

Linking Marketing Efforts to Financial Outcome: An Exploratory Study in Tourism and Hospitality Contexts

INTRODUCTION

In today's business environment, marketing practitioners and scholars are under increasing pressure to substantiate the value of marketing efforts in clear financial terms (Lehmann, 2004; Madden, Fehle, & Fournier, 2006). Sheth and Sisodia (1995a, 1995b) provided evidence that marketing-related business costs increased to approximately 50 percent from 20 percent of total costs over the past 50 years. Coming along with the increase of marketing expenses is the expectation for the field of marketing to show direct link between marketing expenditure and share-holder value. However, the marketing function has long been criticized for low productivity and accountability (Sheth & Sisodia, 2002). Rust, Ambler, Carpenter, Kumar, and Srivastava cautioned that (2004, p. 76), "the perceived lack of accountability has undermined marketing's credibility, threatened marketing's standing in the firm, and even threatened marketing's existence as a distinct capability within the firm." Although within the field, it has long been argued that marketing should be viewed as an investment rather than expense (Sheth & Sisodia, 2002; Slywotzky & Shapiro, 1993), to change shareholders' mindset and practice requires substantial empirical evidence presented in their, rather than marketers' language. Obviously, the language and performance metrics used in today's business world, regrettably for marketing, are dominated by the financial school of thought (Madden et al., 2006; Moorman & Lehmann, 2004). Lehmann (2004, p. 74) put it simply, "if marketing wants 'a seat at the table' in important business decisions, it must link to financial performance."

To respond to this critical challenge, as a joint decision of both academic leaders and corporate executives, the Marketing Science Institute (MSI) designated marketing metrics, or the

measurement of financial effects of marketing, as its top priority topic for the 2004-2006 period. Moreover, three prestigious marketing (business) journals have respectively published special issues on the gap/linkage between marketing and finance recently, which include the *Journal of Business Research* (2002), the *Journal of Marketing* (2004), and *Journal of the Academy of Marketing Science* (2005). Some researchers even suggested that “the new era of accountable marketing” might not be far over the horizon (Uncles, 2005).

Despite the growing interests in linking marketing efforts with financial performance (e.g., Agrawal and Kamakura, 1995; Day and Fahey, 1988; Mathur and Mathur, 1995; Pauwels, Silva-Rosso, Srinivasan, and Hanssens, 2004, Srivastava, Shervani and Fahey, 1998, 1999; Narayanan, Desiraju and Chintagunta, 2004), majority of the effort in the marketing literature is given to develop a conceptual framework for marketing productivity and to model the relationship between the marketing efforts and firm performance. Only a few studies (e.g., Anderson, Fornell and Mazvancheryl, 2004; Fornell, Mithas, Morgeson, and Krishnan, 2006; Gruca and Rego, 2005; Ho, Keh, and Ong, 2005, Narayanan, Desiraju, and Chintagunta, 2004) empirically examined the relationship. Further, notwithstanding the heated discussion in the general marketing literature, marketing productivity has not drawn adequate attention in the field of tourism and hospitality (T&H). Although most T&H researchers have long assumed that marketing efforts contribute to a company’s financial performance, it is disquieting that the relationship largely lacks empirical proof to date. Thus, the purpose of this study is twofold: to empirically examine the effect of marketing efforts on the firm value in the H&T contexts, and to introduce the discussion on marketing productivity to this field.

REVIEW OF RELATED LITERATURE

The Concept of Marketing Productivity

Marketing productivity used to be a central concern in marketing (Morgan, Clark, & Gooner, 2002; Sheth & Sisodia, 2002). Kerin (1996) suggested that the 1946-1955 period of *Journal of Marketing* was characterized by the perspective of “marketing as a managerial activity.” Specifically, the key question was how to improve the productivity of the marketing function, and at that time, the sole solution seemed to be cost analysis (Sheth & Sisodia, 2002). However, following the initial interest, the marketing productivity issue has only drawn sporadic attention in both academic and managerial domains (Morgan et al., 2002). Overall, despite some important work in this area (Bonoma & Clark, 1988; Kotler, Gregor, & Rodgers, 1977; Sevin, 1965), marketing productivity as a topic has not been widely explored in the marketing discipline.

