A MARKETING PERSPECTIVE OF STAKEHOLDER INFLUENCE ON LONG AND SHORT-TERM FIRM FINANCIAL MEASURES

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Submitted to the Graduate Faculty of

The Katz Graduate School of Business in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

University of Pittsburgh

2008

UNIVERSITY OF PITTSBURGH

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This dissertation consists of three essays that examine the effects of stakeholder influence on a firm's long and short-term financial measures. The first essay posits that the influence of customer satisfaction and corporate governance on a firms' financial performance is moderated by the firm's focus (the number of different segments in which a firm operates). I draw on the attention-based view of firms and use 289 firm-year observations across various industries between 2002 and 2005. Results suggest that the interactive impact of customer satisfaction and corporate governance is related to a firms' long-term financial performance. Firms with high focus face tradeoffs between customer satisfaction and corporate governance in order to improve long-term financial growth. Firms with low focus have adequate attention resources such that they are able to improve customer satisfaction and corporate governance practices to achieve their long-term financial growth.

My second essay, using signaling theory, helps clarify when CSR will benefit a firm financially, and on which aspects of CSR firms should focus. The approach divides CSR signals into external (e.g., environmental issues such as pollution) and internal (e.g., employee issues such as hiring practices) as well as strengths (exceeding legal standards) and concerns (running afoul of the law). I suggest that these four types of CSR signals in addition to information from annual reports, customer satisfaction, short-term financial measures, and industry concentration combine to provide strong signals to investors regarding a firm's future prospects.

The third essay investigates the impact that managerial, front-line employee, and customer satisfaction have on one another and on, purchase intentions, actual behavior and finally, on firm revenues. Results show that 1) The effect of managerial (franchisee) satisfaction on customer satisfaction is fully mediated via employee satisfaction; 2) The effect of customer satisfaction on repurchase intention is strongly moderated by front-line employee satisfaction; and 3) Customer repurchase intentions affect firm revenues. These results suggest that firms seeking to enhance customer satisfaction, repurchase intentions, and profits should not only make direct investments in customer satisfaction, but also indirect investments in human resources, especially in improving satisfaction among front-line employees.

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PREFACE

Professionally, I would first and foremost like to thank my co-advisors Vikas Mittal and Vanitha Swaminathan. Vikas embodies everything I wanted in an advisor; fast response to my questions, honest criticism, plenty of ideas, introductions to other researchers, and a wealth of knowledge. Without Vikas's belief in me, my research and advancement would not be where they are today. Vanitha Swaminathan provided lots of feedback and constantly pushed me towards better reasoned hypotheses. She managed to do this while advising other students and achieving tenure. Both of my advisors will serve as excellent role models as I advance through academia. I also am indebted to my committee members for their efforts and energies to develop my research abilities and prepare me for my academic career: John Prescott and Carrie Leana for keeping me on the path of theory, and Vishal Singh for his guidance in modeling. Other academics have helped with my research, but one who stands out is Heiner Evanschitzky, who helped immensely with my third essay. Finally, a special thanks to Ryan Luchs, who accompanied me these past four years through the program, assisting me through many a class.

Of course there are those in my personal life that deserve credit too. My mom and dad for encouraging me and making it financially possible to go through the program. And, of course, unwavering faith from my wife to be, Patty Jaconetta.

1.0 INTRODUCTION

Many groups have an interest in how a firm conducts business. The firm, in turn, must balance the competing wants and needs of each of these stakeholders (Figure 1.1). Differing academic research groups have traditionally concentrated on an individual or small subset of all stakeholders. For instance, marketing scholars historically have only looked at customers; organizational behavior has focused on employees and managers; finance and accounting have investigated shareholders and regulating agencies like the SEC. In recent years researchers have begun to take an interdisciplinary view, simultaneously examining the firm's response towards the multiple stakeholder groups. Continuing in this direction of research, my dissertation addresses interests of multiple stakeholders, with a particular focus on customers. The common thread tying my essays together is the most important stakeholder group from a marketing point of view: customers and their satisfaction (Figure 1.2).

Stakeholder theory conceptualizes a firm as a confluence of stakeholders with varying cooperative, competitive, and legitimate interests (Alkhafaji 1989; Donaldson and Preston 1995; Freeman 1984; Hill and Jones 1992; Jones and Wicks 1999). Stakeholders are defined as those who provide input to *and* receive benefits from the firm. Empirical research shows that firms that actively engage in stakeholder management have better financial performance than those that do not (Berman et al. 1999; Donaldson and Preston 1995). In addition to its theoretical appeal, stakeholder theory also has found acceptance among managers. Surveys of managers have found that the majority of managers believe they have a moral obligation to address the needs of multiple stakeholders, rather than investors exclusively (Posner and Schmidt 1984).

As argued by Milton Friedman (1970), the goal of a firm is to create value for its shareholders. However, the needs and desires of each of the stakeholder groups need not be mutually exclusive or to the detriment of shareholders. In fact, addressing the needs of one stakeholder group may in turn produce results that can benefit another group. An example of this is a firm that rigorously adopts governmental environmental measures also helps satisfy those constituents who desire the firm to be more social responsible. The results of addressing the needs of one group of stakeholders combined with addressing the needs of another group of stakeholders need not even have an additive effect on the financial measures of a firm. In some instances addressing the needs of multiple groups of stakeholders can have synergistic or multiplicative effects on firm performance. In other instances firms must trade off the interests of one group of stakeholders to satisfy the interests of other stakeholder group.

The outcomes of stakeholder wants and needs are captured by satisfaction measures (customer, managerial and employee), social responsibility measures (government agencies, employees, and special interest groups), and corporate governance scores (investors and government agencies). My essays will use ROI (short-term), Tobin's q (long-term), and abnormal stock return (long-term) to capture a firm's financial returns and the desires of shareholders. Together my essays will utilize these measures to help direct a firm's resources towards optimum implementation of stakeholder strategy.

1.1 OVERVIEW OF ESSAYS

This dissertation comprises three essays. In Essay 1, I focus on two main groups of stakeholders, the investor community and the customers of a firm. I view their interaction through the lens of a third group of stakeholders, managers. Managers have a limited amount of attention to apply to firm projects (Ocasio 1997). When attention is diluted for firms operating in many business segments, managers are unable to address adequately the needs of the investor community and customer stakeholder groups. A tradeoff between investors and customers is necessary. However, when a firm is narrowly focused, doing business in only a few segments, then there is enough managerial attention and the firm can follow a dual emphasis. A firm that has achieved a dual emphasis in this scenario should be able to achieve higher long-term financial results compared with only pursuing customer- or investor-related projects.

Essay 2 continues the theme of researching multiple stakeholder groups. This essay investigates the interactions of the investor community, the employees of a firm, and society. A firm can address the needs of these groups through corporate social responsibility (CSR) acts, but how does CSR benefit or disadvantage investors? This essay uses signaling theory (Kirmani and Rao 2000) in four common situations to discern the extent to which firms are advantaged or disadvantaged by CSR strengths and concerns. CSR signals are divided into external (e.g., environmental issues such as pollution) and internal (e.g., employee issues such as hiring practices) as well as strengths (exceeding legal standards) and concerns (running afoul of the law). These four types of CSR signals, in addition to information from annual reports, customer satisfaction, short-term financial measures, and industry concentration, combine to provide strong signals to investors regarding a firm's future prospects only in certain situations. Results from this essay show that the best results, from the investment community point of view, can be summarized in three points. First, externally focused CSR activities are assisted by managerial advertising to investors. They do not compensate for low short-term financial outcomes, assist firms in concentrated industries, but are more detrimental for firms in less concentrated industries. Second, internally focused CSR activities are worse for firms with high (vs. low) levels of customer satisfaction, low (vs. high) levels of industry concentration, and low (vs. high) levels of short-term financial outcomes. Third, internal CSR issues have little importance from an investor point of view.

The third essay in my dissertation once again centers on customers, but also investigates the role that managers and employees have on value creation for a firm. To determine the interactions of these groups, two data sets were used. One was from the German retailing industry and the other from a US banking firm. This variety in the data source allows the results to be generalized beyond specific industries and countries. Results show that 1) the effect of managerial (franchisee) satisfaction on customer satisfaction is fully mediated via employee satisfaction; 2) the effect of customer satisfaction on repurchase intention is moderated strongly by front-line employee satisfaction; and 3) customer repurchase intentions affect firm revenues. These results suggest that firms seeking to enhance customer satisfaction, repurchase intentions, and profits should not only make direct investments in customer satisfaction, but also indirect investments in human resources, especially in improving satisfaction among front-line employees.

1.2 OVERALL CONTRIBUTIONS AND IMPLICATIONS

Overall, these three essays provide several noteworthy insights. The first is that marketing, through its emphasis on customers, can help realize superior long-term financial results for a firm. In other words, customers are clearly one of the key stakeholders for market-oriented firms. This is particularly important as improvements in customer satisfaction, as my findings show, are significantly related to increased shareholder value. However, this benefit does not occur in isolation. Employees, investors, and others influenced by corporate social responsibility, human resource practices, and corporate governance practices provide the context wherein the link between customer satisfaction and shareholder value plays out.

Figure 1.1: Stakeholders

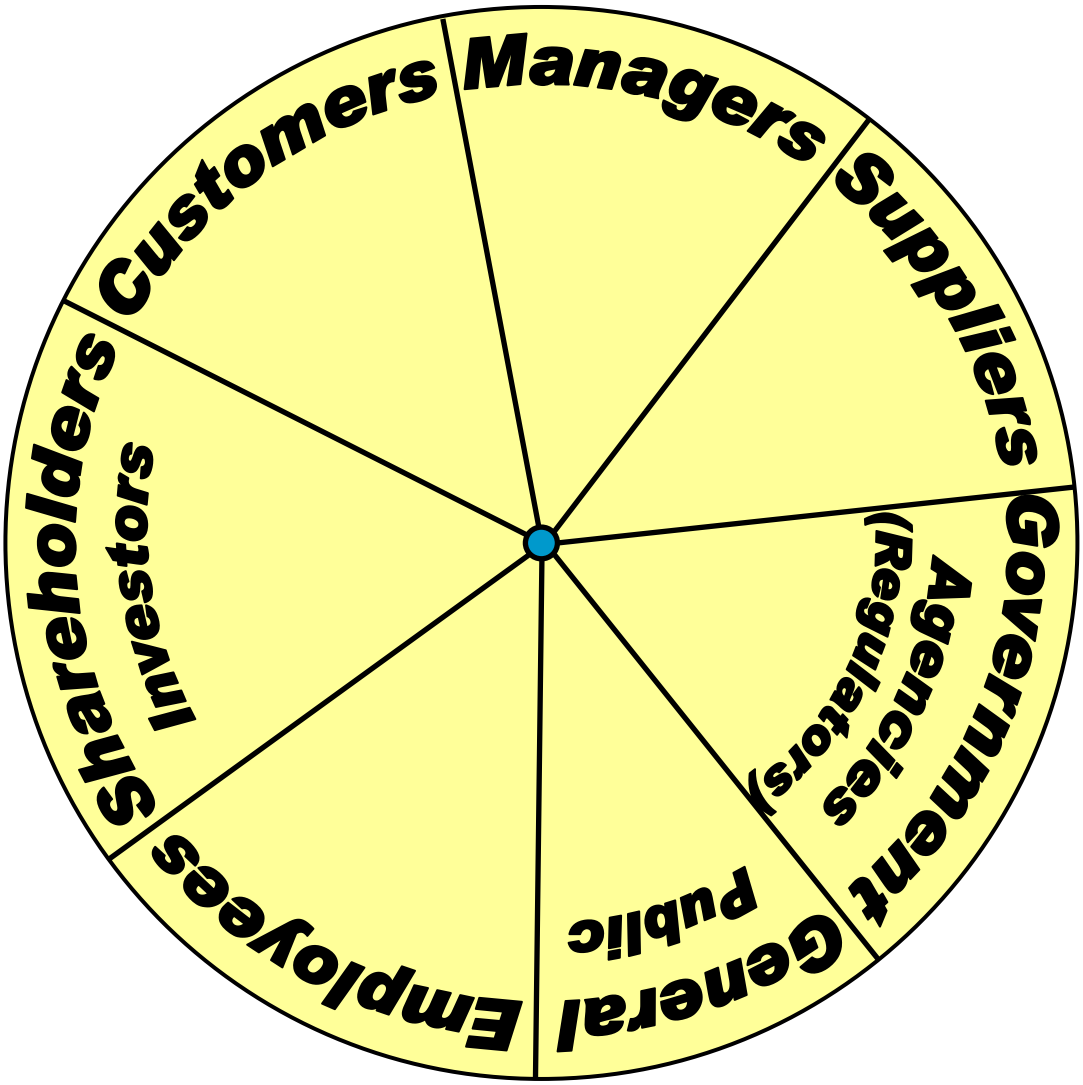
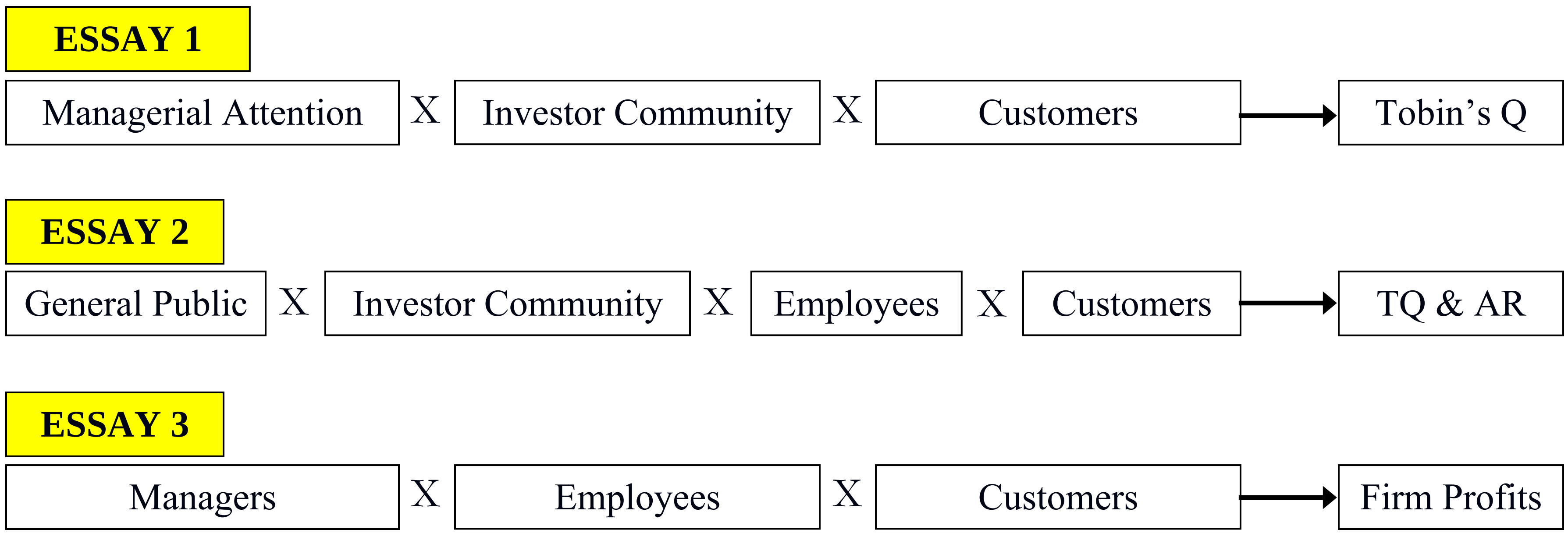


Figure 1.2: Dissertation Overview



2.0 ESSAY 1: TRADEOFFS BETWEEN CUSTOMER SATISFACTION AND CORPORATE GOVERNANCE: THE ROLE OF MANAGERIAL ATTENTION

A firm's top management must allocate its attention to issues that are salient to multiple stakeholders such as shareholders, employees, customers, competitors, special interest groups and various regulators (Donaldson and Preston 1995; Freeman 1984; Friedman and Miles 2002; Gaba and Kalra 1999; Grewal and Dharwadkar 2002; Kalra et al. 1998; Kalra and Shi 2001). To the extent that managerial attention is a scare resource, top management must decide how to allocate it among these groups (Brown and Dacin 1997; Grewal et al. 2001; Grewal and Tansuhaj 2001; Jones and Wicks 1999). As explained later, differences in how management allocates attention to different stakeholders affects a firm's strategy (Ocasio 1997; Ocasio and Joseph 2005; Ocasio and Joseph 2006).

While each stakeholder group is important in its own right, two groups of stakeholders who are the most salient and integral to a firm's financial well-being are its shareholders and its customers. The extent to which a firm's management promotes fairness, transparency and accountability to investor stakeholders can be measured by the firm's corporate governance (Anderson et al. 2000; Colley et al. 2003; Eldenburg and Krishnan 2003; Farber 2005; Gompers et al. 2003). Attainment of customer interests, on the other hand, can be represented empirically by the extent to which a firm satisfies its customers (Anderson et al. 2000; Colley et al. 2003; Eldenburg and Krishnan 2003; Farber 2005; Gompers et al. 2003). Top managers, inevitably must balance the interests of these two most important stakeholders. The natural question that arises is whether long-term value of a firm is maximized by achieving simultaneously the goals of one stakeholder group or both of them? In other words, are both of these goals—high levels of corporate governance and customer satisfaction—compatible or competing goals. More interestingly, are there conditions under which these goals can complement each other in achieving superior financial performance? Broadly speaking, I seek answers to these questions in this paper. As explained later, I argue that firm focus provides one such condition that can explain systematically the extent to which customer satisfaction and corporate governance are complementary or competing goals for an organization.

The determinants of financial success of a firm have become a key research area for business school scholars, but the antecedents of financial performance examined appear to be discipline specific. For instance, marketing scholars have conceptualized financial performance as an outcome of satisfying the needs of customers, i.e., how customer satisfaction affects financial returns (Anderson et al. 2004; Anderson et al. 1997; Anderson and Sullivan 1993; Fornell et al. 1996; Guo et al. 2004; Mittal et al. 2005; Mittal and Kamakura 2001; Rust and Zahorik 1993). In contrast, researchers in accounting, finance, and strategy have investigated how corporate governance affects financial returns (Anderson et al. 2000; Colley et al. 2003; Eldenburg and Krishnan 2003; Farber 2005; Gompers et al. 2003). To date, I am not aware of any study that examines how both corporate governance and customer satisfaction simultaneously may affect a firm's performance. Top management, needless to say, must manage both customer satisfaction and corporate governance to improve the financial outcomes for its firm.

It may be asked, why it is important for marketing scholars to examine simultaneously the impact of corporate governance and customer satisfaction on a firm's financial performance. After all, issues of corporate governance and customer satisfaction are dealt with by such different corporate departments, that marketing managers may rarely, if at all, be required to examine corporate governance issues. There are two important reasons for such an endeavor. First, in order for marketing to have a seat in top-management circles, it is vital for marketing managers to understand and demonstrate how marketing activities can enhance firm value and corporate brand equity. Second, and more importantly, corporate governance activities, by virtue of their effect on the corporate brand, can affect customers' perceptions of a firm's products and brands. Brown and Dacin (1997, pg. 68) assert that consumers' cognitive associations with a company can be a strategic asset and a source of sustainable competitive advantage. Using both experimental and survey data, Brown and Dacin (1997) found that consumers' associations with a company can affect their product evaluations. Brown and Dacin (1997, pg. 79) concluded: "what consumers know about a company can influence their reactions to the company's products." Similarly, Rao et al. (2004) show that a corporate-branding strategy –where the corporation's name or corporate brand is reflected integrally in the product brands—produces superior financial returns than a "house of brands" strategy where no underlying corporate identity is visible to consumers. This finding is consistent with McGuire, Sundgren, and Schneeweis' (1988) argument that customers perceive themselves as having implicit claims on the corporation. As such, even non-marketing activities at the corporate level are used by customers to draw inferences about the firm's offering. Therefore, it is vital for marketing managers to understand fully the interactive and reciprocal nature of corporate governance and customer satisfaction issues.

While marketing scholars are more familiar with customer satisfaction (e.g., American Customer Satisfaction Index 2007), corporate governance has not received much attention in the marketing literature. However, or top management, corporate governance is by no means a subordinate goal to customer interests. Illustrative of the importance of corporate governance is the voluminous coverage it receives in business press (e.g., The Wall Street Journal 2005a; The Wall Street Journal 2005b; The Wall Street Journal 2005c). Broadly speaking, corporate governance refers to the methods that investing stakeholders including individual investors, institutional investors, and regulatory agencies employ to monitor and control top-management and to protect investor interests (John and Senbet 1998). Operationally, corporate governance encompasses a broad set of activities including creating and enforcing company bylaws, determining managerial stock, general compensation, and the makeup of the board committee (Baysinger and Butler 1985). A sample of such activities is shown in Appendix A. As explained later, the Institute for Shareholder Services (ISS) tracks the corporate governance quotient for all companies in the S&P 500.

In developing my hypotheses, I take the view that achieving high levels of customer satisfaction and high levels of corporate governance represent large, resource intensive, and comprehensive activities to which top-management must attend. Limits to managerial attention (Ocasio 1997), in some cases, may preclude management from addressing adequately one of these priorities. To address this issue, I develop my hypotheses based on the attention-based theory of a firm (Ocasio 1997). The hypotheses are then tested using longitudinal data comprising four years of observations from S&P 500 companies for which both customer satisfaction and corporate governance metrics were available. I examine their impact on measures and include covariates that control for factors such as industry type, productivity, firm size, quick ratio, operating leverage, and financial leverage in my empirical analysis.

2.1 LITERATURE REVIEW

2.1.1 Stakeholder Theory

Stakeholder theory conceptualizes a firm as a confluence of stakeholders who have varying cooperative, competitive, and legitimate interests (Alkhafaji 1989; Donaldson and Preston 1995; Freeman 1984; Hill and Jones 1992; Jones and Wicks 1999). Stakeholders are defined as those who provide input to *and* receive benefits from the firm. In addition to its theoretical appeal, stakeholder theory also has found acceptance among managers. In surveys, the majority of managers believe they have an inherent obligation to address the needs of multiple stakeholders and not just shareholders (Posner and Schmidt 1984). Empirical research shows that firms in which top management actively address multiple stakeholder interests have better financial performance than those that do not (Berman et al. 1999; Donaldson and Preston 1995).

In practice, stakeholder management entails that top management must allocate attention to diverse stakeholder claims, especially those that are foremost in their minds. The salience of stakeholder concerns to managers is dependent on such factors as the relative power of particular stakeholders (Mitchell et al. 1997) or on the values that managers espouse (Freeman 1984). Donaldson and Preston (1995) summarize the nebulous process of attention allocation by stating that "it is the responsibility of managers, and the management function, to select activities and direct resources to obtain benefits for legitimate stakeholders." In other words, the extent to which a stakeholder group's interests are met by the firm may be linked to the extent to which they were salient to top management. Stated differently, the extent to which top management allocates attention to and achieves the interests of customers may manifest as increased customer satisfaction. Similarly, the extent to which top management attends to and aims to achieve the interests of the investor community may be represented by its corporate governance practices. This is important because, as explained below, how and where top management directs its attention determines the firms' strategic posture.

2.1.2 Customers and Investing Community as Stakeholders

Customers and their satisfaction have been examined extensively by marketing scholars (Anderson and Sullivan 1993). The overwhelming majority of research finds that attending to and satisfying the needs of customers, as measured by improvements in customer satisfaction, is related to positive financial outcomes such as increased sales (Gomez et al. 2004), profitability (Kamakura et al. 2002), cash flow (Gruca and Rego 2005), short-term financial performance as measured by ROI (Anderson et al. 1994), as well as long-term financial performance as measured by Tobin's *q* (Anderson et al. 2004; Mittal et al. 2005; Swaminathan et al. 2007). Research regarding the impact of corporate governance on financial metrics shows similar findings, although it has received scant attention in the marketing literature. Empirical studies show that measures of corporate governance are correlated with firm profitability (Gompers et al. 2003), relative financial performance (Baysinger and Butler 1985), profit margin and sales growth (Brown and Caylor 2004), as well as firm value and stock holder returns (Bebchuk et al. 2004). As explained earlier, corporate governance[1] does not imply corporate honesty or corporate intent to "be good." Rather, it is a broad set of activities including duties of the

[1] Some papers show that a specific individual component of corporate governance may not be positively related to firm value. For instance, Bebchuk et al. (2004) found that poison pills and measures designed to discourage majority shareholders from influencing management were negatively correlated with firm valuation. Hermalin and Weisbach (1991) found no relation between board independence and Tobin's q. However, studies employing comprehensive measures find that higher corporate governance is positively related to firm value.

directors, bylaws, stock and general compensation, and the board committee intended to ensure that management addresses the concerns not only of shareholders, but other investors such as bond holders, regulators, and governmental agencies (e.g., see Appendix A).

The preceding review suggests that when examined separately—as has been done in the marketing and finance/strategy literature—both the customer community and the investing community represent important stakeholders whose goals, if attended to and achieved by top management, result in enhanced firm financial performance. Absent, however, is a consideration of their joint effect on firm performance. From the perspective of testing stakeholder theory it is critical to conduct such a test because a basic tenet of stakeholder theory is top management's ability simultaneously to attend to and maximize the interests of diverse stakeholders. Thus, at a theory-testing level, I contribute to stakeholder theory by showing conditions under which stakeholder interests may represent competing or complementary objectives to be achieved by top management.

2.1.3 Firm Focus and Managerial Attention: Moderating Role

Firm focus may be represented by the number of different business segments in which a firm competes (Rao et al. 2004). The fewer the segments, the more focused the firm. Competing in many segments may allow firms to avail themselves of economies of scale and scope through harnessing cross-segment efficiencies. However, it is argued that competing in a few segments—i.e., being more focused, may enable a firm to specialize, leading to greater efficiencies and faster learning.

Empirical research addressing this issue suggests that, in general, firms competing in fewer segments have better financial results than unfocused firms (e.g., Berger and Ofek 1999;

Comment and Jarrell 1995; Lang and Stulz 1994; Servaes 1996). For instance, Lang and Stulz (1994) found that firm diversification and Tobin's *q* were negatively correlated, and that highly diversified firms have Tobin's *q* measures below the mean and median in every year of their study, even when controlling for industry effects. Examining firms from the 1960's and early 1970's, Servaes (1996) found that diversified firms sold at a discount when compared to single industry firms. Berger and Ofek (1999) and Comment and Jarrell (1995) found similar results: lower company focus leads to better financial performance. Finally, refuting the economies of scope argument, Gimeno and Woo (1999), showed that more singularly focused companies achieve savings that negate any superior performance from a diversification[2] strategy.

While many explanations are possible, I build on attention-based theory to postulate why and how firm focus may affect the extent to which top management's attention to its stakeholders represents competing or complementary pathways to superior financial performance. The attention-based theory of a firm posits that the environment is a source of constant input and stimuli, and managers, as human beings, have limited cognitive capabilities to deal with all available stimuli (Ocasio 1997). Thus, attention-based theory starts with a single, relatively modest assumption—managers have a finite amount of attention. Allocation of attention, a key managerial resource, has implications for firm success (Ocasio and Joseph 2005; Sproull 1984). Attention is a firm-based resource, which, if properly deployed, should provide a competitive advantage for a firm (Peteraf and Bergen 2003). Attention-based theory can be thought of as a subset of resource dependence, whereby one actor supplies another with a resource that is scarce, controllable, non-mobile, or non-sustainable (Barney 1991; Frooman

[2] While operating in many unrelated segments minimizes risk, it reduces firm value and profitability.

1999). Resource dependence has been used to explain how stakeholders influence an organization's behavior (Frooman 1999).

For instance, in a study of 36 French firms, Durand (2003) found that firms that invested in assets that would assist in employee attention were able to reduce the magnitude of forecast errors as well as reduce positive forecast bias. The theory builds on Simon's (1976) concept of bounded rationality, especially among managers who must operate in an environment marked with information munificence. In such information rich environments, multiple and sometimes competing stimuli focused managerial attention on certain issues, to the exclusion of others. As Simon (cited in Falkinger (2007), pg 267) observed, "a wealth of information creates a poverty of attention." This culminates as selective attention—management will selectively attend to an external event/constituent—while ignoring others. Thus, the key decision facing a manager is one of attention allocation, i.e., deciding what to decide (Dutton et al. 1983). The decision to select one issue over another may depend on what is deemed critical by top management (Hambrick and Mason 1984), what is immediately rewarded in organizations (Darrough and Melumad 1995), or what is deemed as urgent (Dutton et al. 1990). These factors can affect how managers invest their attention in issues, which in turn affects their actions—actions such as resource allocation (Ocasio 1997). For instance, Sims (1998) shows that optimal allocation of attention may endogenously determine which data are tracked or ignored in decision making.

Despite its newness, an attention-based view of the firm has become a powerful explanatory paradigm for understanding managerial action and strategic outcomes. For instance, Ocasio and Joseph (2005) applied the attention-based theory of a firm to explain how the chemical industry's responses to various events were shaped by factors that determined which events received management's attention and which events were ignored. They concluded that only events that receive sustained attention from managers and external constituents are seen as critical and elicit industry-wide action. D'Aveni and MacMillan (1990) found that top-management's ability to pay attention to the output environment (e.g., customers and demand growth) decreased their firm's likelihood to go bankrupt compared to firms that were internally focused. Cho and Hambrick (2006) conducted textual analysis of shareholder reports issued by top management to measure the relative attention top management paid to engineering versus entrepreneurship issues. They found that entrepreneurial attention mediated the extent to which characteristics of the top management team affected the level of entrepreneurial change in the company's strategy. More recently, Falkinger (2007) proposed an attention-based model of competition among firms in which the winning firm eventually is shown to survive a contest for attention from constituents like customers.

External firm focus is measured by the number of segments with which a firm has business relationships (Rao et al. 2004). A narrowly focused firm will operate in only a few business segments, while an unfocused firm operates in many business segments. Examples of narrowly focused firms consist of 1-800-Flowers (flowers) and Southwest Airlines (commercial air travel). On the other hand, General Electric operates in many business segments and is the poster company for a diversified firm. A business segment is separate from a geographic or operating segment. In fact, a company can operate in separate sub-segments of a business segment. Large automobile companies are a prime example of this—GM may have multiple lines of passenger cars, pickup trucks and so on. GM is classified as operating in many business segments when sub-segments are included. However, if similar GM sub-segments are amalgamated, then GM is classified as operating in fewer unique business segments than total business segments. I investigate both of these measures of business segments in the results section.

