Linking marketing activities to shareholder value: philosophical and methodological issues

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ABSTRACT

The stream of marketing-finance interface has provided justification for marketing's important value in the business world. However, little attention has been paid to address philosophical and methodological issues and to provide scientific rationales of marketing-finance. Therefore, the authors strive to address several philosophical and methodological issues in the marketing-finance interface research stream. The marketing-finance interface research appears to adopt a relativistic approach, seeking to apply rigorous empirical methods and secondary large-scale archival data for higher external validity. Recommendations for solidification of philosophical and methodological foundations are provided.

Keywords – Marketing-Finance interface, Marketing Metric, Firm valuation, Research Methodology, External validity
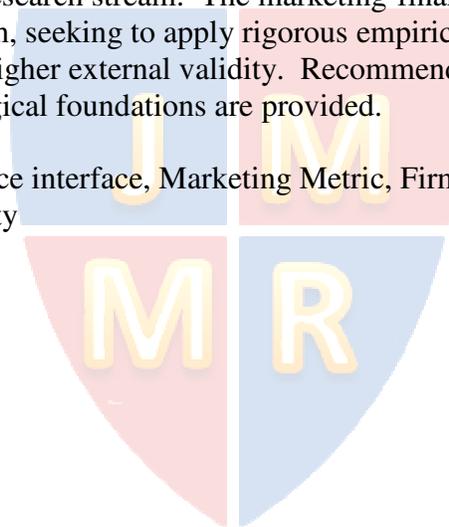
INTRODUCTION

Prior marketing research has focused on the relationship between firm capabilities and actual consumption market performance measures such as market share, brand awareness, and customer satisfaction. For example, if a firm changes its advertising strategy in an effort to improve advertising effectiveness, it generally seeks consumer based brand awareness or market share as a positive outcome (Lovett and MacDonald, 2005).

In recent years, as there has been a call for more financial accountability in marketing, many scholars have focused on the marketing-finance interface (Hyman and Mathur, 2005). The marketing-finance interface approach, a relatively new research stream, is a macro-level focus that examines the relationship between firm level advertising spending and firm level financial performance. As companies have grown to realize that consumers are not the advertising target audience but also investors (Kim and Morris, 2003), researchers examining the marketing-finance interface researchers maintain that advertising effectiveness should be measured with firm's sales and stock market valuation. Unlike previous research on advertising effectiveness mentioned above, financial value of advertising can be approximated with appropriate marketing mix modeling statistical methods.

As shown in Figure1, the marketing-finance interface can be defined as consisting of three components, marketing variables, finance related factor and methods. In other words, the marketing-finance interface seeks to find the relationship between marketing variables and finance variables using a variety of advanced statistical methods. The marketing-finance interface develops the relationship between marketing related factors and finance outcome at the firm level. The marketing-finance interface refers to a research domain that investigates the relationship between marketing input activities and financial outputs and vice versa. It starts with the basic assumption that marketing activities create financial value based on market-based asset theory, customer equity theory, brand equity theory, and product life time value theory.

Basically, marketing is involved with the task of developing and managing market-based assets. Market-based assets include customer relationships, channel relationships and partner relationships. These market-based assets influence shareholder value by accelerating and enhancing cash flows, reducing the risks of cash flows, and increasing the value of cash flows (Srivastava, Shervani & Fahey, 1998).

The stream of the marketing-finance interface makes it possible to provide justification for marketing's value as a functional discipline in the business world. However, little attention has been paid to identify philosophical and methodological issues and to provide scientific rationales for the marketing-finance interface. Therefore, the authors review the existing literature of the marketing-finance interface and strive to address several philosophical and methodological issues in the marketing-finance interface research stream.

RELATIVISTIC MOTIVATION

Hunt asserted that marketing should not adopt relativism as a philosophy of science by arguing that relativism cannot distinguish science from non-science (Hunt, 1984). However, the marketing-finance interface appears to start with a relativistic approach. According to Peter and Olson, the relativist researcher holds that "science is subjective,"and that "scientific knowledge is relative to a particular context and period of time in history." (Peter & Olson, 1983).

