

**CUSTOMER SATISFACTION, PROFITABILITY, AND FIRM VALUE IN THE
HOSPITALITY AND TOURISM INDUSTRY:
AN APPLICATION OF AMERICAN CUSTOMER SATISFACTION INDEX (ACSI)**

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ABSTRACT

Customer satisfaction has been considered one of the most prominent factors in the measurement of marketing strategies and performances. On the other hand, profitability and value of firm are important indicators of companies' financial performance. Considering the unique differences from other industries (e.g., intangibility, variability, etc.), this study assumes that the hospitality industry will be more vulnerable to customer satisfaction than any other industry in terms of the firm's profitability and value. Based upon this presumption, this study empirically examines whether the customer satisfaction index (CSI) influences the companies' financial performance in the hospitality and tourism industry (i.e., hotels, restaurants, and airlines). Findings suggest that the impact of customer satisfaction is only reflected in the return on equity (ROE) which is proxy of a firm's profitability. This result indicates that marketing strategy for customer satisfaction affects a firm's short-term profitability in the hospitality and tourism industry. Possible further implications are also discussed.

Keywords: *customer satisfaction, profitability, firm's value, ACSI, ROE*

INTRODUCTION

In the current business world, where competition among companies becomes more and more fierce, it is important for companies to differentiate themselves to increase their market shares. Not surprisingly, firms have invested substantial resources for increasing customer satisfaction, and as a result, the costs related to customer satisfaction account for the largest portion of the annual marketing budget (Wilson, 2002). According to Sheth and Sisodia (1995a, 1995b), marketing-related business costs increased to approximately 50% from 20% of total costs over the past 50 years. Despite the long-term argument that marketing should be regarded as an investment rather than an expense (Sheth & Sisodia, 2002; Slywotzky & Shapiro, 1993), the majority of financial experts (Madden, Fehle, & Fournier, 2006; Moorman & Lemann, 2004) still insist that "if marketing wants 'a seat at the table' in important business decisions, it must be linked to financial performance" (p. 74). In other words, marketing can be appreciated by a financial view point only if it shows financial contribution to the firms' annual performance.

This has given rise to research interests in assessing the extent to which marketing strategies perform for the financial purposes (Aaker and Jacobson 2001; Jacobson and Mizik 2009; Rust, Ambler, Carpenter, Kumar, & Srivastava, 2004; Srivastava and Reibstein, 2005; Wiesel, Skiera, & Villanueva, 2008). In related issues, the main practical argument for

marketing investments to increase customer satisfaction has become a heated discussion in the real business world (Agrawal & Kamakura, 1995; Day & Fahey, 1988; Mathur & Mathur, 1995; Narayanan, Desiraju, & Chintagunta, 2004; Pauwels, Silva-Rosso, Srinivasan, & Hanssens, 2004; Srivastava, Shervani, & Fahey, 1998, 1999). Concomitant to the increasing importance of customer satisfaction on a firm's performance, corporate management such as the chief executive officer (CEO) wants to know whether customer satisfaction through customer relationship marketing positively influence indices of a firms' performance and value (Tuli & Bharadwaj, 2009). With this realization, the purpose of this study is to empirically examine how customer satisfaction influences the financial performance in the hospitality and tourism industry.

LITERATURE REVIEW

Most companies are trying to attract customers and to make them satisfied with the companies' products or services in order to increase customer loyalty. Among various methods to measure a firm's competitiveness and marketing performance, customer satisfaction is a most universally accepted measurement (Morgan, Anderson, & Mittal, 2005), as well as an influential performance metric (Kaplan & Norton, 1996). Many firms attempt to measure customer satisfaction in order to evaluate whether they meet their customers' needs better than their competitors (Fornell, Mithas, Morgeson, & Krishnan, 2006). Theoretically, it can be assumed that increasing customer satisfaction is more likely to bring positive outcomes such as increasing sales volume and market share. Thus, marketplace outcomes such as sales or market share have become a traditional method of evaluating the success of marketing strategies (Lehmann, 2004).

