Chapter 2
A Comparison of Excess Stock Market Return to Standard Marketing Metrics

Vicki Lane
University of Colorado – Denver, USA

Madhavan Parthasarathy
University of Colorado – Denver, USA

ABSTRACT
Marketing metrics provide measures of the impact of various marketing strategies. This paper examines excess stock market return as a potential measure to include in the metric arsenal. Excess stock return reflects investors’ views of the likely impact of a particular strategy. Investors form expectations about how the strategy will affect future cash flows. Consequently, a stock’s price changes to reflect investor “votes” about the strategy’s impact on firm value. By tapping into event study techniques for measuring the impact of an announcement, firms can better understand the value of a particular marketing strategy. An assessment of various marketing measures indicates that excess stock market return compares favorably to other 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.

INTRODUCTION
There is growing interest in measuring a marketing strategy’s financial impact (Cao & Sorescu, 2013; Sorescu, Warren, & Ertekin, 2017; Yan & Cao, 2017). Yet, most companies do not base marketing strategy on data-driven metrics (Jefferey, 2010). There is an old adage in marketing, half of the marketing budget works, half does not, but it is not clear which is which. For firms that do try to track the connection between strategy and success, market share is often the financial metric that guides decisions (Farris, et al., 2010). Even fewer firms look at ROI. However, the financial value of marketing strategy is not fully captured by either metric (Fisher, 1984; Jacobson, 1987; Lev, 1980). Consistent with experts’ rec-

ommendation to 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. It provides an overview of event study method, a technique that examines the excess return to a firm’s stock price after the release of information that is relevant to the firm’s financial success. The paper also illustrates how excess return is useful as a metric for judging the success of marketing strategy. A comparison shows that excess return surpasses standard marketing metrics in vital ways.

Financial analysts recognize that risk (volatility in earnings) and return go hand in hand. That is, greater returns are the reward for taking on more risk. As the next section describes, excess return reflects the return to a firm that occurs over and above what is expected based on systematic risks of the stock market as a whole. Systematic risks occur because of macro economic events such as interest rate fluctuations, inflation, war, and recessions. These risks impact the volatility of financial returns for all firms. Excess return represents how investors judge the potential outcome of a particular firm’s marketing strategy beyond what they expect would occur based on these systematic economic risks that impact all firms.

BACKGROUND: EXCESS STOCK RETURN AND FINANCIAL THEORY

Present Value Model and 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.

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. 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)

Stock Market Efficiency, Investor Behavior, and Unbiased Estimates of Value

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, & Roll,