Litigation and Shareholder Wealth of Sport Corporations: Applicability of Event Study Analysis

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Theoretical Background

This project introduces the event study methodology (Bhagat & Roberta, 2007) primarily used in the literature of financial economics to examine the impact of litigation on the shareholder wealth of sport corporations.
Litigation is a major part of the corporate environment (Bizjak & Coles, 1995). Direct or prospective competitors bring legal actions to claim or preempt intellectual property rights associated with sport and fitness products. Recently, NIKE and APPLE jointly introduced an athletic performance tracking system, NIKE PLUS. The technology links NIKE's athletic footwear, exerciser, and I POD applications in order to monitor various aspects of personalized fitness programs, i.e., intensity of exercise, estimated consumption of calories, heart rates, etc. On December 5, 2011, an individual inventor filed an antitrust and patent infringement lawsuit against NIKE and Apple by claiming that they collusively infringed his "Athletic Shoe with Timing Device" technology. Complaint at 2, Cherdak v. Vock et al. (E.D. VA filed Dec. 5, 2011) (Case No. 1:11-cv-1311). Although the court granted a summary judgment for the defendants with respect to the antitrust claim, the patent infringement claim is still being in progress. Cherdak v. Vock et al., 2012 U.S. Dist. LEXIS 57511 (E.D. VA, 2012).

When the Broncos traded Tim Tebow to the Jets in March 2012, REEBOK began to sell his new jersey. Complaint at 2, NIKE, INC. v. REEBOK INTERNATIONAL LTD. (S.D.N.Y. filed Mar. 27, 2012) (Docket No. 12 CV 2275). Since NIKE had allegedly become the exclusive licensee of all NFL player jerseys as of March 1, 2012, it immediately filed a lawsuit for trademark infringement. The complaint alleged that REEBOK's licensing agreement with the NFL expired as of March 1, 2012, and NIKE acquired the exclusive rights for selling such licensed merchandise. Id. at 9. Later the parties settled the case. NIKE, INC. v. REEBOK INTERNATIONAL LTD. (S.D.N.Y. settled April 10, 2012) (Docket No. 12 CV 2275).

While many high-profile cases in sport industry are initiated by private parties, government agencies also bring lawsuits when sport corporations commit deceptive marketing practices. In 2011, REEBOK advertised that its EasyTone footwear makes consumers' lower body work up to 11% more and tones 28% more than regular sneakers, just by walking. Complaint at 5, Fed. Trade Comm'n v. Reebok Int'l Ltd. (N.D. Ohio filed Sept. 28, 2011) (Case No. 1:11-cv-02046-DCN). In response to these unsubstantiated marketing claims, the Federal Trade Commission began an investigation for deceptive marketing practices under § 5(a) and § 12 of the Federal Trade Commission Act, 15 U.S.C. § 45(a) and § 52(a)(1). Eventually, REEBOK and the federal agency reached a settlement. Fed. Trade Comm'n v. Reebok Int'l Ltd. (N.D. Ohio settled Sept. 28, 2011) (No. 1:11-cv-02046-DCN). Under the settled stipulation, REEBOK had to establish a $25 million fund that was available for consumer refunds. Id. at 7. Reebok is also permanently enjoined from making any health or fitness-related efficacy claims for its toning shoes unless they are true and empirically supported by reliable scientific evidence. Id. at 5-7. The federal agency conducted another investigation against SKETCHERS for a similar type of deceptive marketing claims. The case was settled for $40 million. Fed. Trade Comm'n v. Sketchers U.S.A., Inc. (N.D. Ohio settled May 16, 2012) (No. 1:12-cv-01214).
Given the litigious business environment, studies examined the impacts of private litigation (Bizjak & Coles, 1995) or public authorities' regulation (Klick & Sitkoff, 2008; Sloan, Trogdon, & Mathews, 2005) on shareholder wealth by using the event study analysis (Bhagat & Roberta, 2007).

Methodology

An event study analysis measures the magnitude of the effect that an unanticipated event has on the expected profitability and risk of a portfolio of firms associated with that event (Brown & Warner, 1985). It has become one of the most widely used methodologies in a variety of disciplines, such as finance, accounting, law, and management (Agrawal & Kamakura, 1995). The methodology is consisted of five steps: (1) defining the event and dates when the information became public; (2) measuring the target security's actual return on the dates of interest; (3) estimating the target security's expected return based on the relationship between such security and the market as a whole; (4) computing the abnormal return by subtracting the expected return from the actual return; and (5) assessing the statistical significance of the abnormal return. (Bhagat & Roberta, 2007). For the purpose of event study analysis, markets are presumed to correctly and quickly response all publicly revealed information regarding a firm's business activity. This presumption is predicated on the so-called efficient market hypothesis (Johnson, Mittelhammer, & Blayney, 1991). For example, public announcement of Reebok's $25M and Skecher's $40M settlements are "events" that would affect the stock values at that moment when the information was publicly disseminated. For the purpose of this study, the authors define the "event" as major lawsuits filed by either private parties or government agencies against publicly traded sport corporations from January 1, 1990, to December 31, 2012.

Short-term Event Analysis & Cross-Sectional Regressions

In this study, a market model is estimated for each individual firm using stock trading days of returns against the market value, S&P 500 and this is employed to compute the cumulative abnormal return (CAR) within 1 day (+1), 2 day (1, +1), 3 day (-1, +1) and 5 day (-2, +2) time windows. Z-test and the generalized sign test are applied to test the significance of abnormal returns (ARs) and cumulative abnormal returns (CARs). A set of multiple regressions will be used to investigate other financial variables (e.g., market value, cash flow, and ROA) and dummy variables reflecting outcome of litigation, e.g., settlement, fines, injunction, etc.

Sample and Data Collection

Manual searches of online database such as Lexis-Nexis will be conducted to identify the event announcements. Firms' stock returns will be collected using the daily returns file available from the Center for Research in Securities Prices (CRSP) at the University of Chicago. The data will be analyzed using Eventus for CARs and SPSS Package for cross-sectional regressions.