Today, however, top managers persist with the idea that every functional activity should have as its ultimate goal the creation of shareholders value. (Day & Fahey, 1988; Hunt & Morgan, 1995). Noted as a financial performance, firm evaluation also has been a prominent area of interest for corporate officials even CEOs because their evaluations, which can be significantly influenced by customer satisfaction, are directly linked to their compensation (Ittner, Larcker, & Rajan, 1997). In that sense, it is important to know how customer satisfaction influences a firm's value and profitability in the academic fields as well. The Marketing Science Institute selected marketing metrics and the measurement of the financial effect of marketing as main concerns for the 2004-2006 period (Denizci & Xiang, 2009). Some researchers even advised that "the new epoch of accountable marketing" might be coming soon (Uncles, 2005).

To measure a financial performance of marketing activities, many studies have employed a survey of the managers or the employees in the organizations (Grafton, Lillis, & Widener, 2010; Bisbe & Otley, 2004; Chenhall, 2005; Ittner, Larcker, & Randall, 2003; Sprinkle, 2003). On the other hand, there are some schools of thought that suggest that the results of surveys from managers and employees are limited when it comes to reflecting the firm's objective performance because their responses sometimes reflect a conflict of interest. Additionally, Sheth and Sisodia (2002) suggested that marketing performance should focus on carrying value to customers and corporations in a quantifiable value relative to its costs. In spite of the efforts about how to measure marketing productivity and how to define marketing success in financial terms (Morgan, Clark, & Gooner, 2002; Uncles, 2005), much of the marketing discussion on marketing productivity dealt with only the conceptual or theoretical facet of the topic (Denizci & Xiang, 2009).

In order to overcome the nature of survey data collected from managers and employees, many recent studies have tried to investigate presumably more objective information such as ROA (Return on Assets), ROE (Return on Equity), and stock market performance. In addition, a recent study found that customer satisfaction improves the ability to predict future cash flows, stock performance, long-term financial measure, and shareholders' value (Aksoy, Cooil, Groening, Keiningham, & Yalçın, 2008). On a related issue, a study by Anderson, Fornell, and Mazvancheryl (2004) found a positive association between a firm's current level of customer satisfaction and simultaneous financial market indexes, such as Tobin's q, stock, and market-to-book ratio. A most recently relevant study conducted by Denizci and Xiang (2009) is improving the understanding of the marketing-finance interface in order to capture a relationship between marketing efforts and financial concepts in the tourism and hospitality industry. They found that marketing efforts are significantly related to financial productivity such as Tobin's q and return on asset. The other researchers have examined the relationship between satisfaction and raw market value and have concluded that when it comes to influencing shareholder value, customer satisfaction is a key component that matters to financial markets (Ittner & Larker, 1996; Rust, Moorman, & Dickson, 2002; Mittal, Anderson, Sayrak, & Tadikamalla, 2005).

Despite the fact that a substantial amount of research has focused on the impact of customer satisfaction on company's performance evaluation, there has been relatively little research attention given to the hospitality and travel industry. As a main domain of service industries, most hospitality firms are producing intangible products and have been trying to satisfy their customers with their services in accordance with their operating goals. Customer satisfaction is the very first step of hospitality companies' main operation and it is the very direct outcome of their services. In the hospitality industry, a motivation for the increase of customer satisfaction is more able to be the provision of a reliable signal of customer satisfaction with links to long-term performance (Fornell et al., 1996). Anderson, Fornell, and Rust (1997) argue that services are more likely than goods to have tradeoffs between customer satisfaction and profitability. Therefore, the profitability and value of a hospitality firm would make the firm more vulnerable to customer satisfaction than any other industry.

Based upon the understanding of the customer satisfaction index (CSI) and financial performance in revenue management within the context of hospitality and tourism, this study examines whether CSI influences the financial performance in the hospitality and tourism industry (i.e., hotels, restaurants and airlines). The primary aims of this study, more specifically, are (1) to examine the impact of CSI on a firm's profitability, and (2) to indentify the relationship between the customer satisfaction index and a firm's value.

METHODOLOGY

This study uses two separate measures that show the financial short-term and long-term performance of firms. One measure looks at profitability and the other looks at value. In terms of the data analysis, this study employs a linear regression model where profit margin (PM), return on assets (ROA), and return on equity (ROE) are used for predicting profitability, and Tobin's q and MVA (Market Value Added) is used for measuring a firm's value. The independent variable is the American customer satisfaction index (ACSI). Debt to equity ratio as a proxy for leverage, the increase rate of sales, firm size, capital intensity, and liquidity were adopted as control variables. Since a majority of previous studies revealed relationships between CSI and profitability and value, this study focuses on investigating the relationships of rate of annual change, instead of the original scores and ratios. Among the hospitality and

