance of the main relationship and a partial significance of all moderators when included in the models. After those assumptions are made, it is possible to define Model 1 (AR200 days) as the most coherent and robust for this study. The model considers an estimation window of 200 days as the most useful in this analysis due to the significance of two of this study's moderating variables. This may be because a wider time frame has been adopted, where all the available information is

clearly processed. In all the three models, two moderating variables are never significant: gender and media coverage.

In the following section, Model 1 is the one that will be used to make all of the conclusions made in this study. The decision of using Model 1 as the main model of this study is because this model has two significant moderating variables, at a 5% significant level. While the other studies have only one significant moderating variable at 5% significant level, and another variable at a 10% significant level. According that this dissertation aims to small errors, only variables at a 5% significant level are considered.

# **CHAPTER 6: Conclusions**

## 6.1 Discussion

This thesis provides several insights useful for both managers and researchers. The main effect is proven; when a negative news about a celebrity endorser is released the stock return of the company will be negatively influenced. Furthermore, two other variables influence stock return, such as Firm (non)response and Brand prior reputation.

Moreover, Celebrity endorsers are a useful but at the same time a dangerous way to advertise a product. Being aware of what can happen when hiring an endorser can be really helpful. Future research could use this study as a starting point and add more variables, that are suggested in the following paragraphs, to provide a bigger framework.

Thanks to this study several implications can be made. Two aspects are considered: the theoretical and the managerial. For theoretical implications are intended all the findings that increase the general knowledge regarding this topic and all the additional findings to previous literature. Then, for managerial implication are included all the actions that companies can do after that is known how this relationship works and what influences it.

## 6.2 Theoretical implications

This study makes important *theoretical contribution* to literature and marketing theory. The gap in academic research regarding the ambiguous response to how news about a celebrity endorser influence stock returns is fulfilled in this study. For the first time a clear framework is defined and can be proved that negative news about a celebrity endorser lead to negative stock returns. This negative relationship in moderated by several aspects that regard both the company itself and the news released. Company prior reputation and Firm (non)response influence the relationship. This dissertation contributed, thus, to existing literature performing an event study analysis of the effect of negative public news about a celebrity endorser on related company stock returns. Extending Bartz et. Al and Louie et. Al<sup>41</sup> works more exhaustive picture of this theory is given thanks to this analysis. Not only a negative relationship between negative news about an endorser and stock return is proven, but also the aspects affecting the relationships are defined.

The use of celebrity endorsers as advertising strategy has been widespread in literature<sup>42</sup> but evidence of this strategy effectiveness from a stock return perspective was mixed. While the reaction of stock markets to the release of news was proven by Agrawal and Kamakura (1995), the actual

<sup>&</sup>lt;sup>41</sup> (Bartz, Molchanov, & Stork, 2013) (Louie, Kulik, & Jacobson, 2001)

<sup>&</sup>lt;sup>42</sup> (Halonen-Knight & Hurmerinta, 2010) (Kaikati, 1987)

effect (negative or positive) was missing due to contrasting findings in previous researches<sup>43</sup>. This dissertation contributes to existing literature providing a definite answer to how stock market reacts to the release of a negative news about a celebrity endorser and providing a more complete framework. Thus, extending Bartz et. Al (2013) work evidence of significant negative returns is reported and variables that influence this relationship are provided.

At the beginning of this thesis different hypotheses have been made and the study has confirmed most of them. The results of this analysis reveal interesting information about negative news about celebrity endorsers and in this section more details are provided.

Previous research indicates that negative news about a celebrity endorser negatively influence stock return (Louie, Kulik, & Jacobson, 2001) (Bartz, Molchanov, & Stork, 2013) and this study confirms these findings. Through this empirical study it can be proven that after a *public news about a scandal regarding a celebrity endorser is released the stock return of a company is negatively affected*. Thus, those findings are in line with the "Meaning-Transfer Model theory" (McCraken, 1989) which create a connection between the endorser actions and the endorsed product. Furthermore, with this analysis more evidence is provided also to "Efficient Market Theories" (Fama, Fisher, Jensen, & Roll, 1969), due to that news about the endorsers reflects on markets reaction immediately. Furthermore, Louie et. Al (2001) study is been confirmed and enlarged. In particular, they sustained that stock returns are negatively influenced when a negative news about celebrity endorsers is reported but this relationship is true only for blame-worthy endorsers. Differently from this, this analysis supports the existence of a negative effect without any conditions.

Hence, literature and theory provided in the previous chapters of this dissertation have been proven and enlarged thanks to the different methodology used.

Barely anything is known about the relationship between negative news about the endorser and negative returns when several variables are considered in this relationship. This study is the first to quantify those aspects. To find out what influences this relationship an additional study has been done to know what the main moderators of this relationship are. From this cross-sectional analysis valuable results have emerged: Company prior reputation and Firm (non) response turn out to influence this relationship. The influence of *Company prior reputation* mitigates the negative effect. Indeed, when a company is considered with high reputation the negative effect is attenuated due to the positive links that investors have with the company. This finding is in line with Brown (1998)<sup>44</sup> findings about a company reputation: investors reward companies with high reputation. Thus, a scandal does not hugely influence a company with great fame.

<sup>&</sup>lt;sup>43</sup> As stated in chapter two, literature was contrasting on this aspect (Berger, Sorensen, & Rasmussen, 2010) (Louie,

Kulik, & Jacobson, 2001)

<sup>&</sup>lt;sup>44</sup> (Brown, 1998)

Moreover, another aspect that affects the main relationship of this study is *Firm (non)response*. When a company stops the endorsement with a celebrity after the news is released the negative effect is bigger than when the company continues its relationship. This is because investors may perceive the end of the contract as a weak point of the company. This finding confirms Hock et al. (2019)<sup>45</sup> study, providing another support to that firm responses (e.g. end the endorsement deal, apologizing etc.) influences stock returns. For example, Nike's decision to continue the endorsement contract with Tiger Woods after the cheating news was released increased the company sales (Bartz, Molchanov, & Stork, 2013). This aspect can be easily linked to the Company prior reputation variable. This is because, when a company has a good prior reputation, ending the contract may decrease its prominence to investors point of view.

From this analysis Gender of the endorser do not influence the effect that a scandal has on stock return. This is because independently of the gender of the celebrity the effect on stock return may vary depending on the accusation and not the endorser's gender. Similarly, to this dissertation, Ding et. Al  $(2011)^{46}$  findings did not find either a significance in Gender variable. Unexpectedly also Media coverage results to be not significant. Media coverage not significance means that no matter how many newspapers report the event this variable will not influence the main relationship. The main argument that can explain why the results are not significant is that the standard deviation is too close to the mean (SD= 5.9436, M=6.0816). In statistical terms, when the standard deviation is close to the mean no reliable conclusions can be made.

#### 6.3 Managerial implications

Given that a great amount of money is spent by firms on celebrity endorsements, more than 10% of the total advertising budget of a company (Agrawal & Kamakura, 1995), is really important to clearly know what happens to company related stock returns when the endorser is involved in some negative events. This thesis wants to help practitioners that are considering signing a celebrity endorser contract or that seek information on how to structure and manage this relationship over time. Several implications stand out.