Given this description of the basics of relativism, the marketing-finance interface appears

to support concepts that are marketing-dependent finance dynamics. In other words, the existing framework for finance research was perceived to be restricted within definitional boundaries, but the marketing-interface attempts to integrate those two disciplines into one coherent relativistic framework.

Srivastava and his colleagues develop a conceptual framework that makes explicit the contribution of marketing to shareholder value. Also, they advance the notion of market-based assets as a principal bridge between marketing and shareholder value and provide rationale and justification for a marketing contribution to improvement of financial performance for the firm. Potential measures of financial performance created by marketing are offered for future empirical study (Srivastava et al., 1998). Nine major propositions are developed as to how marketing creates shareholder value, including the impact of brand equity, customer equity, customer satisfaction, research and development (R&D) and product equity, and specific marketing-mix actions on the formation of value (Srinivasan et al. 2008).

First, with respect to customer satisfaction, the relationship between customer satisfaction and stock prices suggests customer satisfaction leads to excess returns, and that satisfied customers are economic assets with high return/low risk (Fornell, Mithas, Morgeson III, & Krishnan, 2006). Higher levels of customer dissatisfaction harm the firm's future stock returns, leading to a conclusion that reducing customer dissatisfaction can boost a firm's stock returns (Luo, 2007). The effects of both customer satisfaction and customer complaint on the stock value gap of firms are also addressed (Luo & Homburg, 2008). Customer satisfaction is related to stock prices, on the basis of abnormal portfolio returns compared against the risk-adjusted benchmark portfolio (Luo & Nguyen, 2008).

Second, product quality and new product development are found to have impacts on financial performance. The impact of product quality on stock market value is assessed using an event study that examines how information about the quality of the new products of a firm affects abnormal returns (Tellis & Johnson, 2007). The magnitude of the economic impact of being late to the market by analyzing a sample of 101 new product delay announcements made by firms indicates the importance of managing product development effectively (Hendricks & Singhal, 1997). The short- and long-term impact of marketing actions on financial metrics are investigated, including top-line, bottom line, and stock market performance by comparing the effects of new product introductions and sales promotions on the firm's performance and investor's performance (Pauwels, Silva-Risso, Srinivasan, and Hanssens, 2004).

Third, advertising and R&D are regarded as critical factors that influence financial returns. The stock price is shown to incorporate the investor's unbiased beliefs about the value of R&D (Chan, Josef & Sougiannis, 2001). Empirical evidence for the long-term benefit of R&D in terms of stock return and operating performance shows that R&D increases are beneficial investments, but the market is often slow to recognize the full extent of this benefit (Eberhart, Maxwell & Siddique, 2004). A firm's advertising and R&D expenditures may produce awareness and support among both finance executives and senior management. In fact, much less is known about the relationship between important indicators of marketing strategy and systematic risk. After accounting and finance factors related to systematic risk are controlled, increases in advertising/sales and R&D/sales can lower a firm's systematic risk (McAlister, Srinivasan & Kim, 2007).

Fourth, financial markets tend to respond to societal contributions by firms. Companies perceived as having a strong corporate social responsibility (CSR) commitment often have an increased ability to attract and to retain employees (Turban and Greening, 1997). Of the

marketing capabilities oriented toward increasing financial performance of the firm, the field of CSR has grown exponentially in the last decade. A larger number of companies than at any time previously are engaged in an intensive effort to define and integrate CSR into all aspects of their businesses. An increasing number of shareholders, analysts, regulators, activists, labor unions, employees, community organizations, and news media have initiated activities leading companies to be more responsible for an evolving set of CSR issues. Accordingly, there is increasing demand for governance transparency and growing expectations that corporations measure, report, and continuously improve their social, environmental, and economic performance (Tsoutsoura, 2004). The relationship between CSR and the market value of the firm are addressed in the marketing-finance interface. CSR affects market value partially through the mediator of customer satisfaction and returns to CSR can be both positive and negative depending on the level of firm's capabilities (Luo & Bhattacharya, 2006).