I argue that firm focus is inversely related to the amount of discretionary attention available to management. The argument is rooted in the concept of managerial span of control, first articulated by Urwick (1956): a manager typically is unable to supervise adequately more than five to six subordinates because of the multiplicity of social and formal interrelationships involved. With every additional subordinate, the increase in management complexity is nonlinear. A similar concept, managerial span of attention limits the number of stimuli an executive may be able to scan and interpret simultaneously (Dutton 1993; Kane et al. 2006). For instance, Thomas and McDaniel (1990) found that increased information processing capacity of a top management teams led to better utilization of strategic information in the decision process. Dutton (1993) argued that, over time, managers develop interpretation capacity related to the environment that enables them to draw conclusions, without much formal processing. Much research shows that information processing capacity systematically is affected by structural factors, notable among them, the extent of unrelated segments in which a firm competes (Gary 2005; Hough 2006; Pehrsson 2006; Snell 1992).

I argue that given the same amount of attention, the attention available to address issues about a given segment will be proportionately less for a top management team. This shortfall of attention will be compounded further by the fact that increased span of control will introduce complexity in the management of subordinates and the inter-relationships among the different segments. This is particularly likely to be the case for demands from customers, who in the case of unrelated segments, will—by definition—have disparate demands. Fornell and Johnson (1993) have shown that greater heterogeneity in customer demand is associated with lower customer satisfaction. Indeed, as Ramanujam and Varadarajan (1989) state in their strategic management review of diversification, “The problems of managing diversity increase dramatically as the firm’s scope of diversification increases” (p. 527). Leontiades and Tezel (1981) find that the broader a firm’s focus, the less time is spent on business level planning and more is spent on corporate level planning. Again, this is likely to translate as less time spent on addressing fully segment-specific customer satisfaction issues.

This view also is supported by in-depth studies of organizations. Ocasio and Joseph (2006) examined 51 years of historical documents at the General Electric Corporation (GE) and found managers constantly struggled to allocate attention to various issues and tasks ranging from meetings, reviews, training sessions, and both formal and informal communication channels. A disproportionate amount of time was spent on issues of coordination and distribution of information among business segments, issues that would not arise in a firm with narrow focus. In other words, broader focus necessitates tradeoffs among issues presented by different stakeholders.

A firm may wish to emphasize customer satisfaction and corporate governance. Such a dual emphasis argues that financial benefits accrue from simultaneous revenue enhancements via customer satisfaction and corporate governance improvements. However, Rust et al. (2002) caution that in practice, a dual emphasis is very difficult to implement because these goals may stem from very different organizational philosophies. A firm may be biased towards one type of enhancement through habitual practice (Porter 1980). Once a dual emphasis has been achieved, then it has been shown to produce superior long-term financial results (Mittal et al. 2005; Swaminathan et al. 2007).

Given this, I argue that in firms with broad focus, the higher demands on attention and the increased complexity of coordinating information will translate into decreased attention span and information processing ability among managers. Stated differently, top management at a company with narrow firm focus should have attention-based resources to successfully implement projects simultaneously to improve both customer satisfaction and corporate governance to enhance firm value. In contrast, for companies with broad firm focus, the relative scarcity of attention-based resources necessitates a tradeoff between customer satisfaction and corporate governance as a means to achieve superior long-term value. In other words, dual emphasis will be hard to achieve for firms with a broad focus. Formally, this is stated as follows:

> **Hypothesis 1:** Firm focus will moderate the joint impact of customer satisfaction and corporate governance on long-term value of the firm. Specifically, for narrowly focused firms, higher long-term value results from achieving simultaneously both high levels of corporate governance and customer satisfaction.

2.2 STUDY OVERVIEW

This study draws upon data from several sources to test the hypothesis. The basic model consists of a regression of the form:

$$Y_{ijt} = \beta X_{ijt} + \varepsilon_{ijt} \qquad (1)$$

where Y_{ijt} is the dependent variable for firm *I,* in industry *j,* at time period *t*. In this paper Tobin's *q* is used to measure long-term financial results. X_{ijt} is a vector of explanatory variables that includes firm focus, customer satisfaction, and corporate governance. These variables represent the attention issues that are of primary interest for this study. In addition, I include interactions of these variables, and a number of other firm and industry specific control variables.

For instance, since larger firms may have more resources than smaller firms to devote to corporate governance or customer satisfaction, firm size is used as a control variable. Similarly, other firm-specific properties such as productivity, operating leverage, or financial leverage also could have differing affects on the financial results of the customer satisfaction – corporate governance – firm focus relationship. Leverage also may be a proxy for pressure, or attention drain, on managers devoting energy to create a more efficient firm (Nickell and Nicolitsas 1999). Finally, industry concentration, a marketplace rather than firm specific measure, is used to control for the market differences firms face. The last component in Equation 1, ε_{ijt}, represents the idiosyncratic component for firm *i* operating in industry *j* at time period *t*. In the empirical application, I try several specifications including random and fixed effects for firm, industry, and time period. I next provide details on the data and the measures on the variables used in the study.

2.2.1 Study Sample

Data for the study were assembled from three sources. Customer satisfaction data were obtained from the American Customer Satisfaction Index (ACSI), while corporate governance data were provided by Institutional Shareholder Services. COMPUSTAT was used to obtain financial and descriptive data for various firms. To be included in the data set, an observation needed all four of the following pieces of information: customer satisfaction, corporate governance, number of business segments, and financial results. Due to the fact that the corporate governance database has been assembled recently, only data from the past few years were available. In addition, this database only contains companies in the S&P 500. Moreover, the ACSI only tracks a subset of the firms in the S&P 500. All firms that had complete information were used in this study. The restrictions resulted in 289 usable firm observations from 2002-2005.

2.2.2 Dependent variables

Tobin's q. Tobin's *q* is a forward-looking measure of financial performance that has been used in a variety of studies (e.g., Anderson et al. 2004; Luo and Bhattacharya 2006; Mittal et al. 2005). It enables one to ascertain how a firm will perform financially in the future. Tobin's *q* is defined as the ratio of the market value of a firm's securities to the replacement costs of its tangible assets (Chung and Pruitt 1994).

$$\text{Tobin's } q = \frac{(\text{Stock Price} * \text{Number of Shares Outstanding}) + (\text{Assets - Common Equity})}{\text{Assets}}$$

Return on Investment. ROI measures how well a company has used its capital to generate returns, or profit, for the firm. Higher ROI indicates better use of firm capital. ROI is used to replace Tobin's *q* as a dependent variable to gauge whether the independent variables predict differing forward or backward looking financial measures. The data also include information on return on assets (ROA) for each firm. However, ROA was found to be highly correlated with ROI (R^2 = .995) in the data sample and so it was decided not to only use ROI as the independent measure of short-term financial goals.

ROI = Net Income/Book Value of Assets

Financial Data. Individual financial data for computing ROI, ROA, and Tobin's *q* were obtained from COMPUSTAT (http://wrds.wharton.upenn.edu).

2.2.3 Independent variables

Customer Satisfaction. Customer Satisfaction (CS) data wwereas obtained from the University of Michigan ACSI database. The ACSI (American Customer Satisfaction Index 2007) was created in 1994 and it provides an annual, firm-level customer satisfaction score for each firm in the sample. It is designed to be representative of the economy as a whole; measuring more than 200 firms in seven economic segments. The ACSI includes survey measures from more than 65,000 customers who are interviewed annually (Fornell et al. 1996). The ACSI uses an econometric model to produce a satisfaction score for each firm. The score ranges from 0 to 100. A key benefit of the ACSI is that the satisfaction score may be compared both across years and across firms.

Corporate Governance. Corporate Governance data were acquired from Institutional Shareholder Services (ISS). ISS has collected data on all firms in the S&P 500 since 2002. For US companies, up to 61 different variables are collected per company (Appendix A). These variables include information about the board, auditing, charter and bylaws, state of incorporation, executive and director compensation, ownership and director education, and other qualitative factors. ISS then uses a proprietary weighting formula to derive a corporate governance quotient. This score is used to rank each of the companies relative to one another. This final percentile ranking was used in the study. Previous research has used this index to examine shareholder voting rights (Bethel and Gillan 2000), find that corporate governance provisions are grouped together rather than used in isolation (Bethel and Gillan 2000; Danielson and Karpoff 1998; Larcker and Richardson 2003), and examine the corporate governance characteristics of firms that have a positive association between non-audit fees and accrual behavior (Larcker and Richardson 2003).[3]

Firm Focus. The number of segments in which a firm operates was used to capture the notion of available attention resources. There are many ways to operationalize the number of segments. For instance, as the number of unique business segments, geographic segments or operating segments. In this paper I follow previous work (Comment and Jarrell 1995; Rao et al. 2004) using the number of segments as compiled by Compustat. There are four possible segment types assigned by Standard & Poors in the Compustat database; business, operating, geographical, and state. It is important to note that these are business segments and do not include other types of segments such as geographical. The analysis will examine business segments—product lines or divisions—exclusively. It is possible to have multiple business sub-segments classified as the same business segment. In other words, a company may have the same business segment listed multiple times. For instance, in 2002, General Electric (GE) had 31 total business segments, but only 15 unique business segments. In the same year General Motors (GM) had 22 total business segments, but only 8 unique segments. In contrast in the year 2005 1-800-FLOWERS (FLWS) and Southwest Airlines (LUV) both had 1 total business segment and 1 unique business segment. That total business segments differs from unique business segments, coupled with the fact that firms may have differing numbers of executives, led me to create four measures of firm focus. The first measured the total number of business segments. The second method counted only unique or distinct business segments. The third method is a hybrid of these two methods. It counts each business segment and then adds a fraction (.5) for each additional instance of that

[3] Gompers et al. (2003) had created an alternative governance index (GIM) based on the presence or absence of 24 factors. They found that firms with high GIM scores had higher firm value, profits and sales growth. However, the GIM is cited as an anti-takeover measure, rather than the all encompassing governance measure that I use. The data from the measure that I use has been found to be much more strongly linked to firm performance than the G Index.

same business segment. For example, a firm with 3 business segments of one type and 2 of another would count as 2.5 business segments total (1 + .5* (3 – 1) + 1 + .5*(2 – 1)). The fourth method of firm focus, attention dilution, is described next.

Attention Dilution. The number of executives per segment can be an important indicator of the amount of attention that a firm is able to devote to its business segments. Logically, an increase in the number of executives per business segment should enable a firm simultaneously to address multiple shareholder issues, such as customer satisfaction and corporate governance. To capture this notion I created a variable, attention dilution, which is expressed as the ratio of number of industry segments divided by the number of executives at a firm.

Financial Leverage. Financial leverage represents the ratio of book debt to total assets. A higher level of financial leverage implies that a firm is using a lot of borrowed money. These firms may be at risk of bankruptcy; however, a leveraged firm may also be able to supply shareholders with a higher return on their investment. Rao et al. (2004) in their findings, and summary of existing literature, state that the effect of financial leverage on financial returns is not clear cut. However, since high or low levels of leverage may allow firms, higher growth opportunities it is important to include this covariate as a control.

Operating Leverage. The goal of operating leverage is to capture how fast revenue growth manifests itself in operating income. Another way of viewing it is as an accounting measure of risk -- the extent to which fixed costs are used in a firm’s operation (Lev 1974; McGuire et al. 1988). It is measured as the ratio of fixed assets to total assets.

Productivity. Following Anderson, Fornell, and Rust (1997), sales per employee was used as a measure of firm productivity. A more productive employee can increase financial returns for a firm.

Size of Firm. Size of firm was measured using the number of employees. The data for the number of employees at a firm was gathered from COMPUSTAT. Missing data for the number of employees only resulted in 1% of the firms from the ACSI to be dropped. This metric has been used in previous literature (Chandy and Tellis 2000) and correlates highly with alternative measures such as sales ($r = 0.84$, $p < 0.001$).

Year. The year in which an observation occurred was coded and included as a dummy variable.

Number of Executives. The number of executives at a firm was used as a proxy for the amount of attention that a firm was able to allocate. The data for the number of executives at a firm was gathered from COMPUSTAT.

Industry concentration. Industry concentration was measured using the Herfindahl-Hirshman Index (HHI), a commonly used metric (Milne 1992; Welker 1986). Higher HHI scores indicate a higher industry concentration, and lower HHI scores imply a less concentrated industry. HHI information was calculated using data obtained from COMPUSTAT.

Energy, Telecommunications, and other Service Firms. Service firms may be affected in a different manner than firms that produce goods in regards to the level that customer satisfaction affects their bottom line. Service firms are more reliant on interactions with the customer, while firms producing goods are more focused on tangible products (Anderson et al. 1997). Moreover, certain industries, such as energy, have monopolies or duopolies in many areas. Although it is true to a lesser extent in recent years, I also classify telecommunications as a monopoly prone industry. Therefore, I included in the models dummy variables to control for energy utilities, telecommunication firms, and other service firms.

2.2.4 Sample Description

Descriptive statistics of the data are shown in Tables 2.1, 2.2, 2.3, and 2.4. Table 2.1 shows the frequency distribution of the total and distinct number of segments in which a firm does business. Slightly less than half (48.1%) conduct business in five or fewer total segments, while 22.7% conduct business in six to ten total business segments. The number of distinct business segments is less than or equal to the total number of business segments for each firm. This is illustrated by the fact that 45.3% of firms are in three or fewer distinct businesses and 75.4% of firms are in five or fewer. Table 2.2 shows the distribution of firms by industry. Utilities make up the largest industry group (24.91%), while real estate (0.35%) makes up the smallest industry group. Table 2.3 displays the summary statistics for the dependent and independent variables: Tobin's *q*, ROI, customer satisfaction, corporate governance, number of business segments, productivity, operating leverage, financial leverage, industry concentration (HHI), number of executives, and firm size (number of employees). Even though the data set only included companies with complete observations, it does not appear to be biased as evidenced by the fact that the mean of the corporate governance score, 52.24% is still very close to 50%. This suggests that the sample from the corporate governance database is representative of the entire population. Finally, Table 2.4 shows the correlations between the various financial measures. The correlations between customer satisfaction, Tobin's *q* and ROI all are significant.

2.2.5 Approach to Analysis

My approach to analyzing the data consisted of estimating the main effects and interactions of customer satisfaction, corporate governance, and attention dilution, along with controls for firm size, productivity, quick ratio, financial leverage, and operating leverage on the dependent variable. My key dependent variable is Tobin's *q*. However, for comparison, I also estimate a separate set of models for ROI.

To test the hypothesis I use the approach suggested by Mittal et al. (2005) and Luo and Donthu (2006). They use a hierarchical mixed model as the best approach to control for unobserved heterogeneity in the effects of the IVs on the DV. This approach "borrows" information across industry and year. The first level captures time-varying effects within a firm from period-to-period; the second models firm-specific effects within an industry. The data set did not provide enough firm-year observations to create a three-level HLM model. Cross-sectional time-series data may have large variance due to the unobserved heterogeneity in firm-level factors, such as managerial expertise, and time-level factors, such as changes in consumer learning and industry trends over time (Boulding and Staelin 1993; Jacobson 1990). HLM subsumes both OLS[4] and random-coefficient approaches as special cases.

The following linear mixed model is used to account for firm and year random effects with the dependent variable, Tobin's *q*:

$$
\begin{aligned}
\text{Tobin's } q_i = \; & ß_0 \\
& + ß_{1\text{-}3} \text{ x Year (2002, 2003, 2004}^{5}) \\
& + ß_4 \text{ x Energy (ERGY)} \\
& + ß_5 \text{ x Telecom (TEL)} \\
& + ß_6 \text{ x Services (other) (SER)} \\
& + ß_7 \text{ x Number of Employees}_i \text{ (FIRM SIZE)} \\
& + ß_8 \text{ x Financial Leverage}_i \text{ (FL)} \\
& + ß_9 \text{ x Operating Leverage}_i \text{ (OL)} \\
& + ß_{10} \text{ x Productivity}_i \text{ (PROD)} \\
& + ß_{11} \text{ x Number of Executives}_i \text{ (NUM EXEC)} \\
& + ß_{12} \text{ x Industry Concentration}_j \text{ (HHI)} \\
& + ß_{13} \text{ x Attention Dilution}_i \text{ (AD)}
\end{aligned}
$$

[4] A traditional OLS model using fixed-effects dummies for firms and industries is unsuitable, as it does not allow for firm and industry-specific variance in model coefficients, nor does it account for random time-varying effects.
[5] 2005 is the base year

$+ \beta_{14}$ x Customer Satisfaction $Score_i$ (CS)
$+ \beta_{15}$ x S&P 500 Corporate Governance Quotient $Score_i$ (CGQ)
$+ \beta_{16}$ x AD_i x CS_i
$+ \beta_{17}$ x AD_i x CGQ_i
$+ \beta_{18}$ x CS_i x CGQ_i
$+ \beta_{19}$ x AD_i x CS_i x CGQ_i

where i = firm, j = industry

To reduce multicollinearity, all variables were mean centered.[6]

2.3 RESULTS

Table 2.5 shows the estimation results. Model 3 uses attention dilution to measure managerial attention, while the other three models use varying measures of firm focus—the number of different business segments in which a firm operates. The parameter estimates show the coefficients are generally stable across both specifications in terms of sign, magnitude and significance. There was some discussion as to which model should be the primary model of discussion. Model 1, with total number of business segments, was the initial model. Model 2, initiated by an observant reviewer, uses the most conservative measure of attention dilution, unique business segments. Model 3 produces the lowest AIC score and highest R^2, indicating that it is probably the best model. However, I settled on Model 4 as the primary model to discuss because it combined elements of all three other models. It had the second lowest AIC score, second highest R^2, and weights distinct business segments higher than duplicate businesses in the same segment. It is important to note that the signs and levels of the significant coefficients were very similar across all four models. The only discernable difference level between the models is

[6] In an OLS estimation, all VIFs were less than 5, indicating multicollinearity is not an issue

the two-way interaction between customer satisfaction and corporate governance is significant (β_{CSxCG} = 0.0009, $p < 0.05$) in Model 4, but not in any of the other models. All four of the models produced significant results with negative coefficients for the customer satisfaction x corporate governance x attention dilution three-way interaction.

Three control variables were significant; financial leverage (β_{FL} = -0.1068, $p < 0.001$), productivity (β_{Prod} = 0.0013, $p < 0.10$), and whether the firm was classified as an energy firm (β_{Energy} = -0.6689, $p < 0.001$). The main effect of customer satisfaction (β_{CS} = 0.0375, $p < 0.01$) was positive and significant. The main effects for corporate governance and firm focus, along with the two-way interactions of firm focus and customer satisfaction, and firm focus and corporate governance, were found to be statistically insignificant. However, in the presence of significant three-way interactions, caution dictates that the main effects and two-way interaction should not be interpreted.

My study reveals that financial leverage (β_{FL} = -0.1068, $p < 0.001$) and operating leverage (β_{OL} = -0.0809, n.s.), while not significant, are both associated with lower Tobin's *q*. While this may seem counter-intuitive at first glance, it should be noted that previous studies examining these variables have found equivalent results (Lev 1974; Safieddine and Titman 1999). To the extent that leverage is an indicator of risk-taking by a firm, it cannot be predicted whether risk alone should lead to higher or lower long-term performance.

The key goal of my paper is to investigate the interactions of customer satisfaction (CS), corporate governance (CG), and firm focus (AD) on long term financial measures as captured by Tobin's *q*. The three-way interaction between firm focus and customer satisfaction and corporate governance score was significant ($ß_{CSxCGxAD}$ = -0.0002, $p < 0.05$). The three-way interaction intuitively is hard to visualize; therefore, I assign each firm, based upon their actual values, into one of the eight groups as follows: a 2 (high and low customer satisfaction) x 2 (high and low corporate governance) x 2 (few and many adjusted business segments). The mean values of Tobin's q for each group was calculated and plotted. Figures 2.1 and 2.2 show the plots for Tobin's q for few and many adjusted segments; Figure 2.3 and 2.4 for few and many total segments; Figures 2.5 and 2.6 for few and many distinct segments; and Figures 2.7 and 2.8 for low and high attention dilution, respectively.[7]

Figure 2.1 shows that when a firm is focused in a few segments the highest possible long-term financial returns are achieved with high levels of customer satisfaction, irrespective of the level of corporate governance (1.12, 1.08 vs. 0.99, 0.73). Figure 2.2, when a firm has low firm focus, or is focused on many business segments, also shows the same pattern—it is best served by focusing on increasing customer satisfaction rather than corporate governance (1.19, 0.87 vs. 0.73, 0.70). However, the largest results are obtained by achieving high customer satisfaction scores and being satisfied with low corporate governance. These results are largely consistent with my hypothesis: firms operating in many business segments achieve superior long-term financial outcomes only by trading off customer satisfaction and corporate governance. On the other hand, firms dealing with few segments achieve superior long-term performance by focusing on high customer satisfaction and low corporate governance. The one factor that I overlooked is the strength of customer satisfaction versus that of corporate governance. In all cases it is better to work on improving customer satisfaction over improving corporate governance.

[7] Plots using the coefficients from the regression equations are similar to those using the actual data.

2.3.1 Alternative Models

To assess the robustness of the results, I ran a series of alternative models.

Random vs. fixed: In order to determine whether a random effects or fixed effects model should be run I conducted a Hausman test. The results suggested that a random effects model was the correct model to run ($p < .01$).

Number of executives: To determine if adding the total number of executives as a covariate to Models 1, 2, and 4 (total segments, different segments, and adjusted segments) produced similar results, I dropped this covariate.

Market Share: In the model I used industry concentration (HHI) as a covariate. This is an industry or external measure rather than a firm specific or internal measure. Market share is used to create industry concentration and so adding this variable to the model would create questions as to whether I was adding the variable twice to the model. I did try adding market share, and found that it did not change the model.

2.4 DISCUSSION

My results show that firms concentrating on long-term financial success may have one or two options depending on the number of segments in which they do business. Firms with high focus should prioritize their resources on improving both corporate governance and customer satisfaction. Firms with low focus, or diluted attention, face a tradeoff between customer satisfaction and corporate governance.

Increasingly, demands on managers have increased as more and more constituents assert their claim on the organization. My paper investigates two constituents—customers and investors—and shows that managers must be careful in addressing these constituents based on their firm's attention-based resources. Within the marketing academic discipline the importance of customers is well established. However, other constituents cannot, and should not be ignored. For instance, Luo and Bhattacharya show the important role played by a firm's corporate social responsibility. To the extent that measures like corporate social responsibility and corporate governance represent interests of stakeholders other than customers, these studies show the growing importance of taking a holistic view of firm strategy.

These results implicate customer satisfaction not only as a marketing measure, but as a broader metric—one that must be considered in conjunction with many other metrics closely scrutinized by top management—corporate governance as well as corporate social responsibility. The interests of many other stakeholders such as employees and key regulators may be similarly intertwined similarly with the interests of customers, as measured by customer satisfaction. Clearly, a broader perspective situated in theories such as stakeholder theory and institutional theory is needed to understand fully the important role of customer satisfaction in corporate strategy.

For the attention-based theory of a firm, this study provides an important step forward, showing that even measures of attention that are constructed from secondary-data can find theoretically meaningful and empirically significant results. Clearly, additional measures of attention-based resources of top-management could be constructed using survey data to provide further validation and clarification of my findings. The consistency of my results with the predictions of classical theories, including span of control theory by Urwick (1956), shows the explanatory power of classical theories in informing current management practices.

These results also have strong implications for stakeholder theory. In past research, it often has been assumed that stakeholders have conflicting interests that necessitate tradeoffs by management. My results show that this need not be the case and that whether the achievement of interests of stakeholders represents competing or aligned possibilities may depend on structural factors such as firm focus, and the resultant behavioral phenomenon of attention dilution. When due to lack of focus, top management suffers attention dilution maximizing long-term firm performance involves trading of the interests of customers and the investing community. However, increased firm focus and the lack of attention dilution ensured that both customer and investor interests are maximized to increase firm value. This is a very important result showing that future empirical studies examining stakeholder theory predictions must view stakeholder interests as being contingent on the characteristics of top-management.

The general notion of corporate governance has been the exclusive domain of research in finance, accounting, and corporate strategy. However, marketing scholars have a lot to contribute to this topic as well. If managers need to allocate attention to corporate governance and customer satisfaction-related issues, there is a need to understand what factors determine the allocation of attention. In this study I only examined the number of segments in which a firm competes. Other factors such as the type of industry and the importance of a business segment to the firm's overall strategy should be investigated as well. It may also be worth investigating if the firm primarily competes within the U.S. or on a global scale. Naturally, such investigations will improve the understanding of the role played by customer satisfaction in the broader strategic framework of a firm.

The attention-based view of the firm is not only new to the strategy field but also to the marketing field. Within marketing, I see broad applications of this theoretical approach. For instance, I view the construct of market orientation to be integrally related to how and where management decides to invest its attention resources. Empirical measures of market orientation invariably measure the extent to which top-management attends to information about competitors and customers. For instance, Noble et al. measured firms' market orientation by coding the extent to which management communications addressed issues related to customers and competitors. Similarly, measures like "our business objectives are primarily driven by customer satisfaction" and "our salespeople regularly share information concerning competitor's strategy" evince the fact that a stronger market orientation is consistent with the notion that top-management views customers as important constituents whose needs should be met. Thus, I see the literature on market orientation to be very consistent with the results: firms that accord the high importance deserved to external constituents, particularly customers, will be more responsive to meeting their needs (e.g., increase customer satisfaction), and enjoy strong financial rewards. Going forward, it would be interesting to examine if the relative attention paid to different sub-components of marketing orientation can provide a nuanced understanding of firm performance.

Future research may wish to address some of the limitations of my research. Many of them follow from the nature of the data involved in the study. Both the customer satisfaction and corporate governance data came from databases that focus on large S&P 500 companies. In addition, I only had access to 4 years of data. As additional data become available, there is a need to replicate and extend these findings in many ways suggested earlier.