travel companies, hotels, restaurants, and airlines are employed in this study. To examine the relationship more accurately, it is considered reasonable to use the rate of annual change rather than the amount of scores and ratios, because the level of CSI scores is quite different from each other among the companies. According to accounting and finance literature traditionally used for financial performance, the model formulations are suggested as follows:

$$\begin{aligned} \Delta \ln PM_t &= \alpha_0 + \alpha_1 \Delta \ln ACSI_t + \alpha_2 \Delta \ln leverage_t + \alpha_3 \Delta \ln IRS_t \\ &\quad + \alpha_4 \Delta \ln FS_t + \alpha_5 \Delta \ln CI_t + \alpha_6 \Delta \ln LQ_t + \varepsilon_t \\ \Delta \ln ROA_t &= \alpha_0 + \alpha_1 \Delta \ln ACSI_t + \alpha_2 \Delta \ln leverage_t + \alpha_3 \Delta \ln IRS_t \\ &\quad + \alpha_4 \Delta \ln FS_t + \alpha_5 \Delta \ln CI_t + \alpha_6 \Delta \ln LQ_t + \varepsilon_t \\ \Delta \ln ROE_t &= \alpha_0 + \alpha_1 \Delta \ln ACSI_t + \alpha_2 \Delta \ln leverage_t + \alpha_3 \Delta \ln IRS_t \\ &\quad + \alpha_4 \Delta \ln FS_t + \alpha_5 \Delta \ln CI_t + \alpha_6 \Delta \ln LQ_t + \varepsilon_t \\ \Delta \ln Tobin's q_t &= \alpha_0 + \alpha_1 \Delta \ln ACSI_t + \alpha_2 \Delta \ln leverage_t + \alpha_3 \Delta \ln IRS_t \\ &\quad + \alpha_4 \Delta \ln FS_t + \alpha_5 \Delta \ln CI_t + \alpha_6 \Delta \ln LQ_t + \varepsilon_t \\ \Delta \ln MVA_t &= \alpha_0 + \alpha_1 \Delta \ln ACSI_t + \alpha_2 \Delta \ln leverage_t + \alpha_3 \Delta \ln IRS_t \\ &\quad + \alpha_4 \Delta \ln FS_t + \alpha_5 \Delta \ln CI_t + \alpha_6 \Delta \ln LQ_t + \varepsilon_t \end{aligned}$$

* $\Delta \ln$ ACSI: rate of change of American Customer Satisfaction Index

* $\Delta \ln$ PM: rate of change of profit margin

* $\Delta \ln$ leverage: rate of change of debt to equity ratio

* $\Delta \ln$ IRS: rate of change of increase sales

* $\Delta \ln$ FS: rate of change of firm size

* $\Delta \ln$ CI: rate of change of capital intensity

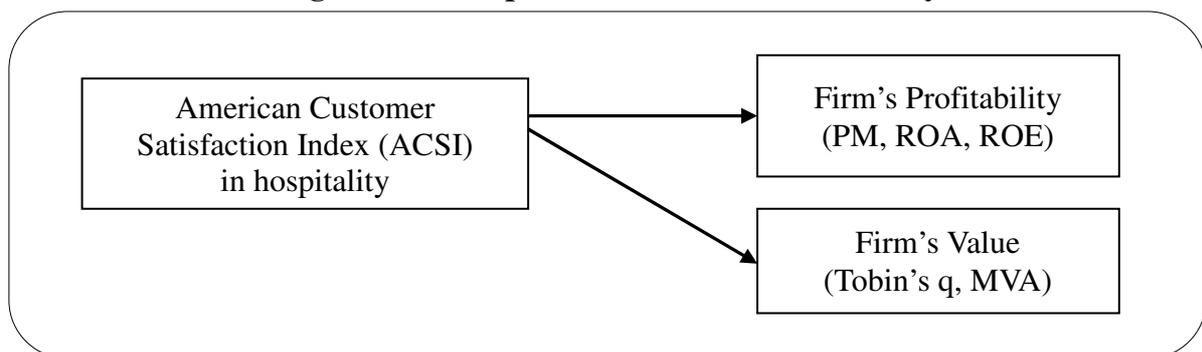
* $\Delta \ln$ LQ: rate of change of liquidity