*First,* when the company decides to hire a celebrity endorser, it needs to account for all the risks associated with them. If the company has a good reputation this process may be less risky if not, any negative news about a celebrity may have a negative effect on the company stock returns. Hence, the company needs to have a solution if a negative news is released and not be unprepared when it happens. A solution is to be helped by companies/online solutions that offer advices regarding

<sup>&</sup>lt;sup>45</sup> (Hock & Raithel, 2019)

<sup>&</sup>lt;sup>46</sup> (Ding, Molchanov, & Stork, 2011)

endorsers contract. For example, different websites (e.g. Spotted.com) rank celebrities by several attributes and indicate their propensity to be involved in a scandal or their match with the company. This is a good solution for having an enduring relationship with an endorser and avoid being involved in a scandal.

*Second,* from the analysis it emerged that when a firm stop the contract with the endorser the negative effect on stock returns is bigger. The company can thus, decide before a scandal news is released what type of response to act. Hence, not consider as reaction just the end of the contract which, as can be seen from this study, is not an effective way of reaction. For each scandal the firm can decide how to react; for example, staying quiet, apologizing or shift the attention on other events. Furthermore, is really important also the timing of response. The company should consider in advance what is the best timing of response if a scandal occurs.

## 6.4 Limitations and Future Research

This study has several limitations that need to be point out and some of them are useful to develop fruitful avenues for future research.

*First*, the sample of the study is small. This analysis has only 49 observations and, even if in previous literature about this topic sample were not too big (e.g. Hood et al.  $(2012)^{47}$  with 6 observations), small samples may lead to statistical problems. Those problems are related to low statistical power, inflated false discovery rate, inflated effect size estimation and low reproducibility. Hence, if this study wants to be replicated by future research a bigger sample is recommended. The small sample is due to three different aspects: not all celebrities have done scandals, not all brands were traded on U.S. stock market when the event took place and that celebrity endorsement is slowly being replaced by influencer marketing (hence, not all the companies use celebrities as advertising strategy). Influencer marketing is taking the advantage over the oldest kind of advertising strategies thanks to the increasing importance given to social media. Several companies use not only celebrities but also influencers. A possible path for future research thus, is to study how scandals about both influencers and celebrity endorsers affect stock return of the company.

Second, another limitation of this thesis is the small R-squared pointed out from the study. Such a small  $R^2$  is included in limitations because the fit of the model is not perfect, but not always a small  $R^2$  means a bad model. Rather, the overall significance of the model is a good pointer. The poor fit with the model may be to that some important variables are missing. For example, a variable that in literature has received a lot of attention is the fit between the product/brand endorsed and the endorser itself. The fit between celebrity endorser and the endorsed products is defined as at what

<sup>&</sup>lt;sup>47</sup> (Hood, 2012)

level the endorser is related to the product. Celebrity endorsers have a special way to grab audience attention and describe the promoted brand in a totally appealing way but a match between the endorser and the product is needed. According to McCraken (1989)<sup>48</sup>, the success of any endorsement depends on the fit between the celebrity and the brand. This fit is commonly known as the "match-up" effect/hypothesis which states that "*Highly relevant characteristics of the spokesperson need to be consistent with highly relevant attributes of the brand*" (Misra & Beatty, 1990). The match-up hypothesis proposes that product endorsements are more effective when a good fit between the endorser's appearance or personality and the endorsed product or service is guaranteed (Till & Busler, 2000). A study by Bower and Landreth (2001)<sup>49</sup> proved that by enhancing the perceptions of the endorser's expertise about the product, the effectiveness of an advertisement was improved. Friedman and Friedman (1979)<sup>50</sup> noted that the main characteristics of a spokesperson interact with the essence of the product advertised. Thus, it can be useful to account for this variable, due to that if the fit is poor the effect of news about celebrity endorsers on stock return will be weaker; on the other side if the fit is big the effect will be stronger (Thwaites, Lowe, Monkhouse, & Bradley, 2012).

*Third*, the data collection of this study is been done through Factiva database and different qualitative aspects were not taken into account due to the difficulty to collect them. According to several studies (Aziz, Ghani, & Niazi, 2013) (McCraken, 1989) a fundamental aspect in celebrity endorsement is the credibility of the endorser. The credibility of the endorser is the degree to which the source is supposed to have the capabilities to deliver the advertising message and how he/she is coherent (has a fit) with the brand. Celebrity credibility is considered to be the sum of celebrity trustworthiness and attractiveness. Hence, knowing if the celebrity is perceived to be credible or not may really affect the returns of the company. Measure those aspects through a collection of empirical data is quite impossible, a questionnaire or a personal interview is required to analyze this aspect. It would be interesting to know how celebrity credibility affect the relationship between negative public news about a celebrity endorser and stock returns of the company.

*Fourth*, the study does not analyze differences between scandals. Making a distinction between different type of negative news released may be useful in predicting more precise results. In this analysis for scandal is intended any kind of negative news; from cheating to murder accusation. Of course, a cheating scandal will have fewer negative consequences on stock return than a murder news. In particular, according to Louie et. al findings (2001) an additional variable could be added: Celebrity blame. Investors may be more tolerant if the celebrity is not blameworthy but just accidentally involved in a scandal. Another study that support the "culpability" variable in this kind

<sup>&</sup>lt;sup>48</sup> (McCraken, 1989)

<sup>&</sup>lt;sup>49</sup> (Bower, 2001)

<sup>&</sup>lt;sup>50</sup> (Friedman & Friedman, 1979)

of analysis is given by Nicolau and Santa-Maria (2012)<sup>51</sup>. In their study they have pointed out that the losses of Rafael Nadal (a tennis player), which can be considered negative events, do not have a negative impact on the company financial returns.

*Fifth*, this analysis focuses on two specific industry sectors, defined in chapter four, which are beverages and fashion and beauty industries. The control variable "Company sector", used in this thesis, resulted to be not significant. This means that the relationship between negative news and stock returns do not depend on the company type. However, a possible path to understand if the significant results gained in this analysis can be extended to other industry sectors is to include other industry kind. Extending this analysis to other sectors could help companies to know if this effect is constant or changes depending on the sector itself. In particular, technology sector could be included due to the great number of endorsement deals between celebrities and industry companies (i.e. Miley Cyrus with Beats by Dr. Dre) and to the great amount of literature devolved to this industry sector <sup>52</sup>. This particular sector has been firstly analyzed by Biswas et. Al (2006)<sup>53</sup>. Their study focused on the effect that celebrity endorsers can have on products in the technology sector. Further, Clark et. Al (2009)<sup>54</sup> found out a positive relationship between technology firms that made a new endorser contract announcement and abnormal returns. They reported that investors perceive a technology company's new sponsorship announcement a positive signal. This is because the company is considered to be reliable enough to sustain the costs of the endorsement deal.

*Finally*, an additional control variable can be added. The variable in question is the endorser itself; if a celebrity has the tendency to be involved in scandals maybe the stock returns will be less influenced because investors expected it. To give a practical example of how this variable can be really important Tiger Woods' scandals are considered. According to this research Tiger Woods has committed five different scandals (e.g. car accident, drug usage, extramarital relationships, etc.). Thus, it has emerged that this celebrity has the tendency to be involved in scandals and companies should learn from the past and not commit the same errors. Knittel & Stango (2014)<sup>55</sup> estimated that Tiger Woods endorsed brands (e.g. Gatorade, Electronic Arts), in the ten-fifteen days after the scandal, lost more than 2% of their market value. Actually, Tiger Woods scandals were spread across time so, companies in advance should have decided to not hire him as an endorser after the first scandal. In this way they could have avoided some of their losses.

