

# Intellectual Property Rights and the Effect on the Equity Value of Fashion Firms

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March 27<sup>th</sup>, 2023

## Abstract

The fashion industry is marked by the constant changing of clothing styles each season. Consumers seek to be “on trend” by wearing the latest designs. The highly competitive, fast paced, seasonally driven nature of this industry leads fashion firms to copy one another’s designs. Unlike other industries, fashion has weak intellectual property rights to protect designers’ creative works. However, in 2017, the U.S. Supreme Court rendered a decision in *Star Athletica v. Varsity Brands* that could potentially provide more copyright protection to fashion firms. An event study methodology is used to examine the impact of the case on the equity value of fashion firms. The results find statistically and economically significant returns to the equity value of firms around the time of the Supreme Court’s case. Investors believed that the Court’s ruling would have a positive impact on the future profitability of fashion firms.

## I. Introduction & Literature Review

Using their intellect, humans have advanced the state of knowledge in every domain from the sciences to the arts. From the creation of prescription drugs to the writings of Ernest Hemmingway, these inventions and creative endeavors have undoubtedly left the whole of society better off. In order to protect the original work of these individuals or groups and incentivize future innovation, intellectual property rights exist. These rights provide a legal monopoly on the unique work produced by that actor and ensures that unauthorized agents are unable to take advantage of another's original creative work (Besen and Raskind 1991).

Although the provision of a monopoly to an artistic creator might seem contradictory to the betterment of society, this is not the case at all. The enforcement of intellectual property rights in the form of patents, trademarks, copyrights, and trade secrets protects the inventors and creators of original works (Besen and Raskind 1991). These agents are incentivized to invest in technology and produce innovative things because anything that they produce will be rewarded with appropriate return, i.e. above normal profits (Besen and Raskind 1991; Toivanen and Väänänen 2012; Hall, Jaffe, and Trajtenberg 2005).

Patents are perhaps both the most well-known and easily enforceable type of intellectual property. Specifically, a patent grants the owner of an invention the legal right to exclude others from making, using, or selling that invention for a limited period of time in exchange for publishing an enabling disclosure of the product, which would provide directions for a skilled artisan to replicate the invention (Cornell Legal Information Institute 2022). One of the industries most associated with patents is the prescription drug industry. To produce a new medicine, firms have to invest significant costs during the research and development process. Adams and Brantner (2010) find that the “cost of drug development” or the net revenue needed to make an

investment in a new drug profitable is over \$1 billion. Similarly, Doubis et al. (2015) have estimated the elasticity of innovation (as measured by the number of new chemical entities appearing on the market for a disease class) to expected market size (the willingness of the sick and others acting on their behalf, such as insurers or governments, to spend on their treatment) to be 0.231. This means that on average a producer must expect to receive an additional \$2.5 million dollars in revenue in order to bring a new chemical drug to the market (Doubis et al. 2015). If there were no intellectual property rights, then pharmaceutical companies would not have an incentive to spend money on the initial research and development process. A competing firm could merely copy the product and be able to reap in the profits without contributing to the initial innovation costs of producing the product. Ultimately, a new prescription drug, which could improve the quality of life for people, may never come into existence. Fortunately though, most countries have intellectual property rights in order to encourage firms of all types to invent new things (Griliches et al. 1986).

Although many industries enjoy strong intellectual property rights, the fashion industry is not one of them. Instead, fashion is marked by the constant changing of clothing styles each season, and fashion consumers seek to wear clothing styles that are considered to be on “trend.” This desire of people to wear the most stylish and innovative designs results in fashion designers copying one another other in two ways. First, leading fashion firms typically trademark certain design elements, such as styles, colors, and patterns, that are associated with their brand, and these trademarked features are copied by others. For example, in 2017, fast-fashion retailer Forever 21 was accused of copying Gucci’s trademarked striped pattern and placing it on its own products (Thau 2017). A U.S. District Court Judge eventually ruled in favor of Gucci and thereby provided trademark protection to the fashion house (Locker 2017). In 2021, Crocs, a

company that produces foam clogs, sued Walmart, Hobby Lobby, and 19 other companies on the grounds that they had copied the Crocs shoe design (Kavilnz 2021). This case is still in the process of being litigated. However, in a similar case, Crocs secured a judgement of infringement against USA Dawgs and Double Distribution, which Crocs accused of replicating its trademarked clog design (Douglass 2022). Crocs won \$6 million from USA Dawgs and \$55,000 in damages from Double Distribution (Douglass 2022). There is no shortage of lawsuits of this same order; see also Adidas (Stempel 2018) and Christian Louboutin (Suk 2012).

Second, designers, most often smaller ones, create unique prints and textile patterns, which are copyrightable, that leading fashion firms imitate. The provision of a copyright protects original works of authorship in fixed tangible mediums, and some examples of copyrightable items include artistic, literary, musical, dramatic, and sculptural works (Besen and Raskind 1991). One case of this second type was between fast-fashion retailer H&M, who was the alleged copyright infringer, and a small but growing fabric designer named Unicolors (Brittan 2022). Using a more procedural or technical argument, H&M contended that Unicolors should be barred from pursuing copyright infringement action because Unicolors included inaccurate information on its copyright application (Bader 2022). In *Unicolors, Inc. v. H&M Hennes & Mauritz, L.P.*, the U.S. Supreme Court found that making innocent mistakes of fact or law when filing a copyright registration form does not void copyright protection (Bader 2022). This decision in favor of Unicolors has the potential to make it easier for non-lawyers, such as novelists, painters, and designers, to obtain valid copyright registrations, even if they are not skilled experts in the law (Bader 2022).

The fashion industry generates \$2.5 trillion in global annual revenues, and if it was ranked alongside individual countries' GDP, it would be the world's 8<sup>th</sup> largest economy

(McKinsey & Co. 2021). Yet despite the sheer size of this industry, it is apparent that fashion designers do not have strong protection over their creative works. However, in 2017, there was a decision rendered by the U.S. Supreme Court in *Star Athletica v. Varsity Brands* that could potentially provide more copyright protection to fashion firms. The issue that gave rise to the case involved two firms that both made cheerleading uniforms. Varsity made cheerleading uniforms with a distinct pattern of stripes, and Star copied this design, which led Varsity to file suit (Oyez 2022). Ultimately, in a 6-2 decision, the Court ruled in favor of Varsity and established a test to determine if the two-dimensional striped design of the cheerleading uniform was copyrightable under the Copyright Act (Oyez 2022).<sup>1</sup>

As for the two-pronged test, the Court had to determine if the feature of a useful article was copyrightable (Oyez 2022). A useful article holds a utilitarian or a functional value in contrast to articles that are for aesthetic or appearance purposes only. Clothing falls into the former category. First, there was the separate identification test, which held that the two- or three-dimensional design in question had to be separable from the useful article (Oyez 2022). In other words, could the stripes on the cheerleading uniform be separated from the rest of the uniform? The second prong was the independent existence test, which maintained that the design had to be able to either stand on its own or fixed in some other tangible medium of expression (Oyez 2022). If you removed the striped pattern off of the cheerleading uniform and applied the design to a blank canvas, would someone be able to identify it as the design used by Varsity? The majority of the Court answered yes to both of these questions.

With the Court ruling in favor of Varsity and thereby providing copyright protection in certain circumstances to fashion products, there is reason to believe that this decision might

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<sup>1</sup> The official case ID: *Star Athletica, L.L.C. v. Varsity Brands, Inc.*, 137 S. Ct. 1002 (2017).

affect companies in the fashion industry. By examining companies in the publishing, software, and media production industries, researchers have estimated that a Supreme Court decision that broadens copyright protection increases excess returns to equity by approximately 105 basis points (Baker and Cunningham 2006). Baker and Cunningham (2006) studied the impact of Court decisions and changes in statutory law pertaining to copyright. They found that broadening copyright protection leads to an increase in the equity value of a firm, and that on average changes in copyright statute leads to a larger equity gain than Court decisions on copyright. If a firm is likely to benefit from an increase in copyright protection, then it is expected that it would be more profitable in the future. This would be reflected as an increase in the equity value of that company. While if a firm is likely to be harmed by an increase in copyright protection, then it is expected that they would be less profitable in the future. Their equity value would likely fall.

To empirically test the effect of the Court's decision on the value of fashion firms, an event study methodology can be used. Specifically, an event study examines the behavior of a firm's stock price around a particular event, i.e. *Star v. Varsity*. This method is widely used in the economics, business, and marketing literature. Kothari and Warner (2006) estimate that over 500 event studies have been published in the literature. Researchers have used this method to examine the stock market's reaction to chapter 11 bankruptcy filings (Becchetti and Ciciretti 2011), changes in regulatory law (Binder 1985), the impact of hosting Olympic Games (Englehardt et al. 2018), and indicators of corporate sustainability (Cheung 2011). The paper most similar to my thesis is Englehardt and Fernandes (2016), who used an event study to analyze the effect of patent infringement verdicts on the stock prices of the firms involved in the litigation before and after the public release of the decision. They found evidence that Court

decisions at the appellate level are being leaked prior to their public release and insider information is being used for profit.

Even with evidence that judicial rulings affect the equity value of firms (Baker and Cunningham 2006) and an empirical strategy to test this, it still remains unclear as to which firms will be impacted by the Court's ruling and if the effects will be positive (increasing stock prices) or negative (decreasing stock prices). The related literature on artistic copyright is sparse. Research primarily focuses on the demand side rather than the supply side. Li, MacGarvie, and Moser (2011) found that doubling the copyright length for books leads to a 50% increase in price for consumers. Similarly, Reimers (2019) concluded that copyrights significantly limit the availability of books leading to a decrease in consumer surplus. On the supply side, Boyle, Nazzaro, and O'Connor (2009) found that artists' income falls by about \$4,000 as a result of increased copyright protection. This is not to say that artistic copyright does not bring value to the creators of original works, but rather there is a split in the theoretical and empirical literature on copyright. In theory, intellectual property rights incentivize artists to produce creative works by rewarding them with above normal profits (Besen and Raskin 1991). However, empirical evidence suggests that artists might see a decrease in income due to increased copyright protection for their creative endeavors.

Since *Star v. Varsity* specifically addressed copyright protection, one possibility is that innovative fabric/textile design companies would see an increase in their equity values. A monopoly over their creative works would benefit these types of companies. While copycat firms would see a decrease in their stock prices because there would be legal repercussions and subsequent monetary costs to imitate a leading firm. However, many of these fabric/textile design companies are relatively small, and therefore public financial data is not readily available.



Another more likely outcome is that investors would view *Star v. Varsity* as a general expansion of intellectual property rights for fashion companies. Leading fashion firms, such as luxury brands Louis Vuitton and Prada, would benefit from an increase in intellectual property rights, and as a result, their equity values would increase around the time of *Star v. Varsity*. The copycat or fast-fashion brands would experience negative effects from expanded intellectual property rights, and their stock prices would likely fall.

In support of the argument that *Star v. Varsity* can be considered a general expansion of intellectual property rights, there is evidence in the Court's actual opinion, the popular media, and the scholarly legal literature surrounding the decision. In the majority opinion, the Court outlined the independent existence and separability tests, but did not clarify the Copyright Act's meaning by using analogies or other descriptive examples (Harvard Law Review 2017). As opposed to the Court implying future limitations on the statute's scope, this ambiguity left by the Justices can be a positive for intellectual property in fashion. It leaves open the possibility for a broader application of intellectual property rights in the future.