As an indication of the lack of studies on marketing productivity, the concept of marketing productivity remains elusive to date (Bush, Smart, & Nichols, 2002). Sheth and Sisodia (2002) suggested that marketing productivity should focus on delivering great value to customers and corporations in a cost-effective manner. They define marketing productivity as “the quantifiable value added by the marketing function, relative to its costs” (p. 351). Their view of marketing productivity deals with both the effectiveness and efficiency of the marketing function. Specifically, they suggest that a firm should first strive to develop the “right” marketing mix for the segments that it seeks to serve, and then efficiently expend resources to achieve the desired effectiveness. This process, in their terms, is called pursuing “effective efficiency.” Uncles (2005) expanded this view, and suggested that the productivity/metrics issue may be discussed at three levels: specific program and activity level (such as the success of an advertising campaign or a loyalty scheme), product level (such as brand audits), and corporate or

strategic business unit (SBU) level (such as the relationship between general investments in marketing and overall SBU performance).

The Measurement Challenge

Despite the increasing attention in this area, consensus is yet reached on how to evaluate marketing productivity and how to translate marketing success into financial terms (Morgan et al., 2002; Uncles, 2005). As indicated, most existing marketing discussion on marketing productivity tackled only the conceptual/theoretical aspect of the topic, while what metrics to use remains in debate. Although the traditional management accounting approach focused primarily on costs associated with the marketing function (e.g., marketing expenses or R&D) (Sheth & Sisodia, 2002), other researchers proposed brand-related measures such as market share, brand awareness, relative price, and customer satisfaction (Uncles, 2005). Overall, there is no agreed upon approach to assess marketing productivity.

Nevertheless, following Sevin (1965), most researchers view marketing productivity from an input-output perspective (Misterek, Dooley, & Anderson, 1992; Morgan et al., 2002; Sheth & Sisodia, 2002). That is, regardless the disagreement on what specific metrics to use, these researchers consider marketing productivity as the ratio of marketing inputs and outputs. For instance, Beckman, Davidson and Talarzyk (1973, p. 596) viewed marketing productivity as “. . . a ratio of output, or the results of production, to the corresponding input of economic resources, both during a given period of time.” Bonoma and Clark (1988) indicated that commonly-used input measures included various quantitative measures of marketing expenses and investment, head count, quality (employee and decision), effort, and allocation of overhead, while the output measures most frequently employed included profits, sales (unit and value) market share, and cash flow.

It seems the key challenge in measurement lies in the inputs side, i.e., how to quantify energy expended by marketers. First of all, it is hard to specify the marketing portion of management costs. As Morgan et al. (2002) stated, “Marketing productivity analysis is an inherently partial productivity measure in that it is based on a subset of the universe of possible organizational inputs, outputs, and transformation processes” (p. 364). Secondly, many candidate measures, such as relative price, brand awareness, are elusive in nature (Uncles, 2005). To measure these perception/recollection/intention-based constructs per se already presents a huge challenge (Uncles, 2005), not to mention using them to measure marketing productivity. Finally, the human inputs in marketing efforts, such as knowledge, creativity, innovation and entrepreneurship, and people skills, are hard to quantify, although they play a critical role in commercial success (Uncles, 2005).

Two of the most popular measures of marketing inputs are advertising and research and development (R&D) expenses. According to Erickson and Jacobson (1992), advertising can increase brand name recognition which may lead to reputation premium that will allow the firm to demand higher prices relative to competing products with similar features. It is important for firms having innovative and attractive products/services to fully utilize the benefits of advertising (Dugal and Morbey, 1995; Morbey, 1988). For instance, Narayanan, Desiraju, and Chintagunta (2004) studied the impact of marketing program spending for prescription medicine categories. They found that direct-to-consumer advertising expenditures affect sales. Ho, Keh, and Ong (2005) examined the effect of R&D and advertising expenses on share price performance. They documented that there is a positive relationship between R&D and advertising expenses, and share price performance.

Although these measures intend to capture marketing productivity using income statement measures, they fail to address off-income-statement variables related to marketing productivity such as customers, human capital and brands. In financial accounting, it is very challenging to capture these intangible assets using income statement and balance sheet measures. Anderson, Fornell and Mazvancheryl (2004) included a customer satisfaction variable in their study as measured by American Consumer Satisfaction Index. This is an important improvement in the sense that it can be considered as the first attempt to measure marketing productivity with the non-financial measures. They found that there is a positive relationship between satisfaction and financial performance after controlling for industry and firm specific factors. Recent studies have further validated the positive impact of customer satisfaction on firms' cash flow growth and stability (Gruca and Rego, 2005) and stock prices (Fornell, Mithas, III, & Krishnan, 2006). Besides, Lusch and Harvey (1994), and Sheth and Sisodia (1995a, 1995b) support the non-metric measures of the marketing productivity and suggest that there should be customer acquisition and customer retention in the measurement of marketing productivity.