<sup>&</sup>lt;sup>51</sup> (Nicolau & Santa Maria, 2012)

<sup>&</sup>lt;sup>52</sup> (Ding, Molchanov, & Stork, 2011)

<sup>&</sup>lt;sup>53</sup> (Biswas, Biswas, & Das, 2006)

<sup>&</sup>lt;sup>54</sup> (Clark, Cornwell, & Pruitt, 2009)

<sup>&</sup>lt;sup>55</sup> (Knittel & Stango, 2014)

# Summary

# **Table of Contents**

1. Introduction	
2. Literature Review and Conceptual framework	
3. Methodology	
3.1 Data Collection	
<i>3.1.1 Operationalization of the variables</i>	
3.2 Event-Study analysis	54
<ul><li>3.2.1 The Event-study</li><li>3.2.2 Cross-sectional analysis</li></ul>	
4. Results	
5. Conclusions	
5.1 Theoretical Implications	58
5.2 Managerial Implications	60
5.3 Limitations and Future Research	61

## **1.** Introduction

This dissertation focuses its attention on a noteworthy marketing advertising strategy: celebrity endorsers. In particular, the aim of this study is to define the effect that negative public news about celebrity endorsers have on stock returns of the company. An empirical analysis has been used to define if a real effect exists and the following research questions have been developed:

- "How do negative public news about celebrity endorsers influence stock return of the company?"
- 2. "Do Gender, Media Coverage, Firm (non)response and Brand Prior Reputation affect this relationship?"

Is fundamental to define the relevance of this topic in marketing field. Nowadays consumers are exposed to a wide variety of ads (Thorson, 1990) that compete to grab consumers' attention (Till B., 1998). All over the world huge amounts of money are spent on advertising. For example, the US spends around 271,074 millions of dollars in advertising (Galbi, 2008). Companies can use different types of advertisements (i.e. Radio, e-mails and so on) to grab people attention; but one of the most well-established advertisement strategies from the late nineteenth century are celebrity endorsers (Erdogan Z. B., 1999). According to Agrawal and Kamakura (1995)<sup>56</sup>, more than 10% of the total advertising budget of a company. In the US celebrity endorsers were approximately in the 25% of the ads (Erdogan, Baker, & Tagg, 2001). A celebrity endorser is "any individual who enjoys public recognition and uses this recognition on behalf of a consumer good by appearing with it in advertisement" (McCraken, 1989) and they can be considered as a brand alliance (Halonen-Knight & Hurmerinta, 2010). Celebrity endorsers are typically indented as: comedians, artists, actors, entertainers, musicians and athletes. (Friedman, Termini, & Washington, 1976). Using a celebrity endorser as an advertising strategy creates for the company unique communications and allows the firm to generate a real effect on consumers' attitude and firm related metrics (Ranjbarian, Shekarchizade, & Momeni, 2010). For example, PepsiCo has attributed a 2% increase in global market share to the Spice Girls' endorsement (Ding, Molchanov, & Stork, 2011). The reason why celebrities' importance is increasing can be found in two main reasons. First, media outlets have increased in number and the same increase has occurred in the interest that media outlets have for celebrities (Giles, 1999). Second, the desire for fame results in emulation of this people and hence, more visibility is given to celebrities. In response to this trend, advertisers are becoming always more aware of celebrities' persuasive power and the number of celebrity endorsers is increased to the extent that it represents the most popular form of retail advertising (Choi & Rifon, 2007). However, while all the benefits of using celebrity endorsers are really appealing to companies, it does not come

<sup>&</sup>lt;sup>56</sup> (Agrawal & Kamakura, 1995),

without risks. Indeed, negative publicity arising around the endorsers image is one of the greatest fears for brands. For example, immediately after Tiger Woods scandal Accenture's (one of the endorsed companies of Tiger Woods) stock price fell by 2.9 % (Knittel & Stango, 2014). This is the main reason why is of primary importance to define how a *negative* news regarding an endorser can impact the return of a company; highlighting the circumstances under which it can happen. Hence, is necessary to link how this exposure to negative information about celebrity endorsers can lead to negative effect on stock return. In this study, for negative pubic news is intended any kind of scandal/negative information spread to convey facts that happened regarding the endorser (e.g. cheating, bankrupt, murders accusation, etc.). Analyzing the possible effects arising from negative public news regarding the endorsers on stock return of the company could be really useful when companies have to decide whether to adopt this advertising strategy or not and maybe prevent from stock losses. There is evidence that stock returns fluctuations depend on public news (Chan, 2003) and according to Agrawal and Kamakura's findings, (Agrawal & Kamakura, 1995) Wall Street values the use of a celebrity endorser. A more detailed study conducted by them, showed that announcement of contracts between a firm and a new endorser by the press resulted in a 0.44% excess return (in term of stock price).

In the following sections a literature review and conceptual framework are provided to give academic support to this study. Then, the methodology is presented and finally conclusions are reported.

## **2.** Literature Review and Conceptual framework

Defining the contribution that this analysis has done to literature is an important aspect to highlight. Different researches (Donaton, 2002) (Gabor, M, & Wienner, 1987) (Berger, Sorensen, & Rasmussen, 2010) sustain that negative news released around a celebrity endorser may lead to positive stock returns. According to Donaton's (2002) idea "any publicity is a good publicity". This means that even if a negative news around a celebrity endorser is released an increase in revenues is expected anyway. In support of this idea there is Gabor and Wienner study which states that celebrity scandals can lead the company to have positive stock return (Gabor, M, & Wienner, 1987). In line with those findings also another study, conducted by Berger et. Al (2010) sustained that negative news about a celebrity endorser can lead to positive stock returns thanks to an increase of product awareness. Indeed, in their study they pointed out several examples to prove with real-world statistics their idea. First, after a review from a food and beverages website, a wine that was described as smelling like "dirty socks", saw its sales increase by 5% <sup>57</sup>. Second, After the release of the movie

<sup>&</sup>lt;sup>57</sup> (O' Connell, 2006)

*Borat*, that clearly made fun of the country of Kazakhstan, the holiday website "Hotel.com" reported a 300% increase in request for that country <sup>58</sup>. However, these findings pointed out that if some negative news is released around a particular event the returns are not surely negative. Thus, differently from this study, the main focus of the above-mentioned analysis is not on negative news about *a celebrity endorser* but about any kind of event. This is the main reason why other literature is provided to clarify what actually happens when a negative news around a celebrity is released.

In contrast with these previous findings, other studies (Bartz, Molchanov, & Stork, 2013) (Knittel & Stango, 2014) (Louie & Obermiller, 2012) have been developed that stated that negative public news about celebrity endorsers generate a negative effect on stock returns. Hence, there is lack of clear evidence in this topic and it can be attributed to the fact that negative aspects of celebrity endorsements are matched by positive ones (e.g. better advertising communication). This dissertation wants to provide a definite answer to what really happens when a negative news is released. In particular, this study wants to define two aspects differently from previous studies:

- Support the idea that when a negative news is released the stock return will be negatively affected.
- Address an important gap: include several moderators in this study- gender, firm (non)response, media coverage and brand prior reputation- that prior research has disregarded.