Fifth, the value of a firm's brand equity is an important driver of financial reward. Brand attitude and brand name familiarity influence the stock market return associated with a brand extension announcement (Lane & Jacobson, 1995). The five basic pillars of brand asset measurement can provide incremental information content to accounting performance measures in explaining stock return (Mizik & Jacobson, 2008).

In summary, advertising, customer satisfaction, brand, R&D, quality, new product introduction, and corporate social responsibility have been considered as marketing variables. Accordingly, it may seem that the foundation of the marketing-finance interface may be based on relativism because this interface assumes that the financial market can be influenced not only by financial dynamics but also by marketing activities.

Although Hunt criticized relativism as nihilistic and self-refuting (Anderson, 1986), the marketing-finance interface accepts relativism and assumes that marketing activities such as advertising, R&D, and customer satisfaction can lead to changes in the response of the financial market to the firm. The marketing-finance interface seeks to investigate the relationship between marketing and finance by adding a more dynamic spectrum to existing finance theories and practices.

However, finance activities can also have an impact on marketing outcomes, creating a new dynamic in examining the marketing-finance interface. As marketing activities can influence financial performance of the firm, finance activities can also impact marketing strategy. For example, the increased stock return or cash flow volatility may result in a reduction of marketing expenditures, shrinking advertising activities and R&D (Minton & Schrand, 1999). Similarly, capital markets can play a critical role in changing, maintaining, or abandoning specific marketing initiatives (Markovitch, Steckel & Yeung, 2005).

EMPIRICAL METHODS

While the marketing-finance interface accepts realism as a starting point, realism is based on rigorous statistical skills and robust empirical results. Logical empiricism, the current dominant philosophical approach employed in marketing (Desphane, 1983), shares the nature of science with logical positivism and assumes that "the purpose of the philosophy of science is to clarify, or explicate, the language of science, using a method that conjoined critical discussion with formal logic" (Hunt, 2003). In the same manner, Hempel, a logical empiricist, maintained that "science strives for objectivity in the sense that its statements are to be capable of public tests with results that do not vary essentially with the tester" (Hempel, 1970).

Given this fundamentals of logical empiricism, the marketing-finance interface seeks to uncover universal laws between marketing and finance that govern the external business world. In this sense, the pursuit of empirical testing can be accepted as an evidence that the marketing-finance is based on logical empiricism. Marketing-interface researchers attempt to test their hypotheses using longitudinal multiple regression, event study, vector autoregression (VAR) and other econometric tools. An empirical testing process has been applied to the marketing-finance interface as seen in Figure 2 (Hunt, 2002).

For example, one can see the harmful impact of consumer dissatisfaction on a firm's stock valuation using longitudinal real-world data and a variety of statistical techniques (Luo, 2007). Hendricks and Singhal empirically investigate the impact of winning a quality award on the market value of firms by estimating the mean abnormal change in the stock prices of a sample of firms on the date when information about winning a quality award was publicly announced. They provide evidence as to impact of implementing an effective quality improvement program on the market value of the firm, a widely accepted measure of firm performance (Hendricks & Singhal, 1996). Chan et al. check whether the results are robust with a variety of risk-adjustment procedures, including controls for confounding effects due to firm size, book-to-market, and past return. Also, it provides some evidence that R&D intensity is positively associated with return volatility (Chan, Josef & Sougiannis, 2001).

The assertion that marketing activities create financial value is well accepted in the academic community as well as among marketing practitioners and investors. Acceptance of the marketing-finance interface model can be attributed to pursuit of rigorous and robust empirical methods. The marketing-finance interface provides an empirical research framework to estimate the value of marketing under a logical empiricism philosophy by adding shareholder value-based criteria to assess the effectiveness of marketing activities.

The marketing-finance interface extends the research domain beyond the traditional domain of marketing by empirically testing new associations between marketing and finance based on a logical empiricist structure. The marketing-finance interface attempts to minimize the problems of measurement and maximize robustness of empirical results using longitudinal analysis and VAR, lending support to the conclusion that the marketing-finance interface is constructed on the basis of logical empiricism (Anderson, 1983).