In the media and scholarly legal communities both before and after the final decision was rendered, a number of sources published articles about the case. The *New York Times* (Smith 2016 and Liptak 2016) and *Forbes* (Fisher 2016 and Goodnow 2016) mentioned that *Star v. Varsity* was on the Court's docket and presented the contending arguments of Star and Varsity. Legal blogs (Tewarie 2017) and scholarly academic journals (Marchese 2016, Diesner 2016, and Ochoa 2017) analyzed the case as well. *Women's Wear Daily* (Ellis 2016) and *Vogue* (Yotka 2017) both wrote about the case, and the former source highlighted that a group of designers filed an *amicus curiae* brief arguing the industry's copyright protection ought to extend far beyond high-priced luxury couture to other products, such as sportswear, footwear, and

accessories. The coverage of *Star v. Varsity* in the popular media and legal literature suggests that the case was not only contentious, but also it represented a larger question about the role of intellectual property in fashion.

As for predictions that can be derived from the literature on fashion in relation to *Star v. Varsity*, the research is mostly theoretical and describes general trends and behaviors that consumers and producers of fashion might demonstrate. The literature on fashion originates out of the idea that fashion is a social signaling game, in which one's purchases are made with the societal standards of taste in mind (Veblen 1899). The decision that an individual makes as to what type of clothing to wear each day is not only a reflection of that individual's personal preferences, but also a reflection of what society deems to be acceptable. One's clothing style and quality is a way to indicate to others where in the social rank that individual stands. Fashion designers create, market, and sell their clothing creations to consumers, who then in turn wear their newly purchased garments for others to see.

From Veblen's work, theorists have attempted to model the demand for fashion by assuming that there are two types of consumers: trendsetters and emulators. The former seeks to wear clothing that will differentiate them from the masses of people. The latter seek to be part of the "select group," and will therefore copy or emulate the trendsetters. Leibenstein (1950) attempts to take this notion into account when trying to derive a more realistic theory of fashion consumer's demand, (see also Robinson 1961). Similarly, Adams and McCormick (1992) theorize about how the willingness-to-pay for trendsetters and emulators varies with the number of people consuming the fashion. Specifically, the willingness-to-pay for trendsetters would fall as the number of other people consuming the fashion increase, while the willingness-to-pay for emulators would rise as the number of other consumers increase. Pesendorfer (1995) breaks from

previous literature and designs a dynamic model to examine both the length of fashion cycles and how profits will vary with cycle duration. Translating the theoretical categories of consumers to the firm level, fashion trendsetting consumers would be equivalent to leading fashion firms, and fashion emulators would represent copycat firms.

There are three ways in which my thesis will contribute to the economics literature. First, in theoretical papers, it is common to assume that fashion designers have strong intellectual property rights over their designs, but in practice this not the case at all. As previously mentioned, Gucci (Thau 2017), Crocs (Kavilnz 2021 and Douglass 2022), Adidas (Stempel 2018), and Christian Louboutin (Suk 2012) have all been the victims in intellectual property infringement cases. Second, there have been few if any empirical studies done analyzing any aspect of the fashion industry. Third, the effects of *Star v. Varsity* have not yet been empirically examined.

## **II. Question**

The formal question that my thesis asks is: Did the decision rendered by the Supreme Court in *Star Athletica v. Varsity Brands* affect the equity value of fashion firms? This question can be considered by examining the behavior of individual firm's stock returns or by aggregating many firms' stock returns. The null hypothesis is that the Court's ruling had no impact on the stock prices of fashion firms, and the alternative hypothesis is that the ruling did have an impact on the stock prices of fashion firms. If the null hypothesis is rejected, then it is a question of in which direction did the firm's stock price go in response to the decision? If a particular fashion company's security performed better than the overall market around the time of the case, then it is likely that the firm is a fashion leader because they benefitted from the expansion of copyright protection. If a firm's security performed worse than the overall market around the time of the

case, then it is likely that the firm is a copycat because they were hurt by the increase in copyright protection.

### **III. Methodology**

The first step in an event study is to identify the events. For any case heard by the Supreme Court, there are two components: oral arguments and the official release of the Court's decision. During oral arguments, each side of the litigation has 30 minutes to present its case, and the Justices are able to ask questions to the attorneys. The types of inquiries and the overall tone used by the Justices might invoke a reaction from the markets. For example, if during oral arguments the Justices are asking questions that would seem to favor expanding copyright protection, then leading fashion firms might see an increase in their equity value, while copycat firms would see the opposite effect. Oral arguments were heard by the Court on Monday October 31<sup>st</sup>, 2016, and this is the first event that will be examined.

From the questions raised by the Justices during oral arguments, it is ambiguous as to whether or not they intended to expand copyright protection. On one side of the debate was Justice Stephen Breyer and Justice Sonia Sotomayor. Justice Breyer was concerned about doubling the price of women's clothing if copyright protection were expanded (Liptak 2016). Similarly, Justice Sotomayor remarked that knockoffs in fashion were unable to be killed with trademark or patents, so now the attorneys were trying to use copyright protection (Liptak 2016). On the other side of the argument was Justice Ruth Bader Ginsburg and Chief Justice John Roberts. Justice Ginsburg said that the striped design could be separated from the uniform and therefore was eligible for copyright protection (Liptak 2016). Chief Justice Roberts highlighted the novelty of striped cheerleading uniforms. Stripes are an artistic design and serve primarily an aesthetic purpose, while the uniform has a utilitarian or functional purpose. This was the first

time the Court was considering a case in which artwork was applied to a utilitarian garment. Despite individual Justices holding different opinions, it became increasingly clear that the case raised a broader set of issues, such as the vast financial consequences for the fashion industry as a whole and the philosophical implications for the way in which clothing signifies meaning (Liptak 2016).

The second event is the official release of the majority, dissenting, and concurring opinions of the Court. This occurred on Wednesday March 22<sup>nd</sup>, 2017. The official release of the decision solidifies the Court's opinion on the questions raised in the case. The decision is binding and serves as the standard for the rest of country's judicial system. I will test the impact on fashion firms' stock returns around both of these event dates. Both oral arguments and the release of the Court's decision will be  $\tau = 0$  when  $\tau$  is time in trading days.

Next, normal returns and abnormal returns have to be calculated and the estimation and event windows be determined. Normal returns predict hypothetical returns that would have been expected in the absence of the event (Cable and Holland 1999). The estimation window is the period over which to measure the stock's normal movements and correlation with a market index. Following prior literature, I have chosen an estimation window of  $-60 \leq \tau \leq -30$  from event day  $\tau = 0$ . Englehardt and Fernandes (2016) used this same window, and Krivin et al. (2003) believe that altering the estimation window is unlikely to greatly impact the results. The event window not only includes the event day, but also extends beyond the particular day in order to capture the effects of the announcement which occur after the stock market closes on the event day (MacKinlay 1997). A number of event windows have been tested. Please see Appendix B Table 1 for a list of the event windows tested.

Two different models to estimate normal returns will be used. First, the market model for normal returns considers a firm's Capital Asset Pricing Model (CAPM) risk by relating the return of any given security to the return of the market portfolio (MacKinlay 1997 and Fama and French 2004). The notation for Equations (1)-(6) is adopted from MacKinlay (1997) and Fama and French (1996). The market model can be estimated using the following ordinary least squares (OLS) regression:

$$R_{i\tau} = \alpha_i + \beta_i R_{m\tau} + \varepsilon_{i\tau} \quad (1)$$

for each firm, “*i*,” where  $R_{i\tau}$  represents the one-day return on security “*i*” on date “ $\tau$ ” and  $R_{m\tau}$  represents the market returns, as measured by the S&P 500, on date “ $\tau$ ”. In the literature, the market model is the most frequently used model for expected returns (Cable and Holland 1999). However, multi-factor models can also be used. These models account not only for a firm's CAPM risk, but other factors as well.

Second, the Fama and French (1993) three-factor model will be used to estimate normal returns using the following regression:

$$R_i - R_f = \alpha_i + b_i(R_m - R_f) + S_iSMB + h_iHML + \varepsilon_i \quad (2)$$

where  $R_i - R_f$  is the return on security “*i*” minus the risk-free rate,  $R_m - R_f$  is the market return minus the risk-free rate, *SMB* (Small Minus Big) is the average return on the three small portfolios minus the average on the three big portfolios, and *HML* is the average return on the two value portfolios minus the average return on the two growth portfolios. By adding size and value risk factors, the three-factor model accounts for the fact value small-cap and value stocks outperform the market on a regular basis.

Abnormal returns determine how much the stock price of a firm deviates from the market return and/or any of the Fama and French factors. Any abnormality in returns to equity values

can be attributed to the event. Abnormal returns for the market model and three-factor model can be calculated as follows, respectively:

$$\widehat{AR}_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{m\tau} \quad (3)$$

$$\widehat{AR}_{it} = R_i - R_f - \hat{\alpha}_i - b_i(R_m - R_f) - S_iSMB - h_iHML \quad (4)$$

where  $AR_{it}$  is the abnormal return for security “ $i$ ” on date “ $\tau$ .” The abnormal returns can be aggregated across the respective event window to determine if *Star v. Varsity* had an impact on a specific firm.<sup>2</sup> Cumulative abnormal returns are aggregated as:

$$\widehat{CAR}_i(\tau_1, \tau_2) = \sum_{\tau=\tau_1}^{\tau_2} \widehat{AR}_{it} \quad (5)$$

where  $\tau_1$  and  $\tau_2$  are the time intervals around the event date. To examine the overall effect of *Star v. Varsity* across all firms, cumulative average abnormal returns are calculated as:

$$CAAR(\tau_1, \tau_2) = \frac{1}{N} \sum_{i=1}^N \sum_{\tau=\tau_1}^{\tau_2} \widehat{AR}_{it} \quad (6)$$

where  $N$  is the total number of firms in the sample.

To check for economic significance, the annualized abnormal return of a firm will be calculated as follows:

$$\text{Annualized Abnormal Return} = CAR_i \cdot \frac{365}{\text{no. days in the event window}} \cdot 100 \quad (7)$$

The annualized abnormal return can be thought of as expanding the returns around the event window to the whole year. It would be as if the event were to persist for a longer duration. This figure for annualized abnormal returns will then be compared to the average annual return of the

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<sup>2</sup> All subsequent formulas for cumulative abnormal returns, cumulative average abnormal returns, and economic significance testing are calculated separately for the market model and the Fama and French model.

fashion firm, the average annual return of the S&P 500, and the average annual return of the fashion industry. The general formula for average annual returns is:

$$\text{Average Annual Return} = \frac{AAR_1 + AAR_2 + \dots + AAR_n}{n} \cdot 100 \quad (8)$$

where  $AAR$  is the annual return for either a fashion firm, the S&P 500, or the fashion industry. If the annualized abnormal return is significantly different in size to any of the three benchmarks, then the result may be considered economically significant.

#### **IV. Data**

A list of 114 consumer discretionary firms was obtained from the Bloomberg Terminal. Daily data on the end-of-day adjusted stock price for each firm and the close value of the S&P 500 index was downloaded from S&P Capital IQ (Capital IQ). After eliminating companies with missing observations and including firms traded only on U.S. exchanges, the final dataset contained 72 fashion firms.

Capital IQ did not have a function to consider survivorship bias, which occurs when a sample of stocks is considered to be representative of the market without regarding firms that are no longer publicly traded. This potential source of bias would most likely affect the calculation of cumulative average abnormal returns. Overall, the characteristics of the firms included in the dataset vary in terms of the markets they serve and the types of products they offer. Appendix A Table 1 contains a complete list of the fashion firms and a short description of their businesses. For the Fama and French three-factor model, daily data was downloaded from the Kenneth R. French online library for  $R_m - R_f$ ,  $SMB$ , and  $HML$ .