* $\Delta \ln$ ROA: rate of change of return on assets

* $\Delta \ln$ ROE: rate of change of return on equity

* $\Delta \ln$ MVA: rate of change of market value added

Figure 1. Conceptual Framework in this study



Notes: PM: profit margin, ROA: return on assets, ROE: return on equity, MVA: market value added

American Customer Satisfaction: To conduct the empirical models presented, this study measures the customer satisfaction using the ACSI (American Customer Satisfaction Index), which is developed by the National Quality Research Center of the Stephen M. Ross Business School at the University of Michigan. The index represents the quality of goods and services purchased in the United States. It is a national indicator of customer satisfaction on a 0-100 scale (Fornell, John, Anderson, Cha, & Bryant, 1996). The national average ACSI score shows correlation between the gross domestic product, the personal consumption expenditure, and the stock market. It can be evidence that ACSI is an important barometer of

economic performance for the macro economy (Aksoy et al., 2008). Hotel and restaurant companies are divided into separate sectors, but this study did not divide them into categories, instead this study combined them into a single sector. Among total the hotel, restaurant, and airline companies in U.S., the only nine restaurants, six hotels, and five airlines made their 1998-2009 financial statements available in this study.

Firm Profitability: Profit margin (PM), return on assets (ROA), and return on equity (ROE) as proxy to measure the firm's profitability, are complemented with COMPUSTAT data from 1998 to 2009. PM is the ratio: net income is divided by sales, ROA is the ratio: net income is divided by total assets, and ROE is the ratio: net income is divided by total equity.

Firm value: To measure the firm's value efficiently, the study uses Tobin's q, which is defined as the ratio of the market value of a firm with the replacement the cost of its assets. There are several methods to measure Tobin's q (Hall, Cummins, Laderman, & Mundy, 1988; Lindenberg & Ross, 1981), and this study uses the approximate Tobin's q, which is generally accepted in economics and finance literature: Chung and Pruitt's (1994) method (Berger, Ofek, & Swary, 1996). The approximate Tobin's q is as followed:

$$\text{Approximate Tobin's } q = \frac{\text{MVE} + \text{PS} + \text{DEBT}}{\text{TA}},$$

Where MVE is the product of firm's share price and the number of common stock shares outstanding, PS stands for the liquidating value of the firm's outstanding preferred stock, DEBT represents the value of short-term liabilities net of its short-term assets plus the book value of the firm's long-term debt; and TA is the book value of the firm's total assets (Chung & Pruitt's, 1994). As another proxy to assess the firm's value, market value added (MVA) is used. MVA is a market generated number that is calculated by subtracting the capital invested in a firm C from the sum V of the total market value of the firm's equity and the book value of its debt:

$$\text{MVA}_t = V_t - C_t$$

MVA is a cumulative measure of the value generated by management in excess of the capital invested by shareholders (Stewart, 1991). Although EVA and MVA are all able to measure a firm's financial performance, only MVA is employed in this study. Unlike MVA, EVA has a lot of noises in order to calculate exact number as well as it is hard to calculate the weight cost of capital in reality. In addition, MVA and EVA have a one to one relationship. These elements mentioned above are collected from COMPUSTAT data from 1998 to 2009.

Control variables: This study employs five control variables, the leverage, the increase rate of sales, firm size, capital intensity, and liquidity respectively in the multiple linear regression models. The increase rate of sales is used to control any systematic effect caused by different scales of sales in relationship to their financial performances. The leverage (debt to equity ratio) controls for the effect caused by the different capital structure. According to McConnell and Servaes (1990), a firm can use increased debt because interest expense is tax deductible whereas dividends are not. Additionally, this study follows other studies in finance and accounting, using firm size, capital intensity, and liquidity as control variables. It is expected that these variables control the relationship between financial performance and ACSI in the model.

Data Analysis: As an empirical study, the multiple regression analysis was primarily employed in this study. First of all, descriptive analysis was used to identify the flow of ACSI

during the period from 1998 to 2009. Second, multiple regression was applied to examine the relationship between ACSI and firms' profitability and value.

