Halo, horn, or dark horse biases: Corporate reputation and the earnings announcement puzzle

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ARTICLE INFO

ABSTRACT

The primary goal of this study is to explore whether the halo, horn, or dark horse effects manifest in U.S. stock markets. To investigate the issue, an ideal empirical framework is newly created by combining a proxy for previous corporate perception, corporate reputation, with a well-known financial market anomaly, the earnings announcement puzzle. The interdisciplinary research presented in this study is original in its methodological design. Using companies listed and traded on the NASDAQ, NYSE, and AMEX between the first quarter of 2006 and the second quarter of 2011, the results show that investors' buying behaviors are influenced by significant horn and dark horse effects in the stock markets. Our findings suggest a short-term trading strategy that adopts long (short) positions in low-reputation stocks with the highest (lowest) class of earnings surprise over the three-day period surrounding the earnings announcements, generating a premium of 9.984%. On the basis of the price reversal effect, our results reveal a long-term trading strategy that adopts long (short) positions in low-reputation stocks with the lowest (highest) class of earnings surprises, starting from two days after the earnings announcement. The long-short positions for thirty, forty-five and sixty consecutive trading days will respectively generate premiums of 2.672%, 5.918%, and 7.602%.

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1. Introduction

In finance, the stock price of a firm is contingent on not only investors' judgments of the firm's performance (specific attribute information) but also their general impressions of the firm (non-attribute information). If we accept that market forces (i.e. demand and supply) significantly affect a firm's stock price, then the determination of stock prices fundamentally relies on the cognitive and emotional processes aimed at capturing the general impressions of the firm and specific judgments of the firm's performance that are stored in investors' respective memories (Ackert and Deaves, 2010; Damasio, 1994; Elster, 1998; Hermalin and Isen, 2000; LeDoux, 1996; Rolls, 1980). Researchers of behavioral finance have noted that the psychological processes that underlie an investor's evaluation of a stock may be affected by multiple classes of bias, such as familiarity, representativeness, overconfidence, herding, and loss aversion. This list of psychological biases may possibly include halo, horn, or dark horse effects as well.

Assume that there are two companies, one of which is perceived positively by investors, and the other is perceived negatively. If investors' trading behaviors create a halo effect on stock returns, when the two companies deliver the same positive surprise to the market, investors will value the positively perceived company higher than the negatively perceived company. Clearly, the horn effect is the opposite of the halo effect. That is, if investors' trading behaviors create a horn effect on stock returns, when the two companies send the same negative surprise to the market, investors will value the negatively perceived company

lower than the positively perceived company. Moreover, if investors' trading behaviors create a dark horse effect, then investors will evaluate a previously unnoticed company positively following that company's delivery of an unexpected positive surprise to the market. As you can see from the above definitions, each of these three psychological biases is composed of three identical elements: previous corporate perceptions, unexpected positive (or negative) surprise and firm valuation. The primary goal of the current study is to explore whether reputation moderates the level of surprise exhibited in stock markets when news arrives, that is, whether the halo, horn, or dark horse effects manifest in U.S. stock markets. To investigate the issue, an applicable empirical framework is newly created by combining previous corporate perception with a well-known financial market anomaly, the earnings announcement puzzle. The reason earnings announcements provide a useful setting to examine the effects of investor perception on investment decisions is because the unexpected earnings could be divided into groups of positive and negative surprises. Thus, we are able to test the two directions of these effects simultaneously.

The earnings announcement puzzle refers to finding that firms reporting unexpectedly high earnings experience positive abnormal returns for several weeks following an earnings announcement, whereas those reporting unexpectedly low earnings experience negative abnormal returns. The delayed market reaction to earnings news has been studied extensively in the finance and accounting literatures and has been found to be one of the most persistent and robust anomalies to challenge the validity of the efficient market hypothesis. Researchers remain puzzled by the way a company's stock prices at the time of the announcement follow the direction and magnitude of the earnings surprises, and this effect on stock prices continues even after the announcement is made. Using companies listed and traded on the NASDAQ, NYSE, and AMEX between the first quarter of 2006 and the second quarter of 2011, this study explores whether investors' previous perceptions of a company affect their responses to unexpected changes in the company's fundamental information.

In the research setting, we utilize corporate reputation ratings as a proxy variable for corporate perception. We also use standardized unexpected earnings (*SUE*) and announcement-date cumulative abnormal returns, two key elements of the earnings announcement framework, as proxy variables for unexpected positive (or negative) surprise and firm valuation, respectively. We measure corporate reputation using a Fortune magazine survey that provides annual rankings of the most admired American companies. The key attributes assessed for ranking are innovation, people management, use of corporate assets, social responsibility, quality of management, financial soundness, long-term investment, and quality of product or services. Furthermore, we consider positive earnings surprises as good news and negative earnings surprises as bad news. From the values of cumulative abnormal returns for various assigned portfolios, we will be able to verify whether investors exhibit any psychological bias in their purchasing behaviors. To put it another way, this study is designed to test whether a firm's reputation (high vs. low) moderates the relationship between unexpected earnings news and immediate and delayed market responses.

Unlike general consumers, whose buying behaviors suggest the influence of the halo effect on the purchase of nonfinancial products or services, our findings suggest that investors' buying behaviors are influenced by significant dark horse and horn effects in the stock markets. More specifically, the results indicate that when standardized unexpected earnings are positive (unexpected positive surprise), the portfolios of low-reputation companies have significantly higher positive announcement three-day cumulative abnormal returns than those of high-reputation companies. Contrarily, when standardized unexpected earnings are large and negative (unexpected negative surprise), portfolios of low-reputation companies have significantly lower negative announcement three-day cumulative abnormal returns than those of high-reputation companies. However, the positive (negative) cumulative abnormal returns after the earnings announcements reverse in 30 trading days, indicating an overreaction in the stock prices. These results remain robust even after controlling for other potential variables that have been cited in the literature.

Although researchers within the sociology, marketing, organisation, or communication management fields have provided empirical evidence for the halo, horn, or dark horse effects, these psychological biases have yet to be explored in the field of finance. As such, this paper contributes to the previous literature in several aspects. First, the paper introduces the three aforementioned psychological biases—halo, horn, or dark horse effects— to the behavioral finance literature and applies them to an important area of practice (stock pricing). Second, it extends knowledge related to the ways in which investors' previous perceptions of companies influence their investment decision-making processes. If investors' behavior is driven by their mind, any bias in perceptions of companies can have substantial effects. Biases can permeate throughout the entire pricing process, resulting in distortions of firm valuation. Third, our paper introduces corporate reputation into stock market anomaly field. Corporate reputation is a common variable of focus in the field of strategic management, whereas the earnings announcement puzzle is the well known stock market anomaly in the field of finance. The interdisciplinary research presented in this study is original in its methodological design, as it incorporates corporate reputation ratings as a proxy measure for investor perceptions with the earnings announcement puzzle in order to achieve our research goals. Finally, our findings revealing horn and dark horse effects around announcements provide a trading strategy for short-term investors, and the price reversal following the announcements provides a trading strategy for longer-term investors. Taken together, the empirical results of this study join the burgeoning literature on the earnings announcement puzzle and offer the potential for significant trading gains.

The remainder of the paper is organized as follows. Section 2 discusses why halo, horn, and dark horse effects can affect market reactions to companies' announcements. In Section 3, we describe the sample selection, portfolio formation method, cross-sectional regression model, primary variables of interest, and control variables that we applied in this study. Section 4 presents the empirical results of the analysis, discusses the results, and provides additional tests of robustness to validate our findings. Section 5 offers some concluding remarks.