Table 2.1: Number of Business Segments

	Total		Distinct	
Number	**Frequency**	**Percent**	**Frequency**	**Percent**
1	26	9.0	92	31.8
2	24	8.3	1	0.4
3	54	18.7	38	13.2
4	17	5.9	46	15.9
5	18	6.2	41	14.2
6	15	5.2	17	5.9
7	12	4.2	26	9.0
8	14	4.8	15	5.2
9	16	5.5	6	2.1
10	9	3.1	0	0.0
11	6	2.1	2	0.7
12	18	6.2	1	0.4
13	8	2.8	0	0.0
14	8	2.8	2	0.7
15	10	3.5	1	0.4
16	5	1.7	0	0.0
17	2	0.7	0	0.0
18	10	3.5	1	0.4
19	5	1.7	0	0.0
20	1	0.4	0	0.0
21	6	2.1	0	0.0
22	0	0.0	0	0.0
23	2	0.7	0	0.0
24	1	0.4	0	0.0
25	0	0.0	0	0.0
26	0	0.0	0	0.0
27	1	0.4	0	0.0
28	1	0.4	0	0.0

N = 289

Table 2.2 Industry Segment Distribution

Industry	Frequency	Percentage
Automobiles & Components	3	1.04
Capital Goods	3	1.04
Commercial Services & Supplies	10	3.46
Consumer Durables & Apparel	24	8.30
Consumer Services	9	3.11
Food & Drug Retailing	4	1.38
Food & Staples Retailing	13	4.50
Food Beverage & Tobacco	28	9.69
Health Care Equipment & Services	8	2.77
Hotels Restaurants & Leisure	13	4.50
Household & Personal Products	5	1.73
Insurance	5	1.73
Media	15	5.19
Real Estate	1	0.35
Retailing	42	14.53
Software & Services	6	2.08
Technology Hardware & Equipment	10	3.46
Telecommunication Services	9	3.11
Transportation	9	3.11
Utilities	72	24.91

n = 289

Table 2.3: Number of Business Segments

	Mean	Std. Dev.
Tobin's *q*	0.93	0.79
ROI	1.46	1.46
Firm Size (number of employees)	82.74	87.44
Financial Leverage	1.54	1.32
Operating Leverage	1.26	0.69
Productivity	102.82	73.48
Number of Executives	6.26	1.38
Industry Concentration	0.00	0.01
Number of Business Segments	7.69	5.91
Number of Distinct Business Segments	3.98	2.80
Divided Attention	1.26	1.01
Customer Satisfaction	74.74	5.57
Corporate Governance	52.24	28.83

n = 289

Table 2.4: Correlations of Variables

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A. Tobin's *q*	1.00															
B. ROI	0.56	1.00														
C. Energy	-0.36	-0.26	1.00													
D. Telecom	-0.03	-0.07	-0.11	1.00												
E. Services (other)	0.02	-0.26	-0.30	-0.10	1.00											
F. Firm Size (number of employees)	0.14	0.06	-0.46	-0.06	0.03	1.00										
G. Financial Leverage	-0.34	-0.34	0.36	0.10	-0.07	-0.17	1.00									
H. Operating Leverage	0.07	0.27	-0.28	-0.12	0.00	-0.09	-0.15	1.00								
I. Productivity	-0.15	-0.13	0.65	-0.04	-0.10	-0.46	0.10	-0.12	1.00							
J. Number of Executives	-0.17	-0.15	0.28	-0.16	-0.14	-0.09	0.13	-0.05	0.12	1.00						
K. Quick Ratio	0.25	0.29	-0.46	-0.13	0.08	0.25	-0.34	0.17	-0.19	-0.05	1.00					
L. Total Business Segments	-0.06	-0.16	0.17	-0.08	0.21	-0.12	0.11	-0.04	0.16	0.12	-0.10	1.00				
M. Distinct Business Segments	-0.11	-0.21	0.20	0.02	0.24	-0.09	0.11	-0.12	0.26	-0.01	-0.13	0.82	1.00			
N. Divided Attention	-0.01	-0.13	0.09	-0.05	0.26	-0.09	0.06	-0.02	0.12	-0.13	-0.07	0.95	0.82	1.00		
O. Customer Satisfaction	0.30	0.26	-0.22	-0.24	-0.18	0.02	-0.09	0.14	-0.24	-0.07	0.18	-0.05	-0.09	-0.03	1.00	
P. Corporate Governance	-0.05	-0.04	0.23	-0.08	0.10	-0.06	-0.04	-0.01	0.19	0.01	-0.15	0.17	0.28	0.16	-0.12	1.00

n = 289

|Correlations| > .11 are significant at $\alpha = 0.05$

Table 2.5: Tobin's *q* - Customer Satisfaction, Corporate Governance, and Financial Performance: The Moderating Role of Attention Dilution

	Model 1 (AD = total segments)		**Model 2 (AD = different segments)**		**Model 3 (AD = total seg./num. exec)**		**Model 4 (AD = adjusted segments)**	
	Estimate	**Standard Error**	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**	**Estimate**	**Standard Error**
Intercept	1.2415	0.1714	1.1979	0.1285	1.2459	0.1071	1.1862	0.0955
Year = 2002	-0.2011+	0.1318	-0.1281	0.1185	-0.1888+	0.1321	-0.1721	0.1265
Year = 2003	-0.0898	0.1316	-0.0367	0.1173	-0.0761	0.1291	-0.0626	0.1254
Year = 2004	-0.0225	0.1156	0.0126	0.1120	-0.0312	0.1186	-0.0072	0.1141
Energy	-0.6776***	0.2650	-0.6544**	0.2208	-0.6687****	0.1893	-0.6689****	0.1823
Telecom	-0.0055	0.3254	0.0181	0.2912	-0.0261	0.2657	-0.0009	0.2624
Services (Other)	-0.1474	0.2292	-0.0881	0.1756	-0.1476	0.1283	-0.1271	0.1244
Firm Size	0.0000	0.0006	0.0000	0.0006	0.0000	0.0006	0.0000	0.0006
Financial Leverage	-0.1070****	0.0301	-0.1030***	0.0304	-0.1269****	0.0358	-0.1068****	0.0302
Operating Leverage	-0.0803	0.0673	-0.0854	0.0672	-0.0792	0.0691	-0.0809	0.0673
Productivity	0.0012*	0.0007	0.0014	0.0007	0.0013+	0.0008	0.0013*	0.0007
Industry Concentration Ratio	1.7908	3.2405	2.2825	3.2517	-0.2046	3.3638	1.8445	3.2461
AD	0.0080	0.0085	-0.0009	0.0168	0.0576	0.0488	0.0075	0.0116
Customer Satisfaction (CS)	0.0350****	0.0084	0.0361***	0.0087	0.0358****	0.0086	0.0375***	0.0131
Corporate Governance (CG)	-0.0001	0.0013	-0.0013	0.0029	-0.0009	0.0079	-0.0003	0.0019
AD * CS	-0.0001	0.0015	0.0001	0.0016	0.0003	0.0016	0.0014	0.0024
AD * CG	-0.0002	0.0002	-0.0004	0.0005	-0.0013	0.0015	-0.0003	0.0003
CS * CG	0.0000	0.0003	0.0001	0.0003	-0.0001	0.0003	0.0009**	0.0004
AD * CS * CG	-0.0001***	0.0000	-0.0002	0.0001	-0.0006**	0.0003	-0.0002**	0.0001
AIC	756.8		754.7		713.5		753.4	
McFadden R^2 or U^2	40.65%		41.04%		44.22%		40.81%	
n = 289								

+ p < 0.15
* p < 0.10
** p < 0.05
*** p < 0.01
**** p < 0.001

Figure 2.2 Few (1-4) Adjusted Segments

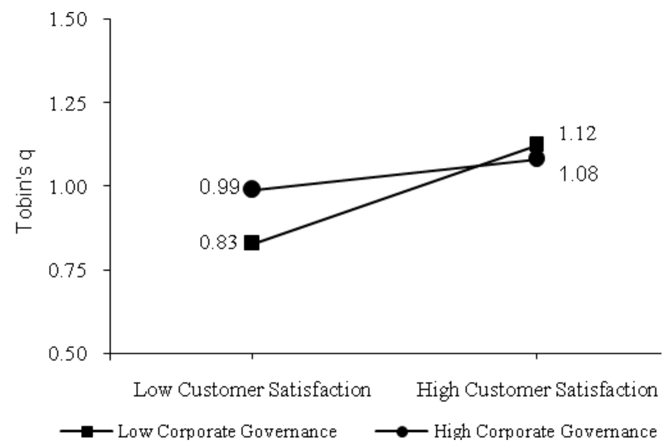


Figure 2.3 Many (4+) Adjusted Segments

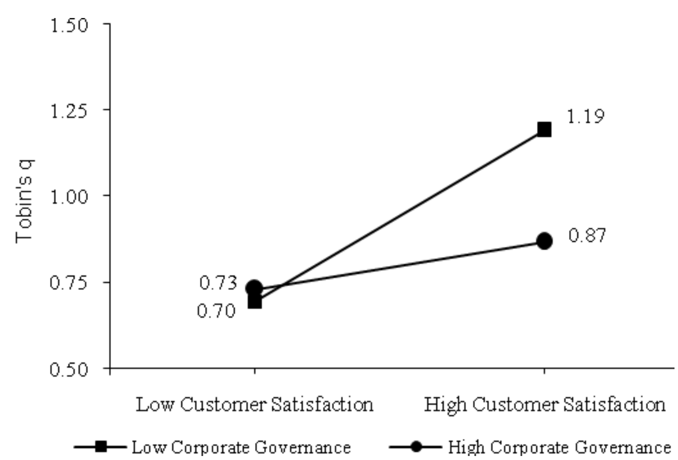


Figure 2.4 Few (1-5) Total Segments

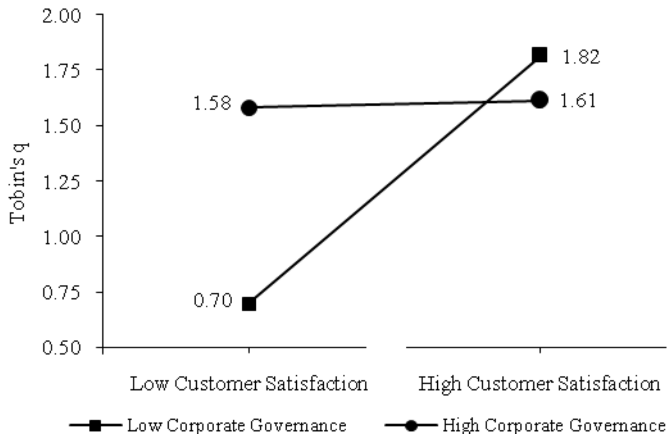


Figure 2.5 Many (6+) Total Segments

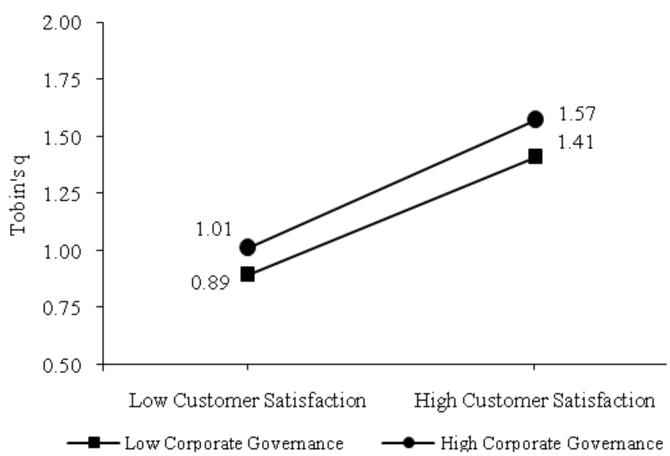


Figure 2.6 Few (1-3) Unique Segments

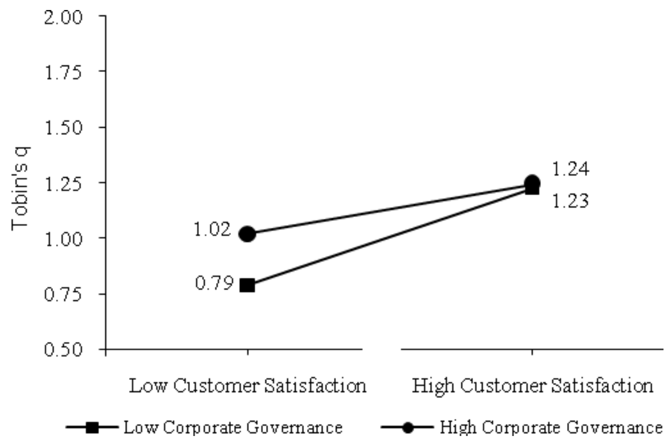


Figure 2.7 Many (3+) Unique Segments

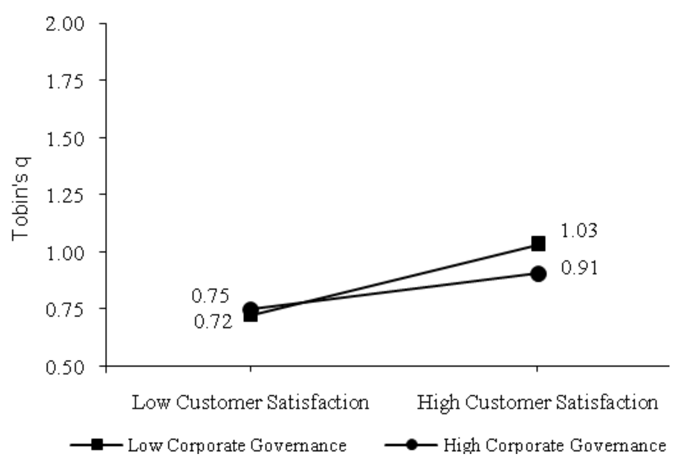


Figure 2.8 Low Attention Dilution

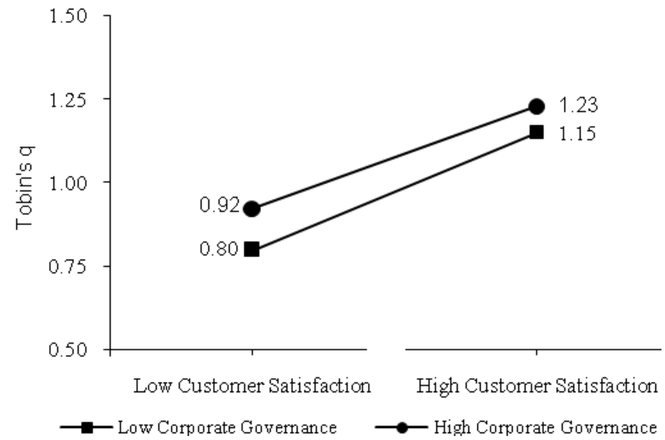
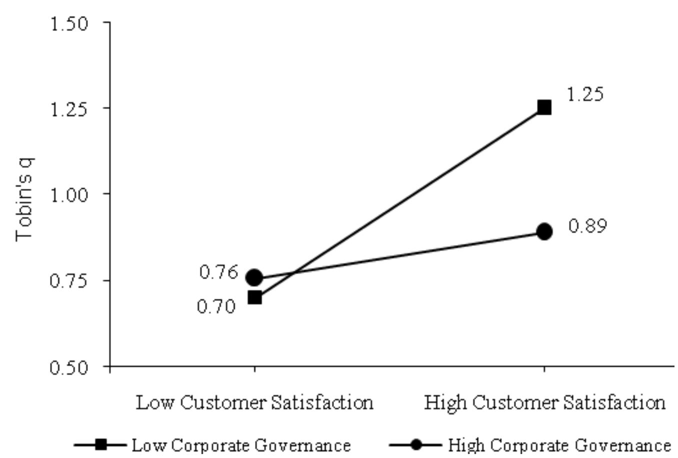


Figure 2.9 High Attention Dilution



3.0 ESSAY 2: *WHEN* DOES DOING GOOD LEAD TO DOING BETTER? CORPORATE SOCIAL RESPONSIBILITY AND FIRM PERFORMANCE

Ms. Rao, CEO of firm X, is trying to decide whether to expend resources to increase the corporate social responsibility (CSR) activities for her firm. The firm just had a banner year, so there were excess resources to direct toward the firm's socially responsible image. But, Ms. Rao pondered possible investor reaction to CSR activities. She also wondered whether an overall strategy of minimizing CSR concerns was preferable to a strategy involving maximizing the firm's perceived strengths in CSR. She wondered whether investors even paid attention to a firm's CSR activities. This paper will examine the situation in which Ms. Rao finds herself, and similar scenarios as firms try to decide how best to address issues of CSR.

Recently, more than 2,000 firms worldwide have published non-financial or intangible reports relating to CSR (White 2005). Entire sections of major newspapers are currently dedicated to environmental issues (The Wall Street Journal 2006) and major professional conferences on CSR have emerged (e.g., Corporate Social Responsibility: Designing a Sustainable Future 2007). It is clear that firms spend substantial resources on CSR activities, yet a clear justification for these expenditures, especially from an investor's viewpoint, is lacking.

Previous researchers in marketing and strategic management fields have addressed questions about CSR and its impact on firm performance using two approaches. The first approach examines the impact of CSR on firm financial outcomes. Much of this research has provided mixed findings, with research finding a positive relationship (e.g., Preston and O'Bannon 1997; Simpson and Kohers 2002), negative relationship (e.g., López et al. 2007; McGuire et al. 1988), mixed (e.g., Bird et al. 2007; Galbreath 2006; Hillman and Keim 2001; Luo and Bhattacharya 2006; McMillan 1996), and in some cases no relationship (e.g., Alexander and Buchholz 1978; Ullmann 1985). The second approach uses a consumer-behavior view where researchers have found that CSR impacts purchase likelihood, long-term loyalty (Du et al. 2007), and company evaluations (Sen and Bhattacharya 2001). Further, CSR activities may also influence employee recruitment and retention (Bhattacharya et al. 2008).

The first approach allowed me to provide further insight into the question of whether CSR has a positive impact on a firm's long-term financial outcomes. I adopt the view that CSR activities act as signals from the firm to investors (Kirmani and Rao 2000). This is a departure from extant research in marketing that views firm benefits from CSR activities mainly from a consumer perspective (e.g., Bhattacharya and Sen 2004; Luo and Bhattacharya 2006). I identify conditions under which firm CSR activities, when combined with other signals of firm performance, can both enhance and weaken financial performance. My results help resolve the inconsistent empirical results regarding the relationship between CSR and financial performance.

Academic research in the CSR area typically has viewed CSR as a singular measure (McGuire et al. 1988). I divide CSR activities into CSR *strengths* and CSR *concerns*, and examine the relative impact of each. Despite recent research focusing on the relative impact of strengths versus concerns (Bird et al. 2007), there is a paucity of research examining *when* CSR strengths and CSR concerns have an impact on a firm's financial performance. Further, while CSR activities undertaken by a firm can be directed at different stakeholders such as employees and environment (Brown 2001; Sen et al. 2006), there is a lack of research that examines the conditions in which these different types of CSR have an impact on financial performance. My research bridges this gap in the literature. Specifically, I suggest that CSR signals can be divided into *internal* CSR or *external* CSR based on the types of stakeholders who are targeted.

CSR is not the only signal of firm performance that an investor evaluates. To assess whether CSR information can influence investors' evaluation of a firm, it is necessary to consider other background factors. For instance, in addition to actually investing in CSR, the efforts made by the firm to *communicate* the CSR activities to the investor community could influence investors' propensity to invest in the firm. Signals about a firm's future financial performance may also be embedded in other non-financial metrics such as customer satisfaction (CS) (Anderson et al. 2004; Gruca and Rego 2005). Depending on the type of CSR signal, investors may view CSR signals as strong yet distinct from CS signals. I also present the argument that the competitive environment in which a firm operates (based on industry concentration) and past financial performance (e.g., ROA) may act as contextual factors that either strengthen or weaken the impact of CSR signals to investors.

In summary, my research contributes to existing literature in three ways. First, I disentangle the effect of different types of CSR (internal vs. external, strengths vs. concerns) on financial performance. In so doing, I seek to resolve the mixed findings in the literature regarding the CSR-financial performance relationship. Second, I examine how CSR signals interact with other types of signals (e.g., CS), signaling mechanisms (e.g., direct communication to investors), and signaling contexts (e.g., industry concentration) to influence a firm's long-term financial outcomes. This helps paint a more complete picture of the role of CSR within specific types of firms and its impact on investors. Third, I apply signaling theory to identify conditions under which CSR signals from firms to investors result in superior financial performance. I provide empirical support for signaling theory that supports the notion that multiple signals, when considered simultaneously, can provide unique insights into the factors driving financial performance. I outline the hypotheses next.

3.1 CONCEPTUAL FRAMEWORK

3.1.1 Corporate Social Responsibility and Financial Performance

Increased CSR may result in positive financial performance for various reasons. First, it can improve consumer perceptions. For instance, brand names (e.g., Toyota Prius) are perceived as environmentally friendly by consumers, and such positive perceptions result in more favorable attitudes towards a company (Sen and Bhattacharya 2001). Second, CSR has been shown to strengthen long-term customer loyalty (Du et al. 2007) and improve company evaluations among customers (Sen and Bhattacharya 2001). As such, CSR helps firms to create a sustainable competitive advantage (Porter 1980; Porter and Kramer 2002), generate positive financial outcomes such as ROA (Preston and O'Bannon 1997), and enhance shareholder value (Hillman and Keim 2001; Luo and Bhattacharya 2006).

In contrast, McGuire et al. (1988) argue that CSR creates higher costs for a firm which may result in lower financial performance. Consistent with this view, Alexander and Buchholz (1978) find no significant difference in stock market returns to firms with high CSR, and Abbott and Monsen (1979) find no significant difference in total return to various stakeholder groups from CSR. Further, López, Garcia, and Rodriguez (2007) show that CSR adopting firms suffered a short-term negative impact on profit before taxes.

How can these mixed findings in the literature be resolved? I argue that the impact of CSR on financial outcomes can be better understood by examining different types of CSR activities, internal and external CSR, CSR strengths and concerns. Further, I use signaling theory to describe a contingency framework for when internal/external CSR and CSR strengths/concerns influence financial outcomes (e.g., stock market performance).

3.1.2 Signaling Theory

Signals from a firm to its customers have been studied in depth, including product quality (Kirmani and Rao 2000), warranties (Boulding and Kirmani 1993), advertising (Kihlstrom and Riordan 1984), pricing (Milgrom and Roberts 1982; Milgrom and Roberts 1986; Weigelt and Camerer 1998), and brands (Erdem and Swait 1998; Rao et al. 1999). Examples outside of marketing include financial policies to signal quality (Ravid and Sarig 1991), board structure in relation to IPO strength (Certo 2003), insider trading to signal dividends (John and Lang 1991), and signals from employees to employers (Spence 1973).

A signal conveys information that is typically unobservable from the sender of the signal to its recipient (Kirmani and Rao 2000). To be effective, signals should have four properties (Kirmani and Rao 2000). First, strong signals *reduce the information asymmetry* between the firm and other stakeholders. Second, a signal should provide clarity of *information* (Kirmani and Rao 2000). Third, there must be *payoff transparency*, whether both the sender and receiver of the signal are aware of the benefits of the signal (Erdem and Swait 1998). Fourth, signals must be *credible*; this is realized through negative consequences to false signals (Erdem and Swait 1998).

To determine whether there is added value to providing multiple signals, one must take into account the type of signal, the degree to which it offers complementary benefits of reducing information asymmetry, information clarity, payoff transparency, and its credibility (Kirmani and Rao 2000). Such an interactive effect of signals is particularly important and has received some attention in the finance literature (John and Lang 1991; Ravid and Sarig 1991).

I illustrate four potential contexts that may enable investors to find complementary information in CSR signals, enabling them to better discern a firm's long-term financial prospects. At the same time, I also illustrate when CSR signals provide either no additional or substitutable information in relation to existing signals. Four types of information relevant to investors include knowledge about CSR activities (i.e., CSR communication to investors), financial performance of the firm in the past (i.e., short-term financial results), a firm's future cash flow prospects (i.e., measured via customer satisfaction), and competitive environment (i.e., industry concentration).

3.2 HYPOTHESIS DEVELOPMENT

Dependent Variables. In this paper, I use two dependent measures: abnormal long-term financial performance as measured by the Carhart Four-Factor Model, and Tobin's *q*, which measures the long-term, future performance of the firm. Both measures rely on stock-market based performance (which is based on investors' stock-market behavior) as an indicator of firm success in the long run. The firm's abnormal financial performance (obtained from the Carhart Four-Factor Model) demonstrates the excess return to a firm relative to the financial performance of similar firms and is widely regarded as an appropriate metric to capture abnormal firm success over the long-run (Aksoy et al. 2008; Carhart 1997; Fama and French 1996). Similarly, Tobin's *q* has been widely used as an indicator of a firm's future success (e.g., Anderson et al. 2004).

Given the focus on how CSR provides signals to investors, and past research in similar areas, I view these stock-market-based performance measures of firms as appropriate dependent variables.

3.2.1 Internal and External CSR

Previous studies of CSR and financial outcomes have for the most part, treated stakeholders as a monolithic group (e.g., Griffin and Mahon 1997; Luo and Bhattacharya 2006; McGuire et al. 1988; Turban and Greening 1997; Waddock and Graves 1997) or used one stakeholder group to represent all issues (e.g., Brown and Dacin 1997; Griffin and Mahon 1997; Sen and Bhattacharya 2001; Yoon et al. 2006). At the broadest level, CSR issues can be divided into external and internal based on who they are targeted toward. Internal CSR includes activities targeted to internal stakeholders such as employees. External CSR includes actions taken to benefit the environment or the broader community. Not surprisingly, internal and external CSR may result in differential responses from investors. Empirically, CSR issues that are targeted to external stakeholders (e.g., environment) have been shown to have a stronger impact on financial performance than those targeted to internal stakeholders (Bird et al. 2007; Hillman and Keim 2001). For instance, McMillan (1996) find that there was no abnormal stock reaction to firms adoption of a code of conduct for treatment of non-white employees in South Africa, but there was a positive abnormal stock return when McDonalds announced an environmental waste reduction initiative.

Consistent with these findings, I argue that internal and external CSR activities have differing impact on financial performance for three reasons. First, the impact of internal CSR may be captured in other measures of internal firm performance, so internal CSR signals are less novel. For instance, the impact of internal CSR directed at employees is likely to enhance employee satisfaction, which, in turn, enhances customer satisfaction and makes the firm more market-oriented (Brown et al. 2002). This line of reasoning leads to the conclusion that a majority of internal CSR may be subsumed in existing measures of customer satisfaction, and investors, who can observe customer satisfaction, may not obtain novel information through a firm's internal CSR activities. Second, an important difference between internal and external CSR is that the amount of resources spent by firms to improve external CSR may often exceed that of internal CSR expenditures. CSR efforts targeted to external stakeholders, by design, also tend to be better publicized (SustainAbility 2002), hence investors may have access to more information on external rather than internal CSR. Third, information regarding costs of internal CSR activities such as diversity-enhancing actions and labor dispute resolutions may be much more firm specific. This means that investors may not be able to benchmark internal CSR activities against those of other firms. In contrast, environmental projects and community projects undertaken by a firm are readily visible in all media. The end result may be that internal CSR is a noisier signal, whereas external CSR activities are easier to interpret. Taken together, these reasons suggest that internal CSR is a weak to non-existent signal to investors. Given this disproportionate impact of external over internal CSR, I focus the hypothesis development on external CSR (although I also control for internal CSR in subsequent empirical work).

3.2.2 Strengths and Concerns of CSR

Another way to demarcate CSR activities is to examine separately CSR strengths and CSR concerns. CSR strengths are measured by activities initiated by a firm that exceed legal requirements. A CSR concern, on the other hand, arises when a firm fails to meet minimum requirements mandated by law. Examples of legislation include the Endangered Species Act, the Americans with Disabilities Act (ADA), and rules implemented by the Occupational Safety and Health Administration (OSHA). The prevalence and proliferation of such rules and regulations set the bar of corporate social responsibility at a certain level. In other words, firms are legally required to engage in and maintain a certain minimum level of CSR, even if they are not engaged proactively in CSR.

I argue that CSR concerns, in most situations, should be more consequential as they are likely to be more visible, diagnostic, and salient than CSR strengths. First, in terms of diagnosticity, previous research has shown negative information can elicit strong reactions from the stock market (King and Soule 2007; Worrell et al. 1991). As a form of information, CSR concerns provide more diagnostic information to investors regarding a firm's financial future relative to CSR strengths. Bhattacharya and Sen (2004 p. 18) suggests that stakeholders are "more sensitive to 'irresponsible' than to 'responsible' corporate behavior. In other words, there is an asymmetric effect and 'doing bad' hurts more than 'doing good' helps." Second, in terms of visibility, CSR concerns are publicized more often than CSR strengths, particularly by the news media. Both of these should make CSR concerns more salient than strengths in the eyes of investors. As such, I argue that CSR concerns should exert an asymmetrically stronger negative impact on the stock market than the positive impact of CSR strengths.

3.2.3 Moderators of CSR-Financial Performance Link

I examine four moderators of the CSR-financial performance link. The first is CSR communication to investors. The second is customer satisfaction, which can be seen as a measure of a firm's future financial performance (Anderson et al. 1994; Rust et al. 2004). The third is the firm's past financial performance (ROA). The fourth is the competitive environment (Porter 1980; Porter and Kramer 2002). I discuss each of these next.

3.2.4 Advertising and CSR

Information asymmetry regarding CSR activities is likely to exist because investors often are not aware of the goal of CSR efforts. Further, CSR data sources tend to tally CSR activities, but not the reasons behind them. Written communication (e.g., CEO letter to shareholders) is a primary mode that firms use to communicate with investors. CSR communication with investors can help to minimize the asymmetries in information between firms and investors.

As a signal, CSR communication by the incumbent firm (e.g., CEO's letter to shareholders) serves a different purpose than actual CSR reports produced by third-parties (e.g., Kinder, Lydenburg, and Domini (KLD)) documenting CSR strengths and concerns for S&P firms. In particular, CSR reports from third parties, alone, may not inform investors fully about the CSR efforts undertaken by the firm or the reasons for these efforts. Potentially, this can create information asymmetry between the firm and investors. Direct communication from the firm to investors reduces information asymmetry because it can be more complete and comprehensive, and provide better information regarding the firm's motives in undertaking CSR actions. Moreover, direct reports can serve as an additional source of information beyond the CSR activity reported by third parties. Third-party reports of CSR activities can also add information credibility to the direct reports from the firm as the former may be perceived as more objective by at least some investors. These signals taken together should enhance value over and above each of these in isolation.

Direct communication to investors should be more credible as it has upfront costs and uses the reputation of the firm as a bond, similar to advertising signals employed by a firm (Kirmani and Rao 2000). If CSR claims that are directly communicated by the firm to investors turn out to be false (upon further verification or based on third-party information), investor confidence should decrease and lower the credibility associated with future firm claims. Jointly, these should adversely affect the long-term reputation of the firm. This is particularly likely to be the case when direct communication is in conflict with third-party information. Based on the above, I hypothesize the following:

> **H_1:** Communicating to investors will interact positively with external CSR strengths such that: (a) the impact of external CSR strengths on long-term financial returns will be positive when CSR communication to investors is high; (b) the impact of external CSR strengths on long-term financial returns will be nonsignificant when CSR communication to investors is low.

Because CEO communication to investors focuses only on strengths and not on CSR concerns, I do not have formal hypotheses regarding the interaction of CSR concerns and CSR communication to investors.

3.2.5 Short-term Financial Outcomes and CSR

Short-term financial outcomes are signals of the firm's financial health, particularly regarding availability of slack resources (McGuire et al. 1988). Firms benefit from high levels of short-term financial resources through decreased cost of capital and slack resources (Lambert et al. 2007; Sharfman and Fernando 2008). Firms that have CSR strengths, ceteris paribus, are not found to have lower levels institutional ownership than firms without CSR strengths (Waddock and Graves 1997). If investors view a firm with high external CSR strengths in the presence of low short-term financial results, they may question the competency of managers. CSR investments against a backdrop of scarce financial resources may signify that managers are misallocating resources to (CSR) projects with questionable short-term benefits. Investors may conclude that a firm with these types of management decisions will not be successful in the long-term. On the other hand, managers of firms with superior short-term financial outcomes may be viewed as having superior acumen, and implementation of external CSR projects will be viewed as evidence of forward thinking. Therefore, the credibility of the CSR signal in providing evidence of a firm's long-term financial viability may be enhanced when its short-term performance is also strong. Given this, I expect the following:

> **Hypothesis 2:** Short-term financial outcomes will interact with external CSR strengths such that: (a) the impact of external CSR strengths on long-term financial returns will be *positive* when short-term financial outcomes is high; (b) the impact of external CSR strengths on long-term financial returns will be *negative* in the presence of *low* short-term financial outcomes.

CSR concerns are likely to exert negative impact on a firm's long-term financial performance. As argued earlier, information regarding CSR concerns (i.e., negative information) is likely to be more informative (because it is more visible and more diagnostic) to investors than information regarding CSR strengths (Chan 2003). As such, investors are likely to react asymmetrically to it (Shane 1996). In particular, when negative information regarding CSR concerns is combined with positive information regarding a firm's short-term financial performance, the impact on long-term financial performance should be lower (non-existent) than the impact of CSR concerns combined with low short-term financial performance. The existence of CSR concerns is likely to create doubts in investors' minds regarding the financial viability of the firm in the future. This doubt, combined with the low short-term financial performance is likely to exert a significant negative impact on the firm's long-term financial future. For these reasons, I hypothesize the following:

> **Hypothesis 3:** Short-term financial outcomes will interact with external CSR concerns such that: (a) the impact of external CSR concerns on long-term financial returns will be *non-significant when* short-term financial outcomes are higher; (b) the impact of external CSR concerns on long-term financial returns will be *negative* when short-term financial outcomes are lower.