This study is the first one to perform such a detailed and extensive analysis. Previous research has mostly analyzed one single negative event. For example, Hood (2012)<sup>59</sup> and Knittel & Stango (2014)<sup>60</sup> studies have only focused on the Tiger Woods scandal and how it negatively affected the endorsed companies. Hood (2012) did not find a statistically significant negative returns after the event took place. On the other hand, Knittel & Stango (2014) found out that the Tiger Woods scandal negatively influenced the endorsed companies. Moreover, Louie et. Al (2001)<sup>61</sup> work analyzed market reaction after a negative news release, about a celebrity endorser, and found out a negative relationship. However, in contrast to this study they focused on if the celebrity was blameworthy or not. In particular, they pointed out that companies should dissociate with endorsers that have high level of blame for the negative event and on the other side associate with the endorsers that have low level of blame for the negative events. Finally, Hock and Raithel (2017)<sup>62</sup> analyzed a different perspective: how the firm's reaction to the negative news affected the company returns. From their study it emerged that depending on if the company react, the type of reaction (e.g. stop the

<sup>&</sup>lt;sup>58</sup> (Yabroff, 2006)

<sup>&</sup>lt;sup>59</sup> (Hood, 2012)

<sup>&</sup>lt;sup>60</sup> (Knittel & Stango, 2014)

<sup>&</sup>lt;sup>61</sup> (Louie & R.L., 2001)

<sup>&</sup>lt;sup>62</sup> (Hock & Raithel, 2019)

endorsement deal, apologize, etc.) and on the timing of reaction, stock returns are affected by the negative news' release. They have identified and defined the conditions under which the stock market punish the company when a negative news is released. Firms have more negative returns when they (i) continue the contract with a high-blame endorser, (ii) continue the contract with the endorser whose scandal is related to his/her real occupation, (iii) suspend the contract with the endorser that has a high match-up (fit) the endorsed product/brand, and (iv) suspend an endorser that has apologized. A notable exception with the above-mentioned studies, is the interesting analysis of Bartz et al. (2013)<sup>63</sup>. Their analysis focuses on how celebrities' misbehavior influences stock returns. In particular, they found out negative and statistically significant abnormal returns around the release of negative news about the endorsers. Differently from the current dissertation, the "news" aspect is not mainly considered and not all the moderators provided in this dissertation are analyzed (e.g. Bartz et. Al considered only firm (non)response and media coverage). Moreover, they analyzed a different time period (1986-2011) than the one used in this analysis (2009-2019). Finally, the data collection of their work was based on Google and Yahoo researches differently from this study that used Factiva database. Indeed, the research engines that they used can generate more biases due to the presence of fake news in the web. While, the current dissertation has done the data collection with a professional information tool that report only proved information. In conclusion, as can be seen from this comparison, this thesis provides a new and different point of view in this topic.

*Then,* several theories have been used to create the basis of the conceptual framework used in this dissertation and to construct the hypotheses made. This investigation relies on two theories: one about *celebrity endorsers* and one about how event surrounding celebrity endorsers *influence stock returns.* Theory regarding celebrity endorsement is the *Theory of cultural meaning transfer (MTM)* modified by Louie et. Al. (Seno & Lukas, 2007) (McCraken, 1989). This theory explains the importance of a celebrity endorser for a company and how the use of this kind of advertising can affect some aspects regarding the company; in particular stock return. It is based on McCraken (1989) studies who posits that there is a model that transfer the positive attitudes that the consumers have on the celebrity to the product endorsed. The same transfer can happen also for negative opinions and this occurs when the celebrity is involved in a somehow unfavorable event (Louie & R.L., 2001). Hence, according to this last aspect in line with the MTM theory: the negative attitudes that a consumer has on the celebrity (due to its involvement in an unfavorable event) are transferred to the product. According to this theory, when a celebrity endorser is involved in an unfavorable event, consumers transfer their negative opinion from the endorser to the product itself. This will lead in less sales, lower returns and investors negative opinion of the brand (Louie, Kulik, & Jacobson,

<sup>&</sup>lt;sup>63</sup> (Bartz, Molchanov, & Stork, 2013)

2001). Furthermore, this study relies on a theory that surround the financial part of a company: *Efficient Market Theory*. According to Efficient Market Theory, (i) market prices reflect all available and relevant information and (ii) when new information is available to the public stock prices instantly change (Fama, Fisher, Jensen, & Roll, 1969). Thus, when a news is released on the market investors can immediately reflect their opinion on the considered company. This theory is shared by Agrawal and Kamakura (1995) findings that explain and prove the existence of the impact of some behavioral aspects on stock return. According to their analysis, for behavioral aspects are intended news regarding celebrity endorsers. Hence, when a news regarding a celebrity is released stock returns will immediately reflect investors opinion. Indeed, in their study they have proven that announcement of contracts between a firm and a new endorser by the press resulted in a 0.44% excess return for a company. The following figure represents the conceptual model of this thesis.



Figure 1. Conceptual framework

After having showed the conceptual model of this study, the study has developed the following hypotheses:

*H1*: Negative public news about celebrity endorsers affects negatively the stock return of the company.

*H2*: If the celebrity endorser is a male, the negative effect will be weaker than when the endorser is a female.

*H3*: If media coverage is high, the negative effect of negative public news about the endorser on stock return will be higher.

*H4*: If the company is considered with well-regarded reputation, the negative effect on stock return based on the negative public news about the celebrity endorser will be weaker.

*H5*: If the company stops the endorsement deal after the spread of the negative news, the stock return will be negatively affected.

#### **3. Methodology**

After having defined the main theories on which this dissertation in based, the gathering of data and the study are exposed in this section.

### 3.1 Data Collection

From an initial sample of 1,5000 companies, this study used only those that are traded on the U.S. stock market (i.e. NASDAQ, NYSE) and then a specific subset of these companies relevant for this topic was defined. The main industries used for this analysis are Fashion & Beauty and Beverages companies. After having defined the industry sectors, which included *230 brands*, the subsequent argument, is to detect celebrity endorsers *for each* brand in the finite years of this study: 2009-2019. Approximately 200 celebrities were defined. The following step is the event identification in which through Factiva one or more event for each brand is defined. Factiva is a research and business information tool that provides access to different kind of sources, around 32000, such as journals, newspapers, magazines, television, etc. With this tool the aim of the study's collection was to find with a defined algorithm and several filters, an event for each of the brand defined in the previous step. An *event* is meant to denote any negative news/scandal (i.e. aggression, cheating, bankrupt, etc.) spread across a celebrity endorser at the time of its activity for the indicated brand. The *event day* is the date when the news was firstly reported. The algorithm provided both relevant and irrelevant articles for the analysis. However, only the articles about the scandal of the celebrity when he/she endorsed each specific brand was included in the sample.

#### 3.1.1 Operationalization of the variables

After having found all relevant articles regarding the events, a new spreadsheet was created to collect further information; such as, event identification, short explanation, date of the events, the moderators and control variables. The relationship tested is between negative public news about celebrity endorsers and company related stock return. Stock return is captured by the abnormal stock market changes (AR) due to the release of the news. Data regarding stock returns were collected through Yahoo Finance Database for each company. Negative public news of the celebrity endorser

is captured by the presence or not of the news on Factiva database. Moreover, to test this relationship different moderators that could affect the firms' value are considered, first the table shows some descriptive statistics, then the variables are explained.

