Measuring the Financial Value of Marketing Strategy with Excess Stock Market Return

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ABSTRACT

This paper proposes excess stock market return as a way to measure the impact of marketing strategy on firm value. First, it provides an overview of event study method. An event study examines the excess return to a firm’s stock price after the release of information that is relevant to the firm’s financial success. Second, it shows how excess return captures a marketing strategy’s impact on firm value. It presents a model that illustrates how a marketing strategy impacts consumers, future cash flows, firm value, investors’ expectations, and excess return. Third, a comparison shows that excess return stacks up well against standard marketing metrics. Excess return yields unbiased estimates, allows direct causal inference, is future oriented, includes all cash flows, accounts for opportunity costs, factors in risk, and takes into account the time value of money.

Keywords: Cash Flow, Event Study, Excess Return, Financial Success, Firm Value, Marketing/Finance Interface, Marketing Strategy, Stock Market

INTRODUCTION

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There is an old saying in marketing, half of the marketing budget works, half does not, but it is not clear which is which. Most companies do not base marketing strategy on data-driven metrics (Jefferey, 2010). At the same time, there is growing interest in measuring a marketing strategy’s financial impact. Of the firms that use metrics, market share is often the financial metric that guides decisions (Farris, et al., 2010). Less often, firms look at ROI. Yet, neither metric fully portrays the financial value of marketing strategy (Fisher, 1984; Jacobson, 1987; Lev, 1980). Thus, experts call for measures that capture the return on marketing investment (Day & Fahey, 1988.) This paper describes how to measure the financial value of marketing strategy with excess stock market return. First, it provides an overview of event study method. An event study examines the excess return to a firm’s stock price after the release of information that is relevant to the firm’s financial success. Second, it shows how excess return captures a marketing strategy’s impact on firm value. It presents a model that illustrates how a marketing

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strategy impacts consumers, future cash flows, firm value, investor’s expectations, and excess return. Third, a comparison shows that excess return surpasses standard marketing metrics in vital ways.

**Excess Stock Return Measures the Present Value of an Event’s Discounted Future Cash Flows**

**Event Study Method**

Researchers in finance and accounting have long used the stock market for scholarly research (Fama, et al., 1969). Such a study is labeled an event study because the researcher examines how the stock market reacts to (values) a public announcement of a particular event. Financial scholars have studied announcements of stock splits, regulatory changes, and accounting procedures.

**Present Value Model of Asset Valuation**

A principle of event study is that investors together assess a firm’s value. This value is equal to the present value of discounted future cash flows of the firm (illustrations assume no debt to simplify formulas and discussion). Firms have long used the present value model to determine the value (V) of all types of assets (e.g., Francis 1980). This model recognizes that assets are valuable because they generate positive cash flows into the future (F). The model also acknowledges that earnings in the future are not worth as much as they are today, so they are discounted by a rate of return (r) that factors in risk (economy, inflation). The present value model is:

\[
V = \sum_{t=1}^{\infty} \left[ \frac{F_t}{(1 + r)^t} \right] 
\]

(1)

**The Stock Market is Efficient**

A premise of event studies is that the stock market is efficient (efficient market theory, EMT). Efficiency occurs because the market rapidly absorbs information into security prices. That is, stock price quickly reflects the present value of expected future cash flows based on new information. The conclusion of roughly 45 years of research is that the market is, in general, efficient (Fama, 1970). As a whole, investor reactions are rational and swift. Early evidence demonstrated that 85-90% of yearly income numbers is reflected in stock prices prior to their publication in annual reports (Ball and Brown, 1968). Moreover, research illustrates that reaction to dividends announcements is rational (Fama, Fisher, Jensen, and Roll, 1969).

Supporting this, EPS growth at time t+1 is predicted by stock return at time t (Beaver, Lambert, and Morse, 1980). Further evidence shows that stock return reflects next years (i) change in capital expenditures for nonfinancial corporations (R$^2$=.54), (ii) change in average real rate of return on corporate capital stock (R$^2$=.4), and (iii) change in GNP (R$^2$=.68) (Fama, 1981). Given the wide-ranging evidence from studies in accounting, finance, industrial organization, and macroeconomics, there is broad consensus that the stock market is efficient. For example, Fama (1991, pp.1601-1602 and 1607) concludes: “This evidence tilts me toward the conclusion that prices adjust efficiently to firm-specific information.” In recognition of this work, Fama received a Nobel Prize in 2013.

**Market Efficiency and Investor Behavior**

Anything that has an impact on a firm’s performance also affects its stock price. Investors form expectations about future costs, revenues, opportunity costs, risk, and their required rate of return. Based on this, they make a judgment about the present value of these future earnings. If the present value is positive, investors buy the stock and the price rises. If the present value is negative, they sell the stock and the price declines. It is important to note that the market votes quickly, as each bit of information comes out. Moment by moment, a stock’s price changes as investors update their predictions.
Balancing Policies, Principles, and Philosophy in Information Assurance
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Reducing Competitive Risk in Indian Banks through Business Intelligence
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