3.2.6 Customer Satisfaction and CSR

Customer satisfaction (CS) has been shown to have an important impact on future financial performance in the marketing literature (e.g., Aksoy et al. 2008; Anderson et al. 1994; Anderson and Mittal 2000; Hogan et al. 2002; Rust et al. 2004; Rust and Zahorik 1993). Higher levels of CS signal higher levels of long-term financial market success (Aksoy et al. 2008). By definition CS is a signal that bridges the information asymmetry gap. CS is a credible signal – it is confirmed by third-party sources such as the ACSI, epinions.com, and ratings on many shopping websites such as amazon.com (Anderson and Fornell 2000). CS takes numerous sustained resources to improve and maintain; in fact, firms must make investments CS very judiciously relative to other priorities (Mittal et al. 2005).

Research has shown that CSR and CS can be related. In fact, similar to CS, external CSR may be targeted to customers to influence corporate associations (Brown and Dacin 1997). CS mediates the relationship between CSR and market value, and can, in some situations, reduce CS (Luo and Bhattacharya 2006). In turn the quality of a firm's products can influence the effectiveness of CSR (Sen and Bhattacharya 2001). As such, I argue that signals embedded in CS and external CSR strengths do not convey sufficiently unique information to investors to have an interactive effect.

Signals of CSR concerns differ from CSR strengths in that they portray information that is negative rather than positive. I hypothesize that external CSR concerns, therefore, do matter in two situations. The first is when a firm has high CS scores. Customers of these firms expect a high level of CSR, while customers of low CS firms do not expect a high level of CSR. Consider if a firm has higher CS, and yet is found to have CSR concerns. This is additional and contrary information to CS and weakens the reputation of the firm, breaking a reputational bond. Therefore, external CSR concern signals have a value – they hurt firms that have higher CS.

> **Hypothesis 4:** Customer satisfaction will interact with external CSR concerns such that the impact of external CSR concerns on long-term financial outcomes will be more *negative* in the presence of higher customer satisfaction.

3.2.7 Industry Concentration and CSR

Industry concentration is a measure of competition within an industry (Milne 1992). Firms in a more concentrated industry, by virtue of less competition, may be less beholden to customers because they have fewer options to switch to when there are fewer firms. Therefore the credibility of a signal regarding CSR strengths and concerns is enhanced in a competitive environment. Industry concentration provides an important context for examining CSR because an oft cited reason for firms to engage in CSR is to obtain competitive advantage (Porter and Kramer 2002). Investors may draw a number of conclusions from industry concentration. More concentrated industries are likely to be mature and have fewer competitors. Less concentrated industries have more competitors and allow for easier customer defection.

If a firm in a competitive environment (low industry concentration) has CSR concerns, it may suffer more than a similar firm in a high concentration industry. One aspect of this difference may be that customers of firms with CSR concerns have more opportunities to switch to competing offerings in low-concentration industries. In less competitive environments (as in more concentrated industries) customers are less likely to defect even when CSR concerns are high. Therefore, CSR concerns will have a stronger negative impact in the presence of low industry concentration (versus high industry concentration). Conversely, when CSR strengths are present, their impact will be greater in more concentrated industries. In less concentrated industries, the competitive environment is such that profit rates of firms are lower than in industries of lower concentration. Therefore, gains to firms in less concentrated industries from CSR strengths will also be lower. Given the above arguments, I suggest the following:

> **Hypothesis 5:** Industry concentration will interact with external CSR *strengths* such that the impact of external CSR *strengths* on long-term financial outcomes will be stronger (weaker) for firms in more (less) concentrated industries.

> **Hypothesis 6:** Industry concentration will interact with external CSR *concerns* such that the impact of external CSR *concerns* on long-term financial outcomes will be more negative for firms in industries with lower industry concentration.

3.3 METHOD

Data for this study were assembled from many sources. Corporate Social Responsibility data for these companies were provided by Kinder, Lydenburg, and Domini (details of this data source are provided later). Customer satisfaction data were obtained for the American Customer Satisfaction Index. Financial and descriptive data were gathered from Compustat and CRSP.

3.3.1 Dependent Variables

This study uses two different methods to assess firm long-term financial performance. Both of these methods use stock-market returns to assess financial performance. The first method uses Tobin's *q* as a measure of long-term financial prospects. The second method uses the Carhart four-factor model to assess abnormal market returns.

3.3.2 Tobin's *q*

The first method used to evaluate the hypotheses uses Tobin's *q* as a dependent measure. Tobin's *q* is a forward looking measure of financial performance in that it allowed me to project how a firm will perform financially in the future. It measures the ratio of market value of a firm's securities to the replacement costs of its tangible assets. I use the Chung and Pruitt (1994) method for obtaining Tobin's *q*. With Tobin's *q* as a dependent measure, I model the effects of the CSR variables, the moderators and their interactions in the same equation.

$$\text{Tobin's } q = \frac{(\text{Stock Price} * \text{Number of Shares Outstanding}) + (\text{Total Assets} - \text{Common Equity})}{\text{Total Assets}}$$

3.3.3 Carhart Four Factor Model

The second method to assess long-term financial performance focuses growth in abnormal stock returns for a portfolio of stocks and recently has gained prominence in the marketing literature. For instance, Aksoy et al. (2008) use this method to capture the growth in a portfolio of stocks as a consequence of customer satisfaction. The Carhart four-factor model subsumes the three-factor Fama French model and measures a firm's abnormal stock returns after accounting for factors such as overall returns to the market (MKT), the size factor (SMB), the value factor (HML) and momentum, derived from the previous year's stock performance (UMD). Recall that the three-factor Fama-French model is based on the observation that small cap stocks and "value" stocks historically tend to do better than market as a whole. In other words, the SMB (small minus big) and HML (high minus low) portfolios serve as correction factors for the broad-based index, i.e., market portfolio. Carhart's four-factor model adds stock-market momentum as the fourth factor to the Fama-French 3-factor model. After accounting for the effects of these four factors in the stock market returns, the p-values of the intercepts (alphas) indicate significant abnormal portfolio returns. This is summarized as follows:

$$R_{pt} - R_{ft} = a_p + m_p MKT_t + s_p SMB_t + h_p HML_t + u_p UMD_t + e_{p,t} \qquad (1)$$

MKT_t is the return on the overall market index (CRSP value-weighted NYSE/AMEX/NASDAQ index) in excess of the risk-free interest rate

SMB_t is the size factor defined as the return differential between portfolios made of small and large market capitalization stocks.

HML_t is the value factor and equals the return difference between portfolios of stocks with high (value) and low (growth) book-to-market ratios.

UMD_t takes into account the previous year's stock performance.

Consistent with recent research in marketing (Aksoy et al. 2008) which uses this approach, I create portfolios of stocks. These portfolios are based on combinations involving the four CSR measures (internal, external, strengths and concerns) and the four moderators: customer satisfaction (high versus low), advertising to investors (high versus low), short-term financial outcomes (high versus low), and industry concentration (high versus low). I use median splits to classify firms as having either high or low levels of a given variable. Since CSR data are annual, the portfolios were rebalanced each year and the returns to each of these portfolios were calculated. This allows firms to enter or leave a particular portfolio every year.

To be sure, one limitation of the Carhart four-factor approach is that it uses a portfolio of stocks with defined characteristics, but does not allow me to test formally the hypotheses on a sample of firm-year observations. Because firms have to be classified into portfolios of stocks based on their CSR strengths/concerns and levels of moderators (e.g., ROA), and their separate returns tracked over time, I focused on one moderator at a time and examined the performance of portfolios of stocks for each moderator and CSR performance (e.g., CSR strengths for high versus low ROA firms) separately. Therefore, I rely on Tobin's q as the primary dependent variable for hypothesis testing.

3.3.4 Independent variables

Corporate Social Responsibility. The source for corporate social responsibility data is Kinder, Lydenburg, and Domini (KLD). This data set has found wide acceptance in academic research (Graves and Waddock 1994; Hillman and Keim 2001; Johnson and Greening 1999; Ruf et al. 2001; Sharfman 1996; Turban and Greening 1997; Waddock and Graves 1997). The KLD CSR database provides consistent ratings across companies and industries. KLD researchers use five methods to gather an objective set of CSR information. First, they directly communicate with company officers. Second, KLD has access to a global network of CSR research firms. Third, more than 14,000 global news sources are monitored. Fourth, information in quarterly and annual reports and proxy statements as evaluated. Finally, government and NGO information is gathered. A key strength of KLD dataset is that it captures actual firm behavior, rather than perceptions about firm behavior. For this reason, KLD data are considered to be superior to other databases used in the past (e.g., *Fortune* reputation data).

The firms captured by the KLD include all firms in the S&P 500. The data primarily focus on: community relations, employee relations, product issues, corporate governance, diversity, human rights issues, and environmental performance. Product issues and corporate governance issues were not included in this study.[8] The second area of KLD measurement focuses on specific issues such as nuclear energy generation, military involvement, or tobacco production. As such, my focus is on the first set of five measures, i.e., employees, diversity, environment, community and human rights. Because employees and diversity aspects focus on internal stakeholders, I combine these two areas to form internal CSR. In contrast, environment, community and human rights were classified as external CSR. CSR internal and external dimensions are further divided into strengths and concerns as follows.

CSR strengths and concerns: Previous research using KLD data specifies areas of CSR as being internal or external and also classifies them as being strengths and concerns (Bird et al. 2007). I follow this classification in my paper. Specifically, internal areas include: diversity and employee relations. Similarly, external CSR areas include human rights, environment and community. For each area, KLD collects data on number of sub-areas. For instance, the area of "community issues" has eight areas of strength (Charitable Giving, Innovative Giving, Non-US Charitable Giving, Support for Housing, Support for Education, Indigenous Peoples Relations, Volunteer Programs, Other Strengths) and five areas of concern (Investment Controversies, Negative Economic Impact, Indigenous Peoples Relations, Tax Disputes, Other Concerns). KLD assigns a score of "1" or "0" for each sub area. I summed each of the sub-areas to arrive at an overall measure of CSR strengths and concerns for each area. A firm in the community issues

[8] I did not use product issues and corporate governance in the CSR measurement because of possible overlap with other moderators used in this study. For instance, product issues also forms part of ACSI's measure of customer satisfaction. Corporate governance is seen as an antecedent of CSR by some researchers. For these reasons, I excluded these two aspects from the calculations involving CSR.

area therefore can have a score ranging from 0-8 in strengths and 0-5 in concerns. For this study, I created an overall score for internal strengths (concerns) and external strengths (concerns). The distribution of these is shown in Table 3.1A and correlations are shown in Table 3.1B.

Communicating to Investors. There is no single source of data that captures all communication with investors. However, letters to shareholders communicate directly with investors, and may contain information justifying CSR expenditures (Abbott and Monsen 1979). Specifically, I use the CEO letter to shareholders found in a company's annual report. Annual reports, containing letters to shareholders (investors), were collected for all 816 observations in the data set. A 0-5 scale[9] was used to code the four types of CSR used in the study (see Appendix A for coding instructions). The annual reports were coded by two research assistants. Initial agreement between them was 91.2%. The coders resolved the differences through discussion.

Customer Satisfaction. Customer Satisfaction (CS) data were obtained from the University of Michigan American Customer Satisfaction Index (ACSI) website (http://www.theacsi.org/) and have been used extensively in previous research. The ACSI was created in 1994. The goal of the ACSI is to present an annual firm-level customer satisfaction index for each company in the sample. It is designed to be representative of the economy as a whole; measuring more than 200 firms in seven economic sectors. More than 65,000 customers are interviewed annually (Fornell et al. 1996), and composite scores for only the largest firms are reported. The ACSI uses an econometric model to measure customer satisfaction based upon customer expectations, perceived quality, and perceived value. ACSI satisfaction scores range from 0 to 100.

[9] 0 = no mention of a specific type of CSR activity, 5 = An entire section is dedicated to a specific type of CSR

Industry concentration. Industry concentration is measured using the Herfindahl-Hirshman Index (HHI), a well established measure of constructs such as market power (Milne 1992) and competitiveness (Anderson et al. 2004). HHI information was calculated, for each year, from Compustat. Consistent with Anderson et al. (2004) the value of HHI was calculated by taking the square of the market share for each firm in a given industry and summing the squares together. Values of HHI that are closer to 1 imply a higher industry concentration, and values closer to 0 represent lower industry concentration.

Short-term financial outcomes. Consistent with previous research, short-term financial outcomes are measured using ROA (McGuire et al. 1988; Roberts 1992). The data were obtained from Compustat.

Control Variables. In line with recent research, I controlled for firm size, industry type, and previous period's Tobin's q. Size of firm can be represented by either sales or number of employees at a firm. Previous research has suggested that the size of the firm has an effect on CSR (Johnson and Greening 1999). I utilized the number of employees (from Compustat) as a measure of firm size. Two groups of service industries, energy and telecommunications sectors are characterized by existence of large, monopolistic firms and high government control. Therefore, I created a variable to capture energy, telecommunications, other services, and goods firms. The lagged value of Tobin's q is used to control for the fact that previous Tobin's q can be highly predictive of current value. In other words, the model captures the impact of CSR efforts on future Tobin's q over and above the variance accounted for by previous period's Tobin's q.

Modeling Heterogeneity. The data set contains observations that include time, firm, and industry. To model these aspects, and to help control for time-varying, random and unobserved fixed effects, I employ hierarchical linear modeling (HLM) (Raudenbush and Bryk 2002; Singer

1998).This multi-level approach of this method encapsulates the single level approach of OLS and the two level approach of a random coefficient model and is fully consistent with prior research in marketing (Anderson et al. 2004; Mittal et al. 2005). The first level captures firm specific effects, the second across firms within industry, and the third captures time varying effects. The model can be summarized as follows:

Level 1: Across a Firm

$$y_{ijk} = \beta_{0jk} + \beta_{1jk}\text{firm}_{ijk} + \beta_{2jk}\text{L1COV}_{ijk} + \varepsilon_{ijk} \quad (2)$$

Level 2: Across Firms within an Industry

$$\begin{aligned} \beta_{0jk} &= \gamma_{00k} + \gamma_{01k}\text{L2COV}_{jk} + \mu_{0jk} \\ \beta_{1jk} &= \gamma_{10k} + \gamma_{11k}\text{L2COV}_{jk} + \mu_{1jk} \\ \beta_{2jk} &= \gamma_{20k} + \gamma_{21k}\text{L2COV}_{jk} + \mu_{2jk} \end{aligned} \quad (3)$$

Level 3: Across Time

$$\begin{aligned} \gamma_{00k} &= \alpha_{000} + \alpha_{001}\text{L3COV}_{k} + r_{00k} \\ \gamma_{10k} &= \alpha_{100} + \alpha_{101}\text{L3COV}_{k} + r_{10k} \\ \gamma_{20k} &= \alpha_{200} + \alpha_{201}\text{L3COV}_{k} + r_{20k} \\ \gamma_{01k} &= \alpha_{010} + \alpha_{011}\text{L3COV}_{k} + r_{01k} \\ \gamma_{11k} &= \alpha_{110} + \alpha_{111}\text{L3COV}_{k} + r_{11k} \\ \gamma_{21k} &= \alpha_{210} + \alpha_{211}\text{L3COV}_{k} + r_{21k} \end{aligned} \quad (4)$$

where i = year, j = industry, and k = time

Dependent variable:

y_{ijk} = Tobin's *q* for a particular year

Predictor variables:

L1COVijk = indicates Level 1 covariates such as CS, CSR, ROA
L2COVjk = indicates Level 2 factors such as HHI
L3COVk = indicates Level 3 factors such as year

3.4 RESULTS

As described earlier, the primary dependent variable is Tobin's *q*, although I also seek to replicate the results using the Carhart Four-Factor Model. Both measures rely on stock-market based performance as an indicator of firm success in the long run.

3.4.1 Tobin's *q* Model

In this section I summarize the results with Tobin's *q* as the dependent variable. The results for the model are displayed in Table 2. To visualize the pattern of results, the statistically significant interactions, using median splits of the independent variables, are depicted graphically in Figures 3.1A-3.1F.

The model has a pseudo or McFadden R^2 value of 33.98% and an AIC value of 1580.5 (compared to 2387.8 for the null model). As can be seen in Table 3.2, considering the impact of CSR types, external CSR strengths are negative and significant (b = -0.070; $p < 0.01$), external CSR concerns are negative and significant (b = -0.048; $p < 0.05$), internal CSR strengths are positive and not significant (b = 0.024; ns), internal CSR concerns are negative and not significant (b = -0.036; ns). Regarding control variables, firm size is not significant (b = 0.008), while lagged Tobin's *q* is significant (b = 0.345; $p < 0.001$). In the following sections I will describe the results of the interactions.

3.4.2 Communication of CSR Strengths and CSR Weaknesses

The main effect of CSR external strengths communication is not significant ($b = 0.115$; $p < 0.001$). As highlighted previously, the main effect of CSR external strength ratings is negative and significant ($b = -0.070$; $p < 0.01$). However, the interaction of CSR communication and external CSR strength ratings is positive and significant ($b = 0.049$; $p < 0.01$). Upon further analysis of simple slopes, I find that the effect of external CSR strengths for high levels of communication is significant and positive ($b = 0.115$; $p < 0.001$). The effect of external CSR strengths for low levels of communication is significant and negative ($b = -0.101$; $p < 0.01$). This pattern of results provides strong support for H_1. Interestingly, although I hypothesized a nonsignificant effect of CSR external strengths when CSR communication is low, the results actually demonstrate that the impact of CSR external strengths ratings are, in fact, *negative*, when CSR communication is low. This is a somewhat counter-intuitive result and I examine possible reasons for this in the general discussion later.

To generate deeper insights, I highlight these results further by examining the mean Tobin's q for various combinations of CSR strengths and CSR communication. These combinations were created using median splits on the two independent variables. Figure 3.1A shows that firms with high external CSR strengths that communicate this to investors have a Tobin's q that increases from 1.15 to 2.08. Interestingly, if a firm has low external CSR strengths, then there is a penalty for falsely claiming high external CSR strengths. In other words, when CSR strength ratings are low, the Tobin's q for low levels of CSR communication are *higher* than the Tobin's q for high levels of CSR communication (M's = 1.72 vs. 1.15). The negative coefficient for CSR external strength ratings when CSR communication is low (see previous paragraph), can be better understood from the pattern of means depicted in Figure 3.1A.

When CSR communication is low, high external strength ratings have lower Tobin's *q* (M = 1.55) than low external strength ratings (M = 1.72). This suggests that when CSR communication is low, the presence of high CSR ratings alone cannot result in higher long-term financial performance, because investors may be unaware of these strength ratings (a situation when information asymmetry is high). In such a situation, a firm may be allocating resources to CSR that do not translate into higher financial performance, because investors are not aware of a firm's efforts. In such a situation, when investors are unaware of a firm's CSR efforts, CSR expenditures may be wasteful. Taken together, the above set of results provides a unique perspective that may help explain the mixed findings in the literature. Do these results hold in the context of internal CSR as well? Interestingly, and consistent with my earlier arguments, I find that the interaction of *internal* CSR strengths and communication does *not* have a significant impact on stock market performance (b = -0.008; ns).

3.4.3 Short-Term Financial Outcomes and CSR Strengths and CSR Weaknesses

Hypothesis 2 proposed that the impact of external CSR strengths on long-term financial returns will be *positive* when short-term financial outcomes are *high* and that the impact of external CSR strengths on long-term financial returns will be *negative* when short-term financial outcomes are *low*. I find that the main effect of short-term financial outcomes is positive and significant (b = 17.082, $p < 0.001$). Recall that the main effect of external CSR strengths is negative and significant (b = -0.070, $p < 0.001$). The interaction of short-term financial outcomes with external CSR strengths is also negative and significant (b = -5.657; $p < 0.001$). Analysis of simple slopes reveals that the effect of external CSR strengths for high levels of ROA is significant and positive (*b* = 0.115; $p < 0.001$). The effect of external CSR strengths for low levels of ROA is significant and negative (*b* = -0.101; $p < 0.001$).

These results are graphically depicted in Figure 3.1C. As can be seen, when ROA is high, Tobin's *q* is not significantly different for high versus low CSR external strengths (M's = 2.30 vs. 2.25). In contrast, when ROA is low, the presence of CSR external strengths actually weakens Tobin's *q* (M's = 0.90 vs. 1.12). This provides strong evidence of the detrimental effects of CSR efforts, particularly when firms are not performing well in the short-term. On the whole, these results show that firms with low ROA cannot improve their long-term returns or compensate for weak performance simply through investing in external CSR. In summary, H_{2a} and H_{2b} are fully supported.

Hypothesis 3 posited a significant *negative* impact of external CSR concerns on long-term financial returns when short-term financial outcomes are low. Further, I also proposed that the impact of external CSR concerns on long-term financial returns will be *nonsignificant* when short-term financial outcomes are high. Recall that I find that a significant positive main effect of short-term financial outcomes (*b* = -17.082; $p < 0.001$) and a significant negative main effect of external CSR concerns (*b* = -0.048; $p < 0.05$). I also find that the interaction of short-term financial outcomes and external CSR concerns is negative and significant (*b* = -4.367; $p < 0.05$). The simple slopes reveal that when CSR concerns are combined with high ROA, the impact is marginally significant and negative (*b* = -0.058; $p < 0.10$). When CSR concerns are combined with low ROA, the impact is negative and significant (*b* = -0.067; $p < 0.05$). Figure 3F depicts these effects graphically. As can be seen, in Figure 3.1F, the impact of external CSR concerns when ROA is high to be minimal (M's = 2.32 vs. 2.23). However, when ROA is low, the impact of external CSR concerns is much greater (M's = 0.86 vs. 1.32). Taken together, these results strongly support H_3.

3.4.4 Customer Satisfaction and CSR Strengths and CSR Concerns

I hypothesized that CSR strengths do not provide any novel or complementary information in the context of CS information. Consistent with this hypothesis, I find no significant main effect of CS (b = -0.001) on long-term financial performance and no significant interaction of CS and external CSR strengths (b = 0.003; ns). Further, I had hypothesized that the interaction of CS and external CSR concerns would be significant, and I find support for this. Specifically, the interaction of CS and external CSR concerns was negative and significant (b = -0.006; $p < 0.05$). I examine the simple slopes to gain further insights. I find that the effect of external CSR concerns in the presence of high CS is negative and significant (b = -0.148; $p < 0.001$) and in the presence of low CS is also negative and significant (b = -0.071; $p < 0.01$). However, the negative impact of external CSR concerns is smaller when CS is low, than when CS is high. Figure 3.1D graphically depicts the effects for H_4. Firms that have high CS scores and low external CSR concerns initially have a Tobin's q values of 2.33. This value drops to 1.52 in the presence of high external CSR concerns, for a drop of 0.81. However, firms with low CS scores have reduced Tobin's q values of only 0.40 (M's = 1.69 to 1.29). Taken together, these results provide strong support for H_4.

3.4.5 Industry Concentration and CSR Strengths and Weaknesses

The interaction of external CSR strengths with industry concentration is non- significant (b = 0.161, ns). Recall that I found a significant negative main effect of external CSR concerns (b = -0.048; $p < 0.05$). Further, I found that the interaction of industry concentration with external CSR concerns was significant (b = 0.585; $p < 0.001$). Exploring this further via simple slopes, I find that when industry concentration is high, the impact of CSR external concerns is not significant (b = 0.003; ns), but the impact is significant and negative when industry concentration is low (b = -0.133; $p < 0.001$). Examining the Figure 3.1E, I find that when HHI is high, the impact of external concerns (high versus low) on Tobin's q is minimal (M's = 2.09 vs. 2.14); however, when HHI is low, the impact of high (versus low) external concerns is significant (M's = 0.94 vs. 1.63). These results provide strong support for H_6. I discuss the implications of these results in the next section.

3.4.6 Carhart Four Factor Model

Recall that the intercept in the Carhart four-factor model (equation 1 described previously) represents the abnormal returns for a given portfolio of firms. In order to determine whether a hypothesis is supported, the corresponding intercept (alpha) value is examined. I first examine the hypotheses using the average monthly portfolio returns in excess of the risk-free rate for the corresponding portfolios (see Table 3). Figures 3.2A and 3.2B contain information for illustrative purposes only and to generate added insights, for two of the hypotheses (H_1 and H_4). These figures are plots of the return to a portfolio on the overall market index (CRSP value-weighted NYSE/AMEX/NASDAQ index) in excess of the risk-free interest rate (the dependent variable in equation 1).

3.4.7 Communication and CSR

The first hypothesis posited that both the combination of high levels of external CSR strengths and communication contribute to greater returns to investors. A positive significant alpha value ($\alpha = 0.013$, $p < 0.01$), from Table 3.3A, for the corresponding portfolio supports this hypothesis. In addition, Figure 3.2A shows that a portfolio consisting of firms that have high external CSR strengths and communicate this to the investor community outperforms all three other combinations. Together, this result strongly supports H_1.

3.4.8 Short-term Financial Outcomes and CSR

H_{2a} proposed that firms with high levels of short-term financial outcomes will have higher long-term financial returns in the presence of external CSR strengths. H_{2b} proposed that firms with low levels of short-term financial outcomes will have weaker long-term financial returns in the presence of external CSR strengths. Consistent with hypothesis H_{2a}, firms with high ROA benefit significantly from external CSR strengths ($\alpha = 0.012$, $p < 0.05$). Note also that firms with high ROA and low external CSR have only marginally significant abnormal returns ($\alpha = 0.011$, $p < 0.10$). Taken together, these results support hypothesis H_{2a}. Table 3C supports H_{2b} by showing that the returns for firms with low ROA are not helped by high external CSR strengths ($\alpha = 0.005$, ns). On the whole, these results show that firms with low ROA cannot improve their long-term returns simply through investing in external CSR.

H_{3a} and H_{3b} proposed that firms with high ROA and external CSR concerns will be less likely to suffer any negative consequences, whereas firms with low ROA and external CSR concerns will suffer more negative consequences. I find that firms with high ROA and low external CSR concerns have a positive long-term financial performance ($\alpha = 0.013$, $p < 0.05$), and none of the other combinations are significant. Therefore, these results do not support H_{3a} and H_{3b}.

3.4.9 Customer Satisfaction and CSR

H_4, addresses CS and external CSR concerns; however, none of the combinations are significant. Thus, results are not supportive of the hypothesis H_4. However, examining the total returns, Figure 3.2B shows that a portfolio consisting of firms that have low external CSR concerns and high CS outperforms all other combinations. The gap between firms with high and low external CSR concerns with high CS is much larger than the gap between firms with high and low external CSR concerns with low CS. Therefore, the results are in the expected direction, but the hypotheses are not supported.

3.4.10 Industry Concentration and CSR

H_5 posits that high (versus low) external CSR strengths benefit firms in more concentrated industries, but do not in less concentrated industries. Examination of Table 3E provides support for H_5. I find that the impact of CSR external strengths is significant when HHI is high ($\alpha = 0.012$, $p < 0.05$), and CSR external strengths are not significant when HHI is low ($\alpha = 0.005$, $p < 0.05$).

H_6 proposes that the impact of CSR concerns will be more negative in lower (versus higher) concentration industries. Firms with low CSR concerns outperform those with high CSR concerns, but this effect only holds when industry concentration is high ($\alpha = 0.015$, $p < 0.05$). In other words, I find that firms in highly concentrated industries are significantly affected if they have high levels of external CSR concerns, while firms with many competitors are not abnormally affected by high levels of external CSR concerns. These results are contrary to H_6.

In interpreting these results, I note that a key limitation of the Carhart approach is the inability to examine the effects of the moderators in a simultaneous fashion. Further, the portfolio approach typically used in the context of the Carhart four-factor model required me to create portfolios of stocks based on median splits of each focal variable, thereby reducing information contained within continuous variables (e.g., HHI, customer satisfaction) into discrete categories. Despite these limitations, the Carhart model provides additional insights regarding the CSR effects I formally tested using Tobin's *q* as a dependent variable. Thus, I view these results as supplementary to the Tobin's *q* results.

3.4.11 Summary of Results

Table 4 summarizes the results for both sets of analyses. In summary, across both the Carhart four-factor model and the Tobin's *q*, I find support for H_1, H_{2b}, H_{3a}, and H_6. Further, I find support for H_{2a}, H_{3b}, and H_4 in the Tobin's *q* approach. Neither model supports H_5.

3.5 DISCUSSION

Based on signaling theory, this research develops and tests a conceptual framework of *when* CSR has an impact on firm performance. The first finding is that firms investing in external CSR strengths also should invest resources in communicating these strengths to investors. This is an intriguing finding and extends previous research which has focused on CSR strengths only as a secondary source of value (e.g., Du et al. 2007; Porter and Kramer 2002; Roman et al. 1999; Ruf et al. 2001; Turban and Greening 1997). Specifically, I find that CSR strengths in the presence of direct communication to investors can have a greater positive impact on Tobin's *q* (2.08) than either CSR strengths alone (1.55) or communication alone (1.15). To my knowledge, this is the first time an examination has been undertaken into whether CSR communication to investors influences firm value. This new finding also contributes to the burgeoning stream of research regarding marketing to investors (e.g., Abbott and Monsen 1979; Gelb 2002; Lovett and MacDonald 2005; Pava and Krausz 1996; White 2005), by demonstrating that the combination of direct communication to investors along with firm actions have a powerful synergistic effect on long-term financial performance over and above the impact of firm actions alone.

Further, I find that the presence of CSR external strengths when there is little or no communication from the firm to investors actually can exert a negative impact on a firm's long-term financial performance. One possible explanation is that without adequate communication and elaboration in these communications from firms, investors may (mis)interpret expenditures on external CSR strengths as projects that are wasteful. In other words, since the firm does not communicate why resources have been spent on external CSR, investors may be likely to penalize the firm for misallocation of resources. Therefore, managers investing in CSR strengths should, in addition, communicate these CSR strengths to investors as well.

From a signaling theory perspective, the above finding provides compelling evidence that complementary signals influence firm value (Basuroy et al. 2006; Kirmani and Rao 2000). CSR direct communication to investors is a clear, unambiguous signal which reduces information asymmetry between investors and firms. In the presence of CSR direct communication, the impact of a credible, strong signal, i.e., CSR strengths, as compiled by a third party regarding CSR strengths (KLD) can have an even greater impact. This finding is unique in the signaling context because previous research has proposed this notion conceptually (e.g., Kirmani and Rao 2000), but has not investigated the context of financial performance. To my knowledge, this is the first time research shows that signals of CSR strength communication and signals of actual CSR strengths interact to create greater firm value. Future research should examine whether other information asymmetry reducing signals (e.g., public relations regarding CSR concerns) interact with other credible signals (third party information regarding CSR concerns) to influence the investor community.