Figure 1 below plots the daily stock returns averaged across all fashion firms in the sample and the daily return for the S&P 500 for  $-5 \leq \tau \leq 5$  when  $\tau =$  oral arguments event day. From days  $-4 \leq \tau \leq -2$ , both the average daily returns and S&P 500 returns were



negative and roughly followed one another. At  $\tau = -1$ , average daily returns became positive, while S&P 500 returns stayed negative. With news of the case being circulated just before oral arguments, higher average daily returns compared to returns on the S&P 500 suggests that investors believed that the outcome of *Star v. Varsity* would be favorable to fashion firms. However after oral arguments at  $\tau = 1$ , both the average daily returns and S&P 500 returns were negative again, with the former being slightly lower than the latter. Post-event it appears that the market overall was down and that investors considered the Justices' tone and questions during oral arguments to be unfavorable to the future profitability of fashion firms.

Figure 1: Oral Arguments

October 31st, 2016

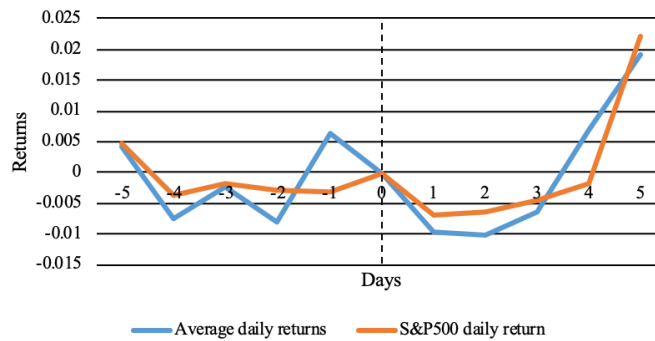


Figure 2: Official Release of the Decision

March 22nd, 2017

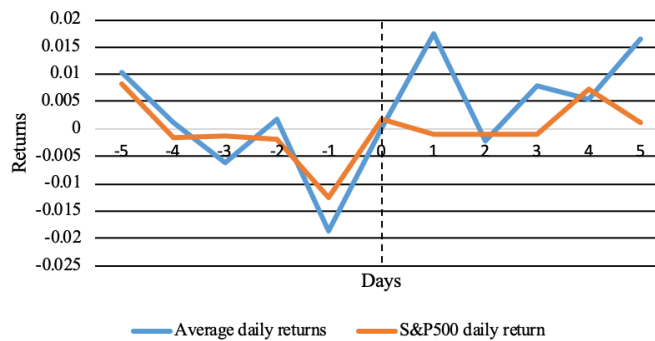


Figure 1: Plots average daily returns and the daily returns of the S&P 500 around  $-5 \leq \tau \leq +5$  when  $\tau =$  oral arguments. Figure 2: Plots average daily returns and the daily returns of the S&P 500 around  $-5 \leq \tau \leq +5$  when  $\tau =$  release of the Court's decision. For average daily returns, the percent change in a firm's stock price from one trading to the next is calculated, and then each firm's daily return is averaged with all other 71 firms' daily return by day. The daily returns of the S&P 500 are calculated as the percent change in the S&P 500's close price from one trading day to the next.

Figure 2 above plots the daily stock returns averaged across all firms and the daily return for the S&P 500 for  $-5 \leq \tau \leq 5$  when  $\tau =$  release of the Court's decision. From days  $-4 \leq \tau \leq -2$ , both average daily returns and S&P 500 returns were generally negative and were roughly the same size in magnitude as the returns during the same period in Figure 1. Just prior to the official release of the decision, both average daily returns and S&P 500 returns fell creating a V-shape in the graph at  $\tau = -1$ . Since average daily returns were lower than the overall market returns, investors might have believed that the Supreme Court was about to release a decision that would be hostile to fashion firms. However, their concern was unfounded, and at  $\tau = 1$ , the average daily returns of the fashion firms rises well above the market return. This makes sense because the Court ultimately ruled in favor of Varsity and allowed two-dimensional striped designs to be copyrightable.

## **V. Results**

### **A. Introduction**

When summarizing the results of both oral arguments and the release of the Court's decision for a given company, particular attention will be paid to event windows that are statistically significant between both the market model and the Fama and French model. Since each of the normal models account for different factors, any results that are consistent between the two of them can be considered more robust (Englehardt and Fernandes 2016). In total, 13 event windows were examined for each normal model and for each event. Please see Appendix B Table 1 for the list of event windows tested and for select results see Appendix C Tables 1-4 and Appendix D Tables 1-6. Additionally, when analyzing the results, greater consideration will be given to companies with multiple significant event windows around  $\tau = 0$ , compared to

companies with only one significant event window. The closeness of the significant event window to  $\tau = 0$  will be factored in as well.<sup>3</sup>

## B. Oral Arguments

The results for cumulative abnormal returns (CAR) by firm for oral arguments were both expected and unexpected compared to what was hypothesized about leading and copycat designers. In both normal models and across multiple event windows, V.F. Corporation, Burberry, G-III, Designer Brands, Macy's, and Tapestry all had positive and statistically significant CAR, as would be predicted for leading firms. Similarly, Citi trends, which would be considered a copycat, had negative CAR. In the Fama and French model, PVH and Capri had positive CAR across multiple windows.

As for firms whose returns were opposite of what was predicted, Nordstrom and Prada had negative and statistically significant CAR in both models. In the Fama and French model, the parent company of Zara, Industria de Diseño Textil, S.A., had positive CAR.

There are also a number of cases where it is unclear if the firm should be classified as a fashion leader or follower. In both normal models, Express and Ross had positive CAR, while Urban Outfitters and Chico's had negative CAR. In the Fama and French model, Land's End and TJ Maxx had positive CAR. In particular, it is interesting that the CAR of Ross and TJ Maxx moved in the opposite directions, since both stores have similar business models, i.e. selling name-brand clothing at a fraction of the retail price. It should also be noted that some firms included in the sample had statistically significant CAR even though it is unlikely that their future business prospects would have been affected by *Star v. Varsity*. One possible explanation for this is that the firm just happened to be performing better or worse than what the models

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<sup>3</sup> For example, event window  $-1 \leq \tau \leq +1$  would be given greater weight than  $-5 \leq \tau \leq +5$  because the former is closer to the event being studied.

would have predicted. The significant CAR is not attributable to the case, but instead to regular market movements.

Table 1 below presents the cumulative average abnormal returns (CAAR) for oral arguments. There are three types of event windows in the table below: balanced, back-end restrictive, and front-end restrictive. The first considers a window that factors in both the pre- and post-reactions from the equity markets, while the latter two try to isolate either just the pre- or just the post-reactions, respectively. In all three types of windows,<sup>4</sup> there are positive and statistically significant CAAR for both normal models, and this suggests that overall *Star v. Varsity* had a positive impact on fashion firms.

Table 1: Oral Arguments Cumulative Average Abnormal Returns (CAAR)				
	Market Model CAAR	T-stat	Fama and French CAAR	T-stat
$-1 \leq \tau \leq 1$	0.008234***	40.578	0.011458***	59.966
$-2 \leq \tau \leq +2$	0.001752***	6.910	0.009686***	21.189
$-3 \leq \tau \leq +3$	-0.000044	-0.085	0.006399***	12.383
$-4 \leq \tau \leq +4$	0.005179***	7.953	0.015728***	34.740
$-5 \leq \tau \leq +5$	-0.015424***	-34.065	-0.000049	-0.062
$-1 \leq \tau \leq +2$	0.006629***	32.435	0.012756***	42.265
$-1 \leq \tau \leq +3$	0.005757***	14.563	0.009107***	34.226
$-1 \leq \tau \leq +4$	0.013949***	33.185	0.018247***	55.919
$-1 \leq \tau \leq +5$	-0.002257***	-6.909	0.005062***	11.509
$-2 \leq \tau \leq +1$	0.003358***	11.711	0.008388***	26.704
$-3 \leq \tau \leq +1$	0.002433***	7.474	0.008750***	19.614
$-4 \leq \tau \leq +1$	-0.000537	-1.284	0.008938***	20.398
$-5 \leq \tau \leq +1$	-0.004933***	-12.345	0.006348***	13.222

Table 1: Using Equation (6), the cumulative average abnormal returns (CAAR) for both normal models are estimated for multiple event windows around  $\tau$  =oral arguments. \* significant at 10%. \*\* significant at 5%. \*\*\*significant at 1%.

<sup>4</sup> Please consider event windows  $-1 \leq \tau \leq 1$ ,  $-2 \leq \tau \leq +2$ ,  $-3 \leq \tau \leq +1$ , and  $-1 \leq \tau \leq +3$  for both normal models.

### C. Release of the Court's Decision

Similar to the results for the event windows around the date of oral arguments, cumulative abnormal returns (CAR) by firm for the release of the Court's decision can be classified as: expected, unexpected, or ambiguous depending on if the firm is a fashion leader or follower. In both normal models, Ralph Lauren and Fast Retailing had positive and statistically significant CAR, as would be predicted for leading firms. Fossil and Nordstrom had positive CAR in the market model. It should be noted that Nordstrom had negative CAR during oral arguments, but positive CAR around the time the Court's opinion was released. In the Fama and French model, Oxford Industries had positive CAR.

As for firms whose returns were opposite of what was predicted, Burberry and Vera Bradley both had negative and statistically significant CAR in both normal models. The Burberry observation is interesting because during oral arguments the British luxury fashion house had strongly positive CAR. For Vera Bradley, it would be expected that their floral design patterns on purses and accessories would greatly benefit from stronger intellectual property rights. Similarly, in both models, Zara had positive CAR for the release of the decision. This result is stronger in the release of the decision than oral arguments. Primarily in the market model and marginally in the Fama and French model, Burlington had positive CAR. In the Fama and French model, Dillard's had negative CAR.

There are also a number of ambiguous CAR results, most of which yielded positive coefficients. Footwear brands, such as Caleres, Boot Barn, Deckers, and Skechers, tended to have positive and statistically significant CAR in both models. Two sportswear companies, Columbia and Dick's Sporting Goods, had positive CAR, as well as Duluth, which might fit into a similar category as the former two. TJ Maxx and Urban Outfitters both had positive CAR, and

for the latter this was different from the results obtained in the oral argument analysis. The CAR for Under Armour was overwhelmingly positive in both models, while the results for Adidas were the complete opposite. This is notable because the two companies' businesses are very much alike, and it would be predicted that *Star v. Varsity* would affect them in a similar manner. However, the difference might be due to Under Armour being more focused on innovative fabric technology.

Table 2 below presents the cumulative average abnormal returns (CAAR) for the release of the Court's decision. Across both normal models and in all event windows, CAAR is positive and statistically significant. With such consistency across models and event windows, it is clear that the official release of the opinion had even more of an impact on fashion firms than oral arguments. This is very much expected, since the release of the Court's decision indicates an authoritative judgement on intellectual property. Overall, the intellectual property rights afforded by *Star v. Varsity* benefitted fashion firms.

	Market Model CAAR	T-stat	Fama and French CAAR	T-stat
$-1 \leq \tau \leq +1$	0.021765***	62.563	0.027319***	75.084
$-2 \leq \tau \leq +2$	0.031143***	40.533	0.033138***	42.332
$-3 \leq \tau \leq +3$	0.042125***	51.311	0.02661***	30.593
$-4 \leq \tau \leq +4$	0.049094***	93.352	0.039646***	65.079
$-5 \leq \tau \leq +5$	0.071906***	150.096	0.054634***	97.646
$-1 \leq \tau \leq +2$	0.023733***	85.785	0.027337***	95.826
$-1 \leq \tau \leq +3$	0.036159***	90.962	0.031285***	73.479
$-1 \leq \tau \leq +4$	0.036809***	124.302	0.042686***	137.597
$-1 \leq \tau \leq +5$	0.0554***	175.665	0.057835***	178.766
$-2 \leq \tau \leq +1$	0.029176***	32.383	0.03312***	36.308
$-3 \leq \tau \leq +1$	0.027732***	37.336	0.022644***	29.268
$-4 \leq \tau \leq +1$	0.034050***	53.573	0.024278***	34.647
$-5 \leq \tau \leq +1$	0.038271***	66.234	0.024118***	37.931

Table 2: Using Equation (6), the cumulative average abnormal returns (CAAR) for both normal models are estimated for multiple event windows around  $\tau$  = release of the Court's decision. \* significant at 10%. \*\* significant at 5%. \*\*\*significant at 1%.