Variables	Description	Source	Ν	Mean	Max	Min	SD
Dependent Variable							
Stock return	Stock returns of companies	Yahoo	49	0016	.0398	0369	.0125
	traded in the US	Finance					
Moderators							
Gender of the endorser	Dummy	Coded	49	.7959	1	0	.4072
Media Coverage	Number of newspapers that	Factiva	49	6.0816	31	1	5.9436
	report the endorser's scandal						
Brand Prior Reputation	Dummy	Fortune 500	49	.3061	1	0	.4657
		List "Most					
		admired					
		brads"					
Firm (non)response	Dummy	Coded	49	.5102	1	0	.5051
Control variable							
Company Sector	Dummy	Coded	49	.8163	1	0	.3912
Firm Size	Market value of equity:	Author's	49	3.54e+1	1.69e+1	1.38e+1	3.43e+1
	Open price x Volume	computatio					
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	n					
Multiple endorsements	Dummy	Coded	49	.4286	1	0	.5
rr	=j	2 3 4 4 4			-	-	

Table 1. Measures Descriptive Statistics

Operationalization of moderators:

- Gender of the endorser. Dummy variable with 0 indicating female and 1 for male.
- Media coverage; determined by the total number of media that report the event.
- Brands' prior reputation. If the company, in the year of when the event took place, is listed on the Fortune 500 ranking is considered as with prior reputation. A dummy variable is then created to explain this moderator. In particular, 0 indicates a brand with no prior reputation (not listed on the Fortune list) and 1 for brands considered with a prior reputation (listed on the list).
- Firm (non) response; determined by if the company stopped, or not, the endorsement deal after the negative news was released. Dummy variable is created; 0 if the brand continues the endorsement or 1, if the brand stops it.

Finally, the study controls for three variables:

- Company sector; dummy variable for the industry sector. Fashion and Beauty Industry=1 and Beverages=0

- Firm size; has been measured by multiplying the volume with the open price of the date of the event.
- Multiple endorsements; is a variable that considers if the endorser endorses more than one product at the same time. It is been measured by creating a dummy variable, where 0 indicate an endorser with only one endorsement deal while 1 an endorser with more than just one deal.

## 3.1.2 The sample

The study has 49 *events;* with 27 *brands* analyzed from the initial sample of 230 brands. This analysis focuses on the endorsers' events. Thus, a brand can be repeated more than once. The reduction of the sample is due to two different aspects:

- Some brands do not use celebrity endorsers as an advertising strategy. This is due to different reasons; first, the rise of influencer marketing is destroying the celebrity image as an advertiser (Farin, 2018). Second, endorsers may be risky and after many of the scandal brands prefer to not use them as an advertising strategy.
- Some celebrities have not done any scandal. So, no negative news is reported around them.
- Yahoo Finance Data in some cases did not report the returns of the company for the needed time period because those companies were not already traded in the US stock market.

## **3.2 Event-Study analysis**

### 3.2.1 The Event-study

An event study examines stock price movements regarding several corporate events, which can be both voluntary (e.g. new product introduction) or non-voluntary (i.e. announcements made by media news or other entities) (Sorescu, Warren, & Ertekin, 2017). This methodology is widely used in different disciplines (i.e. finance, business strategy, etc.) and in particular in *marketing* (Horsky & Swyngedouw, 1987). When news is reported about a celebrity endorser, investors may make different judgments about the future profit impact of the firm, and these judgments are then reflected on the stock returns. This is why, measuring abnormal returns of celebrity endorsers' scandal when endorsing a particular brand enable us to see how this news affect the financial performance of the company. Moreover, event study methodology is the prevalent procedure in studies that examine the effect of celebrity endorsers on stock returns (Bartz, Molchanov, & Stork, 2013). The event study methodology measures the magnitude of the effect that an event has on the profitability of a company related to that event (Agrawal & Kamakura, 1995). According to Fama et. Al (Fama, Fisher, Jensen, & Roll, 1969), underlying an event study methodology, there is the hypothesis of efficient markets.

The Event and Estimation window. In an event study, the most important information to identify is the focal event. In this analysis, the focal event is the first article reporting the negative news about the celebrity endorser. Afterwards, the following step is to settle the timing of the event.  $T_2$  is the date of each event. The *estimation window* represents the time period that preceded the event itself, which is used to calculate returns under normal conditions, which goes from  $T_0$  to  $T_1$ . The estimation window considered in this analysis comprehend three different time periods: 200 days, 100 days and 14 days to deeply analyze which effect is bigger. According to MacKinlay (Mackinlay, 1997) the estimation window that gives better significant results is 120 days, hence the analysis of three different time frames can give robustness to the study. The *event window* is the time frame in which the reaction of the stock market due to that the time when the event took place, is expected. It covers the day before the event ( $t_1$ ), the day of the event ( $T_2$ ) and the day after it happened ( $t_2$ )- (-1;1). This study leaves out calculations 7 days from the estimation window because in those days' investors can already be aware of the news and more fluctuations in the stock market may be present. In figure 3, the Event and Estimation window is graphically explained.



#### Figure 2. Schematization of Event and Estimation Window

**Normal and Abnormal returns.** This study uses the Mean-adjusted Model where Abnormal returns (AR) are given by the following formula:

(1) 
$$AR_{it} = R_{it} - (\bar{R}_{it})$$

With  $R_{it}$  the average actual returns, hence the return of observation *i* in the event window. And  $\bar{R}_{it}$  the average expected returns, if the event did not take place (closing price of the current day over closing price of the day before minus 1). According to the Mean-adjusted Model, abnormal returns of observations *i* on period *t* are described as the difference between the average returns of the event window ( $R_{it}$ ) and the estimation window ( $\bar{R}_{it}$ ). In the present case, those are the measure of the variations in shareholder wealth associated with each news related to negative news about celebrity endorsers, which is for each negative news *i* and period *t*.

**Estimation and procedure.** To conclude, in order to be able to use Abnormal Returns, their significance also need to be tested. The null hypothesis H<sub>0</sub>:  $\bar{R}_{it}$ =0 (negative news about celebrity endorsers has a positive effect on stock returns) is tested against the alternative H<sub>1</sub>:  $\bar{R}_{it} \neq 0$  (negative news about celebrity endorsers negative impact on stock returns).

#### 3.2.2 Cross-sectional analysis

The cross-sectional analysis uses a linear regression, to sort out the existence of a causal effect of an independent variable (or more than one) on a dependent variable at a certain point of time. Built on the results of the event study, the magnitude of the impact of the release of the negative news is measured using a cross-sectional analysis. The AR is the dependent variable in those analysis. A regression model tests the effects and measure the effect of the different moderators and control variables on abnormal returns. In particular, Abnormal returns have a regressive effect on the identified moderators and control variables. Here, the regression model used is explained: (2)

$$\begin{split} AR_{it} &= \beta_0 + \beta_1 Gender + \beta_2 MediaCoverage + \beta_3 Brand \ Prior \ Reputation + \beta_4 Firm \ (non)Respons \\ &+ \beta_5 Company \ type + \ \beta_6 Firm \ size + \beta_7 \ Multiple \ endorsements + \varepsilon_i \end{split}$$

The dependent variable is the AR<sub>it</sub>, abnormal stock return for each i event and t different time period.  $\beta_0$  is the intercept which measures the average daily AR after the initial negative event becomes public. Finally,  $\varepsilon_i$  is the error associated with the event.

## 4. Results

This thesis provides several insights useful for both managers and researchers. The main effect is proven; when a negative news about a celebrity endorser is released the stock return of the company will be negatively influenced. Furthermore, two other variables influence stock return, such as Firm (non)response and Brand prior reputation.