RESULTS

Flow of ACSI in the Hospitality and Tourism Industry: Figure 1 represents the flow of ACSI on hotels, restaurants, and airlines respectively. Although, the scores of customer satisfaction are in different ranges among the industries, both ASCIs of hotels and restaurants are a growing trend over time, while ACSI of airlines shows repeated increase and decrease within the relatively low levels until 2008. It is indicated that airline companies did not focus on customer satisfaction in their operation. Although, half of the hotels surveyed are luxury hotels that are more likely to acquire higher scores, customer satisfaction of restaurants has risen dramatically from 2008. In addition, customer satisfaction of airlines also started increasing in 2008. As this chart represents, the difference of ACSI scores are quite different from each industry. Thus, this study uses rate of change of ACSI scores instead of score numbers. And to secure more sample size, this study combines hotels, restaurants, and airlines into one field.

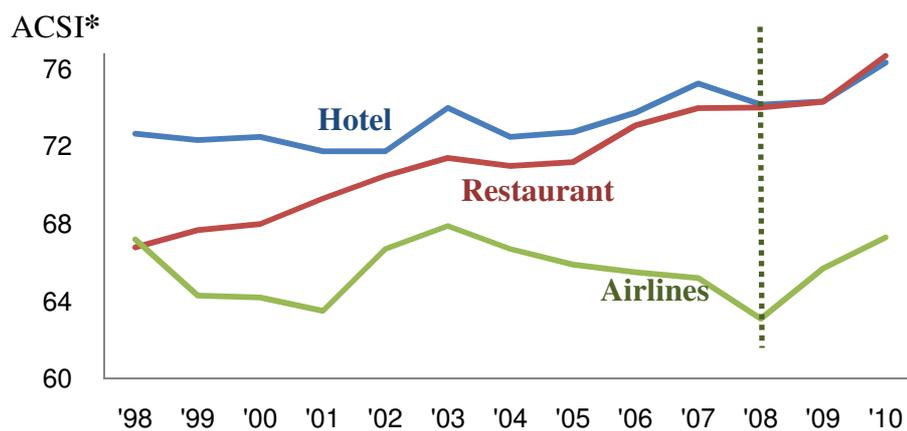


Figure 2. Flow of ACSI in the Hospitality and Tourism Industry

*ACSI: American Customer Satisfaction Index

Results of Regression Analyses: Table 1 outlines the results of the models. Goodness of fit of each models, expect MVA model, implies that each model explains a significant portion of total variance; *F*-value confirms overall significance of models at the 0.1% α level (PM, ROA) and 5% α level (ROE, Tobin's *q*). There is no substantial multicollinearity problem in these models because every VIF value is smaller than 2 (Belsley, Kuh, & Welsch, 1980). As expected above, it was assumed that ACSI would be one of the primary indicators in predicting profitability in terms of the context of hospitality and tourism companies (i.e., hotels, restaurants, and airlines). While the results show that there are not significant relationships between ACSI, and PM, ROA, Tobin's *q* and MVA, ACSI shows a positive impact on ROE at the 5% α level (*t*-value = 2.73). This reveals that the results of the regression analyses are consistent with the results of previous research and that customer satisfaction has a positive impact on firms' profitability, suggested by Anderson et al., 1997;

Grusa & Rego, 2005; Grewal, Chandrashekar, & Citrin, 2010; O'Sullivan & McCalling, 2009; Tuli & Bharadwaj, 2009). ROE (return on equity) is regarded as a well-known profitability ratio used in analysis of financial statements. According to Brigham and Daves (2007), return on equity is the most significant bottom-line ratio among financial ratios. ROE measures the return for each dollar of shareholder investment; characteristically, it illustrates how efficiently the shareholders' investment is being used. Unlike ACSI, leverage and increase rate of sales have slightly negative relationships with ROE at the 0.1% significant level and 5% significant level respectively. In addition, although FS (firm size) negatively relates with PM and ROA at the 0.1% level, CI (capital intensity) shows a significantly positive impact on PM and ROA at the 0.1% level.