#### D. Economic Significance

Appendix D Tables 3-6 present the annualized abnormal returns for each fashion firm alongside three benchmarks – a particular firm's own historical average annual return, the S&P 500's average annual return, and the average annual return of the fashion industry.<sup>5</sup> The average annual returns for both the S&P 500 and the fashion industry remain the same in all of the comparisons. The calculations for economic significance were only completed if the firm had statistically significant cumulative abnormal returns (CAR) for a given event window. Appendix D Table 1 notes the number of statistically significant results by event, normal model, and event window.

Across events and normal models, the results are economically significant. For example, during oral arguments, Burberry's annualized abnormal returns ranged from 141% to 236% for the market model and 213% to 283% for the Fama and French model. The 30-year historical average annual returns for Burberry, the S&P 500, and the fashion industry were 19% , 9%, and 18%, respectively. The annualized abnormal returns are significantly larger than the three historical standards, so the result is economically meaningful. Similar results can be seen around the release of the Court's decision. Fast Retailing's annualized abnormal returns ranged from 309% to 439% for the market model and 360% to 567% for the Fama and French model. The 30-year historical average annual return for Fast Retaining was 14%. There are economically significant results of similar magnitude when considering other firms as well.

Appendix D Table 2 presents the annualized abnormal returns averaged across all of the firms in the sample – whose results were statistically significant – by event, normal model, and

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<sup>5</sup> The average annual return of the fashion industry is based only on firms included in the sample.

event window. Overall, *Star v. Varsity* appeared to have a positive economic impact on the fashion firms. During oral arguments and for the event window  $-1 \leq \tau \leq +1$ , collectively the fashion firms had annualized abnormal returns of 130% for the market model and 313% for the Fama and French model. Similarly, for the same event window around the release of the Court's decision, this figure was 424% for the market model and 630% for the Fama and French model. Across both events and normal models, only two event windows had negative annualized abnormal returns averaged across firms, but for the 14 other event windows this figure was positive and very large, which shows that *Star v. Varsity* was perceived by investors to be largely favorable for fashion firms.

## VI. Conclusion

Based on the results of the event study from both oral arguments and the release of the decision, *Star v. Varsity* had a statistically and economically significant impact on the equity value of fashion firms. There were some firms whose cumulative abnormal returns did not move in the direction as theory would predict. However, this could be due to underlying market movements driving the firm's stock price that are unrelated to the Supreme Court's case. It might also reflect the challenge of classifying a firm as a fashion leader or follower. Overall, since the cumulative average abnormal returns were largely positive across both normal models, *Star v. Varsity* was interpreted by investors as being favorable for fashion firms.



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## Appendix A

Table 1: List of firms

<u>Ticker</u>	<u>Name</u>	<u>Business Description</u>
NYSE:VIPS	Vipshop Holdings Limited	Chinese e-commerce discount sales
NasdaqGs:CROX	Cros, Inc.	American footwear
NYSE:CPRI	Capri Holdings Limited	Luxury brands Michael Kors, Versace, and Jimmy Choo
NYSE:UFI	Unifi, Inc.	Manufactures sustainable fibers
NYSE:VFC	V.F. Corporation	Parent company North Face, Timberlands, Supreme etc.
OTCPK:LVMU.Y	LVMH Moët Hennessy - Louis Vuitton, Société Européenne	Luxury fashion (Louis Vuitton, Fendi, Givenchy etc.) & other products.
NYSE:BURL	Burlington Stores, Inc.	American off-price department store
NYSE:VNCE	Vince Holding Corp.	Luxury brands Vince, Rebecca Taylor, and Parker
NYSE:CAL	Caleres, Inc.	Operates footwear brand stores (e.g. Famous Footwear/Naturalizer)
OTCPK:BURB.Y	Burberry Group plc	British luxury fashion
NasdaqCM:CRWS	Crown Crafts, Inc.	Infant product manufacturer
NasdaqGM:DXLG	Destination XL Group, Inc.	Specialty retailer of men's big and tall apparel
NYSE:BOOT	Boot Barn Holdings, Inc.	Retailer of western-style footwear and apparel
NYSE:DDS	Dillard's, Inc.	Upscale American department store
NasdaqGS:GIII	G-III Apparel Group, Ltd.	Owens Donna Karan, DKNY, Eliza J., Bass, etc.
NYSE:GPS	The Gap, Inc.	Operates Gap, Banana Republic, Old Navy, & Athleta
NYSE:GCO	Genesco Inc.	Specialty footwear retailer
NYSE :DKS	DICK'S Sporting Goods, Inc.	Sporting goods retailer
NasdaqGM:LAKE	Lakeland Industries, Inc.	Manufacturer of personal protective clothing
NasdaqCM:LE	Lands' End, Inc.	American clothing and home décor
NYSE:NKE	NIKE, Inc.	Sportswear and footwear
NYSE:OXM	Oxford Industries, Inc.	Sells Tommy Bahama, Lily Pulitzer, Johnny Was, & Southern Tide
NYSE:PVH	PVH Corp.	Owens Tommy Hilfiger, Calvin Klein, Warner's
NYSE:CRI	Carter's, Inc.	Baby and children's clothing
NasdaqGM:SGC	Superior Group of Companies, Inc.	Uniform apparel
NYSE:TJX	The TJX Companies, Inc.	American off-price department store
NYSE:WWW	Wolverine World Wide, Inc.	Manufactures footwear (Wolverine, Merrell, and Hush Puppies)
NYSE:FL	Foot Locker, Inc.	Sportswear and footwear
NasdaqGS:FOSL	Fossil Group, Inc.	Designer and manufacturer of Fossil, Relic, Skagen etc.
NYSE:M	Macy's, Inc.	American high-end department store
NYSE:BKE	The Buckle, Inc.	Fashion retailer (clothing, footwear, accessories)
NYSE:DBI	Designer Brands Inc.	Producer and retailers of footwear (DSW, Camuto Group, and Shoe Warehouse)
NYSE:JWN	Nordstrom, Inc.	American luxury department store

NasdaqGS:RCKY	Rocky Brands, Inc.	Outdoor, work, western, and military footwear and apparel
NasdaqGS:SCVL	Shoe Carnival, Inc.	American shoe retailer
NYSE:CHS	Chico's FAS, Inc.	Operates Chico's, White House Black Market, Soma etc.
NYSE:DECK	Deckers Outdoor Corporation	Footwear designer and distributor (Ugg, Hoka One One, and Koolaburra)
NasdaqGS:URBN	Urban Outfitters, Inc.	Lifestyle retailer
NYSE:MOV	Movado Group, Inc.	American luxury watch maker
NYSE:AEO	American Eagle Outfitters, Inc.	Lifestyle, clothing, and accessory retailer
NasdaqGS:ROST	Ross Stores, Inc.	American discount retailer
NasdaqGS:LULU	Lululemon Athletica Inc.	Canadian athletic apparel
NasdaqGS:SHOO	Steven Madden, Ltd.	American shoe designer/retailer (Steve Madden, Dolce Vita, & Betsey Johnson)
NYSE:GES	Guess?, Inc.	American clothing brand and retailer
NasdaqGS:PLCE	The Children's Place, Inc.	Specialty retailer of children's apparel and accessories
NYSE:ANF	Abercrombie & Fitch Co.	American lifestyle retailer focusing on casual wear
NYSE:RL	Ralph Lauren Corporation	American mid-range to luxury clothing, home, accessories etc.
NasdaqGS:ZUMZ	Zumiez Inc.	Specialty retailer of young men and women's clothing and accessories
NasdaqCM:CTHR	Charles & Colvard, Ltd.	Distributor and manufacturer of jewelry
NasdaqGS:COLM	Columbia Sportswear Company	Manufactures and distributes outerwear, sportswear, and footwear
NYSE:GIL	Gildan Activewear Inc.	Canadian manufacturer of branded clothing
NYSE:SKX	Skechers U.S.A., Inc.	Family footwear brand featuring athletic and casual shoes
NYSE:HBI	Hanesbrands Inc.	Owns Hanes, Champion, Maidenform, and Bali etc.
OTCPK:PAND.Y	Pandora A/S	Danish jewelry manufacturer and retailer
NYSE:EXPR	Express, Inc.	American fashion retailer catering to young men and women
NYSE:TLYS	Tilly's, Inc.	Retail company selling branded apparel, accessories, shoes, and more
NYSEAM:BGI	Birks Group Inc.	Designer, manufacturer, and retailer of jewelry, timepieces, and silverware
OTCPK:IDEX.Y	Industria de Diseño Textil, S.A.	Flagship company Zara
OTCPK:FRCO.Y	Fast Retailing Co., Ltd.	Owns UNIQLO, Theory, J Brand, Helmut Lang etc.
NasdaqGS:VRA	Vera Bradley, Inc.	American luggage and handbag design company
NasdaqGS:DLTH	Duluth Holdings Inc.	Seller of casual wear, workwear, and accessories for men and women
NYSE:TPR	Tapestry, Inc.	Parent company of Coach, Kate Spade, and Stuart Weitzman
NYSEAM:DLA	Delta Apparel, Inc.	Wholesaler retailer of blank t-shirts
OTCPK:CGAC	Code Green Apparel Corp.	Designs, manufactures, & distributes eco-friendly/sustainable apparel products
NasdaqGS:CTRN	Citi Trends, Inc.	Discounted retail clothing chain targeting urban consumers
OTCPK:HNNM.Y	H & M Hennes & Mauritz AB (publ)	Swedish fast-fashion company owning H&M and & Other Stories etc.
OTCPK:PRDS.Y	Prada S.p.A.	Italian high-end luxury fashion house
NYSE:UAA	Under Armour, Inc.	American sportswear equipment, footwear, and casual wear
OTCPK:MAKS.Y	Marks and Spencer Group plc	British retailer selling clothing, beauty, and home products

OTCPK:SWGA.Y	The Swatch Group AG	Swiss manufacturer of watches and jewelry
OTCPK:CFRU.Y	Compagnie Financière Richemont SA	Holding company of Cartier, Cholé, Dunhill, Montblanc etc.
OTCPK:ADDY.Y	adidas AG	German manufacturer of sporty clothing and shoes

Appendix A Table 1: All stocks included in the sample are traded on either the Nasdaq, NYSE, or OTC. The Nasdaq is further broken down into the Capital Market (CM), Global Market (GM), and the Select Market (GS), which are different tiers based on small, mid, and large market capitalizations, respectively. For the OTC, the initials “PK” after the exchange’s name indicates a stock trades on the Pink Sheets, and the letter “Y” after a ticker name indicates that the stock trades as an American Depository Receipt (ADR). The data presented in subsequent appendices and tables will drop the exchange’s name and refer to the firms only by their ticker name. Please note that Column 3 is a brief description of the types of business a firm is engaged in and is not intended to detail all of a company’s business operations.