A second important finding is the impact of CSR strengths against a backdrop of a firm's short-term past performance. I find that external CSR strengths benefit (harm) firms with high (low) ROA. Investing in CSR when the firm has low past performance has a significant negative impact on firm value (-0.32, a decrease from 1.12 to 0.90) relative to CSR strengths when the firm has demonstrated strong short-term past performance (0.05, an increase from 2.25 to 2.30). This result suggests that CSR is seen as complementary to, and not a substitute for a firm's short-term past performance. Firms with poor short-term financial performance can be penalized for investing in CSR. This is an interesting finding, as it helps demonstrate why past research may have found mixed results with regard to CSR-firm performance. When the firm's past short-term financial performance has been poor, investing in CSR could have negative effects. The opposite is true when the firm has demonstrated a strong short-term performance in the past. It is possible that viewed in the larger context of the firm, CSR is seen as an investment that should only be taken in the presence of excess slack resources generated by strong past performance in the short term (Hillman and Keim 2001; Orlitzky et al. 2003; Seifert et al. 2004). Specifically, when firms have low ROA in the past, and additional slack resources are not available, then CSR investments can be viewed as wasteful and are detrimental to firm value. This may result from the perception that CSR investments do not necessarily help enhance a firm's profitability in the immediate future and are therefore wasteful in the context of a firm with weak past performance. CSR is seen as a worthwhile investment only after a firm fulfills its basic obligations to its investors (demonstrated by satisfactory ROA). Future research should examine this further by investigating investors' perceptions directly.

I note; however, that this result does not imply that CSR can be ignored altogether by poor performing firms. An interesting finding is that poor performing firms (those with low ROA) are penalized significantly more for having external CSR concerns than strong performing firms. In other words, there is an asymmetrically stronger negative impact of CSR concerns relative to CSR strengths, and this asymmetry is significantly greater for poor performing firms. Taken together, these findings provide a clear set of guidelines for poor performing firms. Firms with low ROA should be mindful of minimizing CSR concerns, whereas investments in CSR strengths only have payoff for high performing firms. Building on these insights future research should investigate how and why CEOs may allocate resources to CSR concerns in light of prior firm performance. This may be particularly important to investigate for firms that operate in cyclical industries, and when firms face macro environments that temporarily affect short-term firm performance.

The interaction of CSR and CS provides the third set of important insights. While ROA can be seen as an indicator of a firm's past performance, CS provides investors with information regarding a firm's future financial prospects (Anderson et al. 2004). First, CSR strengths are less valuable when a firm is seen as having a strong financial future (as evinced by higher CS). This result is consistent with a signaling perspective, since it appears that CSR strengths may not provide unique information (no reduction in information asymmetry), or complement information over and above CS signals. In contrast, CSR concerns do have a significant signaling value in the presence of CS strengths, since they contradict existing information. Therefore, I find that CSR concerns have a greater negative impact in the presence of CS strengths. Again, this finding lends support to the importance of taking into account the complementary nature of multiple signals that investors rely on in making decisions regarding firms. It would be important for researchers to understand factors that determine the relative strength of potentially complementary signals. Thus, for instance, are there systematic conditions under which CSR and/or CS may be systematically stronger or weaker than one another as a signal to investors? This result is an important research direction.

Fourth, I find that competitive context (as measured by industry concentration) influences the value created from CSR. I find that external CSR strengths do not interact with industry concentration, shedding doubt on my claim that a lower degree of competition (implied by higher concentration) enables firms to extract greater value from each dollar invested in CSR. However, firms in industries that have low concentration face stiffer penalties from external CSR concerns than firms in more concentrated industries. In other words, the competitive context can magnify the impact of CSR concerns in more competitive industries. A likely explanation is the ease of defection for consumers in low concentration industries. In my review of the literature, I found that while some signaling papers have investigated industry concentration (e.g., Akhigbe 2002; Heil and Robertson 1991), previous research in CSR has mentioned (Amato and Amato 2007) but not explicitly considered the competitive context as a moderator of CSR effects.

An important contribution made by this research is the demarcation of different types of CSR based on strengths (versus concerns) and internal (versus external). This research shows that CSR is a complex signal whose various components have different implications for value creation within a firm. In so doing, I attempt to resolve the debate in the literature as to whether CSR strengths add to, detract from, or have no impact on firm performance. I provide a more nuanced perspective by suggesting that external strengths (consisting of CSR investments directed toward the environment, community, and human rights) systematically can benefit a firm, but only under certain conditions: when CSR external strengths are accompanied by communication to investors, when CSR external strengths are accompanied by high ROA, and when firms with CSR external strengths are in more concentrated (less competitive) industries.

Although I had theorized that internal CSR issues would have no impact on firm performance, the results demonstrated that internal concerns in conjunction with other metrics do have a significant impact on firm performance. I found that interaction between internal concerns and CS was significant, suggesting that firms with high CS will face greater negative long-term financial consequences than firms with lower CS in the presence on internal CSR concerns. Internal concerns also interacted significantly with ROA, suggesting that, similar to external CSR concerns, firms with low levels of ROA will have their long-term financial outcomes more negatively affected than firms with high levels of ROA. I also found a significant interaction of industry concentration and CSR which indicates that internal CSR concerns may be a greater negative influence on firms in more (vs. less) concentrated industries. Taken together, it appears that not all internal CSR signals lack strength. Internal concerns under certain conditions could influence investor behavior. This could be because internal CSR concerns such as striking workers may severely disrupt output (e.g., autoworkers), or unions may make mergers difficult (e.g., airline pilots).

I also shed light on the asymmetries inherent in firms that demonstrate concerns in CSR. Firms with high external concerns can have lower value than firms without significant external concerns, but only under certain conditions: firms with higher than average CS a firm especially should be careful to avoid external CSR concerns. Future research could investigate how specific internal or external strengths could have a stronger influence on a firm's long-term financial outcome, potentially helping managers further decide how to allocate resources for corporate social responsible projects.

This research is not without limitations, some of which provide fruitful avenues for future research. First, the use of multiple dependent variables (e.g., Carhart four-factor model and Tobin's *q*) can be viewed both a strength and a limitation of this research. On the one hand, the use of multiple dependent variables does strengthen the findings, and the Carhart four-factor model helps control for extraneous noise in examining the impact of CSR efforts on abnormal stock returns. However, in some cases, the results from the Carhart four-factor model are not borne out in the Tobin's *q* approach. A possible reason is that the Carhart approach did not permit me to examine the moderators and their interactions with CSR simultaneously. Therefore, I rely on the Tobin's *q* approach more heavily in the hypothesis testing.

Second, a related point is that this research is based on stock-market metrics, e.g., market return and Tobin's q. This point of view limits the ability to consider other, broader benefits of CSR (e.g., consumer welfare, social welfare), which may be important for society at large. For instance, Bhattacharya, et al. (2008) have suggested that CSR efforts can help enhance employee welfare. Examination of these broader benefits of various types of CSR activities (e.g., strengths/concerns) is an important topic for future research. Further, the impact of CSR efforts on organizational identification by key stakeholders (e.g., Bhattacharya and Sen 2003) is worthy of further research. Third, a limitation of this research is that it relies on existing data sources (e.g., ACSI for customer satisfaction, KLD for CSR), which limits the study to those firms which are tracked within these datasets. Further, there are most likely items missing from the KLD data set such as retirement plans or amount of work that is out-sourced. Additionally the impact of different CSR issues may vary on a yearly basis. For instance in some years, clean rivers may be the foremost environmental issue, while other years, renewable energy may be the most prominent. Fourth, the set of firms used in this study was restricted to relatively larger firms included in the ACSI dataset. As better data becomes available, these issues may be addressed resulting in refined insights.

Table 3.1A: Percentage of Internal and External Strengths and Concerns

Frequency	Internal Concerns	Internal Strengths	External Concerns	External Strengths
0	40.20	12.01	44.73	47.79
1	29.66	20.96	25.12	27.08
2	20.71	16.18	8.58	16.54
3	6.37	19.12	8.21	6.25
4	2.82	11.89	3.31	1.23
5	0.25	7.48	4.53	1.10
6		7.84	4.04	0.12
7		3.19	1.47	
8		1.35		

n = 816

Table 3.1B: Correlations between Independent Variables

	External CSR Strengths	External CSR Concerns	Internal CSR Strengths	Internal CSR Concerns	Annual Report External Strengths	Annual Report Internal Strengths	ROA	Ind. Conc.	Cust. Sat.
External CSR Strengths	1.00								
External CSR Concerns	0.11	1.00							
Internal CSR Strengths	0.37	0.15	1.00						
Internal CSR Concerns	-0.03	0.06	0.15	1.00					
Annual Report Ext. Strs.	0.07	0.12	-0.03	-0.00	1.00				
Annual Report Int. Strs.	-0.06	0.03	-0.03	-0.07	0.15	1.00			
ROA	0.03	-0.05	0.07	-0.00	-0.04	-0.01	1.00		
Industry Concentration	0.04	-0.26	0.05	0.03	-0.05	0.00	0.13	1.00	
Customer Satisfaction	0.08	0.07	0.03	-0.14	-0.01	0.08	0.08	0.46	1.00

Correlations +/- 0.07 are significant at $p < 0.05$
n = 816

Table 3.2: Model 2 Results

	Tobin's *q*		
Hypothesis	**Term**	**Estimate**	**Std. Error**
	Intercept	1.074****	0.060
	Firm Size	0.008	0.028
	Tobin's q_{t-1}	0.345****	0.014
	Competition (Industry Concentration)	0.099	0.245
	Customer Satisfaction (CS)	-0.001	0.008
	Short-term Financial Outcome (ROA)	17.082****	3.241
	Annual Report External Strengths	-0.004	0.023
	Annual Report Internal Strengths	0.008	0.033
	External CSR Strengths	-0.070***	0.026
	External CSR Concerns	-0.048**	0.020
	Internal CSR Strengths	0.024	0.015
	Internal CSR Concerns	-0.036	0.024
H1	CSR External Strengths X Annual Report Ext. Str.	0.049***	0.017
	CSR External Strengths X CS	0.003	0.004
H5	CSR External Strengths X Industry Concentration	0.161	0.161
H2	CSR External Strengths X ROA	-5.657****	1.556
	CSR Internal Strengths X Annual Report Int. Str.	-0.008	0.011
	CSR Internal Strengths X CS	0.003	0.003
	CSR Internal Strengths X Industry Concentration	0.018	0.099
	CSR Internal Strengths X ROA	5.908****	1.053
H4	CSR External Concerns X CS	-0.006**	0.003
H6	CSR External Concerns X Industry Concentration	0.585****	0.162
H3	CSR External Concerns X ROA	-4.367**	1.775
	CSR Internal Concerns X CS	-0.002**	0.004
	CSR Internal Concerns X Industry Concentration	0.340**	0.157
	CSR Internal Concerns X ROA	-7.332****	1.499
	n = 816		
	AIC = 1580.5		
	R^2 = 33.98		

*< 0.10
**< 0.05
***< 0.01
****< 0.001

Table 3.3: Model 1 - Carhart 4 Factor Model Results

	A: Annual Report External Strengths and CSR External Strengths				B: Customer Satisfaction and CSR External Concerns				C: ROA and CSR External Strengths			
	Hi-Hi	**Hi-Lo**	**Lo-Hi**	**Lo-Lo**	**Hi-Hi+**	**Hi-Lo+**	**Lo-Hi+**	**Lo-Lo**	**Hi-Hi**	**Hi-Lo+**	**Lo-Hi**	**Lo-Lo**
alpha	0.013**	0.011	0.008	0.010	-0.001	0.010	0.003	0.010	0.012**	0.011*	0.005	0.008
mktrf	0.252	0.280	0.147	0.275	0.379	0.230	0.223	0.245	0.166	0.202	0.191	0.328
smb	-0.306	-0.659**	-0.239**	-0.251	-0.034**	-0.144	-0.385**	-0.286	-0.288*	-0.242	-0.157	-0.280
hml	-0.059	-0.078	0.071	0.028	0.315	0.024	0.299*	0.054	-0.086	-0.065	0.210	0.145
umd	-0.051	0.048	-0.070	-0.142	0.022	-0.015	-0.005	-0.167	-0.064	-0.029	-0.075	-0.173
R^2	0.04	0.09	0.06	0.06	0.05	0.02	0.11	0.00	0.05	0.00	0.07	0.06

	D: ROA and CSR External Concerns				E: HHI and CSR External Strengths				F: HHI and CSR External Concerns			
	Hi-Hi	**Hi-Lo**	**Lo-Hi**	**Lo-Lo**	**Hi-Hi+**	**Hi-Lo**	**Lo-Hi**	**Lo-Lo**	**Hi-Hi**	**Hi-Lo**	**Lo-Hi**	**Lo-Lo**
alpha	0.012	0.013**	0.007	0.006	0.012**	0.016**	0.005	0.003	0.010	0.015**	0.007	0.003
mktrf	-0.085	0.166	0.192	0.286	0.098	0.175	0.236	0.391*	-0.002	0.112	0.182	0.377**
smb	-0.242	-0.264	-0.284	-0.207	-0.201	-0.119	-0.252*	-0.359	-0.233	-0.142	-0.291	-0.282
hml	0.303	-0.124	0.144	0.194	-0.065	-0.241	0.195	0.331	0.330	-0.198	0.129	0.354
umd	-0.041	-0.057	-0.061	-0.136	-0.111	-0.206*	-0.031	-0.039	-0.064	-0.178*	-0.067	-0.002
R^2	0.10	0.05	0.06	0.06	0.04	0.07	0.08	0.09	0.10	0.06	0.06	0.08

+Model is not significant at p < .10

*< 0.10

**< 0.05

**< 0.01

***< 0.001

Table 3.4: Results of Hypotheses

	Hypothesis Statement	**Carhart Result**	**Tobin's *q* Result**
H_1	External CSR strengths benefit from communicating to investors	Yes	Yes
H_{2a}	External CSR strengths benefit for firms with high ROA	Yes	Yes
H_{2b}	External CSR strengths are detrimental for firms with low ROA	Yes	Yes
H_{3a}	External CSR concerns are weaker for firms with high ROA	No	Yes
H_{3b}	External CSR concerns are stronger for firms with low ROA	No	Yes
H_4	External CSR concerns affect firms with high CS more than low CS	No	Yes
H_5	External CSR strengths benefit (are detrimental) for firms in more (less) concentrated industries	Yes	No
H_6	External CSR concerns will be more negative in the presence of less concentrated industries	No	Yes

Figures 1A, B, C
External CSR Strengths

Figure 3.1A: Awareness and External Strengths

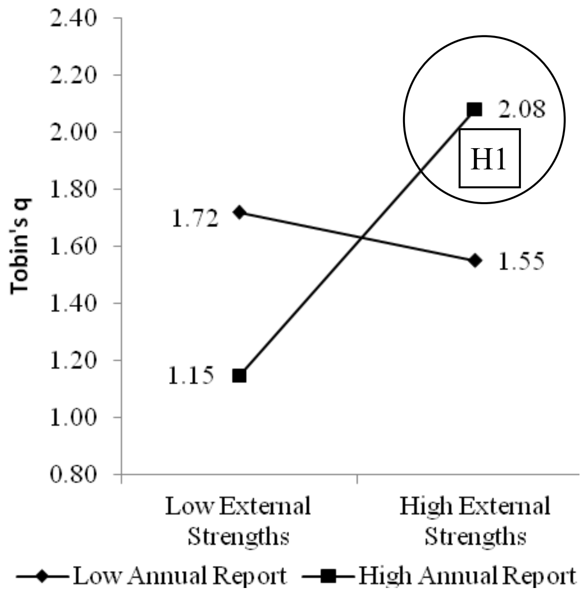


Figure 3.1B: HHI and External Strengths

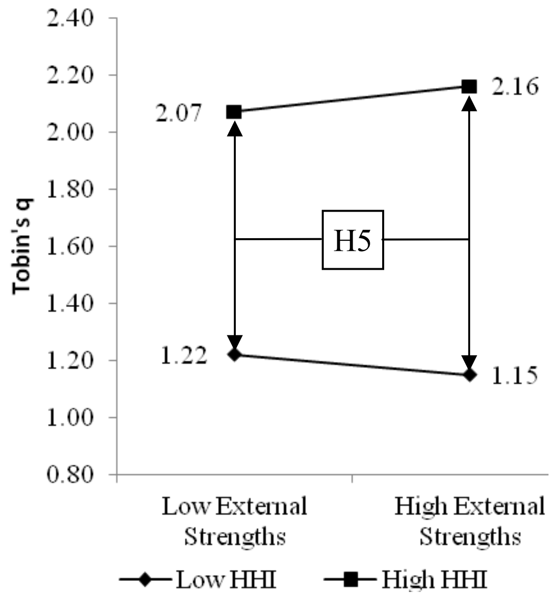


Figure 3.1C: ROA and External Strengths

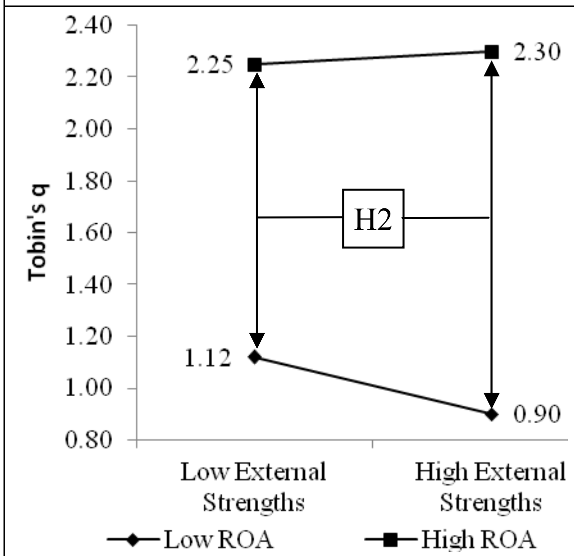


Figure 1D, E, F
External CSR Concerns

Figure 3.1D: CS and External Concerns

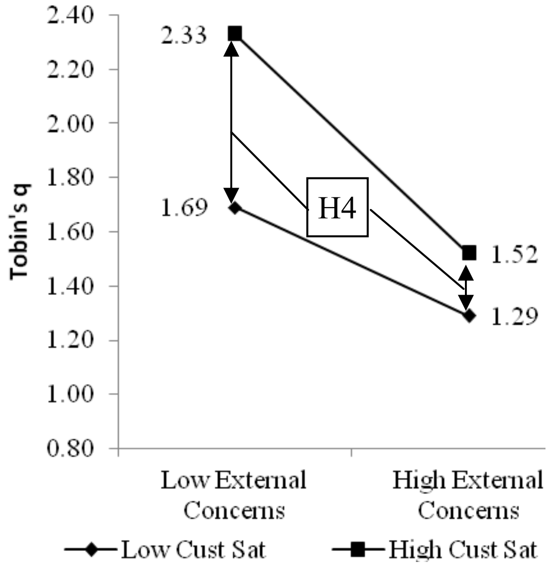


Figure 3.1E: HHI and External Concerns

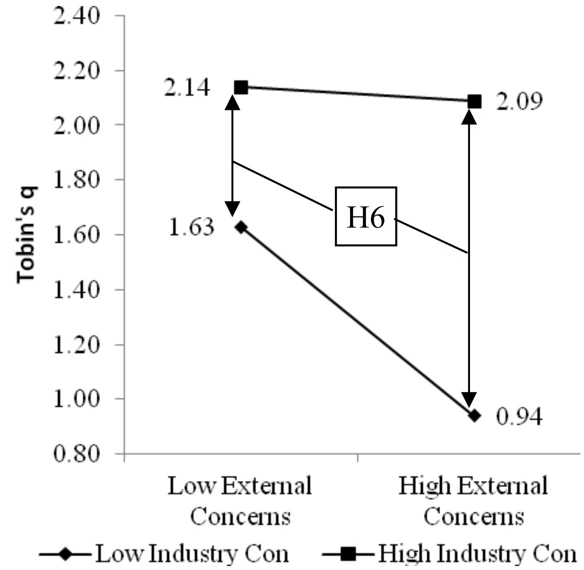


Figure 3.1F: ROA and External Concerns

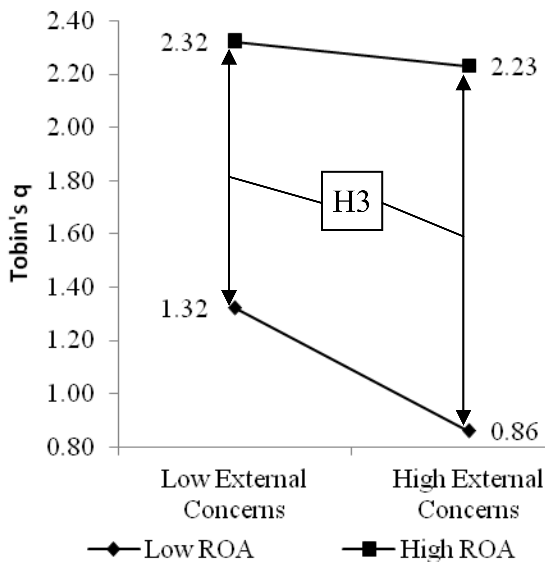


Figure 3.2A: CSR Communications and External Strengths

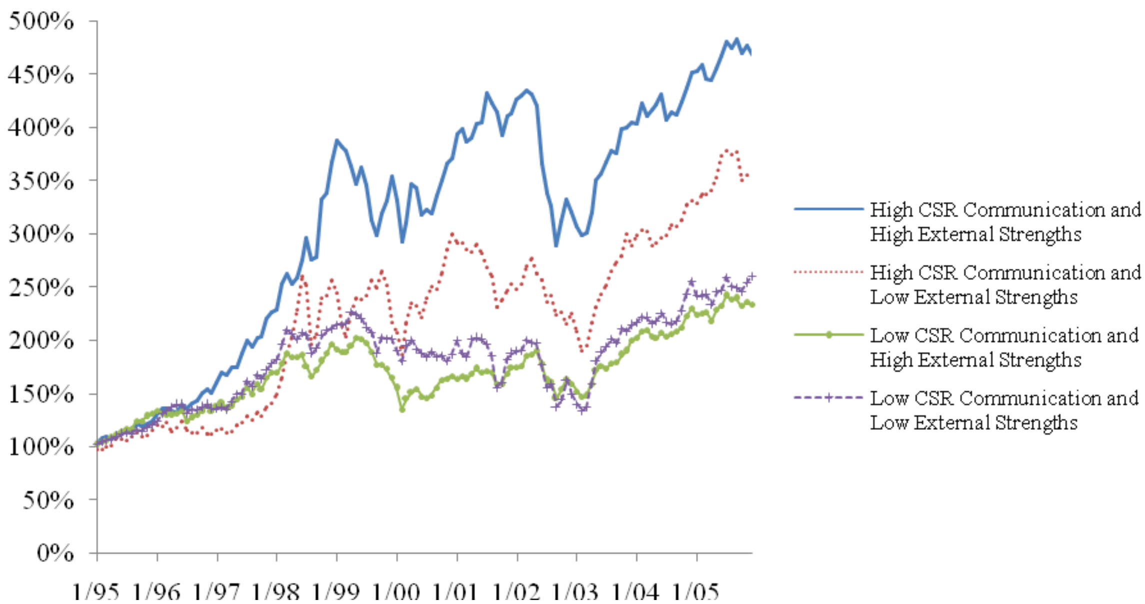
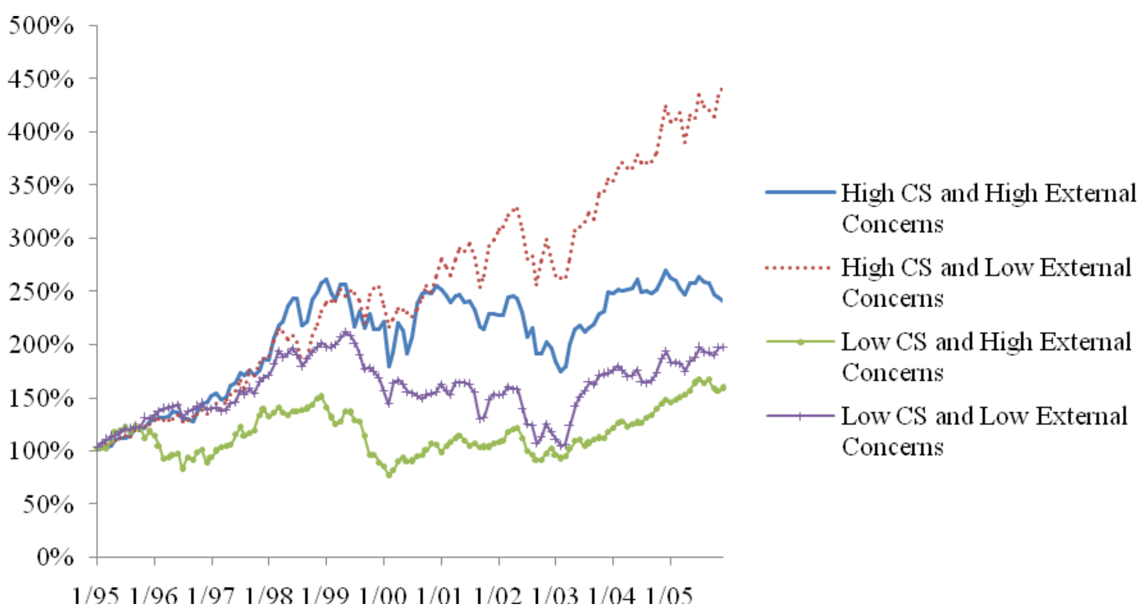


Figure 3.2B: Customer Satisfaction and External Concerns



4.0 ESSAY 3: EMPLOYEE SATISFACTION AND CUSTOMER SATISFACTION IN SERVICE FIRMS

The notion of co-creation of value by both front-line employees and customers (Bolton et al. 2004; Smith and Bolton 2002) is a basic tenet of the service-based logic for conceptualizing marketing (Lusch 1977; Vargo and Lusch 2004). Recognition of employees and customers as key stakeholders is instrumental for developing and implementing a company's service strategy. For instance, prior research on service delivery that shows the important role that front-line employees play in service delivery (Bolton and Drew 1991; Smith and Bolton 2002; Smith and Bolton 1998). Therefore, firms are interested in understanding the interplay of customer satisfaction and employee satisfaction (Heskett et al. 1994; Heskett et al. 1997; Loveman 1998; Wiley 1991). The relative resource investment a firm makes in improving customer satisfaction and employee satisfaction is an important strategic consideration. Top management would benefit from knowing how customer and employee satisfaction—individually and jointly—affect outcomes like behavioral intentions and revenues.

The service-profit-chain (SPC) provides a conceptual framework that integrates customer and employee metrics to understand outcomes like purchasing behavior and ultimately profitability (Heskett et al. 1994; Heskett et al. 1997). A central thesis of the SPC is that satisfied employees are more productive and help create more satisfied customers which, in turn, leads to higher revenues (Bolton and Drew 1991; Bolton et al. 2004; Heskett et al. 1997; Smith et al. 1999). Researchers have used comprehensive models to examine simultaneously the key linkages in the SPC (Anderson and Mittal 2000; Bowman and Narayandas 2004; Zeithaml 2000). Such a comprehensive approach, as argued by Bolton, et al. (2004, p. 286) can enable "managers to conduct a systematic investigation of how they can influence customer relationships" and can provide a "common metric to compare consequences of resource allocation decisions regarding diverse actions that a service organization might undertake." In taking a comprehensive approach, key moderating and mediating relationships pertaining to managerial satisfaction, employee satisfaction, customer satisfaction, and firm revenue need to be clarified. This allows me to build on the work of scholars like Maxham et al. (forthcoming), Homburg and Stock (2004), Wangenheim, Evanschitzky, and Wunderlich (2007), and Keiningham et al. (2006) who investigate the simultaneous role of customer and employee perceptions.

The empirical literature shows that the link between front-line employee satisfaction, customer purchase intention, and firm profits has received mixed support (Hafer and McCuen 1985; Iaffaldano and Muchinsky 1985; Wiley 1991). Harter et al. (2002) find correlations between employee satisfaction and business-unit outcomes such as customer satisfaction and revenue, but conclude that a causal model should be developed. Part of the mixed support may be due to the relationships involved being moderated and/or mediated by customer satisfaction. For instance, Homburg and Stock (2004) show that employee satisfaction directly and indirectly affects customer satisfaction, a key antecedent of customer intentions and revenues. In other words, customer satisfaction may mediate the impact of employee satisfaction on downstream outcomes. It also may be the case that employee satisfaction moderates the impact of customer satisfaction on customer intentions. As argued later, such a moderating role—if empirically verified—provides additional justification for having satisfied employees. By fully examining such issues, my research can help firms determine how to allocate finite resources to improve employee and customer satisfaction. Empirical studies that examine only customers or employees run the risk of over-estimating the impact of the examined group. As such, they may provide biased guidance for further theory development. For instance, as shown in Table 4.1, most early studies examined data from either customers or employees but not both combined. However, as Bolton, Lemon, and Verhoef (2004) argue, both constituents should be examined simultaneously to enable sound resource allocation decisions by firms.

Among the studies reviewed, perhaps the most cited empirical study taking a satisfaction-profit chain perspective to examine both employee and customer satisfaction and link them to revenues was undertaken at Sears (Rucci et al. 1998). The study's authors asserted that a 5 point improvement in employee attitudes will produce a 1.3% increase in customer satisfaction, which in turn will produce a 0.5% improvement in revenue. During the same time, Loveman (1998) published a study that examined the SPC at a bank. In his empirical analysis, he found no statistically significant impact of employee satisfaction either on customer satisfaction or on financial outcomes for the bank.