Measures for the productivity have been previously established in the finance literature. The most popular financial productivity measures are return on investment (ROI), stock market performance, internal rate of return, net present value, Tobin's q, sales, profit and shareholder value. According to Rust and colleagues (2004), using ROI is one way to measure the financial impact of the marketing productivity. They suggest that ROI measures only short term returns which may be prejudicial against marketing expenditures. They further argue that many marketing expenditures have a long term effect rather than short term. Lehmann (2004) draws

attention to use stock performance to assess marketing productivity and argues that this variable is far from being a perfect measurement for evaluating marketing performance.

METHODOLOGY

Operationalization of the Present Study

This paper specifically studies the relationship between marketing efforts and firm's financial performance in the T&H industries. The focus of this study is the airline, hotel and restaurant sectors of the T&H industries. All these sectors are also considered to be part of the service industry.

Variables of Interest

Variables in this study were identified in compliant with the measures established in the finance and marketing literature, and data availability. The authors conceptualize marketing productivity as marketing related expenditures and the effect of customer relationships, and how these factors influence firms' financial performance (Rust et al., 2004). Since previous research defines marketing productivity as the ratio of marketing inputs and outputs, this study identified independent variables (e.g., advertising expense, customer satisfaction score) to measure marketing efforts and dependent variables (e.g., return on equity, return on assets, profit margin, stock return, Tobin's q) to measure financial outcomes.

The independent variables are annual advertising expenditure and consumer satisfaction score. Advertising expense is arguably the most straightforward and hence most commonly used approach, while customer satisfaction is deemed to reflect, though indirectly, the intangible and human aspects of firms' marketing efforts. Together, the two variables intend to capture the marketing efforts put forward by the airline, hotel and restaurant companies. It is worth noting

that R&D expense is not included as one category of marketing efforts due to practical and conceptual reasons. Lack of data availability aside, it is documented that firms in the service industry do not invest extensively on R&D (Howells, 2000). According to Howells (2000), R&D and advertising expenditures make up the large portion of the marketing expenditures. In this respect, since airline, hotel and restaurant companies do not invest in R&D as much as manufacturing companies do, it can be suggested that firms in these sectors use advertising expense as their main marketing expenditure. Further, selling, administrative and general expenses were not included either given that expenses in this category are considered to be undistributable expenses. Therefore, it is not conceptually logical to attribute all expenditures in this group to the marketing efforts.

The dependent variables are return on equity, return on assets, profit margin, stock return and Tobin's q. The purpose of using these five variables is to measure the firms' marketing outcome, or in other words firms' financial productivity. These variables were used separately as independent variables in the regression model to examine the relationship between marketing efforts and financial outcomes for airline, hotel and restaurant companies.

Return on equity, return on assets and profit margin are well known profitability ratios used in analysis of financial statements. According to Brigham and Daves (2007), return on equity is the most important "bottom-line" ratio among all three. This ratio measures the return for each dollar of shareholder investment; quintessentially, it is how effectively the shareholder's investment is being employed. Return on assets is an indicator of the profitability of the company relative to its total assets. Profit margin shows management's ability to generate sales and control expenses by comparing firms' total revenue and net income. A stock share represents partial ownership of a publicly traded firm, and the value of the stock depends on many factors,

including the likelihood that the company will pay a dividend. Stock return intends to measure the profitability of the firm from a different perspective compared to the profitability ratios. It combines share price appreciation and dividends paid to show the total return to the shareholder. Tobin's q , which is defined as the ratio of the total market value of the firm at the end of year to the estimated replacement costs of assets (Tobin, 1969), is one of the most popular performance measures. Given that the calculation of estimated replacement costs and intangible assets is very complex, this study used a proxy measure for Tobin's q (Gompers, Ishii, and Metrick, 2003; Kaplan and Zingales, 1997; Tsai and Gu, 2007). According to Tobin (1969), if the market value reflected exclusively the book value of assets of a company, Tobin's q would be one.