## Appendix B

Table 1: List of Event Windows Tested

Event Window	Tested and Analyzed	Included in Appendix C and D
$-1 \leq \tau \leq +1$	✓	✓
$-2 \leq \tau \leq +2$	✓	✓
$-3 \leq \tau \leq +3$	✓	-
$-4 \leq \tau \leq +4$	✓	-
$-5 \leq \tau \leq +5$	✓	-
$-1 \leq \tau \leq +2$	✓	✓
$-1 \leq \tau \leq +3$	✓	-
$-1 \leq \tau \leq +4$	✓	-
$-1 \leq \tau \leq +5$	✓	-
$-2 \leq \tau \leq +1$	✓	✓
$-3 \leq \tau \leq +1$	✓	-
$-4 \leq \tau \leq +1$	✓	-
$-5 \leq \tau \leq +1$	✓	-

Appendix B Table 1: Multiple event windows were tested and analyzed. The results of select windows are available in Appendix C Tables 1-4 and Appendix D Tables 2-6. Full results are available upon request.

## Appendix C

Table 1: Oral Arguments Market Model Cumulative Abnormal Returns (CAR)

Ticker	$-1 \leq \tau \leq +1$		$-2 \leq \tau \leq +2$		$-1 \leq \tau \leq +2$		$-2 \leq \tau \leq +1$	
	CAR	T-test	CAR	T-test	CAR	T-test	CAR	T-test
VIPS	-0.003848	-0.3	-0.053909	-1.492	-0.040253	-1.084	-0.017504	-1.012
CROX	0.009344	0.28	-0.008617	-0.212	-0.013804	-0.337	0.01453	0.461
CPRI	0.0593	1.508	0.050984	1.1	0.054846	1.238	0.055438	1.261



UFI	-0.066966**	-2.117	-0.027673	-0.348	-0.081162***	-2.626	-0.013477	-0.165
VFC	0.007994**	2.056	0.023642***	2.993	0.013833***	2.852	0.017803**	2.217
LVMU.Y	0.013268	0.659	0.01801	0.966	0.014497	0.753	0.016781	0.883
BURL	0.005854	0.33	-0.023917	-0.909	-0.010548	-0.425	-0.007515	-0.332
VNCE	-0.014994	-0.302	-0.132147	-1.638	-0.081145	-1.053	-0.065995	-1.005
CAL	0.015922	0.457	-0.010367	-0.208	0.022369	0.68	-0.016815	-0.334
BURB.Y	0.019407***	2.682	0.019258*	1.853	0.019546**	2.1	0.01912**	1.991
CRWS	-0.010463	-0.728	-0.025336*	-1.809	-0.018346	-1.287	-0.017453	-1.246
DXLG	-0.077299	-1.631	-0.061926	-1.037	-0.067105	-1.17	-0.072121	-1.327
BOOT	0.036013***	7.285	0.151295	1.046	0.009287	0.238	0.178022	1.368
DDS	0.046977	1.018	0.026131	0.461	0.049513	1.09	0.023595	0.404
GIII	0.079952***	2.627	0.0992**	2.491	0.101891***	3.504	0.077261*	1.882
GPS	0.027661	0.704	0.032468	0.801	0.040769	1.095	0.01936	0.472
GCO	0.014572	0.53	0.035188	0.895	0.043548	1.23	0.006211	0.214
DKS	-0.008697	-0.386	0.012563	0.287	0.024028	0.579	-0.020162	-0.881
LAKE	0.00586	0.26	-0.012384	-0.456	-0.010437	-0.372	0.003913	0.181
LE	-0.001024	-0.211	-0.018022	-1.439	-0.00565	-0.901	-0.013396	-1.041
NKE	-0.038166	-1.057	-0.031526	-0.815	-0.031661	-0.81	-0.038031	-1.045
OXM	-0.000773	-0.061	-0.017237	-0.546	-0.026495	-0.941	0.008485	0.554
PVH	0.012467*	1.669	0.012234	1.038	0.017448**	2.461	0.007252	0.619
CRI	-0.017666	-0.819	0.03948	0.749	-0.004713	-0.17	0.026526	0.491
SGC	-0.063045	-1.282	-0.102546**	-2.232	-0.088848*	-1.906	-0.076744	-1.635
TJX	0.007183	0.439	0.012626	0.588	0.019669	1.067	0.00014	0.008
WWW	0.029362	0.811	0.038401	1.029	0.04405	1.277	0.023713	0.633
FL	-0.020036	-1.262	-0.030794	-0.679	0.001758	0.055	-0.052588*	-1.759
FOSL	0.014368	0.306	-0.071018	-0.768	0.008191	0.179	-0.064841	-0.683
M	0.047666***	3.789	0.03803	1.122	0.055092***	3.781	0.030604	0.874
BKE	-0.033148	-1.219	-0.029651	-0.735	-0.013902	-0.35	-0.048897*	-1.876
DBI	0.021063	1.072	0.011959	0.296	0.037605*	1.805	-0.004582	-0.122
JWN	-0.039345*	-1.88	-0.066974**	-1.976	-0.035461	-1.362	-0.070857***	-2.627
RCKY	0.008435	0.643	0.002632	0.135	-0.00319	-0.168	0.014256	1.12
SCVL	-0.013562	-0.447	-0.012927	-0.29	0.008509	0.218	-0.034998	-1.053
CHS	-0.023392**	-2.272	-0.042618**	-2.148	-0.022042*	-1.653	-0.043968***	-2.74
DECK	0.026834	0.258	0.024881	0.256	0.037306	0.381	0.014409	0.144
URBN	-0.011238	-0.418	-0.050938	-1.617	-0.030268	-1.023	-0.031907	-1.048
MOV	0.013149	0.399	-0.003049	-0.089	0.008465	0.262	0.001635	0.047
AEO	-0.004346	-0.258	-0.010452	-0.636	-0.00396	-0.248	-0.010838	-0.65
ROST	0.005238	1.535	-0.004846	-0.243	0.011464**	2.079	-0.011071	-0.604
LULU	0.020788	0.576	0.039751	1.201	0.029943	0.878	0.030596	0.896
SHOO	0.090362	1.194	0.104123	1.39	0.100576	1.358	0.093909	1.234
GES	0.014402	0.874	0.012553	0.261	0.041977	1.523	-0.015022	-0.4

PLCE	-0.023323	-0.457	0.005364	0.097	-0.016379	-0.325	-0.001581	-0.028
ANF	-0.017479	-1.192	-0.012377	-0.404	0.001255	0.045	-0.03111*	-1.959
RL	0.010065	0.948	0.002375	0.177	0.004409	0.327	0.008031	0.707
ZUMZ	0.028969	0.948	0.025714	0.593	0.046415	1.555	0.008269	0.198
CTHR	0.037591	1.185	-0.041942	-0.597	-0.001877	-0.031	-0.002474	-0.041
COLM	0.006262	0.124	0.009416	0.162	0.030241	0.578	-0.014563	-0.276
GIL	0.006183	0.701	0.008929	1.02	0.005456	0.622	0.009656	1.145
SKX	0.033801	1.189	0.045227	1.413	0.028468	0.903	0.05056*	1.848
HBI	0.054569	0.546	0.024047	0.236	0.026995	0.258	0.05162	0.535
PAND.Y	-0.043187	-1.048	-0.026556	-0.568	-0.034654	-0.768	-0.03509	-0.782
EXPR	0.031257**	2.2	0.037192	0.882	0.058921***	2.698	0.009527	0.274
TLYS	-0.059921	-1.626	-0.132785	-0.998	-0.015922	-0.219	-0.176784*	-1.717
BGI	0.037458	0.309	0.087216	0.732	0.035884	0.312	0.08879	0.736
IDEX.Y	0.001894	0.19	-0.004225	-0.407	0.000083	0.009	-0.002414	-0.227
FRCO.Y	0.006088	0.247	0.006918	0.261	0.015335	0.63	-0.00233	-0.091
VRA	0.000566	0.016	-0.000643	-0.017	0.012557	0.345	-0.012634	-0.342
DLTH	0.013598	0.736	0.036183*	1.656	0.017838	1.024	0.031943	1.437
TPR	0.059446**	2.486	0.042582	0.953	0.039623	0.869	0.062405**	2.217
DLA	0.14791	1.43	0.124663	1.022	0.123859	1.015	0.148714	1.365
CGAC	0.135226	0.582	0.023222	0.072	-0.054178	-0.169	0.212626	0.96
CTRN	-0.034852	-1.033	-0.027749	-0.747	-0.025468	-0.668	-0.037133	-1.12
HNNM.Y	0.015295	0.56	0.006999	0.253	0.013635	0.512	0.008659	0.306
PRDS.Y	-0.036114***	-6.984	-0.041816	-1.49	-0.054953***	-6.567	-0.022977	-0.896
UAA	-0.015648	-1.054	-0.007249	-0.262	0.00199	0.074	-0.024887*	-1.708
MAKS.Y	0.01568	0.544	0.008484	0.273	0.02003	0.737	0.004134	0.129
SWGA.Y	-0.016682	-0.619	-0.029374	-1.128	-0.02839	-1.086	-0.017665	-0.684
CFRU.Y	-0.005356	-0.236	-0.006944	-0.329	-0.003851	-0.178	-0.008449	-0.394
ADDY.Y	-0.001855	-0.195	0.00676	0.637	0.002786	0.267	0.002119	0.21

Appendix C Table 1: Market model cumulative abnormal returns (CAR) estimated for each of the 72 firms using Equation (5) when  $\tau$  = oral arguments . \* significant at 10%. \*\* significant at 5%. \*\*\*significant at 1%.

Table 2: Oral Arguments Fama and French Cumulative Abnormal Returns (CAR)

Ticker	$-1 \leq \tau \leq +1$		$-2 \leq \tau \leq +2$		$-1 \leq \tau \leq +2$		$-2 \leq \tau \leq +1$	
	CAR	T-test	CAR	T-test	CAR	T-test	CAR	T-test
VIPS	0.00028	0.023	-0.043234	-1.261	-0.033054	-0.935	-0.0099	-0.641
CROX	0.013065	0.386	0.001524	0.038	-0.006543	-0.164	0.021132	0.657
CPRI	0.072397*	1.949	0.103426***	2.842	0.082898**	2.206	0.092925***	2.639
UFI	-0.059111*	-1.831	-0.001149	-0.013	-0.066577**	-2.029	0.006316	0.07
VFC	0.011524**	2.559	0.032706***	3.362	0.020176***	3.145	0.024055**	2.487
LVMU.Y	0.014882	0.751	0.01794	0.966	0.016415	0.864	0.016408	0.863