Recently studies have begun to investigate simultaneously customer and employee satisfaction. These studies suggest that while customer satisfaction and employee satisfaction are related, the relationship is not as straightforward as was assumed previously (Homburg and Stock 2005; Homburg and Stock 2004). Homburg and Stock (2004), for instance, found that the impact of employee satisfaction on customer satisfaction was mediated partially via customer-employee interactions. In a later study (2005) they found that salespersons' expertise, trust and empathy moderated the impact of salesperson satisfaction on customer satisfaction. Specifically, the link was stronger when salespeople scored higher on these characteristics. Silvestro and Cross (2000) found employee satisfaction was lowest in some of the most profitable and productive stores of a retailer. Similarly, Keiningham et al. (2006) analyzed bi-variate correlations and cross-tabulations, concluding that employee satisfaction was related to customer satisfaction and sales, but that customer satisfaction was not related strongly to sales. An integrative approach that examines both customer and employee satisfaction can better elucidate their joint effect on downstream outcomes for a firm.

Building on these studies, I develop hypotheses about the relationships among customer satisfaction, employee satisfaction, and downstream outcomes like purchase intentions and revenues. I test my hypotheses using data from two sources. The first is a German franchise system consisting of 54 franchisees with 1,013 employee and 22,346 customer observations from 2001-2002. Study 1 investigates the linkages among manager (franchisee), front-line employee, and customer satisfaction and how they collectively impact customer repurchase intentions. Study 2 uses data from 1,812 customers randomly sampled from a major U.S. bank. It includes measures of employee satisfaction, customer satisfaction, customer intentions, customer behavior, and firm revenue. In addition to replicating key hypotheses tested in Study 1, an additional goal of Study 2 is to demonstrate that both employee satisfaction and customer satisfaction impact a firm's financial performance. I articulate a theoretical nomological net of constructs and empirically test the embedded hypotheses.

4.1 HYPOTHESES

4.1.1 Front-line Employee Satisfaction: Antecedents and Consequences

Employee job satisfaction represents the emotional state that an employee has toward his/her job and work environment (Brown and Peterson 1993). Taking a systems approach to organizations, it can be argued that increased front-line employee satisfaction should be related to better job performance (Paradise-Tornow 1991). Arguably, employees play a key role in customer experiences. Therefore, increases in satisfaction for employees—by virtue of enhanced job performance—should lead to greater customer value (Bolton and Drew 1991) and eventually higher customer satisfaction. However, it should be noted that meta-analyses of the relationship between job satisfaction and employee performance measures support only a very weak—though positive—relationship between them (Iaffaldano and Muchinsky 1985). As such it is unlikely that employee satisfaction would have only a direct impact on overall performance as measured by customer purchasing behavior. In other words, there are other routes by which employee satisfaction could affect customer repurchase intentions and revenues: the effect of employee satisfaction on customer repurchase intentions may be mediated by customer satisfaction.

Motowidlo (1984) showed that, among service employees, job satisfaction was associated with patterns of behaviors that are conducive to increasing customer satisfaction. Specifically, employees with higher levels of satisfaction displayed patterns of behaviors associated with an awareness and concern for others' needs and feelings, higher emotional control, and acceptance of criticism. The author concluded that "people who are satisfied with their jobs—express their good feelings by behaving considerately and sensitively with others" (Motowidlo 1984 p. 914). When exhibited toward customers, these behaviors should lead to higher customer satisfaction because employees who display such behaviors also foster the perception, among customers, that the firm is empathetic and listens to customers (Ramsey and Sohi 1997). Additionally, when employees, by virtue of higher job satisfaction, are less assertive and more accepting of criticism, customers should experience better service recovery (Bolton 1998; Smith and Bolton 1998;

Smith et al. 1999). Specifically, in the case of service failure, employees who are less assertive and more accepting of criticism will provide a more positive and facilitative experience to customers, thereby increasing customer satisfaction. These arguments suggest a positive association between employee satisfaction and customer satisfaction. Thus:

Hypothesis 1: Front-line employee satisfaction is positively associated with customer satisfaction.

If H1 is supported, the results will add support to recent studies that show a positive association between employee satisfaction and customer satisfaction (c.f., Homburg and Stock 2000). However, other studies (e.g., Hallowell et al. 1996; Loveman 1998) have failed to observe such a relationship. The results from testing H1 will contribute further empirical evidence to understand the relationship between employee satisfaction and customer satisfaction.

4.1.2 Managerial (Franchisee) Satisfaction and Front-line Employee Satisfaction

Within service contexts involving multiple units such as branches of a bank or franchisee-run retail units, the manager of each sub-unit exerts substantial control over the day-to-day operations of the subunit. Acting as agents of the firm (Berger et al. 1992; Jensen and Meckling 1976; Norton 1988), managers are responsible for managing customer interactions through their front-line employees. For instance, while the franchisor (principal) has ownership of assets (e.g. the brand name), the franchisee is responsible for day-to-day management of the retail outlet overseeing both the customer base and employees associated with that outlet. Similarly, the manager of a bank-branch, acting as the bank's agent, is responsible for managing both the employees and customers who participate in the activities of that branch.

In service organizations, the satisfaction of all service-providing members—especially managers and front-line employees at a service outlet—is highly interdependent (Phillips et al. 1998). In their comprehensive meta-analysis, Brown and Peterson (1993) found that factors like role ambiguity, role conflict and organizational commitment were key antecedents of employees' satisfaction with their jobs. Similarly, Bagozzi (1978) found that employee's performance was predictive of their satisfaction with their job. I argue that managers who are satisfied with their jobs will create conditions that are conducive to enhancing job satisfaction among front-line employees (Schneider and Bowen 1995). For instance, a manager who is satisfied with his job should, as an agent of the organization, create a positive and supportive work environment for front-line employees, reducing role ambiguity and role conflict. This type of manager also is likely to be more empathetic and a better listener than a dissatisfied manager (Motowidlo 1984). A satisfied manager, by enhancing performance of the service unit, also should contribute to overall satisfaction among front-line employees. Hence:

Hypothesis 2: Manager (franchisee) satisfaction is positively associated with satisfaction among front-line employees.

Jointly, H1 and H2 argue that front-line employee satisfaction mediates the relationship between managerial satisfaction and customer satisfaction. This mediation is both theoretically and managerially important because in most service encounters customers typically interact only with front-line employees and not with the manager/management[10]. As such, it may be tempting to assume that managers' or franchisor's satisfaction is not relevant to customer satisfaction. Yet, joint support for H1 and H2 will show that front-line employee satisfaction mediates the link between managerial satisfaction and customer satisfaction. In other words, the satisfaction experienced by managers can impact customer satisfaction through its impact on front-line employee satisfaction.

4.1.3 Customer Satisfaction and Repurchase Intention: The Moderating Role of Front-line Employee Satisfaction

Within the field of marketing, the positive behavioral and financial consequences of increased customer satisfaction are well understood and conclusively established in several empirical studies (Anderson and Fornell 1994; Anderson et al. 2004; Anderson and Sullivan 1993; Bolton 1998; Bolton and Lemon 1999; Bowman and Narayandas 2004). Furthermore, many studies show that customer satisfaction influences repurchase intention (Anderson and Mittal 2000; Halstead and Page 1992; Mittal and Kamakura 2001; Verhoef 2003). Consistent with prior research, I expect a positive association between customer satisfaction and repurchase intentions. More importantly, I hypothesize a novel effect that has not been investigated in

[10] In this paper, I only focus on those service outlets in which day-to-day business is not conducted by the owner.

previous literature: employee satisfaction moderates the impact of customer satisfaction on repurchase intention. To my knowledge, this moderating effect neither has been theoretically proposed nor empirically investigated. Support for this link will provide a direct and cogent argument for why firms interested in managing customer loyalty and profitability also should attend to front-line employee satisfaction.

The first argument about how employee satisfaction moderates the customer satisfaction-repurchase intention link is based on the theory of emotional contagion; "the mere perception of another's behavior automatically increases the likelihood of engaging in that behavior oneself" (Chartrand and Bargh 1999 p. 893; Gump and Kulik 1997; Hoffman and Ingram 1992). Howard and Gengler (2001) found that happy salespeople, as opposed to unhappy salespeople, evoked more positive attitudes in consumers toward a product. Pugh (2001), found that bank tellers' emotions were related positively to customer effect and ratings of service quality. In service settings, multiple interpersonal interactions between front-line employees and customers enable such a transfer of emotions. Research shows that despite their brevity, such interactions can be effective in molding other people's behavioral intentions (Chartrand and Bargh 1999). In other words, emotional contagion can occur during very brief interactions lasting no more than a few seconds. Thus, given the same level of satisfaction, customers who interact with employees displaying more positive behaviors toward their organization also should develop more positive behavioral intentions. Conversely, if employees do not have a high level of satisfaction and consequently positive intentions toward the firm, customers—even when satisfied—may not have as strongly positive behavioral intentions toward the firm.

In the context of customer repurchase intentions, Bayesian-updating theory (Anderson and Sullivan 1993) suggests a similar logic. Anderson and Sullivan (1993) argue that customers weigh all available information—prior satisfaction included—to update their intentions and subsequent behavior. I argue that customers update their behavioral intentions based not only on the quality of service they receive, but also the information they glean from observing front-line employees. In many instances, dissatisfied employees may behave in ways that not only affect customer satisfaction directly (e.g., H1), but also motivate customers to re-calibrate their repurchase intentions. For instance, after providing satisfactory service to the customer, an unsatisfied employee may make negative remarks toward the franchise. While it may have little or no bearing on the satisfaction of the customer, it may attenuate the link between the satisfaction experienced by that customer and the customer's desire to re-patronize the firm. Satisfied employees, in contrast, may provide cues to customers that reinforce the satisfaction-repurchase intention link.

In summary, both theories—emotional contagion and Bayesian-updating—predict that given the same level of customer satisfaction, customers dealing with highly satisfied employees are more likely to have stronger intention to stay with the current firm. Thus:

Hypothesis 3: The link between customer satisfaction and repurchase intention is moderated by employee satisfaction such that the relationship between customer satisfaction and repurchase intention will be stronger for customers associated with satisfied employees than for customers associated with relatively dissatisfied employees.

This hypothesis, in conjunction with H1, has important theoretical implications. Jointly, H1 and H3 articulate two mechanisms by which employee satisfaction can impact customers' behavioral intentions. As reviewed earlier, most previous studies have examined the direct impact of employee satisfaction on organizational outcomes. I argue that, in addition to the direct impact, the impact of employee satisfaction on customer-behavior intentions may occur through two indirect routes: moderating the impact of customer satisfaction on repurchase intentions (H3) and mediation by customer satisfaction (H1).

4.1.4 Consequences of Customer Intentions: Customer Behavior and Firm Profitability

Research has shown that, though probabilistic, stated intentions systematically predict future behavior. Within the context of a service-profit chain, such a relationship has been empirically shown by previous researchers (e.g., Bowman and Narayandas 2004; Mittal and Kamakura 2001). Furthermore, it is also clear that such consumer behaviors are likely to affect firm revenues positively (Bolton 1998; Bolton et al. 2004). Therefore:

Hypothesis 4: Customer purchase intention is positively associated with customer behavior.

Hypothesis 5: Increases in consumer transactions with the firm are positively associated with firm revenue.

Though well known, I state the two previous hypotheses for the sake of completeness, and to relate my survey-based measures to behavioral and financial metrics.

4.2 OVERVIEW OF STUDIES

I report two studies designed to test my hypotheses. Figure 1 outlines the specific hypotheses tested in each study. For each study, a large-scale dataset, including data from employees and customers associated with each business location (franchise operation or bank branch), of the organization was collected. In both studies, data on front-line employee satisfaction, customer satisfaction, and customers repurchase intentions enable the testing of the mediating role of customer satisfaction (H1) and the moderating role of employee satisfaction (H3). In Study 1, the presence of managerial satisfaction data enabled me to test the mediating role of employee satisfaction (H2). In Study 2, where actual purchase behavior and firm revenue metrics were available, I am able to test the role of customer intention on actual repurchase behavior (H4), and the impact of consumer behavior on firm revenue (H5). Moreover, one dataset is from Germany and the second set from the United States. As such, I am able to generalize my findings across two different countries and service industries.

4.3 STUDY 1

4.3.1 Study context

Study 1 is set within the context of a German retail franchise system. The franchise has a system-wide annual turnover of 4.52 billion Euros and consists of 342 outlets, each with between 39 and 61 employees (average = 50). From a total of 342 outlets, 300 are franchisees and 42 are company-owned. The franchisor allowed me to collect data from three sources: franchisees, employees, and customers from 148 of 300 franchisees.

Three waves of data were collected. The first wave of data was qualitative, enabling me to generate an item pool and understand the research setting. This phase included in-depth interviews with franchisees (n = 10), front-line employees (n = 25), and focus groups with customers (n = 62). The second wave was a quantitative study done in 2001. The purpose of this study was to validate the measurement instruments, the appropriateness of the survey administration (Appendix A), and exploratory factor analysis. The third wave of the study, conducted in 2002, constituted the main study. Separate surveys were administered to three sets of informants of the franchise system: franchisees, employees, and customers. Confirmatory factor analysis and the structural model were based on this wave of data. By using separate sets of respondents for each analysis, I provide a relatively conservative test of my hypotheses and avoid common method bias (Lankford et al. 1995; Winer 1983).

4.3.2 Sample

Each franchisee was mailed a standardized questionnaire about his/her overall satisfaction. In addition, a self-administered questionnaire was provided to the franchisees' employees to investigate their satisfaction levels. The customer satisfaction survey was conducted by means of a self-administered questionnaire that could be dropped off directly or returned by mail. To maintain employee and customer confidentially and to avoid social desirability bias, the employees and customers answered surveys anonymously. Thus, it was not possible to pair a specific employee to a specific customer. However, each customer and employee survey did have an identifying code enabling researchers to link it to a specific franchise outlet. In other words, each employee surveyed and each customer surveyed can be associated with a unique outlet, but not with the other. As explained later, this affects my choice of statistical analysis used to test my hypotheses.

Using this approach, the final sample consisted of 54 franchisees (36.5% response rate); 2,478 employees (40.9% response rate); and 22,346 customers, an average of 413 customers per franchisee.

4.3.3 Measures

Items for the three major satisfaction constructs: customer, employee, and franchisee, were measured using 5-point Likert scales anchored at "1 = very satisfied" or "fully agree" to "5 = very unsatisfied" or "fully disagree." The scales are based on multiple items adapted from pre-established scales used in prior literature (Churchill et al. 1974; Smith et al. 1969; Wadsworth and Haines 2000; Westbrook 1981). The item pool was augmented based on insights generated from the in-depth interviews and focus groups conducted with management, front-line employees, and customers. My goal was to keep the study grounded in literature but also to ensure that the scales were meaningful to the specific context of the study.

Exploratory factor analysis (2001 study): Exploratory factor analysis was used to refine the item pool to conceptualize the constructs "customer satisfaction," "employee satisfaction," and "franchisee satisfaction" (Churchill 1979). The exploratory factor analysis results are as follows:

- *Customer satisfaction:* Customer satisfaction is captured via three component constructs: service quality, assortment/outlet appearance, and price (Westbrook 1981). (Table 4.2)
- *Employee satisfaction:* In line with Smith et al. (1969), the three factors include: supervision, organization of work, and team. (Table 4.3)

- *Franchisee satisfaction:* Ruekert and Churchill (1984) identified four dimensions of channel member satisfaction: "product," "financial," "assistance," and "social interaction," whereas Geyskens et al. (1999) broadly group these factors into the two dimensions of "economic" and "non-economic" satisfaction. The exploratory factor analysis resulted in three clear factors of franchisee satisfaction: relationship to other franchisees, relationship to franchisor, and field service. (Table 4.4)

In developing these scales, I used the measure of sampling adequacy (MSA) to determine the degree of inter-correlation among the variables - appropriateness of the results of the factor analysis.

Confirmatory factor analysis (2002 study): The items based on the exploratory factor analysis provide the basis for confirmatory analysis conducted on the second wave of data (2002). The results of the confirmatory factor analysis are encouraging, both with respect to reliability and discriminant validity.

The scale values exceed the reliability thresholds proposed in the literature (Bagozzi and Yi 1988; Nunnally 1978). First, the composite reliabilities were adequate and ranged from 0.78 to 0.94. Second, Cronbach's Alpha for each scale ranged from .82 to .94 indicating adequate reliability. Thus, the construct measures have adequate reliability.

Discriminant validity was assessed using the criterion proposed by Fornell and Larcker (1981 p. 46). It requires that the squared correlation between two constructs is smaller than the average variance extracted (AVE) for each construct. As can be seen in Table 4.6, AVE of most of the constructs exceeds even simple correlations between the constructs. In other words, the AVE is far greater than the squared correlation. For the three antecedents of employee satisfaction, the highest correlations are between the three constructs “supervision,” “team,” and “organization of work.” Nonetheless, the squared correlation between “supervision” and “organization of work” is 0.52, less than the AVE of “organization of work” (0.54) and “supervision” (0.70). Similar patterns can be found for “organization of work” and “team” and for “assortment/outlet appearance” and “quality” as drivers of the customer satisfaction construct. Thus, both reliability and discriminant validity criteria are satisfied for the scales used in this study. Appendix A shows the scale items, Cronbach´s Alpha, composite reliabilities, and average variance extracted.

4.3.4 Data aggregation issues

The nature of the data in my study leads to some methodological challenges related to data aggregation and disaggregation. For each outlet, there is a clear pairing between the franchisee and the employees, but not between each employee and the customers served by that employee. If such were the case, an approach such as HLM easily could be used to model the data. It also is common that one employee is in contact with more than one customer, and one customer in turn is in contact with more than one employee. Finally, to maintain customer confidentiality, I was not permitted to match customers with employees. Therefore, a clear pairing of customers and employees, though statistically desirable, is not possible.

Next, it can be noted that employee, customer, and franchisee data represent different levels of analysis. In general, there are two ways of handling such a data structure (Luke 2004; van Duijn et al. 1999). First, one can ignore the hierarchical structure by assuming that all observations are independent, implying the disaggregation of the data to the customer level (n = 22,346). This method may overestimate the significance of effects (Luke 2004 p. 6). A second way of handling the nested structure of the data is to eliminate dependency by averaging over the highest level of aggregation, i.e., the franchisee level (n = 54). That, in turn, would underestimate effects by removing much of the variance in the data (van Duijn et al. 1999 p. 207). Since the goal of this study is to focus on employee satisfaction and its effects on customer satisfaction, and not to explain variation in customer satisfaction among customers of a particular franchise outlet, I aggregated customer data to the employee level. This approach is consistent with previous research (e.g., Homburg and Stock 2005; Homburg and Stock 2004). In so doing, I avoid overestimating the effects between employee and customer satisfaction, since the variation in customer satisfaction ratings cannot be explained by the satisfaction rating of a particular employee. I also disaggregated franchisee satisfaction data to the employee level. This is consistent with the assumption that the franchisee—also the outlet manager—influences all of their employees in a similar manner (see Kamakura et al. (2002) for a similar approach). The final data set matched each franchisee with each of its employees which in turn was matched with the mean customer satisfaction score of the franchise outlet.[11]

4.4 STUDY 1 RESULTS

Table 4.7 summarizes the path coefficients for franchisee satisfaction, employee satisfaction, and customer satisfaction.

Franchisee satisfaction: This construct is made up of three factors: "relationship to the franchisor," "field service," and "relationship to other franchisees." Fit criteria (AGFI = .932; RMR = .085; NFI = .939) are well above the minimum proposed by Hair et al. (2006). The positive path coefficient from "relationship to the franchisor" to "franchisee satisfaction," (path = 0.69; $p < 0.01$) indicates that social interaction and quality of cooperation such as the services offered by the franchisor are strong indicators of franchisee satisfaction (see Ruekert and Churchill 1984). To a smaller but still statistically significant extent (path = 0.34, $p < 0.05$), the "field service" that the franchisor employs to support the franchisee positively influences franchisee satisfaction (see Schul et al. 1985). The coefficient from "relationship to other franchisees" to "franchisee satisfaction" is not significant at the 0.05 level. One possible reason

[11] I estimated the model with data aggregated to the franchisee-level (n = 54). Regression coefficients between employee satisfaction and customer satisfaction were similar to the model estimated in this study, but coefficients between franchisee satisfaction and employee satisfaction were no longer significant. The regression between franchisee satisfaction and customer satisfaction remains insignificant. Next I estimated the data disaggregated at the customer level (n = 22,346) and obtained results that were even stronger than the ones reported here.

is that each franchisee in this system is relatively entrepreneurial and therefore concern with relationships with other franchisees may be low.

Employee satisfaction: This construct consists of three factors: “organization of work,” team,” and “supervision.” All the fit criteria are met (AGFI = .995; RMR = .030; NFI = .996). “Organization of work” in the franchise outlet is the strongest predictor of employee satisfaction with a path coefficient of 0.73 ($p < 0.01$). This is consistent with the work of Herzberg et al. (1959), Locke (1976) and Vroom (1964). “Team” also is statistically significant in influencing employee satisfaction (path = 0.17, $p < 0.05$), similar to Hoffman and Ingram (1992). The path from “supervision” is not significant ($p > 0.05$). However, this result is similar to the ones reported by deCarlo and Agarwal (1999), and by Schmit and Allscheid (1995).

Customer satisfaction: This construct contains three factors: “price,” “assortment/outlet appearance,” and “service quality.” Again, all fit criteria are met (AGFI = .996; RMR = .015; NFI = .996). “Price” exhibits no significant influence on customer satisfaction, while “assortment/outlet appearance” (path = 0.68, $p < 0.01$) and “service quality” (path = 0.30, $p < 0.01$) are highly significant. Generally high level of customer satisfaction suggests limited price sensitivity among customers (e.g., Anderson 1996).

4.4.1 Structural model (2002 data): Hypotheses tests

The structural model tested replicates the conceptual model shown in Figure 1. I analyzed the chain of effects from franchisee satisfaction to repurchase intention. For the overall model, the fit criteria are well above the minima (AGFI = .985; RMR = .037; NFI = .982). Moreover, the model is able to explain about 76.50% of the variance in repurchase intention. Hence, predictive validity of the model is satisfactory. Recall that this is a conservative test since the model combines data from three different sources. Table 4.8 shows the results.

Hypothesis 1: H1 predicts that employee satisfaction influences customer satisfaction. Supporting H1, I find that employee satisfaction influences customer satisfaction directly and positively (path = 0.22, $p < 0.05$).

Hypothesis 2: H2 predicts a direct impact of managerial (franchisee) satisfaction on the satisfaction experienced by front-line employees. Supporting H2, I find that franchisee satisfaction directly and positively influences satisfaction experienced by front-line employees (path = 0.11, $p < 0.01$).

The mediating role of employee satisfaction (Hypothesis 1 and 2): Jointly, hypotheses 1 and 2 imply that the effect of franchisee satisfaction on customer satisfaction is mediated through employee satisfaction.

The mediating effect of employee satisfaction is tested more formally using partial and total effects. First, there is no significant direct effect of franchisee satisfaction on customer satisfaction (path = -0.05, $p > 0.10$). Second, there is a direct effect of franchisee satisfaction on employee satisfaction (path = 0.11, $p < 0.01$). Third, there is a positive impact of employee satisfaction on customer satisfaction (path = 0.22, $p < 0.05$). The total effect of franchisee satisfaction was calculated to be 0.024 and this value is statistically significant ($p < 0.05$). For another formal test of mediation, I also calculated the Sobel's test statistic for mediation (Sobel 1982). The calculated value of 2.34 ($p < 0.02$) exceeds what would be expected by chance. Thus, both tests support full mediation, and I conclude that the impact of managerial satisfaction on customer satisfaction is fully mediated by the satisfaction experienced by front-line employees.

Hypothesis 3: I posit that employee satisfaction moderates the impact of customer satisfaction on repurchase intentions. H3 posits that this relationship is stronger when customers are associated with relatively more satisfied employees. To test for moderation, I performed a two-group causal analysis (see Homburg and Giering 2001). I used a median split[12] on employee satisfaction to create two groups: "customers associated with satisfied employees" and "customers associated with dissatisfied employees." I then compared two rival models that differ only with respect to the effect of customer satisfaction on repurchase intention. One model restricts the parameter to be equal across groups, while the second model allows the parameter to

[12] I also ran the analysis using a mean split. The results were virtually identical and H3 was supported fully.

vary across groups. The restricted model has one more degree of freedom than the general model. A moderating effect would be present when the improvement in χ^2 when moving from the restricted to the non-restricted model is statistically significant and the coefficients are in the hypothesized direction.

Consistent with H3, the restricted model that constrains the paths to be equal can be rejected in favor of the unrestricted model ($\chi^2_{(d.f.= 1)} = 4.37$, $p < 0.05$). Further supporting H3, the path coefficient from customer satisfaction to repurchase intentions is 0.53 ($p < 0.05$) for customers associated with dissatisfied employees and 0.85 ($p < 0.05$) for customers associated with satisfied employees. Thus, H3 is fully supported.

4.5 DISCUSSION

This study supports the first three hypotheses, H1-H3. Collectively these hypotheses show that the inter-relationship among manager satisfaction, front-line employee satisfaction, and customer satisfaction is a complex one. First, front-line employee satisfaction mediates the relationship between manager satisfaction and customer satisfaction. Second, front-line employee satisfaction also moderates the impact of customer satisfaction on repurchase intention: the impact of customer satisfaction on repurchase intentions is stronger when employees are more satisfied. Thus, both from a human-resource and a market perspective it is important for firms to examine employee satisfaction. However, in this study I was unable to examine directly the impact of these relationships on firm outcomes like customer behavior and revenues. This is done in Study 2, in which the key moderating hypothesis (H3) and the impact on customer behaviors (H4) and financial metrics (H5) are tested.

4.6 STUDY 2: U.S. BANK

4.6.1 Data

To replicate the results from Study 1, particularly H3, and to examine the effect of customer and employee satisfaction on customer behaviors and revenues, I conducted another study using data from a bank in the United States. This bank has over $49 billion in assets and serves customers through 800 branches in eight Atlantic states and Washington D.C.

I was provided with data for a random sample of 5,812 retail customers from 766 branches. For each branch, I was given the average satisfaction score for employees. Similar to Study 1, I was unable to link each individual employee with a specific customer due to confidentiality.

4.6.2 Measures

The survey measures were obtained from a pre-existing tracking study that is conducted at the bank. With the bank's cooperation, these survey measures were linked to employee satisfaction measures at the branch level and to customer behaviors and financial metrics.

Overall Customer Satisfaction: Overall customer satisfaction was based on responses to the question "How would you rate your overall experience with the bank?" (1=Poor, 7=Excellent). Customers also used this same scale to provide ratings on the following service attributes: doing things right the first time, making it easy to do business, effectively resolving problems, helping you achieve your financial goals, being flexible in applying policies and procedures, and competitive rates and fees.

Overall Front-Line Employee Satisfaction: Front-line employees were asked the following two questions: (1) "How do you rate the branch network as a place to work?" and (2) "How do you rate your satisfaction with your current job?" Satisfaction scores ranged from 1 (Poor) to 7 (Excellent). These two questions were averaged to create an overall employee satisfaction score. Employees also rated the antecedents of employee satisfaction on six specific attributes using the same 7-point scale. These were:

1. I am treated with respect and consideration by management
2. I am provided with the training that I need to do my job well
3. The objectives/standards for the work expected of me are reasonable
4. There is excellent opportunity for advancement
5. In my department, individuals are valued for their unique contribution

6. I have good job security

Customer Intent to Deposit: Customers rated their intention to continue making deposits with the bank during the next 12 months using a 7-point scale (1=not at all likely, 7=extremely likely).

Customer Behavior: Using internal accounting metrics, the bank measured the actual deposits that each customer had with the bank. Deposits ranged from $0 to $546,972.

Customer Profit: The bank also provided me with the computed yearly profit for each customer. This profit calculation was used as the final dependent variable in the analysis. Tables 4.9 and 4.10 describe the summary statistics and correlations among the variables used in this study. Interestingly, I find there is no statistically significant correlation between employee satisfaction and customer satisfaction in the bi-variate analysis.

4.6.3 Approach to Analysis

I model profits for each customer as a function of actual deposits. Actual deposits are a function of behavioral intentions. In turn, behavioral intentions are based on employee satisfaction, customer satisfaction and their interaction. The model is estimated using seemingly unrelated regression (SUR) to account for contemporaneous correlations. As noted earlier, an approach such as hierarchical-linear modeling is infeasible because of the organization's inability to link each individual employee to each individual customer. More generally, my approach is based on the approach used by Kamakura et al. (2002). The following equations are estimated each customer (i) representing an observation:

(1) Intent to $Deposit_i = ß_0$
$+ ß_1$ x Employee $satisfaction_i$ (ES_i)
$+ ß_2$ x Customer $satisfaction_i$ (CS_i)
$+ ß_3$ x ES_i x CS_i

(2) Firm $Profit_i = ß_4$
$+ ß_5$ x Actual $deposits_i$

(3) Actual $Deposits_i = ß_6$
$+ ß_7$ x Intent to $deposit_i$
$+ ß_8$ x Intent to $deposit^2_i$

(4) Employee $Satisfaction_i = ß_9$
$+ ß_{10}$ x $(\text{I am treated with respect and consideration by management})_i$
$+ ß_{11}$ x $(\text{I am provided with the training that I need to do my job well})_i$
$+ ß_{12}$ x $(\text{The objectives/standards for the work expected of me are reasonable})_i$
$+ ß_{12}$ x $(\text{There is excellent opportunity for advancement})_i$
$+ ß_{14}$ x $(\text{In my department, individuals are valued for their unique contribution})_i$
$+ ß_{15}$ x $(\text{I have good job security})_i$

(5) Customer $Satisfaction_i = ß_{16}$
$+ ß_{17}$ x $(\text{Doing things right the first time})_i$
$+ ß_{18}$ x $(\text{Making it easy to do business})_i$
$+ ß_{19}$ x $(\text{Effectively resolving problems})_i$
$+ ß_{20}$ x $(\text{Helping you achieve your financial goals})_i$
$+ ß_{21}$ x $(\text{Being flexible in applying policies and procedures})_i$
$+ ß_{22}$ x $(\text{Competitive rates and fees})_i$
$+ ß_{23}$ x $(\text{Employee Satisfaction})_i$

Results: Study 2

Table 4.11 summarizes the results obtained from estimating the system of equations outlined above. Each equation is statistically significant ($p < 0.05$). In each equation, I also added control variables like number of tellers and number of ATMs, and branch size. None of these controls were significant or had any influence on the main variables of interest. Therefore they are not discussed further. Below, I summarize the tests for the hypotheses related to behavioral and financial outcomes, and then the replication hypotheses (H1 and H3).