Table 1. Results of the Regression Analyses

	ACSI	Leverage	IRS	FS	CI	LQ
PM						
Coefficient	34.27	1.016	-.013	-281.51	49.13	2.13
<i>t</i> -value	1.612	.907	-1.29	-10.57**	48.36**	.851
R ²	.955					
Adjusted R ²	.952					
<i>F</i> -value	406.55**					
ROA						
Coefficient	13.55	-.355	-.012	-32.12	5.17	1.042
<i>t</i> -value	1.94	-.962	-3.42*	-3.66**	15.45**	1.262
R ²	.704					
Adjusted R ²	.688					
<i>F</i> -value	45.93**					
ROE						
Coefficient	23.91	-1.226	-.027	11.355	.169	1.865
<i>t</i> -value	2.73*	-2.649*	-6.296**	1.032	.403	1.802
R ²	.36					
Adjusted R ²	.291					
<i>F</i> -value	9.326**					
Tobin's q						
Coefficient	-.45	.019	.000	-.516	-.104	-.035
<i>t</i> -value	-.66	.526	-.802	-.605	-3.718*	-.434
R ²	.111					
Adjusted R ²	.065					
<i>F</i> -value	2.416*					
MVA						
Coefficient	-12.366	-.573	.005	-43.068	1.031	-1.227
<i>t</i> -value	-.541	-.475	.466	-1.503	.943	-.455
R ²	.030					
Adjusted R ²	-.21					
<i>F</i> -value	.591					

NOTE: ACSI= American Customer Satisfaction Index , Leverage= Debt to Equity ratio, IRS= Increase Rate of Sales, FS= Firm Size, CI= Capital Intensity, LQ= Liquidity, PM= Profit Margin, ROA= Return on Assets, ROE= Return on Equity, MVA= Market Value Added

*P< .05

**P<.001

CONCLUSION & DISCUSSIONS

In this study, ACSI was primarily employed to identify the relationships between the firm's profitability and the firm's value. To empirically investigate the relationships, data was extracted from publicly available access such as ACSI and COMPUSTAT accounting data. Using marketing and finance literature, degree of customer satisfaction were measured by ACSI, and the firms' financial performance was measured by profit margin, return on assets, return on equity, Tobin's q and market value added.

During the period from 1998 to 2009, it was observed that the ACSI in both hotels and restaurants has shown similar increasing index patterns. In fact, since 2008 the index have become almost the same. ACSI of airlines was similar as the restaurant's scores in 1998, but their ASCIs decreased significantly afterward (Fornell & Cook, 2010). The results of a series of regression analyses reveal that ACSI is significant in predicting the firm's profitability only for ROE. On the other hand, ACSI was not reflected in other indices such as PM, ROA, Tobin's q and MVA. The findings are consistent with previous studies (Fornell et al., 2006). The insignificant impact of ACSI in the Tobin's q and MVA indicate that changes of customer satisfaction do not have a straight and immediate impact on stock prices.

Return on Equity, which is calculated by a fiscal year's net income divided by total equity, measures the rate of return on the shareholders' equity of the common stock owners. To put it another way, ROE illustrates how well a company uses investment funds to generate earning growth (Ross, Westerfield, & Jaffe, 2008). Although there exist many ratios (i.e., PM, ROA, and ROI) and each ratio has an essential meaning and implication, ROE is considered one of the best indices for comparing companies in terms of their financial performance (Ross et al., 2008). ROE's reputation as an excellent indice is demonstrated by the DuPont formula: known as a strategic profit model: DuPont formula breaks down ROE into three components and reveals the effect of each component on the firm's profitability (Wooldridge, 2002). The significant result of ROE in this study indicates show that the effect of ACSI on ROE can be utilized in understanding the relationship between customer satisfaction and a firm's profitability. The fact that customer satisfaction has a direct and indirect impact on financial outcome indicators (ROE), demonstrates the economic value of customer satisfaction (Fornell et al., 2006). This implies that the increase of customer satisfaction by marketing activities significantly improves a firm's operating performance.

One limitation of this study is that the available data from ACSI and COMPUSTAT were limited to the only 21 hospitality and tourism firms in the U.S. (i.e., hotels: 6, restaurants: 9, and airlines: 5). Future study should encompass more firms in the hospitality and tourism industry to generalize the findings. More studies should be done in other sectors in the same industry as a natural extension of the current research effort.

REFERENCES

- Aaker, D. A., & Jacobson, R. (2001). The value relevance of brand attitude in high-technology markets. *Journal of Marketing Research*, 38, 485–493.
- Agrawal, J., & Kamakura, W. A. (1995). The economic worth of celebrity endorsers: An event study analysis. *Journal of Marketing*, 59(3), 56-63.