BURL	0.008684	0.49	-0.019189	-0.731	-0.006355	-0.259	-0.00415	-0.181
VNCE	0.002262	0.054	-0.058931	-1.011	-0.04196	-0.702	-0.014709	-0.34
CAL	0.01244	0.333	-0.032047	-0.533	0.013906	0.394	-0.033513	-0.547
BURB.Y	0.023311***	3.083	0.029218***	3.218	0.026322***	3.071	0.026207***	3.035
CRWS	-0.006794	-0.477	-0.01752	-1.286	-0.013042	-0.93	-0.0112720	-0.827
DXLG	-0.066756	-1.345	-0.022352	-0.315	-0.045955	-0.723	-0.0431530	-0.659
BOOT	0.051967***	11.4	0.219143	1.343	0.046081*	1.952	0.2250290	1.444
DDS	0.052323	1.159	0.042784	0.806	0.059918	1.371	0.0351880	0.642
GIII	0.094923***	2.605	0.158885***	4.56	0.133445***	3.808	0.120363***	3.447
GPS	0.032427	0.85	0.047532	1.228	0.050356	1.374	0.029603	0.77
GCO	0.009747	0.343	0.012009	0.259	0.03518	1.011	-0.013424	-0.357
DKS	-0.009244	-0.394	0.004216	0.092	0.021965	0.538	-0.026993	-1.017
LAKE	0.014682	0.578	0.019556	0.697	0.007326	0.272	0.026912	1.074
LE	0.018826***	2.584	0.064272***	2.875	0.037088***	2.684	0.04601**	2.091
NKE	-0.033119	-0.901	-0.016617	-0.403	-0.022512	-0.551	-0.027225	-0.706
OXM	0.009982	0.617	0.02326	0.636	-0.004377	-0.187	0.037619	1.311
PVH	0.017616***	2.847	0.028182***	3.103	0.027373***	3.905	0.018425**	2.385
CRI	-0.009939	-0.451	0.066578	1.083	0.010611	0.335	0.046028	0.733
SGC	-0.052356	-1.112	-0.063469	-1.319	-0.068054	-1.532	-0.047771	-0.964
TJX	0.012032	0.761	0.02539	1.246	0.027576	1.464	0.009846	0.61
WWW	0.033071	0.915	0.048397	1.303	0.051182	1.47	0.030286	0.824
FL	-0.012231	-0.809	-0.00445	-0.104	0.016488	0.461	-0.03317	-1.502
FOSL	0.022086	0.504	-0.042312	-0.506	0.024861	0.598	-0.045087	-0.529
M	0.057207***	4.855	0.073755***	3.22	0.075158***	6.731	0.055804**	2.396
BKE	-0.025194	-1.044	0.001288	0.03	0.003993	0.091	-0.027899	-1.189
DBI	0.029866*	1.852	0.04517	1.36	0.056264**	2.512	0.018771	0.723
JWN	-0.030526	-1.444	-0.033597	-1.011	-0.016302	-0.517	-0.047821**	-2.259
RCKY	0.01061	0.82	0.004096	0.21	-0.0009	-0.046	0.015606	1.27
SCVL	-0.00895	-0.311	0.002784	0.063	0.018476	0.453	-0.024641	-0.822
CHS	-0.025756**	-2.257	-0.058903**	-2.145	-0.027497**	-2.156	-0.057163**	-2.266
DECK	0.033986	0.326	0.049761	0.516	0.051733	0.526	0.032014	0.323
URBN	-0.027448	-1.21	-0.129442**	-2.226	-0.067029*	-1.802	-0.089861	-1.566
MOV	0.02109	0.701	0.026229	0.933	0.025241	0.885	0.022079	0.761
AEO	0.002098	0.144	0.011294	0.774	0.008953	0.594	0.004438	0.32
ROST	0.00956***	3.145	0.006039	0.332	0.018488***	2.881	-0.002889	-0.182
LULU	0.025355	0.704	0.051451	1.538	0.036994	1.084	0.039811	1.154
SHOO	0.095659	1.244	0.120479	1.622	0.11074	1.487	0.105398	1.39
GES	0.027328	1.211	0.067825	1.45	0.072699*	1.729	0.022455	0.882
PLCE	-0.02152	-0.418	0.006344	0.116	-0.014058	-0.278	-0.001117	-0.02
ANF	-0.009691	-0.545	0.01691	0.492	0.017841	0.509	-0.010621	-0.628
RL	0.012889	1.231	0.006342	0.47	0.008262	0.621	0.010969	0.94

ZUMZ	0.035464	1.25	0.048803	1.257	0.059995**	2.026	0.024272	0.688
CTHR	0.042353	1.351	-0.029734	-0.439	0.005919	0.101	0.0067	0.116
COLM	0.01006	0.199	0.019484	0.334	0.037239	0.699	-0.007695	-0.148
GIL	0.007973	0.889	0.009796	1.139	0.007925	0.892	0.009844	1.159
SKX	0.037831	1.353	0.055704*	1.781	0.035697	1.182	0.057837**	2.112
HBI	0.053767	0.535	0.01151	0.11	0.022282	0.208	0.042994	0.434
PAND.Y	-0.037712	-0.939	-0.011034	-0.228	-0.025212	-0.555	-0.023533	-0.508
EXPR	0.053811***	3.709	0.133985***	3.425	0.109634***	2.722	0.078163***	5.174
TLYS	-0.060253	-1.611	-0.141489	-1.037	-0.018864	-0.266	-0.182878*	-1.686
BGI	0.028521	0.238	0.043395	0.383	0.017617	0.153	0.054299	0.475
IDEX.Y	0.008963	0.755	0.02044*	1.799	0.014301	1.251	0.015102	1.3
FRCO.Y	0.008916	0.349	0.014335	0.514	0.021295	0.823	0.001956	0.075
VRA	0.005575	0.156	0.014539	0.384	0.021945	0.598	-0.00183	-0.052
DLTH	0.013543	0.72	0.030195	1.555	0.016952	0.954	0.026786	1.355
TPR	0.066284**	2.492	0.067289	1.638	0.054157	1.277	0.079416***	2.982
DLA	0.15008	1.451	0.126022	1.028	0.126491	1.035	0.14961	1.362
CGAC	0.003128	0.018	-0.549209	-1.426	-0.325605	-0.881	-0.220477	-0.788
CTRN	-0.040477	-1.08	-0.05889	-1.521	-0.038701	-1.006	-0.060667*	-1.687
HNNM.Y	0.021296	0.733	0.02681	0.988	0.025468	0.925	0.022638	0.809
PRDS.Y	-0.035848***	-8.503	-0.047933**	-2.004	-0.056103***	-6.093	-0.027678	-1.35
UAA	-0.001841	-0.16	0.048279	1.357	0.031407	0.883	0.015031	0.731
MAKS.Y	0.016452	0.57	0.004527	0.135	0.020117	0.738	0.000862	0.025
SWGA.Y	-0.016437	-0.652	-0.037298	-1.519	-0.03072	-1.212	-0.023014	-0.968
CFRU.Y	-0.001573	-0.067	0.002362	0.108	0.002726	0.121	-0.001937	-0.088
ADDY.Y	-0.000441	-0.043	0.003922	0.396	0.002675	0.262	0.000807	0.083

Appendix C Table 2: Fama and French cumulative abnormal returns (CAR) estimated for each of the 72 firms using Equation (5) when  $\tau$  = oral arguments . \* significant at 10%. \*\* significant at 5%. \*\*\*significant at 1%.

Table 3: Release of the Court's Decision Market Model Cumulative Abnormal Returns (CAR)

Ticker	$-1 \leq \tau \leq +1$		$-2 \leq \tau \leq +2$		$-1 \leq \tau \leq +2$		$-2 \leq \tau \leq +1$	
	CAR	T-test	CAR	T-test	CAR	T-test	CAR	T-test
VIPS	-0.020971	-0.426	-0.006327	-0.128	-0.020248	-0.43	-0.007051	-0.138
CROX	0.003123	0.072	0.005322	0.135	0.005741	0.141	0.002704	0.067
CPRI	0.007212	0.259	0.010096	0.336	0.018685	0.672	-0.001378	-0.048
UFI	0.026128	0.511	0.025843	0.534	0.021953	0.44	0.030018	0.619
VFC	0.007141	0.252	0.014919	0.568	0.01367	0.506	0.008391	0.314
LVMU.Y	0.002462	0.198	-0.010366	-0.685	-0.001006	-0.081	-0.006898	-0.444
BURL	0.031564***	5.419	0.015389	0.565	0.032292***	2.876	0.014661	0.524
VNCE	0.357413	1.637	0.248419	0.836	0.266073	0.904	0.33976	1.375
CAL	0.040435***	5.175	-0.004165	-0.065	0.047562***	4.89	-0.011292	-0.172

BURB.Y	-0.00629	-0.408	-0.035413*	-1.685	-0.022958	-1.116	-0.018745	-1.051
CRWS	0.014949	0.323	0.037708	0.83	0.035597	0.767	0.01706	0.39
DXLG	0.139748	1.413	0.165142	1.591	0.171455*	1.816	0.133436	1.245
BOOT	0.041895	1.274	0.026094	0.569	0.047888	1.496	0.020101	0.425
DDS	-0.017161	-0.541	-0.043922	-0.916	-0.007129	-0.211	-0.053954	-1.251
GIII	0.009307	0.127	-0.000061	-0.001	0.016641	0.24	-0.007395	-0.103
GPS	0.017191	1.067	-0.003301	-0.108	0.01858	1.176	-0.00469	-0.149
GCO	-0.020701	-0.579	-0.026667	-0.737	-0.014287	-0.394	-0.033081	-0.968
DKS	0.027881	1.643	0.026075	1.3	0.02538	1.277	0.028575	1.573
LAKE	-0.016346	-0.837	0.007387	0.201	-0.019719	-1.065	0.01076	0.288
LE	0.046376	0.662	0.022513	0.291	0.052074	0.78	0.016815	0.21
NKE	-0.044	-0.491	-0.008137	-0.089	-0.025292	-0.278	-0.026846	-0.297
OXM	0.005189	0.128	0.037696	0.457	0.066731	0.94	-0.023847	-0.486
PVH	0.058812	0.589	0.074207	0.768	0.084308	0.893	0.048711	0.493
CRI	0.026547***	2.965	0.015857	0.653	0.030597***	3.151	0.011807	0.471
SGC	-0.047704	-1.201	-0.028423	-0.591	-0.035106	-0.746	-0.041022	-0.938
TJX	0.02018	1.64	0.012931	0.668	0.02247*	1.809	0.010641	0.533
WWW	-0.006576	-0.183	0.000321	0.009	-0.000083	-0.002	-0.006171	-0.181
FL	0.008302	0.514	-0.007856	-0.326	0.008844	0.575	-0.008399	-0.34
FOSL	0.042831	1.101	0.041576	1.014	0.048054	1.272	0.036353	0.863
M	0.002019	0.337	-0.022791	-0.74	0.005875	0.907	-0.026648	-0.892
BKE	0.02899	0.307	-0.039672	-0.388	0.002822	0.029	-0.013503	-0.131
DBI	-0.014081	-0.37	-0.040368	-0.774	-0.00353	-0.09	-0.050919	-1.056
JWN	0.014305*	1.845	0.009062	0.289	0.030106**	2.275	-0.006739	-0.251
RCKY	-0.018735	-0.638	0.010554	0.214	-0.02458	-0.888	0.016399	0.329
SCVL	0.017738	1.152	-0.052403	-0.99	-0.011438	-0.301	-0.023227	-0.473
CHS	0.034694	1.137	0.042297	1.287	0.047733*	1.657	0.029258	0.876
DECK	0.027961	0.652	0.045626	1.093	0.045917	1.11	0.027671	0.666
URBN	0.027042	1.585	0.020961	0.873	0.030822*	1.822	0.017181	0.693
MOV	-0.016788	-0.305	0.02858	0.314	-0.036756	-0.682	0.048548	0.552
AEO	0.004934	0.182	-0.00902	-0.291	0.007647	0.298	-0.011734	-0.373
ROST	0.002575	0.196	-0.005101	-0.233	0.009715	0.701	-0.012241	-0.613
LULU	0.008272	0.839	0.019753	1.463	0.019938	1.548	0.008087	0.829
SHOO	0.000558	0.035	0.0156	0.741	0.015996	0.752	0.000162	0.011
GES	0.003205	0.073	-0.00768	-0.184	0.003445	0.084	-0.00792	-0.184
PLCE	0.041384	1.241	0.025621	0.61	0.040735	1.178	0.026269	0.615
ANF	0.005371	0.097	-0.001302	-0.023	0.01703	0.321	-0.012962	-0.232
RL	0.017506	0.776	0.02125	0.78	0.030222	1.351	0.008534	0.329
ZUMZ	0.026355	0.515	0.005974	0.11	0.026071	0.531	0.006258	0.111
CTHR	-0.016024	-0.649	0.025378	0.497	-0.016169	-0.678	0.025523	0.488
COLM	0.004349	0.714	0.015324**	2.023	0.010728	1.418	0.008945	1.366