H1: Equation 5 models overall customer satisfaction as a function of various quality attributes and employee satisfaction. While the different quality attributes are statistically significant predictors of customer satisfaction (all p's < 0.01), employee satisfaction is not statistically significant. Thus, the possibility that customer satisfaction mediates the impact of employee satisfaction on purchase intentions—contrary to the results in Study 1—is excluded. I discuss this issue later in my paper.

H3: Equation 1, which predicts intent to deposit, relates to the moderating effect of employee satisfaction hypothesized in H3. Confirming results in many previous studies, overall customer satisfaction is related to positive behavioral intentions (0.427, $p < 0.05$). More importantly, the interaction between customer satisfaction and employee satisfaction is positive and statistically significant (0.084, $p < 0.05$). This implies that as employee satisfaction increases, the impact of customer satisfaction on behavioral intentions is stronger. Thus, H3 is fully supported.

H4: Equation 3 shows that actual deposits made by customers of the bank, as expected, are related to their intentions to transact business with the bank ($p < .0001$). This is supportive of H4 which hypothesizes a positive association between customer intentions and actual behavior.

Interestingly, I find a non-linear relationship between the stated intent and actual deposits such that as intentions increase, there are diminishing returns in terms of deposits.

H5: Similarly, H5 states that customer repurchase behavior will be related to firm revenues. Equation 2 tests this hypothesis. There is a statistically significant relationship between actual deposit behavior and bank profitability ($p < 0.01$) such that for every $1,000 in actual deposits, the bank realizes $3 in pre-tax revenue.

Equation 4 ($p < 0.001$) shows the component antecedents of employee satisfaction. Though not relevant for testing my hypotheses, this equation is included for model completeness. It shows the different factors that the bank can address to improve overall.

4.7 DISCUSSION

In addition to replicating the key moderating hypothesis, this study takes a major step by linking customer satisfaction and employee satisfaction to hard marketing metrics like customer behavior and profitability. Consistent with Study 1, the impact of customer satisfaction on purchase intentions is stronger when employees are more satisfied. However, in contrast with Study 1, I did not find a statistically significant impact of employee satisfaction on customer satisfaction. The implications of these results are discussed next.

Using two large-scale datasets assembled from multiple sources, I investigated the joint role of employee satisfaction and customer satisfaction on customer intentions in the context of a retail franchise in Germany and an American banking firm. Both datasets combine satisfaction measures from managers (franchisees), front-line employees and customers, along with outcome metrics like customer intentions, actual customer behavior and firm revenues/profitability. Results provided new insights about the mediated and moderated nature of the links involved.

- In both studies I find that employee satisfaction moderates the impact of customer satisfaction on repurchase intentions (H3). When employees are relatively dissatisfied, the link between customer satisfaction and repurchase intentions is weaker than when employees are relatively more satisfied. Moreover, in Study 2, I am able to show that customer intentions strongly impact customer behaviors and bank profitability.
- In Study 1, I find that the effect of managerial (franchisee) satisfaction on customer satisfaction is fully mediated by satisfaction experienced by front-line employees. Thus, even though customers may never come in direct contact with management, management's satisfaction can influence customer satisfaction.
- I obtain contrasting results about the direct impact of employee satisfaction on customer satisfaction. In Study 1 I find a strong impact of employee satisfaction on customer satisfaction but in Study 2 I find no impact of employee satisfaction on customer satisfaction.

Conceptually this research builds on Homburg and Stock (2004) who argue that moderator analysis can provide a systematic explanation of the large range of effect size for specific relationships in the service-profit chain. They showed that the link between employee satisfaction and customer satisfaction is moderated by salespersons' characteristics like perceived trust and empathy. This paper details the next link—customer satisfaction and repurchase intentions—and shows that overall employee satisfaction moderates the customer satisfaction customer repurchase relationship. This suggests that factors that are antecedents of overall satisfaction experienced by front-line employees also can indirectly affect customer-level outcomes, such as repurchase intentions, and downstream outcomes like actual repurchase behavior and firm profitability. Broadly speaking, investments made in improving employee satisfaction can benefit the bottom line by increasing customer repurchase behavior and profitability. This approach provides top management with a more complete way of assessing the costs and benefits of human-resource initiatives pertaining to training, job environment, job burnout, and job redesign.

While the German dataset (Study 1) showed a strong impact of employee satisfaction on customer satisfaction such an effect was not found in the American dataset (Study 2). Thus, while customer satisfaction was found to mediate the effect of employee satisfaction on customer intention in Study 1, such mediation could not be established for Study 2. Several factors may have led to this discrepancy. First, my experience with retail outlets at both organizations shows that the general level of customers' interaction with front-line employees is much higher in Europe than in the US. This may be particularly true because banks emphasize self-serve technologies (e.g, ATM, banking online). Second, there may be differences in the studies set in Germany versus the U.S. along with differences in measures. For instance, in the case of banks, switching is typically perceived as much harder (e.g.; closing a bank account and moving around the balance) and this may be one reason for the relatively weaker (though statistically significant) moderating effect observed. Naturally, more theorizing and empirical research is needed to better understand conditions under which employee satisfaction leads to customer satisfaction.

These results leave no doubt that employee satisfaction is indeed an integral linkage in the satisfaction-profit chain, playing an important role not only as a mediator but also as a moderator. Though employee satisfaction, especially satisfaction among front-line employees is typically seen as the domain of human resources and organizational behavior, an investigative stance by marketing scholars is warranted. The results show that satisfied employees benefit the firm's bottom line through two routes. In addition to enhancing directly overall customer satisfaction, highly-satisfied employees also ensure that the customer satisfaction-repurchase intent link is strengthened. This latter finding is a key contribution and, to my knowledge, has neither been theoretically hypothesized nor empirically investigated. My study also shows the need to understand managerial satisfaction. In many instances, it is assumed that managerial satisfaction—because managers are so far removed from customers—may not impact customer satisfaction. This may not be the case, as the results show. Managerial satisfaction, through its mediated effect (via front-line employee satisfaction) has a critical and strong impact on customer satisfaction. Recognizing that employee satisfaction—among managers and front-line employees—is inextricably linked to customer satisfaction, behavior, and final profitability should spur more research.

Collectively, these findings have strong managerial implications for firms interested in enhancing revenues and profitability through customer retention. Typically, such firms make direct investments in enhancing customer satisfaction. For instance, Kamakura et al. (2002) show that investments in technology directly enhance customer satisfaction and retention. However, they do not measure the role of employee satisfaction in their model. The results suggest that firms should seriously consider investing in their employees' satisfaction, not solely in training them to better serve customers. The results are consistent and also provide insight into Bowman and Naryandas's (2004) important findings that, the context in which customers evaluate their relationships with the firm, affects the firm's profitability. The results show that the relative satisfaction experienced by the firm's employees provides one such contextual moderator.

The finding that customer satisfaction leads to repurchase intention and eventually firm revenues, in addition to replicating previous research, also provides a framework for guiding managerial actions. The non-linear pattern of the relationship between customer intentions and behavior suggests that management needs to take a balanced and measured approach of optimizing, rather than maximizing customer and employee satisfaction. Moreover, it provides a common metric for measuring the impact of investments made in customer satisfaction and employee satisfaction. In my research I was also able to include specific measures of attributes that are antecedents of both employee and customer satisfaction. This provides management with actionable advice on how to enhance employee and customer satisfaction.

As businesses understand the importance of service delivery in managing their firms, the simultaneous role of employees and customers will bear increased scrutiny. Recognizing this, marketing scholars have focused on this area of research (Homburg and Stock 2004; Keiningham et al. 2006; Wangenheim et al. 2007). My work adds to this stream of research by providing new insights. I hope future research will elaborate on these insights to provide theoretical and managerial guidance.

Table 4.1: Antecedents and Consequences of Employee and Customer Satisfaction

Authors	Employee Satisfaction		Customer Satisfaction		Sample	Relevant Findings
	Antecedents	Consequences	Antecedents	Consequences		
Sheridan and Slocum (1975)	X	X			35 managers, 59 non-managers	Managers' satisfaction was not related to job performance but non-manager satisfaction is
Bagozzi (1978)	X	X			124 salesmen selling industrial goods	Role conflict influences job satisfaction. Self-esteem, role conflict and verbal intelligence influence performance
Bagozzi (1980)	X	X			122 industrial salesmen	Job satisfaction and performance have correlation of .4
Hafer and McCuen (1985)	X				336 insurance and industrial salespeople (2 industries, same firm)	No evidence to support that employee satisfaction is related to annual sales
Iaffaldano and Muchinsky (1985)		X			Meta-analysis of 74 studies	Correlation between satisfaction and performance is low (.17)
Schlesinger and Zornitsky (1991)		X	X		1,277 employees and 4,269 customers of insurance organization	Correlations are negative between job satisfaction and overall customer satisfaction
Tornow and Wiley (1991)		X	X	X	667 employees and 633 customers of a computer corporation	No link between employee attitudes and from gross profit
Wiley (1991)	X	X			56 retail stores	Employee satisfaction influences customer satisfaction but not financial performance
Hoffman and Ingram (1992)		X			114 healthcare employees	Overall job satisfaction is related to customer orientation.
Brown and Peterson (1993)	X	X			Meta-analysis of 59 studies	Job satisfaction is weakly related to sales performance, but is antecedent to commitment
Hallowell et al. (1996)		X	X		9,475 insurance company employees	No direct link between employee and customer satisfaction
Spreng et al. (1996)			X		207 parishioners	Attribute and information satisfaction affect overall customer satisfaction

Table 4.1 (continued): Antecedents and Consequences of Employee and Customer Satisfaction

	Employee Satisfaction		Customer Satisfaction			
Authors	**Antecedents**	**Consequences**	**Antecedents**	**Consequences**	**Sample**	**Relevant Findings**
Loveman (1998)	X	X	X	X	955 banking customers and employees	Service profit chain examined. Weak/no link between employee and customer satisfaction
Rucci et al. (1998)		X	X	X	Not stated	5 point improvement in employee attitudes -> 1.3 point increase in customer satisfaction -> 0.5% improvement in revenue
Bernhardt et al. (2000)		X		X	342,308 restaurant consumers, 3,009 employees	Positive relationship between customer and employee satisfaction. No relationship between customer or employee satisfaction and performance. But, change in customer satisfaction produces change in firm performance
Homburg and Stock (2000)		X	X		221 salespeople, 448 customers	Positive relationship between employee and customer satisfaction
Silvestro and Cross (2000)		X			Customers and employees at 15 grocery stores	The most profitable store may have the least satisfied employees
Szymanski and Henard (2001)			X	X	Meta-analysis of 50 studies	Antecedents of customer satisfaction: expectations, disconfirmation, performance, affect, equity Consequences of customer satisfaction: complaining, word-of-mouth, repurchase intentions
Donavan et al. (2004)			X		156 bank employees	Customer orientation has a positive influence on job satisfaction
Homburg and Stock (2004)		X	X		221 salespeople, 448 customers	Salespeople job satisfaction influences customer satisfaction through emotional contagion and salesperson-customer interaction
Homburg and Stock (2005)		X	X		221 salespeople, 448 customers	Salespeople directly and indirectly (empathy, expertise, and reliability) affect customer satisfaction
Wangenheim et al. (2007)	X		X		53,645 customers and 1,659 employees	Customer satisfaction is driven by employees who have contact with customers and employees who do not have contact with customers

Table 4.2: Exploratory Factor Analysis "Customer Satisfaction" (Study 1: 2001 German Franchise data)

	Components		
Questions	**Quality**	**Assortment/ Outlet Appearance**	**Price**
How satisfied are you with clarity of arrangements in the store?		.660	
How satisfied are you with the choices provided in the assortment?		.714	
How satisfied are you with the cleanliness?		.800	
How satisfied are you with the ease of finding service employees?	.757		
How satisfied are you with the quality of products offered?		.572	
How satisfied are you with the friendliness of employees?	.806		
How satisfied are you with the professional assistance?	.792		
How satisfied are you with the prices of products?			.860

n = 144965, MSA (Kaiser-criterion) = .929
(Principle component analysis, VARIMAX-rotation)

Table 4.3: Exploratory Factor Analysis "Employee Satisfaction" (Study 1: 2001 German Franchise Data)

	Factors		
Questions	**Supervision**	**Team**	**Organization**
The working atmosphere in our outlet is very good			.766
The flow of work in our outlet is very good.		.568	
All employees in our outlet have the competence to make decisions to react flexibly to customer wants.		.643	
I am provided all material and equipment necessary to do my job.		.780	
All imperfections in our operations are resolved swiftly.		.675	
Our outlet encourages making suggestions for improvements.		.561	
I feel like being a team member in my outlet.			.832
My colleagues support me in helping my customers.			.701
My superiors are "living examples" of our company's goals.	.754		
My superiors are "living examples" of customer orientation.	.793		
My superior is open-minded towards me.	.845		
My superior always helps me in case of difficulties.	.837		
I can count on my superior's word.	.784		
My superior values my work performance.	.742		
Employees' opinions are considered by the superiors when making decisions for the outlet.	.652		

n = 7668, MSA (Kaiser-criterion): .946
(Principle component analysis, VARIMAX-rotation)

Table 4.4: Exploratory Factor Analysis "Franchisee Satisfaction" (Study 1: 2001 German Franchise Data)

	Factors		
Questions	**Relationship to Franchisor**	**Field Service**	**Relationship to Franchisees**
How satisfied are you with the relationship to other franchisees?			.621
How satisfied are you with your everyday work?	.725		
How satisfied are you with the market performance of your franchise system?	.904		
How satisfied are you with your relationship to the franchisor?	.681		
How satisfied are you with the services offered by the franchisor?	.899		
How satisfied are you with franchisor's field service?		.681	
How satisfied are you with the franchise fee with respect to services offered by the franchisor?	.840		

n = 72, MSA (Kaiser-criterion): .857 (Principle component analysis, VARIMAX-rotation)

Table 4.5: Descriptive Statistics of Scale Items: (Study 1: 2002 German Franchise Data)

(1) Franchisee Satisfaction

Items	**Mean**	**Std. Dev.**
How satisfied are you with the relationship to other franchisees?	2.16	.80
How satisfied are you with your everyday work?	2.62	.71
How satisfied are you with the market performance of your franchise system?	2.45	1.11
How satisfied are you with your relationship to the franchisor?	2.79	1.06
How satisfied are you with the services offered by the franchisor?	3.72	1.66
How satisfied are you with franchisor's field service?	4.42	1.47
How satisfied are you with the franchise fee with respect to services offered by the franchisor?	2.66	1.12

(2) Employee Satisfaction

Items	**Mean**	**Std. Dev.**
The working atmosphere in our outlet is very good	2.10	.90
The flow of work in our outlet is very good.	2.26	.86
All employees in our outlet have the competence to make decisions to react flexibly to customer wants.	2.08	.91
I am provided all material and equipment necessary to do my job.	1.77	.83
All imperfections in our operations are resolved swiftly.	1.92	.85
Our outlet encourages making suggestions for improvements.	2.64	1.22
I feel like being a team member in my outlet.	1.81	.89
My colleagues support me in helping my customers.	2.03	.90
My superiors are "living examples" of our company's goals.	1.75	.90
My superiors are "living examples" of customer orientation.	1.79	.94
My superior is open-minded towards me.	1.92	1.03
My superior always helps me in case of difficulties.	1.83	1.01
I can count on my superior's word.	1.79	.93
My superior values my work performance.	2.08	1.04
Employees' opinions are considered by the superiors when making decisions for the outlet.	2.29	.99

(3) Customer Satisfaction

Items	**Mean**	**Std. Dev.**
How satisfied are you with clarity of arrangements in the store?	2.02	.69
How satisfied are you with the choices provided in the assortment?	2.02	.64
How satisfied are you with the cleanliness?	1.82	.68
How satisfied are you with the ease of finding service employees?	2.44	.75
How satisfied are you with the quality of products offered?	1.95	.63
How satisfied are you with the friendliness of employees?	1.74	.66
How satisfied are you with the professional assistance?	2.06	.61
How satisfied are you with the prices of products?	2.58	.68

Table 4.6: Correlations among Factors (Study 1: 2002 German Franchise Data)

	Customer Satisfaction			Employee Satisfaction			Franchisee Satisfaction		
	Price	**Assortment/ Outlet Appearance**	**Quality**	**Supervision**	**Team**	**Organization**	**Field Service**	**Relationship to Franchisor**	**Relationship to Franchisees**
Price	1								
Assortment/Outlet Appearance	0.56 *	1							
Quality	0.54 *	0.67 *	1						
Supervision	0.22 *	0.17 **	0.21 **	1					
Team	0.12 *	0.13 *	0.19 *	0.68 **	1				
Organization	0.21 *	0.18 **	0.21 **	0.73 **	0.73 *	1			
Field Service	0.23 *	0.09 *	0.13 *	0.03	0.02	0.06	1		
Relationship to Franchisor	0.08	-0.13 *	-0.09 *	0.05	0.00	-0.01	0.46 **	1	
Relationship to Franchisees	0.12 *	0.33 **	0.05	-0.02	-0.03	0.04	0.29 *	0.21 *	1

* $p < 0.05$

** $p < 0.01$

Table 4.7: Measurement Models

Model	Path	Coefficient	Average Variance Extracted
Franchisee satisfaction (FS)	Relationship to other franchisees → FS	.015 (n.s.)	.591
	Relationship to franchisor → FS	.685 **	
	Field service → FS	.342 *	
Employee satisfaction (ES)	Supervision → ES	.065 (n.s.)	.688
	Organization of work → ES	.732 **	
	Team → ES	.169 *	
Customer satisfaction (CS)	Service quality → CS	.295 **	.538
	Assortment/outlet appearance → CS	.682 **	
	Price → CS	.014 (n.s.)	

n.s. not significant
* p < 0.05
** p < 0.01

Table 4.8: Test of Hypotheses in the Total Model

Hypotheses	Proposed effect	Path coefficient
H1: Employee satisfaction → Customer satisfaction	+	.222 *
H2: Managerial satisfaction → Employee satisfaction	+	.106 **
H3: Franchisee satisfaction → Employee satisfaction → Customer satisfaction	mediation	total effect: .024 *

* p < 0.05
** p < 0.01

Table 4.9: Summary Statistics for Employee and Customer Satisfaction

Variable	Mean	Std Dev	Minimum	Maximum
Employee Satisfaction	4.62	0.54	1.9	6.43
Customer Satisfaction	5.90	1.21	1	7

n = 5812
Satisfaction scores ranged from 1 (Poor) to 7 (Excellent)

Table 4.10 Correlations among Measures (Study 2: 2004-5 US banking data)

Table 10:

	1	2	3	4	5
1. Employee Satisfaction	1				
2. Customer Satisfaction	0.02	1			
3. Intent to Deposit	0.02	0.32 **	1		
4. Actual Deposit	0.02	-0.01	-0.02	1	
5. Profit from Deposits	0.00	-0.01	-0.03 *	0.53 **	1

* p < 0.10

** p < 0.01

Table 4.11 SUR Estimation Results for Predicting Firm Profit

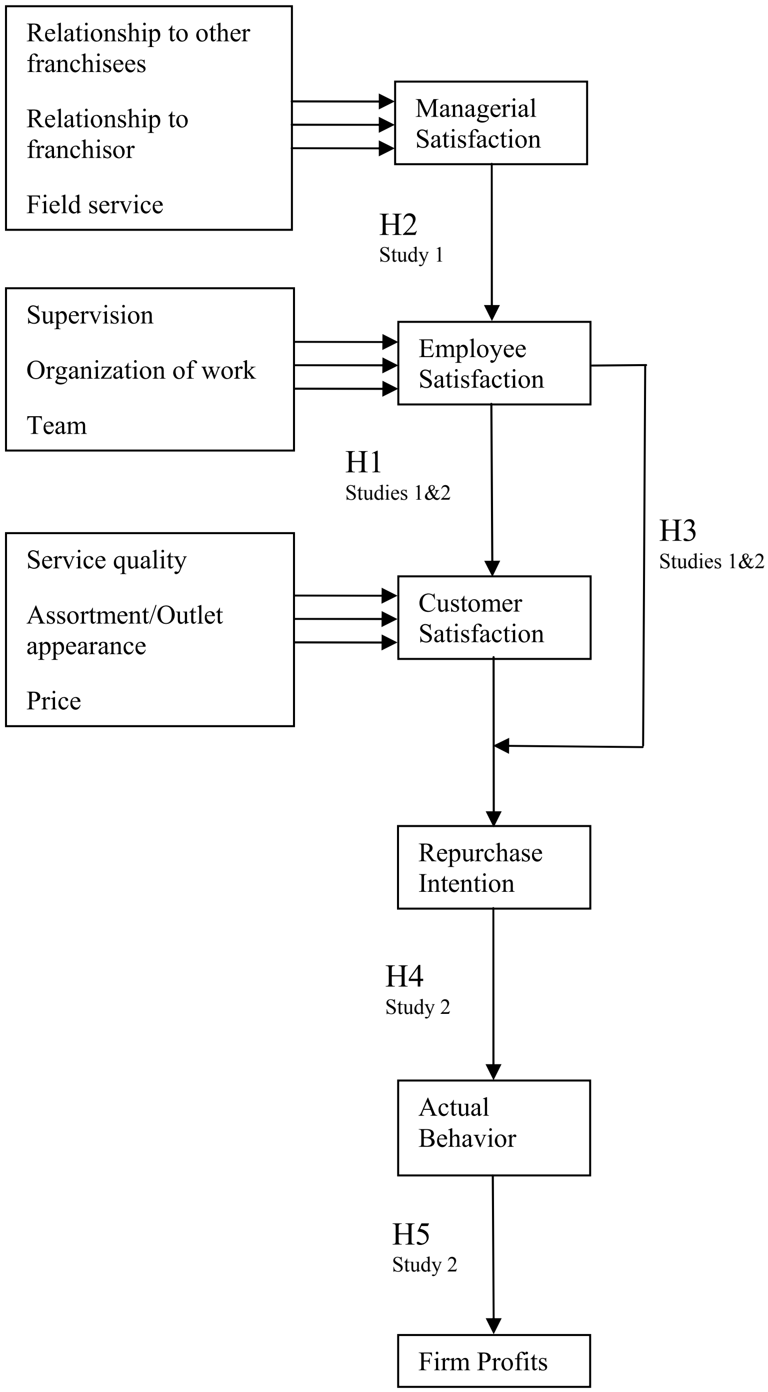
	Parameter Est.
Intent to Deposit (Adj. R^2=0.102)	
Intercept	4.164***
Employee Satisfaction (ES)	0.043
Customer Satisfaction (CS)	0.424*
ES * CS	0.085*
Firm Profit (Adj. R^2=0.286)	
Intercept	74.865***
Customer Deposit Balance	0.003***
Actual Deposits (Adj. R^2=0.003)	
Intercept	15169.260***
Intent to Deposit	4179.539***
Intent to Deposit^2	-561.644***
Employee Satisfaction (Adj. R^2=0.228)	
Intercept	0.347***
I am treated with respect and consideration by management	0.167***
I am provided with the training that I need to do my job well	0.173***
The objectives/standards for the work expected of me are reasonable	0.208***
There is excellent opportunity for advancement	0.153***
In my department, individuals are valued for their unique contribution	0.166***
I have good job security	0.028***
Customer Satisfaction (Adj. R^2=0.555)	
Intercept	-4.769***
Doing things right the first time	0.164***
Making it easy to do business	0.207***
Effectively resolving problems	0.123***
Helping you achieve your financial goals	0.071***
Being flexible in applying policies and procedures	0.104***
Competitive rates and fees	0.133***
Employee Satisfaction	0.029

*** p < 0.001

** p < .01

* p < .05

Figure 4.1 Conceptual Model and Research Plan



5.0 SUMMARY AND CONCLUSIONS

A central theme in the essays is the impact of interactive relationship on customer-focused practices on other stakeholders of the firm. Sometimes, as in Essay 2, this relationship can be symbiotic: a number of different groups, such as investors, governmental agencies, society, and customers can have their needs met simultaneously. In other cases, as in Essay 1, it may be compensatory: customers and the investor community may be at odds, because managers at broadly focused firms are unable to direct adequate attention to their needs, and the needs of their various business segments. Finally, Essay 3 illustrates that relationships between stakeholder groups may be mediated. That is, the benefits of improving satisfaction of one stakeholder (employees) may only manifest if another stakeholder (customers) improves its perceptions of the firm as well.

For top management, these essays present useful insights. CEOs must evaluate their firms' particular strengths and circumstances when allocating resources to the interests of various stakeholders to maximize shareholder wealth. Marketing related investments are one such category, although marketing scholars view it as the primary category. The three essays in this dissertation show the importance of taking a contextual perspective on marketing investments. While it is true that customer satisfaction enhances shareholder value, CEOs want to know under what circumstances the beneficial impact of customer satisfaction would be stronger or weaker. The third essay's results, for instance, show that while direct investments in customer satisfaction will enhance sales through repurchase intention and initial sales, making such investments at the expense of employee satisfaction may be a mistake. Because employee satisfaction has a direct effect and an indirect affect on customer repurchase intention, the firm also should invest in employee satisfaction projects. Essay 2, on the other hand, shows that CS and CSR initiatives, together, do not provide the firm multiplicative benefit.

For marketing scholars, an immediate and key conclusion from these essays is to take a broadened perspective on the role of customer satisfaction. To my knowledge, current theorizing in customer satisfaction focuses solely on the function of marketing, and is largely divorced from efforts aimed at satisfying customers that affect and interact with other constituents. For instance, is it possible for management to push employees too hard -- to the point that satisfying customers leaves employees dissatisfied? Does satisfying customers through socially responsible programs truly benefit the firm? Do managers have attention diverted in too many directions, and thus do not address adequately any of the issues at hand? Such issues have not been investigated in the marketing literature and deserve more attention from marketing scholars.

By introducing constructs from other disciplines, my three essays help to construct a more complete picture of how stakeholder groups interact with each other to provide optimal long-term financial outcomes for a firm. Recognizing that CEOs must be fully engaged with all stakeholders, marketing scholars also may work to increase the impact of marketing scholarship more broadly by embracing the language, ideas, and thoughts from other disciplines, particularly organizational behavior and strategy. More specifically, theories such as stakeholder theory (Donaldson and Preston 1995; Freeman 1984; Freeman and McVea 2001), managerial attention (Ocasio 1997; Ocasio and Joseph 2005; Ocasio and Joseph 2006), bayesian-updating theory (Anderson and Sullivan 1993), emotional contagion (Chartrand and Bargh 1999 p. 893; Gump and Kulik 1997; Hoffman and Ingram 1992) and signaling (Kirmani and Rao 2000) need to be recognized more fully and integrated in the marketing discipline. Clearly, one aspect of implementation revolves around completely understanding how various stakeholders compete for resources within the firm, while still acting as resources for the firm.

Another key insight is to integrate structural aspects of firms into the dialogue on marketing and its impact on shareholder wealth. For instance, I found that firms that cater to many segments stretch and strain managerial attention such that trade-offs between customer satisfaction and corporate governance become inevitable. However, many other structural components of firms such as firm size, firm focus (services versus goods), availability of resources, and the number of types of organizational levels, can impact the interplay of customer satisfaction with other factors. Similar issues remain unaddressed, but should provide a focus for future research. For instance, is it the case that organizations that have more layers of managers make slower decisions and therefore become incapable of meeting changing customer needs? Are global firms more able to satisfy their customers in all the countries they operate? How do these factors affect corporate governance practices? How are employees affected in their ability to satisfy customers in different organizational structures?

In concluding this dissertation, it would be remiss to remain inattentive to the limitations of the work presented here. First, I note that the firms used in the analysis for Essays 1 and 2 are limited to larger firms since those are the firms for which customer satisfaction data were available. Though in my studies I controlled for firm size as a covariate it would be remiss to assume that my findings would apply to very small firms—the type that are not included in ACSI. Second, by participating in the ACSI firms demonstrates a commitment to being market oriented, to put the interest of customers as a top priority. There may be firms that may have different orientations and foci. It would be useful to see how the results presented here would be different for such firms. Third, my focus is on U.S. firms. Even though Essay 3 has data from a European firm, Asian firms are excluded from my investigation. Given the growing importance of Asia as a business venue and customer base, I believe future research should incorporate those firms and customers in empirical investigations. Fourth, I acknowledge the limitations imposed by secondary datasets which have their own unique strengths and weaknesses when measuring customer, employee, and other stakeholder values. Clearly, as better and more data become available there would be a need to replicate and extend these findings to gain greater confidence and more refined insights. I hope that this dissertation, despite these limitations, has increased knowledge in this domain.

APPENDIX A: CORPORATE GOVERNANCE MEASURES USED BY THE INSTITUTE OF SHAREHOLDER SERVICES (ISS)

Board

1	Board Composition
2	Nominating Committee
3	Compensation Committee
4	Governance Committee
5	Board Structure
6	Board Size
7	Changes In Board Size
8	Cumulative Voting
9	Boards Served On - CEO
10	Boards Served On - Other Than CEO
11	Former CEOs
12	Chairman/CEOs Separation
13	Board Guidelines
14	Response To Shareholder Proposals
15	Board Attendance
16	Board Vacancies
17	Related Party Transactions

Audit

18	Audit Committee
19	Audit Fees
20	Auditor Rotation
21	Auditor Ratification

Charter/Bylaws

22-27	Features of Poison Pills
28-29	Vote Requirements
30	Written Consent
31	Special Meetings
32	Board Amendments
33	Capital Structure

State of Incorporation

34-40	Takeover Provisions Applicable Under State Law - Has Company Opted Out?