Variables to measure efforts are defined as follows:

$CSI_{i,t}$ = Consumer satisfaction score for firm i at time t , retrieved from American Consumer Satisfaction Index (ACSI), and developed by National Quality Research Center at University of Michigan, ACSI reports consumer satisfaction scores on a 0-100 scale.

$ADEX_{i,t}$ = Advertising expenditure for firm i at time t (in millions of dollars).

Variables to measure financial outcomes are defined and measured as follows:

$ROE_{i,t}$ = Return on equity for firm i at time t , calculated by dividing net earnings by book value of total common equity.

$ROA_{i,t}$ = Return on assets for firm i at time t , calculated by dividing net earnings by book value of total assets.

$PM_{i,t}$ = Profit margin for firm i at time t , calculated by dividing net earnings by total revenues.

$SR_{i,t}$ = Stock return for firm i at time t , calculated by dividing the difference between closing stock price at end of the year and closing stock price at the beginning of the year (adjusted for any cash dividends distributed) by closing stock price at beginning of the year.

$Q_{i,t}$ = Proxy measure for Tobin's Q is the book value of total assets, market value of common equity minus the sum of book value of common equity and deferred taxes, all divided by the book value of total assets.

Further, it was deemed necessary to control the effect of company size and industry.

Since both industry and company size are discrete variables, they were converted into a set of

dichotomous independent variables (Tabachnick & Fidell, 2001). Firms were categorized into 4 groups based on their size. Treating the first quartile of firm size as baseline, three dichotomous variables were entered into regression as a group, which are:

SIZE2_t = Second quartile, firm size at time t, measured by total revenues.

SIZE3_t = Third quartile, firm size at time t, measured by total revenues.

SIZE4_t = Fourth quartile, firm size at time t, measured by total revenues.

Since there are three industry sectors of interest in this study, two dichotomous variables were entered into regression as a group, with the restaurant industry as baseline. These include:

IND1 = Hotel companies.

IND2 = Airline companies.

Proposed models for this study include:

$$SR_{i,t} = A_0 + B_1CSS_{i,t} + B_2ADEX_{i,t} + B_3SIZE2_t + B_4SIZE3_t + B_5SIZE4_t + B_6IND1 + B_8IND2 + e_{i,t} \quad (1)$$

$$PM_{i,t} = A_0 + B_1CSS_{i,t} + B_2ADEX_{i,t} + B_3SIZE2_t + B_4SIZE3_t + B_5SIZE4_t + B_6IND1 + B_8IND2 + e_{i,t} \quad (2)$$

$$ROA_{i,t} = A_0 + B_1CSS_{i,t} + B_2ADEX_{i,t} + B_3SIZE2_t + B_4SIZE3_t + B_5SIZE4_t + B_6IND1 + B_8IND2 + e_{i,t} \quad (3)$$

$$ROE_{i,t} = A_0 + B_1CSS_{i,t} + B_2ADEX_{i,t} + B_3SIZE2_t + B_4SIZE3_t + B_5SIZE4_t + B_6IND1 + B_8IND2 + e_{i,t} \quad (4)$$

$$Q_{i,t} = A_0 + B_1CSS_{i,t} + B_2ADEX_{i,t} + B_3SIZE2_t + B_4SIZE3_t + B_5SIZE4_t + B_6IND1 + B_8IND2 + e_{i,t} \quad (5)$$

Data Collection

Standard and Poor's Compustat database, CRSP (Center for Research in Security Prices) database and American Consumer Satisfaction Index were used as data resources. Financial

information including yearly advertising expenses, sales, earnings, total assets, total shareholders' equity and number of shares outstanding was retrieved from Compustat while stock price related data was collected from CRSP. Consumer satisfaction scores were retrieved from American Consumer Satisfaction Index (2006). First, yearly customer satisfaction scores were collected for the 1995-2005 period from the American Consumer Satisfaction Index for airline, hotel and restaurant companies. Second, financial information related to these companies was retrieved from Compustat. Standard Industry Code (SIC) is 7011 for the hotels, 5812 for the restaurants and 4512 for the airlines. Seventeen firms were used in the analysis after airline, hotel and restaurant firms from the American Consumer Satisfaction Index were matched with the firms available in Compustat.

INSERT TABLE 1 ABOUT HERE

Data Analysis

The data analysis used a standard multiple regression procedure, with each company's annual advertising expenditure and consumer satisfaction score as independent variables, and multiple financial productivity indicators as dependent variables. The dependent variables, identified based on the foregoing literature review and data availability, include return on equity, return on assets, profit margin, stock return, and Tobin's q.