GIL	-0.00787	-0.31	0.007072	0.238	0.008485	0.278	-0.009282	-0.388
SKX	0.028908	1.271	0.071955	1.186	0.085294*	1.658	0.015569	0.495
HBI	0.002249	0.094	0.005814	0.247	0.009415	0.4	-0.001353	-0.059
PAND.Y	-0.015315	-0.519	-0.040698	-0.998	-0.009561	-0.32	-0.046452	-1.219
EXPR	-0.006777	-0.148	-0.066769	-1.052	-0.0156	-0.356	-0.057946	-0.887
TLYS	-0.014141	-0.292	-0.017848	-0.403	-0.016328	-0.357	-0.015661	-0.342
BGI	0.029466	0.409	0.0468	0.697	0.029387	0.429	0.046879	0.687
IDEX.Y	0.015135	1.075	0.021823	1.5	0.014367	0.992	0.022591*	1.675
FRCO.Y	0.036079***	2.654	0.054269**	2.459	0.056491***	3.688	0.033858*	1.767
VRA	-0.056738**	-2.082	-0.04181	-0.906	-0.035581	-0.748	-0.062967**	-2.198
DLTH	0.202162*	1.734	0.262181**	2.259	0.227598*	1.935	0.236746**	2.064
TPR	-0.007636	-0.482	-0.019047	-0.877	-0.003387	-0.206	-0.023297	-1.172
DLA	0.060118	0.788	0.052362	0.671	0.068568	0.941	0.043912	0.545
CGAC	0.340829	0.889	1.175617	1.043	0.122818	0.25	1.393628	1.385
CTRN	-0.030241	-0.536	-0.004791	-0.078	-0.029042	-0.534	-0.005991	-0.095
HNNM.Y	0.016333	0.927	0.008156	0.388	0.01654	0.949	0.007949	0.368
PRDS.Y	-0.04524	-0.702	-0.065223	-1.102	-0.054578	-0.894	-0.055885	-0.917
UAA	0.030042***	6.254	0.10696***	2.718	0.079736**	1.996	0.057266***	3.218
MAKS.Y	0.042906	0.86	0.0147	0.254	0.023749	0.412	0.033856	0.645
SWGA.Y	0.01211	0.406	-0.008071	-0.239	0.008459	0.29	-0.00442	-0.127
CFRU.Y	-0.011585	-0.332	-0.016288	-0.47	-0.005339	-0.155	-0.022534	-0.67
ADDY.Y	-0.010251*	-1.926	-0.025356***	-2.688	-0.013819***	-2.752	-0.021788**	-2.282

Appendix C Table 3: Market model cumulative abnormal returns (CAR) estimated for each of the 72 firms using Equation (5) when  $\tau$  =release of the Court's decision . \* significant at 10%. \*\* significant at 5%. \*\*\*significant at 1%.

Table 4: Release of the Court's Decision Fama and French Cumulative Abnormal Returns (CAR)

Ticker	$-1 \leq \tau \leq +1$		$-2 \leq \tau \leq +2$		$-1 \leq \tau \leq +2$		$-2 \leq \tau \leq +1$	
	CAR	T-test	CAR	T-test	CAR	T-test	CAR	T-test
VIPS	-0.013173	-0.283	-0.001894	-0.042	-0.012041	-0.273	-0.003026	-0.066
CROX	0.009488	0.327	0.00598	0.219	0.009324	0.339	0.006144	0.219
CPRI	0.010837	1.12	0.010281	0.585	0.019674*	1.872	0.001444	0.091
UFI	0.028705	0.918	0.028759	0.88	0.021914	0.65	0.035549	1.201
VFC	0.012183	0.471	0.021521	0.895	0.019633	0.797	0.014071	0.575
LVMU.Y	0.007094	0.588	-0.002276	-0.156	0.005036	0.412	-0.000218	-0.015
BURL	0.037763**	2.102	0.013309	0.354	0.034937	1.526	0.016135	0.423
VNCE	0.369425**	2.009	0.242739	0.845	0.276666	0.999	0.335498	1.434
CAL	0.045086**	2.039	-0.009355	-0.13	0.046826*	1.894	-0.011095	-0.15
BURB.Y	-0.003406	-0.27	-0.024209	-1.381	-0.018121	-1.004	-0.009494	-0.738
CRWS	0.018245	0.561	0.044959	1.353	0.039162	1.15	0.024042	0.784

DXLG	0.135724	1.252	0.157754	1.447	0.158325	1.512	0.135153	1.207
BOOT	0.050476*	1.955	0.01301	0.23	0.049174	1.62	0.014313	0.245
DDS	-0.014298***	-2.84	-0.042964	-1.23	-0.008021	-0.667	-0.049242	-1.612
GIII	0.01265	0.317	-0.005204	-0.121	0.014033	0.373	-0.006587	-0.149
GPS	0.024837**	1.961	0.00076	0.022	0.025555*	1.808	0.000042	0.001
GCO	-0.014805	-1.378	-0.031748	-1.78	-0.014264	-1.239	-0.032288**	-2.002
DKS	0.033427*	1.656	0.03276	1.4	0.031054	1.331	0.035133*	1.654
LAKE	-0.007426	-0.314	0.006407	0.197	-0.013968	-0.615	0.012949	0.405
LE	0.051604	0.752	0.031017	0.411	0.057245	0.871	0.025376	0.326
NKE	-0.037249	-0.38	0.000755	0.008	-0.016332	-0.166	-0.020161	-0.208
OXM	0.008626	0.327	0.040318	0.539	0.068082	1.102	-0.019138	-0.485
PVH	0.065357	0.576	0.078918	0.717	0.092492	0.863	0.051783	0.459
CRI	0.033692**	2.251	0.019236	0.611	0.037299**	2.326	0.015629	0.481
SGC	-0.047134***	-3.722	-0.023552	-0.66	-0.036682	-1.276	-0.034003	-1.089
TJX	0.026078*	1.656	0.017062	0.712	0.028079*	1.724	0.015061	0.61
WWW	-0.000144	-0.008	-0.006147	-0.323	0.001325	0.074	-0.007616	-0.394
FL	0.013997	0.713	-0.004427	-0.157	0.013334	0.692	-0.003764	-0.129
FOSL	0.046211	1.17	0.037538	0.858	0.045388	1.117	0.038361	0.874
M	0.002662	0.08	-0.019514	-0.506	0.003269	0.104	-0.020122	-0.51
BKE	0.034115	0.506	-0.045907	-0.517	0.001913	0.025	-0.013705	-0.158
DBI	-0.009072	-0.394	-0.040214	-0.897	-0.001572	-0.065	-0.047715	-1.144
JWN	0.018549	0.561	0.008179	0.192	0.030271	0.955	-0.003544	-0.084
RCKY	-0.012593	-0.429	0.014161	0.309	-0.018351	-0.662	0.019919	0.433
SCVL	0.024487	0.967	-0.053972	-0.852	-0.008212	-0.174	-0.021272	-0.361
CHS	0.039166	1.109	0.041087	1.096	0.047815	1.424	0.032438	0.838
DECK	0.036331	1.018	0.04402	1.13	0.052091	1.539	0.02826	0.72
URBN	0.030058*	1.82	0.021621	0.903	0.029952	1.613	0.021727	0.903
MOV	-0.013983	-0.413	0.040623	0.459	-0.032911	-0.94	0.059551	0.705
AEO	0.010309	0.345	-0.011407	-0.32	0.008875	0.31	-0.009973	-0.271
ROST	0.008107	0.371	-0.000928	-0.034	0.014224	0.682	-0.007044	-0.259
LULU	0.013863	1.081	0.021701	1.456	0.023599*	1.798	0.011966	0.871
SHOO	0.005632	0.38	0.011543	0.627	0.016441	0.992	0.000734	0.047
GES	0.008271	0.24	-0.012071	-0.33	0.004254	0.128	-0.008055	-0.214
PLCE	0.048476*	1.821	0.0256	0.582	0.046017	1.472	0.028059	0.633
ANF	0.009825	0.212	-0.005415	-0.11	0.015398	0.352	-0.010989	-0.22
RL	0.021465	1.368	0.030322	1.471	0.035036**	2.173	0.016752	0.883
ZUMZ	0.029395	1.007	-0.003031	-0.07	0.021087	0.64	0.005277	0.121
CTHR	-0.010543	-0.277	0.00924	0.193	-0.018699	-0.518	0.017397	0.365
COLM	0.008564	0.893	0.016457*	1.846	0.013141	1.427	0.011881	1.312
GIL	-0.001365	-0.065	0.008997	0.347	0.014038	0.555	-0.006406	-0.317
SKX	0.03575	1.13	0.068329	1.082	0.087375*	1.759	0.016704	0.389

HBI	0.011534	0.373	0.007851	0.237	0.019643	0.666	-0.000258	-0.008
PAND.Y	-0.012261	-0.666	-0.036511	-1.08	-0.006916	-0.35	-0.041856	-1.357
EXPR	-0.003215	-0.173	-0.070828	-1.333	-0.017718	-0.804	-0.056324	-1.026
TLYS	-0.009966	-0.425	-0.032818	-1.389	-0.020584	-0.884	-0.0222	-0.931
BGI	0.030943	0.341	0.066864	0.777	0.035543	0.415	0.062264	0.707
IDEX.Y	0.020589	1.351	0.024909	1.582	0.01984	1.22	0.025658*	1.772
FRCO.Y	0.04263***	3.546	0.058998***	2.644	0.06218***	4.963	0.039448*	1.9
VRA	-0.052077**	-2.087	-0.042137	-1.034	-0.034555	-0.821	-0.059659**	-2.341
DLTH	0.207714*	1.769	0.264529**	2.233	0.231684*	1.937	0.240558**	2.065
TPR	-0.003323	-0.63	-0.018023	-1.078	-0.001775	-0.315	-0.019571	-1.228
DLA	0.063373	1.126	0.053505	0.851	0.069198	1.253	0.04768	0.738
CGAC	0.384125	0.831	1.199461	1.063	0.166581	0.299	1.417005	1.411
CTRN	-0.030001	-0.317	0.001582	0.017	-0.031413	-0.351	0.002994	0.03
HNNM	0.022406	1.298	0.005407	0.2	0.020281	1.074	0.007532	0.273
PRDS	-0.036848	-0.518	-0.061253	-0.939	-0.045527	-0.677	-0.052574	-0.782
UAA	0.036963	1.079	0.145425**	2.354	0.100212*	1.662	0.082176*	1.782
MAKS.Y	0.047274	0.725	0.02656	0.391	0.033179	0.485	0.040655	0.621
SWGA.Y	0.018225	0.723	-0.002816	-0.086	0.014751	0.576	0.000658	0.02
CFRU.Y	-0.004877	-0.153	-0.010708	-0.322	0.002366	0.076	-0.017951	-0.559
ADDY.Y	-0.007597*	-1.712	-0.014794***	-2.631	-0.00887**	-2.03	-0.013521**	-2.511

Appendix C Table 4: Fama and French cumulative abnormal returns (CAR) estimated for each of the 72 firms using Equation (5) when  $\tau$  =release of the Court's decision . \* significant at 10%. \*\* significant at 5%. \*\*\*significant at 1%.