- Aksoy, L., Cooil, B., Groening, C., Keiningham, T. L., & Yalçın, A. (2008). The Long-Term Stock Market Valuation of Customer Satisfaction, *Journal of Marketing*, 72 (July) 105-122.
- Anderson, E. W., Fornell, C., & Mazvancheryl, S. K. (2004). Customer Satisfaction and Shareholder Value. *Journal of Marketing*, 68(October), 172–85.
- Anderson, E. W., Fornell, C., & Rust, R. T. (1997). Customer satisfaction, productivity, and profitability: Differences between goods and services. *Marketing Science*, 16(2), 129-145.
- Berger, P. G., Ofek, E., & Swary, I. (1996). Investor Valuation of the Abandonment Option. *Journal of Financial Economics*, 42(October), 257–87.
- Belsley, D.A., Kuh, E., & Welsch, R.E. (1980). *Regression Diagnostics: Identifying Influential Data and Sources of Collinearity*. New York, NY: John Wiley & Sons,
- Bisbe, J., & Otley, D. (2004). The effects of the interactive use of management control systems on product innovation. *Accounting, Organizations and Society*, 29(8), 709–737.
- Brigham, E. F., & Daves, P. R. (2007). *Intermediate financial management* (9th ed.). New York: Dryden.
- Chenhall, R. H. (2005). Integrative strategic performance measurement systems, strategic alignment of manufacturing, learning and strategic outcomes: An exploratory study. *Accounting, Organizations and Society*, 30, 395–422.
- Chung, K. H., & Pruitt, S. W. (1994). A Simple Approximation of Tobin's q. *Financial Management*, 23(3), 70-74.
- Day, G. & Fahey, L. (1988) Valuing Market Strategies. *Journal of Marketing*, 52(July), 45–57.
- Denizci, B., & Xiang, L. (2009). Linking Marketing Efforts To Financial Outcome: an Exploratory Study in Tourism and Hospitality Contexts. *Journal of Hospitality & Tourism Research*, 33(2), 211-226.
- Fornell, C., & Cook, D. (2010). ACSI Commentary June 2010, Retrieved June 15, 2010, from <http://www.theacsi.org>
- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). The American Customer Satisfaction Index: nature, purpose, and findings. *Journal of Marketing*, 60, 7–19.
- Fornell, C., Mithas, S., Morgeson III, F. V., & Krishnan, M. S. (2006). Customer Satisfaction and Stock Prices: High Returns and Low Risk. *Journal of Marketing*, 70 (January), 1-14..
- Grafton, J., Lillis, A. M., & Widener, S.K. (2010). The role of performance measurement and evaluation in building organizational capabilities and performance. *Accounting, Organizations and Society*.
- Grewal, R., Chandrashekar, M., & Citrin, A. V. (2010). Customer Satisfaction Heterogeneity and Shareholder Value. *Journal of Marketing Research*, XLVII, 612–626.
- Hall, B., Cummins, C., Laderman, E., & Mundy, J. (1988). The R&D Master File Documentation. Working Paper No. 72, National Bureau of Economic Research.
- Hunt, S. D., & Morgan, R. M. (1995). The Comparative Advantage Theory of Competition. *Journal of Marketing*, 59(2), 1–15.
- Ittner, C. D., & Larker, D. F. (1996). Measuring the Impact of Quality Initiatives on Firm Financial Performance. In S. Ghosh, & D. Fedor (Ed.), *Advances in the Management of Organizational Quality* (pp. 1-37). Greenwich, CT: JAI Press.
- Ittner, C. D., Larcker, D.F., & Rajan, M. (1997). The Choice of Performance Measures in Annual Bonus Contracts. *Accounting Review*, 72 (2), 231–55.