Results of pre-analysis assessment indicated that transformation of the dependent variables may be necessary, in order to reduce skewness, and improve the normality, linearity,

and homoscedasticity of residuals (Tabachnick & Fidell, 2001). The transformation procedure followed the Box-Cox approach (Box & Cox, 1964), which is widely practiced in statistics (Cohen, Cohen, West, & Aiken, 2003). Simply put, the Box-Cox procedure numerically selects a value of λ for transformation that may “achieve a linear relationship with residuals that exhibit normality and homoscedasticity” (Cohen et al., 2003, p. 236). The Box-Cox procedure was conducted with the aid of a SPSS syntax prepared by Speed (2004). Since the procedure requires all cases of the dependent variable to be positive (>0), a constant would be added when necessary. For instance, several firms’ stock return is negative (as low as -95.06), a 100 was hence added to each case, to ensure all Y values to be positive. Further, since the models include interactions between independent variables, centering was used as the literature recommends to avoid multicollinearity (Tabachnick & Fidell, 2001). Centering means to convert the independents by subtracting the mean from each case, so that each variable has a mean of zero.

For each dependent variable, the regression analysis was performed in three steps. First, to control the effect of company size (4 categories, from the “First Quartile” to the “Fourth Quartile”) and industry (hotel, restaurant, and airline industries), a set of dummy variables were created, and entered into regression as a group (Fox, 1991). Second, the two variables of interest (i.e., advertising expenses and CSS) were added. Finally, the interaction between advertising expenses and CSS was entered. Table 2 presents the results when all variables were entered (i.e., Step 3) for each dependent variable.

INSERT TABLE 2 ABOUT HERE

As shown in Table 2, in 3 out of the 5 models examined, consumer satisfaction score and/or advertising expenses significantly affect financial productivity measures. It appeared that the two variables did not have a significant impact on a company's stock return or return on asset. However, when financial productivity was represented by profit margin ($\lambda=2.9$), it was found that the interaction between advertising expenses and customer satisfaction ($\beta=-0.361$, $p=0.014$) had a significant effect on profit margin. Moreover, the interaction between consumer satisfaction and advertising expenses accounted for over 32 percent of the variability in profit margin.

When financial productivity was represented in terms of return on asset ($\lambda=2.9$), it was significantly affected by customer satisfaction ($\beta=0.264$, $p=0.012$). However, 36 percent of the variance in a company's return on asset was predicted by knowing its consumer satisfaction level.

Finally, when financial productivity was measured by Tobin's q ($\lambda=0.2$), it was revealed that both advertising expenses ($\beta=0.277$, $p=0.041$) and customer satisfaction ($\beta=0.207$, $p=0.01$) had a significant effect on profit margin. Nevertheless, their interaction ($\beta=-0.193$, $p=0.075$) was only marginally significant (hence considered not significant in Table 2). Combined, the two independent variables and their interaction explained 71.6 percent of the variance in Tobin's q.

Multicollinearity was not detected in any of the models (i.e., $VIF < 10$). Notably, advertising expenses, customer satisfaction, and their interaction did not demonstrate consistent effect across the three models. Customer satisfaction contributed significantly to the prediction of both Tobin's q and return on asset, but did not have a direct effect on profit margin. The significant/marginally significant interaction indicated that both consumer satisfaction and advertising expenses could moderate each other's effect on profit margin and Tobin's q.

Interestingly, in both cases the interaction had a negative sign. This implied that consumer satisfaction and advertising expenses might offset each other's effect on financial productivity. Moreover, in the aforementioned three models, their adjusted R-square values were all above 0.25, which is considered as reasonable in social science (Cohen, 1988; Kenny, 1979).

DISCUSSION AND CONCLUSION

The focus of this article is to improve our understanding of the marketing-finance interface by developing a model to capture the relationship between marketing efforts and the formation of owners' (shareholders') firm related wealth. Following marketing and finance literature, marketing efforts were measured by advertising expense and consumer satisfaction score while creation of owners' firm related wealth was measured by return on equity, return on assets, profit margin, stock return, and Tobin's q.