This analysis begins with providing information about the significance of the dependent variable: Abnormal Returns. The study wants to prove that  $H_0 \neq H_1$  where  $H_0$  states that "Negative public news about celebrity endorsers affects positively on the stock returns of the company". The other argument being:  $H_1$  states that "Negative public news about celebrity endorsers affects negatively stock returns of the company". As stated in the event study paragraph this study uses an Event Window that takes the day before the event, the day after the event and the date of the event itself with three different estimation windows to define which model works best for this analysis. Table 3 shows the basic results from the standard t-test over the abnormal returns from the event study.

		AR 200days	AR	R100days		AR14 days	
Event Window	N	Mean	t	Mean	t	Mean	t
(-1;1)	49	00268**	-2.5782	00285***	-2.7860	00278**	-2.3920
Notes: *** p<0.01, **p<0.05 <i>Table 2. Models' signif</i>				nificance			

The three models show that there is *significant evidence* that negative news results in a negative impact on stock return; as can be easily seen, for all the models demonstrate a negative result. The one sample t-test reveals that the abnormal returns are statistically significant, hence different from zero. The significance of these results shows that when a negative news about a celebrity endorser is released the effect on the returns of the company will be negative. This results in the rejection of  $H_0$  and acceptation of  $H_1$ . A summary of the main findings of the cross-sectional analysis are reported (Table 3). For each model, the table shows the estimates and the standard errors of the variables.

	Model 1		Model 2		Model 3	
Coefficient of	Estimate	SE	Estimate	SE	Estimate	SE
$\beta_0$ Intercept	00469	.00402	00584	.00434	00777	.00483
$\beta_1$ Gender	00171	.00278	00211	.00268	00290	.00309
$\beta_2$ Media Coverage	.00012	.00017	.00021	.00016	.00025	.00019
$\beta_3$ Brand Prior Reputation	.00686***	.00246	.00611**	.00247	.00715**	.00274
$\beta_4$ Firm (non) response	00489**	.00229	00408	.00228	00468	.00255
$eta_5$ Company type	.00276	.00305	.00300	.00319	.00464	.00355
β <sub>6</sub> Firm size	-1.70e-1	3.18e-1	5.57e-1	3.20e-1	3.10e-1	3.46e-1
$\beta_7$ Multiple endorsements	00469	.00402	.00226	.00213	.00249	.00234
Notes: *** p<0.01, **p<0.05	Table 3. Main findings from Cross-sectional analysis				nalysis	

**Model 1 (AR 200 days).** The first significant variable is *Brand prior reputation* (F=2.02, p=0.008). If the company is considered to have a good reputation even after the spread of the negative news the abnormal returns will be positively affected with a coefficient of 0.00686. Hence, the negative news will be attenuated by the reputation owned by the company. The second one is *Firm* (*non*)*response* (F=2.02, p=0.039) with a coefficient of -.00489 meaning that if the brand stops the endorsement deal (response) the abnormal returns will be negatively affected. AR will decrease of - 0.0489 each time the firm stops the endorsement contract after a negative news is spread. The other moderating variables, Gender and Media Coverage are not significant. The reason why those

variables are not significant may be found in the big-time frame considered as estimation window that may decrease the impact of the news.

**Model 2 (AR 100 days).** In this model there is just one significant variable: Brand Prior Reputation. Hence, hypothesis H<sub>4</sub> is confirmed (F=1.67, p=0.018). This result means that when a company is considered to have a good reputation the negative effect on stock return, by the released of the news, will be attenuated of a coefficient of .00611.

**Model 3 (AR14 days).** Again, in this last model there is only one significant variable: Brand prior reputation (F = 2.02, p = 0.013). Thus, H<sub>4</sub> is confirmed sustaining that for each increment in this variable value AR will increase of 0.00075.

**Effects of Control Variables.** There are also three control variables that are included in the model: Company type, Firm size and Multiple endorsements. None of the three-control variable is significant hence they do not affect the main relationship.

## **5.** Conclusions

#### **5.1 Theoretical Implications**

This study makes important *theoretical contribution* to literature and marketing theory. The gap in academic research regarding the ambiguous response to how news about a celebrity endorser influence stock returns is fulfilled in this study. For the first time a clear framework is defined and can be proved that negative news about a celebrity endorser lead to negative stock returns. This negative relationship in moderated by several aspects that regard both the company itself and the news released. Company prior reputation and Firm (non)response influence the relationship. This dissertation contributed, thus, to existing literature performing an event study analysis of the effect of negative public news about a celebrity endorser on related company stock returns. Extending Bartz et. Al and Louie et. Al<sup>64</sup> works more exhaustive picture of this theory is given thanks to this analysis. Not only a negative relationship between negative news about an endorser and stock return is proven, but also the aspects affecting the relationships are defined. The use of celebrity endorsers as advertising strategy has been widespread in literature<sup>65</sup> but evidence of this strategy effectiveness from a stock return perspective was mixed. While the reaction of stock markets to the release of news was proven by Agrawal and Kamakura (1995), the actual effect (negative or positive) was missing due to contrasting findings in previous researches<sup>66</sup>. This dissertation contributes to existing literature providing a definite answer to how stock market reacts to the release of a negative news about a

<sup>&</sup>lt;sup>64</sup> (Bartz, Molchanov, & Stork, 2013) (Louie, Kulik, & Jacobson, 2001)

<sup>&</sup>lt;sup>65</sup> (Halonen-Knight & Hurmerinta, 2010) (Kaikati, 1987)

<sup>&</sup>lt;sup>66</sup> As stated in chapter two, literature was contrasting on this aspect (Berger, Sorensen, & Rasmussen, 2010) (Louie, Kulik, & Jacobson, 2001)

celebrity endorser and providing a more complete framework. Thus, extending Bartz et. Al (2013) work evidence of significant negative returns is reported and variables that influence this relationship are provided. At the beginning of this thesis different hypotheses have been made and the study has confirmed most of them. The results of this analysis reveal interesting information about negative news about celebrity endorsers and in this section more details are provided. Previous research indicates that negative news about a celebrity endorser negatively influence stock return (Louie, Kulik, & Jacobson, 2001) (Bartz, Molchanov, & Stork, 2013) and this study confirm these findings. Through this empirical study it can be proven that after a *public news about a scandal regarding a* celebrity endorser is released the stock return of a company is negatively affected. Thus, those findings are in line with the "Meaning-Transfer Model theory" (McCraken, 1989) which create a connection between the endorser actions and the endorsed product. Furthermore, with this analysis more evidence is provided also to "Efficient Market Theories" (Fama, Fisher, Jensen, & Roll, 1969), due to that news about the endorsers reflects on markets reaction immediately. Furthermore, Louie et. Al (2001) study is been confirmed and enlarged. In particular, they sustained that stock returns are negatively influenced when a negative news about celebrity endorsers is reported but this relationship is true only for blame-worthy endorsers. Differently from this, this analysis supports the existence of a negative effect without any conditions. Hence, literature and theory provided in the previous chapters of this dissertation have been proven and enlarged thanks to the different methodology used. Barely anything is known about the relationship between negative news about the endorser and negative returns when several variables are considered in this relationship. This study is the first to quantify those aspects. To find out what influences this relationship an additional study has been done to know what the main moderators of this relationship are. From this cross-sectional analysis valuable results have emerged: Company prior reputation and Firm (non) response turn out to influence this relationship. The influence of Company prior reputation mitigates the negative effect. Indeed, when a company is considered with high reputation the negative effect is attenuated due to the positive links that investors have with the company. This finding is in line with Brown (1998)<sup>67</sup> findings about a company reputation: investors reward companies with high reputation. Thus, a scandal does not hugely influence a company with great fame. Moreover, another aspect that affects the main relationship of this study is Firm (non)response. When a company stops the endorsement with a celebrity after the news is released the negative effect is bigger than when the company continues its relationship. This is because investors may perceive the end of the contract as a weak point of the company. This finding confirms Hock et. Al study, providing another support to that firm responses (e.g. end the endorsement deal, apologizing etc.) influences stock returns. For example, Nike's