EXTERNAL VALIDITY

The marketing domain includes both the impact of marketing activities on financial performance and the influence of financial outcomes on marketing initiatives. Financial variables include short-term and long-term stock returns, volatility (risk), and analyst forecasting (Srinivasan & Hanssens, 2007). In fact, the marketing-finance interface attempts to improve the external validity of this model. Existing consumer research approaches examine individual responses to marketing activities such as advertising and promotion, but the marketing-finance interface typically uses macro-level data of consumer satisfaction and advertising expenditures. For example, an individual consumer response to marketing activities can be collected from consumer surveys, but the marketing-finance interface data comes from large-scale archival databases such as ACSI, CRSP, Compustat, IBES, Fortune and other source as shown in Table 1, creating an improvement of external validity, improving statistical generalizability, conceptual replicability and realism (Lynch, 1982).

Tellis and Johnson suggest that published ratings of a product's quality, such as a new

product evaluation in The Wall Street Journal, are valid sources of quality information with important strategic and financial impacts (Tellis & Johnson, 2007). Data on customer satisfaction are collected not from individual questionnaire response but from the American Customer Satisfaction Index (ACSI) (Luo, 2007). Using a portfolio approach, Fornell et al examine whether excessive stock returns might be generated as a result. (Fornell, Mithas, Morgeson III, and Krishnan, 2006).

Meanwhile, Mizik & Jacobson update the Young and Rubicam Brand Asset Valuator (Y&R BAV: Differentiation, Relevance, Esteem, Knowledge, and Energy) model by adding 'Energy' such as innovativeness and dynamic characteristics and apply it to evaluate each attributes' incremental contribution to stock return. Stock return response modeling assesses the stock market reaction to a non-discrete continuous process over time. Analysis shows that the constructs of perceived brand Relevance and Energy provide incremental information to accounting measures in explaining stock returns. The effects of the constructs Esteem and Knowledge are reflected in current-term accounting measures and in the brand Relevance and Energy constructs. The financial markets do not view the Differentiation construct as having incremental information content. Changes in the Differentiation are indicative of future term accounting performance, which affects stock return (Mizik & Jacobson, 2008).

To examine the relationship between new product preannouncements and firm value, Sorescu, et al. (2007) build on agency and signaling theories to develop hypotheses about the effects of preannouncements on shareholder value, providing answers to questions important to senior management for making appropriate decisions on preannouncements and the timing of launches (Sorescu, Shankar & Kushwaha, 2007).

As mentioned above, large scale data sources and carefuldefinition can produce strong theories in the marketing-finance interface, and can simultaneously satisfy the validity concepts called for by Lynch and Calder. While Lynch stated that external validity must be a priority in theoretical research and that research weak in external validity cannot provide an adequate test of theory, Calder et al. held that external validity is most appropriately addressed through development rather than testing (Calder, Phillips, Tybout, 1982). This approach provides an initial reconciliation of these two diametrically opposed philosophies of science.

The enhanced external validity of the marketing-finance interface solidifies existing marketing theories such as brand equity theory and customer equity theory, indicating that marketing theory is sufficiently visible and easy to understand. Futher, future marketing theory can be built based on this marketing-finance interface.

CONCLUSION

The marketing-finance interface has expanded its boundary and solidified its explanatory power based on a relativistic perspective, with application of rigorous empirical methods and producing the potential for higher external validity. This combination of philosophical and methodological foundations provides a more robust theoretical framework for academicians, practitioners, and investors. Using the marketing-finance interface model, marketing educators can offer a more comprehensive understanding of the complex dynamics of the firm for business students. Accordingly, business students receive a more coordinated treatment of concepts from the marketing, finance, and accounting disciplines (Srivastava, Shervani & Fahey, 1998).

Marketing practitioners historically have found it difficult to measure and communicate to other functional executives and top management the value created by investment in marketing.

A new challenge for marketing managers could be the identification of the market-based assets that they now possess and the prioritization of these market-based assets leading to improvement in the firm's financial outcome. Generally, a firm seeks simultaneously to maximize its profit and shareholder value. Therefore, it is clear that increased profitability and higher firm value are not possible until the marketing managers identify which market-based assets are contained within the firm. Also, through the application of the marketing-finance interface model, marketing managers can communicate with finance managers and accounting managers using the same structural language, producing clear and consistent communications among business functions.