This paper contributes to the existing literature in the following ways. First, it is the first attempt to empirically examine the relationship between marketing efforts and outcomes in the T&H industry. The dataset covers publicly traded hotel, restaurant and airline companies, which have consumer satisfaction data available, over the 1995-2005 period. This study can be considered as a preliminary investigation into measuring marketing efforts and its impact on firms' financial productivity in the T&H industries. Second, data analysis indicates that consumer satisfaction score and advertising expense were significantly related to financial productivity when Tobin's q was used as financial outcome variables. Customer satisfaction was also found to be significantly related to return on asset. These empirical results provide partial support the general belief that positive marketing efforts will contribute to a firm's financial performance.

The effect of advertising expenditure on financial outcome provides new evidence to the argument that marketing is an investment, rather than merely an expense (Sheth and Sisodia, 2002; Slywotzky and Shapiro, 1993). The fact that customer satisfaction had a direct or indirect effect on all three financial outcome indicators illustrates the economic value of satisfied customers (Fornell et al., 2006). For today's executives who prioritize the interest of stakeholders/stockholders, results of the present paper suggest that satisfying customers and satisfying investors are inherently consistent. As Gruca and Rego (2005, p. 116) stated, "By satisfying a customer, a firm generates benefits for itself beyond the present transaction and the current moment. These benefits arise from the positive shaping of the satisfied customer's future behavior." These results implied the importance of marketing being a pro-customer champion (Webster, 1992) and active player in firms' decision making.

On the other hand, the relationship was not statistically significant when stock return and return on equity were used as financial outcome variables. Fornell and associates (2006) also reported that changes in customer satisfaction do not have a direct and immediate effect on stock prices. One plausible reason for this outcome might be related to the differences in measurement of these financial return variables. Tobin's q and stock return were calculated using stock market related variables while profit margin, return on assets and return on equity were calculated using variables retrieved from balance sheet and income statement. As Uncle (2005) stated, human inputs in marketing efforts are challenging to quantify but they play a crucial role in firms' success. The value of these marketing efforts may not be reflected in the accounting statements accurately since part of these efforts might be valued as a part of intangible assets of the firm. In this respect, one can argue that the market's perceptions of the company and intangible assets such as marketing efforts, human capital and customer value could be reflected in market value

of the T&H firms (hence in Tobin's q and stock return). However, value of these market perceptions and intangible assets would not be embedded in the balance sheet and income statement driven measures. Overall, considering that all three variables were computed using income statement and balance sheet measures, it is interesting that profit margin was statistically significant while return on assets and return on equity were not. Rust et al. (2004) argued that many marketing efforts have a long term effect which suggests that marketing efforts might not be captured by short term return on investment measures such as return on equity and return on assets.

The insignificance of the stock return may be attributed to the market efficiency argument. Developed by Eugene Fama in 1970, efficient market hypothesis states that at any given time, stock prices fully reflect all available information about the firm. In this respect, in efficient markets no information or analysis can be used to outperform the market. However, in the real world of investment, markets are neither completely efficient nor totally inefficient. Therefore, it might be reasonable to see markets as a mixture of both, in which daily decisions and events cannot always be reflected immediately into a market. Following this argument and applying to the results of this study, it can be argued that stock return variable as a measure of financial outcome was not statistically significant because the prices are being manipulated by profit seekers which in turn cause the markets to be inefficient. In addition, because the markets are not efficient, marketing efforts might not be reflected instantaneously to the market price of that stock. It might take market more than a year to realize and incorporate the marketing efforts put forward by the hotel, restaurant and airline firms. To address that inquiry, future research can examine the lagged effect of the marketing efforts on stock return. Lehmann (2004) also mentioned that stock performance is not an adequate measure to assess marketing productivity.

Limitation and Future Research

By using the Compustat and ASCI database, the present results are limited to the 17 large T&H firms fitting the data requirements. This context effect may have influenced the link between marketing efforts and financial outcomes (Gruca and Rego, 2005). Empirical replications in smaller firms, other sectors of the tourism industry, and business in other countries/cultures may provide more insights to this discussion.

This paper is further limited by using advertising expenses and customer satisfaction scores, two publicly available variables to measure marketing efforts and financial performance, to represent a firm's various investments in marketing. Other variables that were considered to measure marketing efforts are R&D expenses and selling, administrative and general expenses. Since only 2 out of the 17 T&H companies report R&D expense in Compustat database, the R&D expenses were not included in the analysis as an independent variable. Selling, administrative and general expenses were also excluded as these are considered to be undistributable expenses. Further research should explore alternative variables to measure marketing efforts which may help to explain the marketing productivity. Further research should explore alternative variables to measure marketing efforts which may help to explain the marketing productivity.