<sup>&</sup>lt;sup>67</sup> (Brown, 1998)

decision to continue the endorsement contract with Tiger Woods after the cheating news was released increased the company sales (Bartz, Molchanov, & Stork, 2013). This aspect can be easily linked to the Company prior reputation variable. This is because, when a company has a good prior reputation, ending the contract may decrease its prominence to investors point of view. From this analysis Gender of the endorser do not influence the effect that a scandal has on stock return. This is because independently of the gender of the celebrity the effect on stock return may vary depending on the accusation and not the endorser's gender. Similarly, to this dissertation, Ding et. Al (2011)<sup>68</sup> findings did not find either a significance in Gender variable. Unexpectedly also Media coverage results to be not significant. Media coverage not significance means that no matter how many newspapers report the event this variable will not influence the main relationship. The main argument that can explain why the results are not significant is that the standard deviation is too close to the mean (SD= 5.9436, M=6.0816). In statistical terms, when the standard deviation is close to the mean no reliable conclusions can be made.

#### 5.2 Managerial Implications

Given that a great amount of money is spent by firms on celebrity endorsements, more than 10% of the total advertising budget of a company (Agrawal & Kamakura, 1995), is really important to clearly know what happens to company related stock returns when the endorser is involved in some negative events. This thesis wants to help practitioners that are considering signing a celebrity endorser contract or that seek information on how to structure and manage this relationship over time. Several implications stand out. First, when the company decides to hire a celebrity endorser, it needs to account for all the risks associated with them. If the company has a good reputation this process may be less risky if not, any negative news about a celebrity may have a negative effect on the company stock returns. Hence, the company needs to have a solution if a negative news is released and not be unprepared when it happens. A solution is to be helped by companies/online solutions that offer advices regarding endorsers contract. For example, different website (e.g. Spotted.com) rank celebrities by several attributes and indicate their propensity to be involved in a scandal or their match with the company. This is a good solution for having an enduring relationship with an endorser and avoid being involved in a scandal. Second, from the analysis it emerged that when a firm stop the contract with the endorser the negative effect on stock returns is bigger. The company can thus, decide before a scandal news is released what type of response to act. Hence, not consider as reaction just the end of the contract which, as can be seen from this study, is not an effective way of reaction. For each scandal the firm can decide how to react; for example, staying quiet, apologizing or shift the

<sup>68 (</sup>Ding, Molchanov, & Stork, 2011)

attention on other events. Furthermore, is really important also the timing of response. The company should consider in advance what is the best timing of response if a scandal occurs.

#### **5.3 Limitations and Future Research**

This study has several limitations that need to be point out and some of them are useful to develop fruitful avenues for future research. First, the sample of the study is small. This analysis has only 49 observations and, even if in previous literature about this topic sample were not too big (e.g. Hood et al. with 6 observations), small samples may lead to statistical problems. Those problems are related to low statistical power, inflated false discovery rate, inflated effect size estimation and low reproducibility. Hence, if this study wants to be replicated by future research a bigger sample is recommended. The small sample is due to three different aspects: not all celebrities has done scandals, not all brands were traded on US stock market when the event took place and that celebrity endorsement is slowly being replaced by influencer marketing (hence, not all the companies use celebrities as advertising strategy). Influencer marketing is taking the advantage over the oldest kind of advertising strategies thanks to the increasing importance given to social media. Several companies use not only celebrities but also influencers. A possible path for future research thus, is to study how scandals about both influencers and celebrity endorsers affect stock return of the company. Second, another limitation of this thesis is the small R-squared pointed out from the study. Such a small R<sup>2</sup> is included in limitations because the fit of the model is not perfect, but not always a small R<sup>2</sup> means a bad model. Rather, the overall significance of the model is a good pointer. Third, the data collection of this study is been done through Factiva database and different qualitative aspects were not taken into account due to the difficulty to collect them. According to several studies (Aziz, Ghani, & Niazi, 2013) (McCraken, 1989) a fundamental aspect in celebrity endorsement is the credibility of the endorser. The credibility of the endorser is the degree to which the source is supposed to have the capabilities to deliver the advertising message and how he/she is coherent (has a fit) with the brand. Celebrity credibility is considered to be the sum of celebrity trustworthiness and attractiveness. Hence, knowing if the celebrity is perceived to be credible or not may really affect the returns of the company. Measure those aspects through a collection of empirical data is quite impossible, a questionnaire or a personal interview is required to analyze this aspect. It would be interesting to know how celebrity credibility affect the relationship between negative public news about a celebrity endorser and stock returns of the company. Fourth, the study does not analyze differences between scandals. Making a distinction between different type of negative news released may be useful in predicting more precise results. In this analysis for scandal is intended any kind of negative news; from cheating to murder accusation. Of course, a cheating scandal will have fewer negative consequences on stock return than a murder news.

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# **Appendix A: Factiva Algorithm**

After some trial and error, the following algorithm was developed:

"Celebrity endorser name and (celebrity endorser or celebrity contract or endorser contract or celebrity scandal or endorser news or endorser negative news or celebrity product or celebrity effect or celebrity value or drink driving or bullying or stalking or sexual issues or harassment or debt or liabilities or corrupted endorsers or careless driving or assault or drug or fat shaming or rehab or mental health faculty or sexism or racism or cheating or murder or punch or twerk or nude photo or tweet or extramarital relationship or arrest or racist phrases or homophobia or animals or charged or anorexia or eating disorder or nude photo or deflate gate or sex tape or kidnapping or paparazzi assault or charged)".

For each company and for the 10 years' time-range several celebrity endorsers were chosen. Next to the celebrity's names different keywords were added to find out the kind of scandal/negative news the endorser did. The different keywords were selected according to a preliminary analysis of the most famous scandals in the Show business and Sport world. From those previous researches some words were repeated more than once and thus, included in the Factiva algorithm.

Once the algorithm was developed it was used in Factiva and relevant results came out. In particular, several articles reported scandals made by celebrity endorsers. After the article appearance every news reported on Factiva was read and if reliable with the thesis reported in another Excel file.