Investors can obtain accurate and appropriate information on their investment. According to the marketing-finance interface model, the stock market is not sufficient to explain the dynamics of shareholder valuation. Given this, the marketing-finance interface can provide useful information that investors can utilize when they make decisions on investments. Investors need to track not only the prior stock market performance but also the company's R&D and advertising expenditures, and the level of customer satisfaction and brand equity in their investment. In this sense, the marketing-finance interface model offers new investment criteria, leading to more deliberate and investments.

There is also a need to address the reciprocal relationship between finance and marketing in order to improve the empirical power of marketing-finance research. As marketing activities can influence financial performance, finance activities can also impact marketing strategy. For example, the increased stock return or cash flow volatility may reduce marketing expenditures, shrinking advertising activities and R&D (Minton & Shrad, 1999). Similarly, capital markets can play a critical role in changing, maintaining, or abandoning specific marketing initiatives (Markovitch, Steckel & Yeung, 2005).

With regard to data from archival sources, the external validity of the marketing-finance interface needs to be improved. Most of the marketing-finance interface includes only publicly-available company data listed on CRSP. Gaining a better understanding of newly listed firms or those which are delisted in CRSP or Compustat is an additional area of research for the market-finance interface area.

The value of an integrated marketing-finance interface model can be significant to a firm. As an example, Samsung, a global electronics firm headquartered in Korea, has dramatically improved its brand value and has recently emerged as one of the top 100 global brands.

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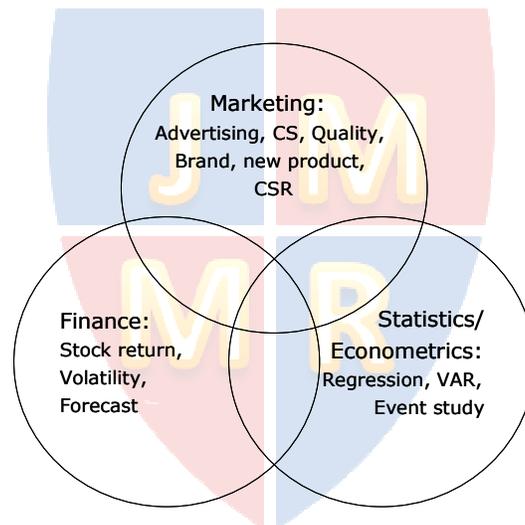
Figure 1. Marketing-Finance Interface Components
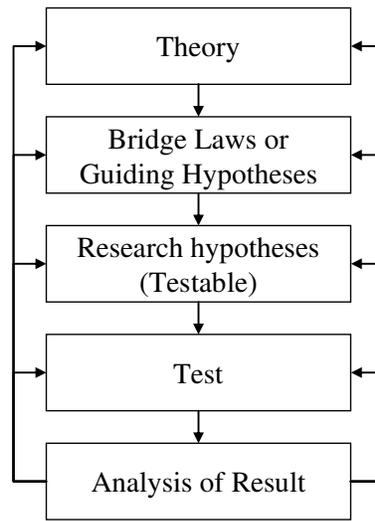
Figure 2. Empirical Test Process

Table 1. Major Sources of Marketing-Finance Interface Data

Variable	Data source
Customer satisfaction	● ACSI(American Customer Satisfaction Index) ● JD Power Index
Innovation	● Wall Street Journal ● Fortune's Innovation Index
Social Responsibility	● Fortune's Most Admired Companies ● PRWeek/Burson-Marsteller CEO Survey 100 Best Companies to Work For ● The Journal of Business Ethics The Business Ethics 100 best Corporate
Brand Equity	● Business Week Top 100 Global Brand ● Young and Rubicam Brand Asset Valuator
Analyst Estimation	● IBES (Institutional Brokers' Estimate System)
Stock Market information	● CRSP (Center for Research in Security Prices) of University of Chicago
Company Information	● Compustat: Standard & Poor's Compustat