- Ittner, C. D., Larcker, D. F., & Randall, T. (2003). Performance implications of strategic performance measurement in financial services firms. *Accounting, Organizations and Society*, 28 (7), 715-741.
- Jacobson, R., & Mizik, N. (2009). The financial markets and customer satisfaction: re-examining the value implications of customer satisfaction from the efficient markets perspective. *Marketing Science*, in press
- Kaplan, R. S. & Norton, D. P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Boston: Harvard Business School Press.
- Lehmann, D. R. (2004). Linking Marketing to Financial Performance and Firm Value. *Journal of Marketing*, 68 (October), 73–75.
- Lindenberg, E. B., & Ross, S. A. (1981). Tobin's q Ratio and Industrial Organization, *Journal of Business*, 54 (January), 1–32.
- Madden, T. J., Fehle, F., & Fournier, S. (2006). Brands matter: An empirical demonstration of the creation of shareholder value through branding. *Journal of the Academy Marketing Science*, 34(2), 224-235.
- Mathur, L. K., & Mathur, I. (1995). The effect of advertising slogan changes on the market value of the firms. *Journal of Advertising Research*, 35(1), 59-65.
- McConnell, J. J., & Servaes, H. (1990). Additional evidence on equity ownership and corporate value, *Journal of Financial Economics*, 27 (2), 595-612.
- Mittal, V., Anderson, E. W., Sayrak, A., & Tadikamalla, P. (2005). Dual Emphasis and the Long-Term Financial Impact of Customer Satisfaction. *Marketing Science*, 24(24), 544-555.
- Moorman, C., & Lehmann, D. R. (2004). *Assessing marketing strategy performance*. Cambridge, MA: Marketing Science Institute.
- Morgan, N. A., Clark, B. H., & Gooner, R. (2002). Marketing productivity, marketing audits, and systems for marketing performance assessment: Integrating multiple perspectives. *Journal of Business Research*, 55(5), 363-375.
- Morgan, N., Anderson, E. & Mittal, V. (2005). Understanding Firms' Customer Satisfaction Information Usage. *Journal of Marketing*, 69 (July), 131–151.
- Narayanan, S., Desiraju, R., & Chintagunta, P. K. (2004). Return on investment implications for pharmaceutical promotional expenditures: The role of marketing-mix interactions. *Journal of Marketing*, 68(4), 90-105.
- O'Sullivan, D., & McCallig, J. (2009). Does customer satisfaction influence the relationship between earnings and firm value? *Market Letters* , 20, 337–351.
- Pauwels, K., Silva-Rosso, J., Srinivasan, S., & Hanssens, D. M. (2004). New products, sale promotions, and firm value: The case of automobile industry. *Journal of Marketing*, 68(4), 42-57.
- Ross, S. A., Westerfield, R. W., & Jaffe, J. (2008). *Corporate Finance* (8th edition). Columbus, OH: McGraw-Hill.
- Rust, R. T., Ambler, T., Carpenter, G. S., Kumar, V., & Srivastava, R. K. (2004). Measuring Marketing productivity; current knowledge and future directions. *Journal of Marketing*, 68, 76–90.
- Rust, R. T., Moorman, C., & Dickson, P. R. (2002). Getting returns from service quality: Revenue expansion, cost reduction, or both. *Journal of Marketing*, 66 (October), 7-24.
- Sheth, J. N., & Sisodia, R. S. (1995a). Feeling the heat. *Marketing Management*, 4(2), 8.
- Sheth, J. N., & Sisodia, R. S. (1995b). Feeling the heat – Part 2. *Marketing Management*, 4 (3), 19.
- Sheth, J. N., & Sisodia, R. S. (2002). Marketing productivity: Issues and analysis. *Journal of*

- Business Research*, 55(5), 349-362.
- Slywotzky, A. J., & Shapiro, B. (1993). Leveraging to beat the odds: The new marketing mind-set. *Harvard Business Review*, 71(5), 97-107.
- Sprinkle, G. B. (2003). Perspectives on experimental research in managerial accounting. *Accounting, Organizations and Society*, 28(2-3), 287-318.
- Srivastava RK, Reibstein DJ (2005) Metrics for linking marketing to financial performance. *Marketing Science Institute*, Report No.05-200
- Srivastava, R. K., Shervani, T., & Fahey, L. (1998). Market-based assets and shareholder value: A framework for analysis. *Journal of Marketing*, 62(1), 2-18.
- Srivastava, R. K., Shervani, T., & Fahey, L. (1999). Marketing, business processes, and shareholder value: An organizationally embedded view of marketing activities and the discipline of marketing. *Journal of Marketing*, 63(Special Issue), 168-179.
- Stewart, G. B. (1991) *The Quest For Value: A Guide for Senior Managers*. New York, NY: Harper Business.
- Tuli, K. R., & Bharadwaj, S. G. (2009). Customer Satisfaction and Stock Returns Risk. *Journal of Marketing*, 73, 184-197.
- Uncles, M. D. (2005). Marketing metrics: A can of worms or the path to enlightenment. *Brand Management*, 12(6), 412-418.
- Wiesel, T., Skiera, B., & Villanueva, J. (2008). Customer equity: an integral part of financial reporting. *Journal of Marketing*, 72, 1-14.
- Wilson, A. (2002). Attitudes Towards Customer Satisfaction Measurement in the Retail Sector. *International Journal of Market Research*, 44 (2), 213-22.