## Appendix D

Table 1: Statistically Significant Results (%)

	Oral Arguments		Release of the Court's Decision	
	Market Model	Fama and French	Market Model	Fama and French
$-1 \leq \tau \leq +1$	16.667	20.833	12.5	22.222
$-2 \leq \tau \leq +2$	11.111	18.056	8.333	6.944
$-1 \leq \tau \leq +2$	16.667	23.611	18.056	16.667
$-2 \leq \tau \leq +1$	16.667	19.444	8.333	11.111

Appendix D Table 1: The purpose of this table is to note the number of statistically significant results by event, normal model, and event window. Appendix D Tables 3-6 show firm level economic significance calculations for statistically significant results. All figures in the table are expressed as percentages.

Table 2: Annualized Abnormal Returns Averaged Across Statistically Significant Results (%)

	Oral Arguments		Release of the Court's Decision	
	Market Model	Fama and French	Market Model	Fama and French



$-1 \leq \tau \leq +1$	130.167	313.557	424.677	630.047
$-2 \leq \tau \leq +2$	-54.011	260.719	459.859	730.296
$-1 \leq \tau \leq +2$	52.312	294.37	595.466	523.658
$-2 \leq \tau \leq +1$	-168.769	163.386	404.093	362.155

Appendix D Table 2: The results from Appendix D Tables 3-6 are averaged by event, normal model, and event window to consider the overall economic impact of *Star v. Varsity* on the fashion firms. For example, around the time of oral arguments in the event window of  $-1 \leq \tau \leq +1$ , the fashion firms in this sample, whose results were statistically significant, had annualized abnormal returns of 130.167% for the market model and 313.557% for the Fama and French model, respectively. All figures in the table are expressed as percentages.

Table 3: Oral Arguments Market Model Economic Significance (%)

Ticker	Annualized Abnormal Returns				30 yr. Historical Annual Average Return		
	$-1 \leq \tau \leq +2$	$-2 \leq \tau \leq +3$	$-1 \leq \tau \leq +3$	$-2 \leq \tau \leq +2$	By Firm	S&P 500	Fashion Industry
UFI	-814.753	-	-740.608	-	12.6024261	8.787	17.85
VFC	97.262	172.584	126.223	162.453	17.067866	8.787	17.85
BURB.Y	236.117	140.587	178.354	174.467	18.8843474	8.787	17.85
CRWS	-	-184.953	-	-	30.8790445	8.787	17.85
BOOT	438.157	-	-	-	- 1.67402718	8.787	17.85
GIII	972.743	724.162	929.756	705.005	24.8330668	8.787	17.85
PVH	151.678	-	159.215	-	19.7917819	8.787	17.85
SGC	-	-748.589	-810.734	-	15.4568806	8.787	17.85
FL	-	-	-	-479.866	13.2471323	8.787	17.85
M	579.941	-	502.716	-	9.81526151	8.787	17.85
BKE	-	-	-	-446.182	17.7727684	8.787	17.85
DBI	-	-	343.143	-	8.15907791	8.787	17.85
JWN	-478.693	-488.907	-	-646.572	17.7855134	8.787	17.85
CHS	-284.602	-311.114	-201.138	-401.206	33.6369515	8.787	17.85
ROST	-	-	104.609	-	28.523922	8.787	17.85
ANF	-	-	-	-283.883	17.0965076	8.787	17.85
SKX	-	-	-	461.364	39.7885531	8.787	17.85
EXPR	380.29	-	537.653	-	- 5.18691465	8.787	17.85
TLYS	-	-	-	-1613.156	12.0229803	8.787	17.85
DLTH	-	264.139	-	-	20.2964932	8.787	17.85
TPR	723.258	-	-	569.443	24.5586708	8.787	17.85
PRDS.Y	-439.39	-	-501.446	-	8.9083232	8.787	17.85
UAA	-	-	-	-227.089	19.8037624	8.787	17.85

Appendix D Table 3: For the market model around  $\tau$  = oral arguments, Equation (7) is used to calculate the annualized abnormal return for each fashion firm,  $i$ . This figure is then compared to the 30-year historical average return of each fashion firm, the S&P 500 index, and the fashion industry, which were calculated using Equation (8). For historical calculations, data was collected for the period from 1986-2016. Fashion firms that had no statistically

significant results in any of the four event windows were omitted from the table. Cells that contain dash marks in them had results that were not statistically significant, so tests for economic significance were not relevant. All figures in the table are expressed as percentages.

Table 4: Oral Arguments Fama and French Economic Significance (%)

Ticker	Annualized Abnormal Returns				30 yr. Historical Annual Average Return		
	$-1 \leq \tau \leq +1$	$-2 \leq \tau \leq +2$	$-1 \leq \tau \leq +2$	$-2 \leq \tau \leq +1$	Firm	S&P	Indus. Avg
CPRI	880.83	755.011	756.446	847.94	23.811	8.787	17.85
UFI	-719.183	-	-607.511	-	12.602	8.787	17.85
VFC	140.213	238.757	184.103	219.503	17.068	8.787	17.85
BURB.Y	283.621	213.289	240.191	239.136	18.884	8.787	17.85
BOOT	632.268	-	420.49	-	-1.674	8.787	17.85
GIII	1154.894	1159.859	1217.684	1098.311	24.833	8.787	17.85
LE	229.045	469.185	338.428	419.837	-24.639	8.787	17.85
PVH	214.323	205.73	249.779	168.126	19.792	8.787	17.85
M	696.018	538.41	685.815	509.211	9.815	8.787	17.85
DBI	363.364	-	513.413	-	8.159	8.787	17.85
JWN	-	-	-	-436.363	17.786	8.787	17.85
CHS	-313.367	-429.994	-250.906	-521.612	33.637	8.787	17.85
URBN	-	-944.929	-611.64	-	29.648	8.787	17.85
ROST	116.318	-	168.704	-	28.524	8.787	17.85
GES	-	-	663.374	-	35.621	8.787	17.85
ZUMZ	-	-	547.456	-	13.987	8.787	17.85
SKX	-	406.638	-	527.765	39.789	8.787	17.85
EXPR	654.703	978.092	1000.409	713.233	-5.187	8.787	17.85
TLYS	-	-	-	-1668.77	12.023	8.787	17.85
IDEX.Y	-	149.209	-	-	17.869	8.787	17.85
TPR	806.453	-	-	724.669	24.559	8.787	17.85
CTRN	-	-	-	-553.584	8.81	8.787	17.85
PRDS.Y	-436.148	-349.913	-511.938	-	8.908	8.787	17.85

Appendix D Table 4: For the Fama and French model around  $\tau$  = oral arguments, Equation (7) is used to calculate the annualized abnormal return for each fashion firm,  $i$ . This figure is then compared to the 30-year historical average return of each fashion firm, the S&P 500 index, and the fashion industry, which were calculated using Equation (8). For historical calculations, data was collected for the period from 1986-2016. Fashion firms that had no statistically significant results in any of the four event windows were omitted from the table. Cells that contain dash marks in them had results that were not statistically significant, so tests for economic significance were not relevant. All figures in the table are expressed as percentages.

Table 5: Release of the Court's Decision Market Model Economic Significance (%)

Ticker	Annualized Abnormal Returns				30 yr. Historical Average Return		
	$-1 \leq \tau \leq +1$	$-2 \leq \tau \leq +2$	$-1 \leq \tau \leq +2$	$-2 \leq \tau \leq +1$	Firm	S&P 500	Fashion Industry

BURL	384.033	-	294.664	-	44.02	8.787	17.85
CAL	491.958	-	433.999	-	10.99	8.787	17.85
BURB.Y	-	-258.512	-	-	18.884	8.787	17.85
DXLG	-	-	1564.522	-	23.353	8.787	17.85
CRI	322.988	-	279.197	-	20.381	8.787	17.85
TJX	-	-	205.036	-	21.313	8.787	17.85
JWN	174.04	-	274.716	-	17.786	8.787	17.85
CHS	-	-	435.561	-	33.637	8.787	17.85
URBN	-	-	281.253	-	29.648	8.787	17.85
COLM	-	111.868	-	-	18.594	8.787	17.85
SKX	-	-	778.312	-	39.789	8.787	17.85
IDEX.Y	-	-	-	206.142	17.869	8.787	17.85
FRCO.Y	438.967	396.16262	515.478	308.95	13.992	8.787	17.85
VRA	-690.317	-	-	-574.575	-13.034	8.787	17.85
DLTH	2459.64	1913.924	2076.827	2160.307	20.296	8.787	17.85
UAA	365.509	780.808	727.594	522.548	19.804	8.787	17.85
ADDY.Y	-124.723	-185.097	-126.097	-198.817	20.183	8.787	17.85

Appendix D Table 5: For the market model around  $\tau$  = the release of the Court's decision, Equation (7) is used to calculate the annualized abnormal return for each fashion firm,  $i$ . This figure is then compared to the 30-year historical average return of each fashion firm, the S&P 500 index, and the fashion industry, which were calculated using Equation (8). For historical calculations, data was collected for the period from 1986-2016. Fashion firms that had no statistically significant results in any of the four event windows were omitted from the table. Cells that contain dash marks in them had results that were not statistically significant, so tests for economic significance were not relevant. All figures in the table are expressed as percentages.

Table 6: Release of the Court's Decision Fama and French Economic Significance (%)

Ticker	Annualized Abnormal Returns				30 yr. Historical Average Return		
	$-1 \leq \tau \leq +1$	$-2 \leq \tau \leq +2$	$-1 \leq \tau \leq +2$	$-2 \leq \tau \leq +1$	Firm	S&P 500	Fashion Industry
CPRI	-	-	179.522	-	23.811	8.787	17.85
BURL	459.446	-	-	-	44.02	8.787	17.85
VNCE	4494.665	-	-	-	-48.9	8.787	17.85
CAL	548.549	-	427.283	-	10.99	8.787	17.85
BOOT	614.13	-	-	-	-1.674	8.787	17.85
DDS	-173.963	-	-	-	19.979	8.787	17.85
GPS	302.185	-	233.19	-	25.944	8.787	17.85
GCO	-	-	-	-294.632	19.946	8.787	17.85
DKS	406.697	-	-	320.592	21.916	8.787	17.85
CRI	409.923	-	340.352	-	20.381	8.787	17.85
SGC	-573.461	-	-	-	15.457	8.787	17.85
TJX	317.281	-	256.22	-	21.313	8.787	17.85
URBN	365.705	-	-	-	29.648	8.787	17.85

LULU	-	-	215.337	-	42.159	8.787	17.85
PLCE	589.787	-	-	-	37.943	8.787	17.85
RL	-	-	319.7	-	11.787	8.787	17.85
COLM	-	120.139	-	-	18.594	8.787	17.85
SKX	-	-	797.295	-	39.789	8.787	17.85
IDEX.Y	-	-	-	234.126	17.869	8.787	17.85
FRCO.Y	518.661	430.686	567.388	359.964	13.992	8.787	17.85
VRA	-633.608	-	-	-544.39	-13.034	8.787	17.85
DLTH	2527.187	1931.059	2114.118	2195.096	20.296	8.787	17.85
UAA	-	1061.603	914.433	749.857	19.804	8.787	17.85
ADDY.Y	-92.431	107.995	-80.942	-123.375	20.183	8.787	17.85

Appendix D Table 6: For the Fama and French model around  $\tau$  = the release of the Court's decision, Equation (7) is used to calculate the annualized abnormal return for each fashion firm,  $i$ . This figure is then compared to the 30-year historical average return of each fashion firm, the S&P 500 index, and the fashion industry, which were calculated using Equation (8). For historical calculations, data was collected for the period from 1986-2016. Fashion firms that had no statistically significant results in any of the four event windows were omitted from the table. Cells that contain dash marks in them had results that were not statistically significant, so tests for economic significance were not relevant. All figures in the table are expressed as percentages.