# **Appendix B: List of Media Outlets**

- 1. Newspapers
  - New York Times (offline)
  - New York Times (online)
  - USA Today (offline)
  - USA Today (online)
  - Wall Street Journal (offline)
  - Wall Street Journal (online)
  - New York Post (offline)
  - New York Post (online)
  - Washington Post (offline)
  - Washington Post (online)
  - New York Daily News (offline)

- CNN.com (online)
- 2. Magazines
  - The Atlantic (offline)
  - The Atlantic (online)
  - Forbes (offline)
  - Forbes (online)
  - Wired (offline)
  - The Guardian (offline)
  - The Guardian (online)
- 3. TV Broadcast
  - ABC News (Specific News Shows)
  - BBC Monitoring Media (Specific News Shows)
  - CBS News (Specific News Shows)
  - CNN (Specific News Shows)
  - Fox News (Specific News Shows)
  - NBC News (Specific News Shows)

# **Appendix C: Statistics table about the sample:**

	Ν	Repetition
Celebrity endorsers	23	26
Brands	27	22

Table 6. Statistics about celebrity endorsers and Brands

In this table are reported the number of analyzed brands and celebrity endorsers used in this study. Some brands and endorsers are repeated more than once due to that sometimes while a celebrity was endorsing a particular brand, he/she did more than one scandal.
# Appendix D: Abnormal returns at 100 days subsequent to the release of the news with the highest value.

In this case the highest value is considered the highest negative number, because the study wants to analyze the most negative effect after the release of the news. In the following table the five most negative abnormal returns gained are provided and a short explanation of what they did is reported. In brackets the brand they were endorsing in that period of time is reported.

		AR
1	Ray Rice and his fiancée got arrested after assaulting each other in Atlantic city (Nike)	-0.00064
2	Ryan Braun fail drug test (Nike)	-0.0009879
3	Kendall Jenner was criticized for appearing to trivialize social justice demonstrations, including those by Black Lives Matter in an ad commercial (Pepsi)	-0.0012967
4	Oscar Pistorius charged of murdered of his girlfriend Eva Steenkamp (Nike)	-0.0008561
5	Gwyneth Paltrow charged by nutritionist Charles Platkin for her website Goop.com (The Estee Lauder Company)	-0.0079385

 Table 7. highest negative AR for Celebrity endorser

### **Appendix E: STATA output**

#### . ttest AR200days=0

One-sample t test

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
AR200d~s	49	0026814	.00104	.0072802	0047726	0005903
mean : Ho: mean :	= mean( <b>AR2(</b> = <b>0</b>	00days)		degrees	t of freedom	= -2.5782 = 48
Ha: mo Pr(T < t	ean < 0 ) = 0.0065	Pr(	Ha: mean !=  T  >  t ) =	• 0 0.0131	Ha: m Pr(T > t	ean > 0 ) = 0.9935

. reg AR200days Gender MediaCoverage Brandthatstoppedtheendorsemen Companypriorreputation Compan > yType Firmsize Multipleendorsements

.00305

3.18e-12

.0021331

.0040165

0.90

-0.05

0.95

-1.17

0.371

0.957

0.346

0.250

Source	SS	df	MS		Number of	obs =	49	
Model Residual	.000651926 .001892163	7 41	.000093132 .00004615		F( 7, Prob > F R-squared	41) = = =	2.02 0.0759 0.2563	
Total	.002544089	48	.000053002		Adj R-squ Root MSE	ared = =	0.1293 .00679	
	AR200day	5	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
	Gende	r	0017081	.0027761	-0.62	0.542	0073146	.0038984
	MediaCoverage	e	.0001156	.0001725	0.67	0.507	0002328	.000464
Brandthatstop	pedtheendorseme	n	004892	.0022958	-2.13	0.039	0095285	0002555
Company	priorreputatio	n	.0068591	.0024569	2.79	0.008	.0018973	.0118209

.0027571

-1.70e-13

.0020315

-.0046899

CompanyType

Multipleendorsements

Firmsize

\_cons

Figure 4. t-test and regression output AR200days

-.0034025

-6.58e-12

-.0022764

-.0128014

.0089168

6.24e-12

.0063394

.0034216

#### . ttest AR100days=0

One-sample t test

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
AR100d~s	49	0028478	.0010222	.0071553	0049031	0007926
mean = Ho: mean =	= mean( <b>AR1(</b> = <b>0</b>	)0days)		degrees	t of freedom	= -2.7860 = 48
Ha: me Pr(T < t)	ean < 0 ) = 0.0038	Pr(	Ha: mean !=  T  >  t ) =	= 0 0.0076	Ha: m Pr(T > t	ean > 0 ) = 0.9962

. reg AR100days Gender MediaCoverage Brandthatstoppedtheendorsemen Companypriorreputation CompanyType Fi
> rmsize Multipleendorsements

Source	SS	df	MS	Number of obs = 49
				F(7, 41) = 1.67
Model	.000544587	7	.000077798	Prob > F = <b>0.1442</b>
Residual	.00191296	41	.000046658	R-squared = <b>0.2216</b>
				Adj R-squared = <b>0.0887</b>
Total	.002457548	48	.000051199	Root MSE = .00683

AR100days	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
Gender	0021084	.0026831	-0.79	0.436	007527	.0033102
MediaCoverage	.0002099	.0001582	1.33	0.192	0001096	.0005295
Brandthatstoppedtheendorsemen	004082	.0022837	-1.79	0.081	008694	.00053
Companypriorreputation	.0061115	.0024688	2.48	0.018	.0011257	.0110972
CompanyType	.0030006	.0031949	0.94	0.353	0034516	.0094527
Firmsize	5.57e-13	3.20e-12	0.17	0.863	-5.92e-12	7.03e-12
Multipleendorsements	.0022579	.002125	1.06	0.294	0020336	.0065494
_cons	0058387	.0043411	-1.34	0.186	0146058	.0029283

Figure 5. t-test and regression output AR100days

#### . ttest AR14days=0

One-sample t test

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf.	Interval]
AR14days	49	0027776	.0011612	.0081286	0051124	0004428
mean : Ho: mean :	= mean( <b>AR1</b> 4 = <b>0</b>	4days)		degrees	t of freedom	= -2.3920 = 48
Ha: m Pr(T < t	ean < 0 ) = 0.0104	Pr(	Ha: mean !=  T  >  t ) =	0 0.0207	Ha: m Pr(T > t	ean > 0 ) = 0.9896

. reg AR14days Gender MediaCoverage Brandthatstoppedtheendorsemen Companypriorreputation CompanyType Fir
> msize Multipleendorsements

Source	SS	df	MS	Number of obs = 49
				F(7, 41) = 2.02
Model	.000814345	7	.000116335	Prob > F = <b>0.0752</b>
Residual	.002357199	41	.000057493	R-squared = <b>0.2568</b>
				Adj R-squared = <b>0.1299</b>
Total	.003171544	48	.000066074	Root MSE = .00758

AR14days	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
Gender	0029014	.00309	-0.94	0.353	0091418	.003339
MediaCoverage	.0002501	.0001927	1.30	0.201	000139	.0006392
Brandthatstoppedtheendorsemen	004679	.0025539	-1.83	0.074	0098366	.0004787
Companypriorreputation	.0071515	.0027373	2.61	0.013	.0016236	.0126795
CompanyType	.0046377	.0035498	1.31	0.199	0025313	.0118067
Firmsize	3.10e-12	3.46e-12	0.90	0.375	-3.88e-12	1.01e-11
Multipleendorsements	.0024868	.0023407	1.06	0.294	0022404	.0072139
_cons	0077723	.0048256	-1.61	0.115	0175178	.0019731

Figure 6. t-test and regression output AR14days

## **Appendix F: Density Histograms**



Figure 7. Density Histograms of Abnormal Returns in estimation window of 200days



Figure 8. Density Histograms of Abnormal Returns in estimation window of 100days



Figure 8. Density Histograms of Abnormal Returns in estimation window of 14 days