Another important question is concerning the treatment of the marketing expenditures. There is still a debate on whether the marketing expenses should be considered as investments that contribute firms' value in the long term or as line-expense items. The authors acknowledge the limitation of the present operationalization due to data availability and measurability issues. However, as Uncles (2005, p. 416) stated, "Rather than look for elusive magic bullets, a more productive task is to appraise the metrics we have and where necessary, refine them (recognizing

that they are not all equally useful, reliable or valid).” Overall, it is believed that this study provides a valuable benchmark for further research in the area of marketing productivity in the T&H industries.

The present study, as well as most previous studies in this area, focuses on the marketing productivity at corporate or SBU level. As indicated, the productivity/metrics issue may be also discussed at specific program and activity level and product level. Obviously, analysis at program and product level will present even more methodological challenges, which warrants future research.

Finally, the discussion on marketing productivity has reflected the lack of communication between marketing and finance researchers. In their discussion on the paradigm difference in the two fields, Madden and associates (2006, p. 224-225) summarized, “Finance researchers are interested in the impact of firm strategies and decisions on investor expectations, whereas marketing researchers focus on customer reactions to marketing strategies and decisions. From a financial perspective, shareholders constitute the central stakeholder group, and the research focus centers on the creation of shareholder value; from the marketing perspective, consumers represent the major constituency, and the focus rests on the attitudes and behaviors that drive revenues in the marketplace. Furthermore, finance researchers study firm-level data and rely on information from equity markets and the firm’s financial statements, whereas marketers focus on consumer data collected through surveys or experimental research. Put differently, marketing’s domain is the creation of customer value, but the shareholder value space belongs to finance.”

Thus, future studies on marketing productivity are expected to enhance research exchanges and practitioners’ communication between the two fields. Ultimately, such studies may contribute to the development of both fields by honing marketers’ analytical skills, and

improving financial literacy among marketers, as well as marketing literacy among financial professionals (Uncles, 2005).

Concluding Remarks

Fundamentally, the difficulty in conducting marketing productivity analysis, as reflected in the present study, illustrates the challenge the whole field of marketing is facing. That is, marketers nowadays are still unable to justify their own credibility in a manner that is best accepted and understood by the corporate world (Rust et al., 2004). As Knowles (2003) observed, shareholder value has become the language of the boardroom but still not of the marketing group (Madden et al., 2006). The present study may be considered as a plea to T&H researchers for more attention to this area.

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Table 1

Sample of firms

Industry	Companies
Airline	American Airlines Inc. Delta Airlines Inc. Northwest Airlines Inc. Southwest Airlines Inc. United Airlines Inc. US Airways Group Inc.
Hotel	Hilton Hotels Corp. Starwood Hotels and Resorts Worldwide Intercontinental Hotels Marriot International Inc. Promus Hotel Corp.
Restaurant	Burger King Holdings Inc. Dominos Pizza Inc. McDonald's Corp. Wendy's International Inc. Papa Johns International YUM Brands Inc.

Table 2. Standard Multiple Regressions of Advertising Expenses and Consumer Satisfaction on Financial Productivity Measures

Models Variables	1. DV=Stock Return ($\lambda=0.2$)	2. DV=Profit Margin ($\lambda=2.9$)	3. DV= Return on Asset ($\lambda=2.9$)	4. DV=Return on Equity ($\lambda=0.8$)	5. DV=Tobin's Q ($\lambda=0.2$)
Control Variables					
industry_hotel	-	-	-	-	0.423**
industry_airline	-	-	-	-	-
size-2nd quartile	-	-	-	-	-
size-3rd quartile	-	-	-	-	-
size-4 th quartile	-	-0.42 ^{1*}	-	-	-0.299**
Independent Variables					
Ad expenses	-	-	-	-	0.277 * (5.079)
CSS	-	-	0.264* (1.777)	-	0.207** (1.730)
Ad expenses * CSS	-	-0.361* (3.232) ²	-	-	-
F	-	7.265***	8.453***	-	26.558***
R ²	-	0.372	0.408	-	0.744
Adjusted R ²	-	0.321	0.36	-	0.716

¹Numbers reported here are standardized regression coefficients.

²Numbers in bracket are VIF value.

DV=Dependent Variable

*p<0.05 **p<0.01 ***p<0.001