When firms increase advertising spending, their stock prices climb in tandem

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Recent research has found that advertising has an important impact on the liquidity and breadth of ownership of stocks. This is intriguing as advertising is intended to increase the awareness of a firm's products rather than its securities. Nevertheless, there appears to be a spillover effect. In a recent paper, I start by providing evidence of the spillover effect of advertising on firm valuation. In particular, I show that an increase in advertising spending is accompanied by a contemporaneous rise in retail buying and higher abnormal stock returns, and is followed by lower future returns. I then examine whether firm managers are aware of this spillover effect of product-market advertising. Evidence from insider sales, as well as seasoned equity offerings and stock-financed acquisitions, appears consistent with the view that managers opportunistically adjust advertising spending, in part, to influence short-term stock prices.

The temporary stock-return effect of advertising

There are good reasons to believe that advertising can have a temporary impact on firm valuation. First, a typical investor has to search through thousands of stocks when making a buy decision but only through the limited number of stocks he already holds when making a sell decision. To the extent that attention is a scarce resource, investors are more likely to buy attention-grabbing stocks than to sell them. As such, advertising, which is designed to attract attention, can temporarily boost stock value by generating more buy orders than sell orders. Second, although advertising almost never portrays the product or firm in a comprehensive, objective manner, investors with limited attention may take advertisements at face value and react overly optimistically, thus resulting in a temporary stock price overshooting.

This prediction of a spillover effect from product market advertising to financial market valuation is borne out in the data. Firms in the top decile ranked by year-to-year changes in advertising spending outperform those in the bottom decile by almost 13% in the ranking year, but underperform by a combined 15% in the following two years. In addition, the documented return effect is stronger for the subsets of firms with lower analyst coverage, lower institutional ownership, higher retail trading intensity, as well as for firms whose brand names are more reminiscent of the firm name.

To further pin down the underlying mechanism of the documented return pattern, I examine trading behavior of retail vs. institutional investors. Since retail investors are usually more attention constrained than their institutional counterparts, we expect that retail investors are more susceptible to the influence of advertising and thus the net buyers of firms with increased advertising expenditures. Regression results confirm this prediction: a one-standard-deviation increase in advertising spending is associated with a 3.4% increase in small-trade imbalance (which measures retail investors' propensity to buy a stock) in the same year. Interestingly, there is also a 4.3% increase in short interest (i.e., the amount of shares shorted divided by the total number of shares outstanding) in the same period, suggesting that institutions are taking the other side of the trades.

Advertising around equity sales

If product-market advertising can attract investor attention and temporarily boost firm value, a natural question to ask is whether firm managers are aware of this temporary return effect and the extent to which managers adjust firm advertising to exploit investors' bounded rationality. Anecdotal evidence suggests that managers indeed use advertising to influence market perceptions and firm valuation. An October 2003 issue of the *Wall Street Journal* reports: "United Technologies Corp has launched an advertising campaign focused on the Wall Street area and a

Times Square building looking into a Morgan Stanley trading room [...] seeks to overcome the view that it is steady, but not a star and to correct what it believes is a 20% discount in its share price against those of peers."

To empirically test managers' opportunistic behavior, I examine variation in advertising spending around times when short-term stock prices matter the most—i.e., around equity sales by both top executives and the firm itself. The main prediction is that we should observe a sharp increase in advertising spending before equity sales (in order to pump up the stock price), and a significant decrease in advertising spending in the subsequent year.

There indeed is an inverted V-shaped pattern in advertising spending around share sales by top executives in the firm (e.g., the chief executive officer, president, chairman of the board). The average advertising spending in the years prior, contemporaneous, and subsequent to insider sales is 5.3% higher, 6.9% higher, and 3.9% lower than that in other years, respectively. Taking the mean annual advertising spending of \$42 million, these coefficients imply that firms in the years prior, contemporaneous, and subsequent to insider sales spend \$2.2 million more, \$2.9 million more, and \$1.6 million less on advertising relative to other years, respectively. Interestingly, if we instead focus on share sales by lower-tier executives (e.g., the chief financial officer, chief investment officer, and chief technology officer) who have little control over firm investment decisions, we do not observe any significant variation in advertising spending around their stock transactions.

I conduct similar analyses of advertising spending around firm equity issues and stock-financed acquisitions. There also appears an inverted V-shaped pattern in advertising around these corporate events. For example, advertising spending in years of equity issuance and stock-finance acquisitions is 7.7% and 14% higher than that in other years, respectively; in other words, firms spend an additional \$3.2 million and \$5.9 million on advertising in these years. Not surprisingly, there is no similar pattern in advertising spending around firm debt issuance or cash-financed acquisitions, as equity valuation has minimal impact on these corporate events.

Notes:

- This article is based on the authors' paper Attracting Investor Attention through Advertising, Review of Financial Studies (Oxford Journals) (2014) doi: 10.1093/rfs/hhu019 First published online: March 25, 2014.
- This post gives the views of its author, not the position of LSE Business Review or the London School of Economics.
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