Executive and Director Compensation

41	Cost of Option Plans
42-43	Option Re-pricing
44	Shareholder Approval of Option Plans
45	Compensation Committee Interlock
46	Director Compensation
47	Pension Plans For Non-Employee Directors
48	Option Expensing
49	Option Burn Rate
50	Corporate Loans

Qualitative Factors

51	Retirement Age for Directors
52	Board Performance Review
53	Meetings of Outside Directors
54	CEO Succession Plan
55	Outside Advisors Available To Board
56	Directors Resign Upon Job Change

Ownership

57	Director Ownership
58	Executive Stock Ownership Guidelines
59	Director Stock Ownership Guidelines
60	Officer And Director Stock Ownership

Director Education

61	Director Education

APPENDIX B: SCALE ITEMS AND RELIABILITY FOR STUDY 1: 2002 GERMAN FRANCHISE DATA

Scale Item	Alpha	Composite Reliability	Average Variance Extracted
Franchisee Satisfaction			
Relationship to franchisor			
How satisfied are you with your everyday work?			
How satisfied are you with the market performance of your franchise system?			
How satisfied are you with your relationship to the franchisor?	.9006	.8233	.4981
How satisfied are you with the services offered by the franchisor?			
How satisfied are you with the franchise fee with respect to services offered by the franchisor?			
Relationship to other franchisees			
How satisfied are you with the relationship to other franchisees?	-	-	-
Field service			
How satisfied are you with franchisor's field service?	-	-	-
Employee Satisfaction			
Supervision			
My superiors are "living examples" of our company's goals.			
My superiors are "living examples" of customer orientation.			
My superior is open-minded towards me.			
My superior always helps me in case of difficulties.	.9354	.9422	.7013
I can count on my superior's word.			
My superior values my work performance.			
Employees' opinions are considered by the superiors when making decisions for the outlet.			
Organization of work			
The flow of work in our outlet is very good.			
All employees in our outlet have the competence to make decisions to react flexibly to customer wants.			
I am provided all material and equipment necessary to do my job.	.8187	.8510	.5364
All imperfections in our operations are resolved swiftly.			
Our outlet encourages making suggestions for improvements.			
Team			
The working atmosphere in our outlet is very good.			
I feel like being a team member in my outlet.	.8203	.8100	.5886
My colleagues support me in helping my customers.			
Customer Satisfaction			
Assortment/Outlet Appearance			
How satisfied are you with clarity of arrangements in the store?			
How satisfied are you with the choices provided in the assortment?	.9067	.8356	.5501
How satisfied are you with the cleanliness?			
How satisfied are you with the quality of products offered?			
Service quality			
How satisfied are you with the ease of finding service employees?			
How satisfied are you with the friendliness of employees?	.9276	.7784	.5354
How satisfied are you with the professional assistance?			
Price			
How satisfied are you with the prices of products?	-	-	-

APPENDIX C: CODING INSTRUCTIONS FOR ADVERTISING TO INVESTORS

0 or blank: No information is given.

1: Mention. This is when the issue is mentioned in passing, but gives no details. Example: ”We worked to improve customer satisfaction.”

2: Some detail. This applies to those annual reports which provide some details regarding the item but the details are minimal and don't provide a complete picture of what is being done. Example: “On November 26th our staff gave out turkeys”. This is a mention of a specific event, but do not indicate how widespread the community involvement issues are.

3: Detail. Detailed information is provided, but just enough to get an idea of what the firm is doing. For example: “We have adopted a company-wide initiative to help the communities where we have factories.”

4: Substantial detail. Usually will require 2+ sentences. For example: “We have adopted a company-wide initiative to help the communities where we have factories. On November 26th our staff gave out turkeys. We built 5 local playgrounds. Finally we established tutoring programs in 7 neighborhoods for high school children.”

5: The issue has its own section.

BIBLIOGRAPHY

Abbott, Walter and R. Joseph Monsen (1979), "On the Measurement of Corporate Social Responsibility: Self-Reported Disclosures as a Method of Measuring Corporate Social Involvement," *Academy of Management Journal*, 22 (3), 501-15.

Akhigbe, Aigbe (2002), "New Product Innovations, Information Signaling and Industry Competition," *Applied Financial Economics, 2002, 15, 371±378*, 15, 371-78.

Aksoy, Lerzan, Bruce Cooil, Christopher Groening, Timothy L. Keiningham, and Atakan Yalçin (2008), "The Long-Term Stock Market Valuation of Customer Satisfaction," *Journal of Marketing*, 72 (4), 105-22.

Alexander, Gordon J. and Rogene A. Buchholz (1978), "Corporate Social Responsibility and Stock Market Performance," *Academy of Management Journal*, 21 (3), 479-86.

Alkhafaji, Abbass F. (1989), A Stakeholder Approach to Corporate Governance. Westport, CT: Greenwood Press.

Amato, Louis H. and Christie H. Amato (2007), "The Effects of Firm Size and Industry on Corporate Giving," *Journal of Business Ethics*, 72, 229-41.

American Customer Satisfaction Index (2007) Vol. 2004.

Anderson, Eugene W. (1996), "Customer Satisfaction and Price Tolerance," *Marketing Letters*, 7 (3), 265-74.

Anderson, Eugene W. and Claes Fornell (2000), "Foundations of the American Customer Satisfaction Index," *Total Quality Management*, 11 (7), S869-S82.

---- (1994), "New Directions in Theory and Practice," in Roland T. Rust and Richard L. Oliver, Eds. 1st ed. Thousand Oaks, CA: Sage.

Anderson, Eugene W., Claes Fornell, and Donald R. Lehmann (1994), "Customer Satisfaction, Market Share, and Profitability: Findings from Sweden," *Journal of Marketing*, 58 (3), 53-66.

Anderson, Eugene W., Claes Fornell, and Sanal K. Mazvancheryl (2004), "Customer Satisfaction and Shareholder Value," *Journal of Marketing*, 68 (Oct), 172-85.

Anderson, Eugene W., Claes Fornell, and Roland T. Rust (1997), "Customer Satisfaction, Productivity, and Profitability: Differences between Goods and Services," *Marketing Science*, 16 (2), 129-45.

Anderson, Eugene W. and Vikas Mittal (2000), "Strengthening the Satisfaction-Profit Chain," *Journal of Service Research*, 3 (2), 107-21.

Anderson, Eugene W. and Mary W. Sullivan (1993), "The Antecedents and Consequences of Customer Satisfaction for Firms," *Marketing Science*, 12 (Spring), 125-43.

Anderson, Ronald C., Thomas W. Bates, John M. Bizjak, and Michael L. Lemmon (2000), "Corporate Governance and Firm Diversification," *Financial Management*, 29 (1), 5-22.

Bagozzi, Richard P. (1980), "The Nature and Causes of Self-Esteem, Performance, and Satisfaction in the Sales Force: A Structural Equation Approach," *Journal of Business*, 53 (1), 315-31.

---- (1978), "Salesforce Performance and Satisfaction as a Function of Individual Difference, Interpersonal, and Situational Factors," *Journal of Marketing Research*, 15 (4), 517-31.

Bagozzi, Richard P. and Youjae Yi (1988), "On Evaluation of Structural Equation Models," *Journal of the Academy of Marketing Science*, 16 (2), 74-94.

Barney, Jay B. (1991), "Firm Resources and Sustained Competitive Advantage," *Journal of Management*, 17 (1), 99-120.

Basuroy, Suman, Kalpesh Kaushik Desai, and Debabrata Talukdar (2006), "An Empirical Investigation of Signaling in the Motion Picture Industry," *Journal of Marketing Research*, 43 (2), 287-95.

Baysinger, Barry D. and Henry N. Butler (1985), "Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition," *Journal of Law, Economics, & Organization,*, 1 (1), 101-24.

Bebchuk, Lucian Arye, Alma Cohen, and Allen Ferrell (2004), "What Matters in Corporate Governance?," in Available at SSRN: http://ssrn.com/abstract=593423 or DOI: 10.2139/ssrn.593423.

Berger, Mark, Shantanu Dutta, and Orville C. Walker (1992), "Agency Relationships in Marketing: A Review of the Implications and Applications of Agency and Related Theories," *Journal of Marketing*, 56, 1-24.

Berger, Philip G. and Eli Ofek (1999), "Causes and Effects of Corporate Refocusing Programs," *Review of Financial Studies*, 12 (2), 311-45.

Berman, Shawn L., Andrew C. Wicks, Suresh Kotha, and Thomas M. Jones (1999), "Does Stakeholder Orientation Matter? The Relationship between Stakeholder Management Models and Firm Financial Performance," *Academy of Management Journal*, 42 (5), 488-506.

Bernhardt, Kenneth L., Naveen Donthu, and Pamela A. Kennett (2000), "A Longitudinal Analysis of Satisfaction and Profitability," *Journal of Business Research*, 47 (2), 161-71.

Bethel, Jennifer E. and Stuart L. Gillan (2000), "The Impact of Institutional and Regulatory Environment on Shareholder Voting," *Financial Management*, 31 (4), 29-54.

Bhattacharya, C. B. and Sankar Sen (2003), "Consumer--Company Identification: A Framework for Understanding Consumers' Relationships with Companies," *Journal of Marketing*, 67 (2), 76-88.

---- (2004), "Doing Better at Doing Good: When, Why, and How Consumers Respond to Corporate Social Initiatives," *California Management Review*, 47 (1), 9-24.

Bhattacharya, C. B., Sankar Sen, and Daniel Korschun (2008), "Using Corporate Social Responsibility to Win the War for Talent," *MIT Sloan Management Review*, 49 (2), 37-44.

Bird, Ron, Anthony D. Hall, Francesco Momente, and Francesco Reggiani (2007), "What Corporate Social Responsibility Activities are Valued by the Market?," *Journal of Business Ethics*, 76 (1), 189-206.

Bolton, Ruth N. (1998), "A Dynamic Model of the Duration of the Customer's Relationship with a Continuous Service Provider: The Role of Satisfaction," *Marketing Science*, 17 (1), 45-65.

Bolton, Ruth N. and James H. Drew (1991), "A Multistage Model of Customers' Assessments of Service Quality and Value," *Journal of Consumer Research*, 17 (4), 375-84.

Bolton, Ruth N. and Katherine N. Lemon (1999), "A Dynamic Model of Customers' Usage of Services: Usage as an Antecedent and Consequence of Satisfaction," *Journal of Marketing Research*, 36 (2), 171-86.

Bolton, Ruth N., Katherine N. Lemon, and Peter C. Verhoef (2004), "The Theoretical Underpinnings of Customer Asset Management: A Framework and Propositions for Future Research," *Journal of the Academy of Marketing Science*, 32 (3), 271-92.

Boulding, William and Amna Kirmani (1993), "A Consumer-Side Experimental Examination of Signaling Theory: Do Consumers Perceive Warranties as Signals of Quality?," *Journal of Consumer Research*, 20, 111-23.

Boulding, William and Richard Staelin (1993), "A Look on the Cost Side: Market Share and Competitive Environment," *Marketing Science*, 12, 144-66.

Bowman, Douglas and Das Narayandas (2004), "Linking Customer Management Effort to Customer Profitability in Business Markets," *Journal of Marketing Research*, 41 (4), 433-47.

Brown, Lawrence D. and Marcus L. Caylor (2004), "Corporate Governance and Firm Performance."

Brown, Steven P. and Robert A. Peterson (1993), "Antecedents and Consequences of Salesperson Job Satisfaction: Meta-Analysis and Assessment of Causal Effects," *Journal of Marketing Research*, 39, 63-78.

Brown, Tom J. (2001), "Assessing Corporate Social Responsibility," *Harvard Management Update*, 6 (4), 6.

Brown, Tom J. and Peter A. Dacin (1997), "The Company and the Product: Corporate Associations and Consumer Product Responses," *Journal of Marketing*, 61 (1), 68-84.

Brown, Tom J., John C. Mowen, Todd D. Donavan, and Jane W. Licata (2002), "The Customer Orientation of Service Workers: Personality Trait Effects on Self-and Supervisor Performance Ratings," *Journal of Marketing Research*, 39 (1), 110-19.

Carhart, Mark (1997), "On Persistence in Mutual Fund Performance," *Journal of Finance*, 52, 57-82.

Certo, S. Trevis (2003), "Influencing Initial Public Offering Investors with Prestige: Signaling with Board Structures," *Academy of Management Review*, 28 (3), 432-46.

Chan, Wesley S. (2003), "Stock Price Reaction to News and No-news: Drift and Reversal after Headlines," *Journal of Financial Economics*, 70 (2), 223-60.

Chandy, Rajesh K. and Gerard T. Tellis (2000), "The Incumbent's Curse? Incumbency, Size, and Radical Product Innovation," *Journal of Marketing*, 64 (3), 1-17.

Chartrand, Tanya L. and John A. Bargh (1999), "The Chameleon Effect: The Perception–Behavior Link and Social Interaction," *Journal of Personality and Social Psychology*, 76 (6), 893-910.

Cho, Theresa S. and Donald C. Hambrick (2006), "Attention as the Mediator between Top Management Team Characteristics and Strategic Change: The Case of Airline Deregulation," *Organization Science*, 17 (4), 453-69.

Chung, Kee H. and Stephen W. Pruitt (1994), "A Simple Approximation of Tobin's q," *Financial Management*, 23 (3), 70-74.

Churchill, Gilbert A. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs," *Journal of Marketing Research*, 16 (1), 64-73.

Churchill, Gilbert A., Neil M. Ford, and Orville C. Walker (1974), "Measuring the Job Satisfaction of Industrial Salesmen," *Journal of Marketing Research*, 11 (3), 254-60.

Colley, John L. Jr., Jacqueline L. Doyle, George W. Logan, and Wallace Stettinius (2003), Corporate Governance. New York: McGraw-Hill.

Comment, Robert and Gregg A. Jarrell (1995), "Corporate Focus and Stock Returns," *Journal of Financial Economics*, 37 (1), 67-87.

D'aveni, Richard A. and Ian C. MacMillan (1990), "Crisis and the Content of Managerial Communications: A Study of the Focus of Attention of Top Managers in Surviving and Failing Firms," *Administrative Science Quarterly*, 35 (4), 634-57.

Danielson, Morris G. and Jonathan M. Karpoff (1998), "On the Uses of Corporate Governance Provisions," *Journal of Corporate Finance*, 4 (4), 347-71.

Darrough, Masako N. and Nahum D. Melumad (1995), "Divisional versus Company-Wide Focus: The Trade-Off between Allocation of Managerial Attention and Screening of Talent," *Journal of Accounting Research*, 33, 65-94.

DeCarlo, Thomas and Sanjeev Agarwal (1999), "Influence of Managerial Behaviors of Job Autonomy on Job Satisfaction of Industrial Salesperson - A Cross-Cultural Study," *Industrial Marketing Management*, 28 (1), 52-62.

Donaldson, Thomas and Lee E. Preston (1995), "The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications," *Academy of Management Review*, 20 (1), 65-91.

Donavan, D. Todd, Tom J. Brown, and John C. Mowen (2004), "Internal Benefits of Service-Worker Customer Orientation: Job Satisfaction, Commitment, and Organizational Citizenship Behaviors," *Journal of Marketing*, 68 (1), 128-46.

Du, Shuili, C.B. Bhattacharya, and Sankar Sen (2007), "Reaping Relational Rewards from Corporate Social Responsibility: The Role of Competitive Positioning," *International Journal of Research in Marketing*, 24 (3), 224-41.

Durand, Rodolphe (2003), "Predicting a Firm's Forecasting Ability: the Roles of Organizational Illusion of Control and Organizational Attention," *Strategic Management Journal*, 24 (9), 821-38.

Dutton, Jane E. (1993), "Interpretations on Automatic: A Different View of Strategic Issue Diagnosis," *Journal of Management Studies*, 30 (3), 339-57.

Dutton, Jane E., Liam Fahey, and V. K. Narayanan (1983), "Toward Understanding Strategic Issue Diagnosis," *Strategic Management Journal*, 4 (4), 307-23.

Dutton, Jane E., Stephen A. Stumpf, and David Wagner (1990), "Diagnosing Strategic Issues and Managerial Investment of Resources," *Advances in Strategic Management*, 6, 143-67.

Eldenburg, Leslie and Ranjani Krishnan (2003), "Public versus Private Governance: A Study of Incentives and Operational Performance," *Journal of Accounting and Economics*, 35, 377-404.

Erdem, Tülin and Joffre Swait (1998), "Brand Equity as a Signaling Phenomenon," *Journal of Consumer Psychology*, 7 (2), 131-57.

Falkinger, Josef (2007), "Attention Economies," *Journal of Economic Theory*, 131 (1), 266-94.

Fama, Eugene F. and Kenneth R. French (1996), "Multifactor Explanations of Asset Pricing Anomolies," *Journal of Finance*, 51, 55-87.

Farber, David B. (2005), "Restoring Trust after Fraud: Does Corporate Governance Matter?," *The Accounting Review*, 80 (2), 539-61.

Fornell, Claes and Michael D. Johnson (1993), "Differentiation as a Basis for Explaining Customer Satisfaction Across Industries," *Journal of Economic Psychology*, 14, 681-96.

Fornell, Claes, Michael D. Johnson, Eugene W. Anderson, Jaesung Cha, and Barbara Everitt Bryant (1996), "The American Customer Satisfaction Index: Nature, Purpose, and Findings," *Journal of Marketing*, 60 (4), 7-18.

Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (1), 39-50.

Freeman, R. Edward (1984), Strategic Management (1 ed.). Marshfield, MA: Pitman Publishing Inc.

Freeman, R. Edward and John McVea (2001), "A Stakeholder Approach to Strategic Management."

Friedman, Andrew L. and Samantha Miles (2002), "Developing Stakeholder Theory," *Journal of Management Studies*, 39 (1), 1-21.

Friedman, Milton (1970), "A Friedman Doctrine-- The Social Responsibility Of Business Is to Increase Its Profits A Friedman Business Doctrine," in New York Times. New York, N.Y.

Frooman, Jeff (1999), "Stakeholder Influence Strategies," *The Academy of Management Review*, 24 (2), 191-205.

Gaba, Anil and Ajay Kalra (1999), "Risk Behavior in Response to Quotas and Contests," *Marketing Science*, 18 (3), 417-34.

Galbreath, Jeremy (2006), "Does Primary Stakeholder Management Positively Affect the Bottom Line?," *Management Decision*, 44 (8), 1106-21.

Gary, Michael Shayne (2005), "Implementation Strategy and Performance Outcomes in Related Diversification," *Strategic Management Journal*, 26 (7), 643-64.

Gelb, David S. (2002), "Intangible Assets and Firms' Disclosures: An Empirical Investigation," *Journal of Business Finance & Accounting*, 29 (3/4), 457-76.

Geyskens, Inge, Jan B. Steenkamp, and N. Kumar (1999), "A Meta-Analysis of Satisfaction in Marketing Channel Relationships," *Journal of Marketing Research*, 36 (2), 223-38.

Gimeno, Javier and Carolyn Y. Woo (1999), "Multimarket Contact, Economies of Scope, and Firm Performance " *The Academy of Management Journal*, 42 (3), 239-59.

Gomez, Miguel I., Edward W. McLaughlin, and Dick R. Wittink (2004), "Customer Satisfaction and Retail Sales Performance: An Empirical Investigation," *Journal of Retailing*, 80 (4), 265-78.

Gompers, Paul A., Joy L. Ishii, and Andrew Metrick (2003), "Corporate Governance and Equity Prices," *Quarterly Journal of Economics*, 118 (1), 107-55.

Graves, Samuel B. and Sandra A. Waddock (1994), "Institutional Owners and Corporate Social Performance," *Academy of Management Journal*,, 37 (4), 1034-46.

Grewal, Rajdeep, James M. Comer, and Raj Mehta (2001), "An Investigation into the Antecedents of Organizational Participation in Business-to-Business Electronic Markets," *Journal of Marketing*, 65 (3), 17-33.

Grewal, Rajdeep and Ravi Dharwadkar (2002), "The Role of the Institutional Environment in Marketing Channels," *Journal of Marketing*, 66 (3), 82-97.

Grewal, Rajdeep and Patriya Tansuhaj (2001), "Building Organizational Capabilities for Managing Economic Crisis: The Role of Marketing Orientation and Strategic Flexibility," *Journal of Marketing*, 65 (2), 67-80.

Griffin, Jennifer J. and John F. Mahon (1997), "The Corporate Social Performance and Corporate Financial Performance Debate," *Business & Society*, 36 (1), 5-31.

Gruca, Thomas S. and Lopo L. Rego (2005), "Customer Satisfaction, Cash Flow, and Shareholder Value," *Journal of Marketing*, 69 (3), 115-30.

Gump, Brooks B. and James A. Kulik (1997), "Stress, Affiliation, and Emotional Contagion," *Journal of Personality and Social Psychology*, 72 (2), 305-19.

Guo, Chiquan, Anand Kumar, and Pornsit Jiraporn (2004), "Customer Satisfaction and Profitability: Is There a Lagged Effect?," *Journal of Strategic Marketing*, 12 (3), 129-44.

Hafer, John and Barbara A McCuen (1985), "Antecedents of Performance and Satisfaction in a Service Sales Force as Compared to an Industrial Sales Force," *Journal of Personal Selling and Sales Management*, 5, 7-17.

Hair, Joseph F. Jr., William C. Black, Barry J. Babin, Rolph E. Anderson, and Ronald L. Tatham (2006), Multivariate Data Analysis (6th ed.). Upper Saddle River, NJ: Prentice-Hall.

Hallowell, Roger, Leonard A. Schlesinger, and Jeffrey Zornitsky (1996), "Internal Service Quality, Customer and Job Satisfaction: Linkages and Implications for Management," *Human Resource Planning*, 19, 20-31.

Halstead, Diane and Thomas J. Page (1992), "The Effects on Satisfaction and Complaining Behavior: The Differential Role of Brand and Category Expectations," *Marketing Letters*, 7 (3), 114-29.

Hambrick, Donald C and Phyllis A Mason (1984), "Upper Echelons: The Organization as a Reflection of Its Top Managers," *Academy of Management Review*, 9 (2), 193-206.

Harter, James K., Frank L. Schmidt, and Theodore L. Hayes (2002), "Business-Unit-Level Relationship Between Employee Satisfaction, Employee Engagement, and Business Outcomes: A Meta-Analysis," *Journal of Applied Psychology*, 87 (2), 268-79.

Heil, Oliver and Thomas S. Robertson (1991), "Toward a Theory of Competitive Market Signaling: A Research Agenda," *Strategic Management Journal*, 12, 403-18.

Hermalin, Benjamin E. and Michael S. Weisbach (1991), "The Effects of Board Composition and Direct Incentives on Firm Performance," *FM: The Journal of the Financial Management Association*, 20 (4), 101-12.

Herzberg, Frederick, Bernard M. Mausner, and Bernard Snyderman (1959), The Motivation to Work. New York: Wiley.

Heskett, James L., Thomas O. Jones, Gary W. Loveman, W. Earl Sasser, and Leonard A. Schlesinger (1994), "Putting the Service Profit Chain to Work," *Harvard Business Review*, 72 (2), 164-74.

Heskett, James L., W. Earl Sasser, and Leonard A. Schlessinger (1997), The Service Profit Chain. New York: The Free Press.

Hill, Charles W. L. and Thomas M. Jones (1992), "Stakeholder-Agency Theory," *Journal of Management Studies*, 29 (2), 131-54.

Hillman, Amy J. and Gerald D. Keim (2001), "Shareholder Value, Stakeholder Management, and Social Issues: What's the Bottom Line?," *Strategic Management Journal*, 22 (2), 125-39.

Hoffman, K. Douglas and Thomas N. Ingram (1992), "Service Provider Job Satisfaction and Customer Oriented Performance," *Journal of Services Marketing*, 6 (2), 68-78.

Hogan, John E. , Donald R. Lehmann, Maria Merino, Rajendra K. Srivastava, Jacquelyn S. Thomas, and Peter C. Verhoef (2002), "Linking Customer Assets to Financial Performance," *Journal of Service Research*, 5 (1), 26-38.

Homburg, Christian and Annette Giering (2001), "Personal Characteristics as Moderators of the Relationship between Customer Satisfaction and Loyalty: An Empirical Analysis," *Psychology & Marketing*, 18 (1), 43-66.

Homburg, Christian and Ruth M. Stock (2005), "Exploring the Conditions Under which Salesperson Work Satisfaction can Lead to Customer Satisfaction," *Psychology and Marketing*, 22 (5), 393-420.

---- (2000), "The Link Between Job Satisfaction and Customer Satisfaction: Empirical Evidence from Employees and Customers," in Proceedings of the American Marketing Association’s Summer Educators´ Conference, Gregory T. Gundlach and Patrick E. Murphy (Ed.) Vol. 243. Chicago.

---- (2004), "The Link between Salespeople’s Job Satisfaction and Customer Satisfaction in a Business-to-Business Context: A Dyadic Analysis," *Journal of the Academy of Marketing Science*, 32 (2), 144-58.

Hough, Jill R. (2006), "Business Segment Performance Redux: A Multilevel Approach," *Strategic Management Journal*, 27 (1), 45-61.

Howard, Daniel J. and Charles Gengler (2001), "Emotional Contagion Effects on Product Attitudes," *Journal of Consumer Research*, 28, 189-201.

Iaffaldano, Michelle T. and Paul M. Muchinsky (1985), "Job Satisfaction and Job Performance: A Meta-Analysis," *Psychological Bulletin*, 97 (2), 251-73.

Jacobson, Robert (1990), "Unobservable Effects and Business Performance," *Marketing Science*, 9 (1), 74-85.

Jensen, Michael and W. Meckling (1976), "Theory of the Firm: Managerial Behavior, Agency Costs and Capital Structure," *Journal of Financial Economics*, 3, 305-60.

John, Kose and Larry H. P. Lang (1991), "Insider Trading Around Dividend Announcements: Theory and Evidence," *Journal of Finance*, 66, 1361-88.

John, Kose and Lemma W. Senbet (1998), "Corporate Governance and Board Effectiveness," *Journal of Banking & Finance*, 22 (4), 371-403.

Johnson, Richard A. and Daniel W. Greening (1999), "The Effects of Corporate Governance and Institutional Ownership Types on Corporate Social Performance," *The Academy of Management Journal*, 42 (5), 564-76.

Jones, Thomas M. and Andrew C. Wicks (1999), "Convergent Stakeholder Theory," *Academy of Management Review*, 24 (2), 206-21.

Kalra, Ajay, Surendra Rajiv, and Kannan Srinivasan (1998), "Response to Competitive Entry: A Rationale for Delayed Defensive Reaction," *Marketing Science*, 17 (4), 380-405.

Kalra, Ajay and Mengze Shi (2001), "Designing Optimal Sales Contests: A Theoretical Perspective," *Marketing Science*, 20 (2), 170-93.

Kamakura, Wagner A., Vikas Mittal, Fernando de Rosa, and Jose´ Afonso Mazzon (2002), "Assessing the Service-Profit Chain," *Marketing Science*, 21 (3), 294-317.

Kane, Michael J., Bradley J. Poole, Stephen W. Tuholski, and Randall W. Engle (2006), "Working Memory Capacity and the Top-Down Control of Visual Search: Exploring the Boundaries of "Executive Attention"," *Journal of Experimental Psychology. Learning, Memory, and Cognition*, 32 (4), 749-77.

Keiningham, Timothy L., Lerzan Aksoy, Bruce Cooil, Kenneth Peterson, and Terry G. Vavra (2006), "A Longitudinal Examination of the Asymmetric Impact of Employee and Customer Satisfaction on Retail Sales," *Managing Service Quality*, 16 (5), 442-59.

Kihlstrom, Richard E. and Michael H. Riordan (1984), "Advertising as Signal," *The Journal of Political Economy*, 92 (3), 427-50.

King, Brayden G. and Sarah A. Soule (2007), "Social Movements as Extra-institutional Entrepreneurs: The Effect of Protests on Stock Price Returns," *Administrative Science Quarterly*, 52 (3), 413-42.

Kirmani, Amna and Akshay R. Rao (2000), "No Pain, No Gain: A Critical Review of the Literature on Signaling Unobservable Product Quality," *Journal of Marketing*, 64 (2), 66-79.

Lambert, Richard, Christian Leuz, and Robert E. Verrecchia (2007), "Accounting Information, Disclosure, and the Cost of Capital," *Journal of Accounting Research*, 45 (2), 385-420.

Lang, Larry H.P. and René M. Stulz (1994), "Tobin's q, Corporate Diversification, and Firm Performance," *Journal of Political Economy*, 102 (6), 1248-80.

Lankford, Samuel V., Barton P. Buxton, Ronald Hetzler, and James R. Little (1995), "Response Bias and Wave Analysis of Mailed Questionnaires in Tourism Impact Assessments," *Journal of Travel Research*, 33 (4), 8-13.

Larcker, David F. and Scott A. Richardson (2003), "Corporate Governance, Fees for Non-audit Services and Accrual Choices," *Available at SSRN: http://ssrn.com/abstract=394441 or DOI: 10.2139/ssrn.394441*.

Leontiades, Milton and Ahmet Tezel (1981), "Some Connections between Corporate-Level Planning and Diversity," *Strategic Management Journal*, 2 (4), 413-18.

Lev, Baruch (1974), "On the Association between Operating Leverage and Risk," *Journal of Financial & Quantitative Analysis*, 9 (4), 627-41.

Locke, Edvin A. (1976), The Nature and Causes of Job Satisfaction. Chicago: Rand McNally.

López, M. Victoria, Arminda Garcia, and Lazaro Rodriguez (2007), "Sustainable Development and Corporate Performance: A Study Based on the Dow Jones Sustainability Index," *Journal of Business Ethics*, 75 (3), 285-300.

Loveman, Gary W. (1998), "Employee Satisfaction, Customer Loyalty, and Financial Performance. An Empirical Examination of the Service Profit Chain in Retail Banking," *Journal of Service Research*, 1 (1), 18-31.

Lovett, Mitchell J. and Jason B. MacDonald (2005), "How Does Financial Performance Affect Marketing? Studying the Marketing-Finance Relationship From a Dynamic Perspective," *Journal of the Academy of Marketing Science*, 33, 476 - 85.

Luke, Douglas A. (2004), Multilevel Modeling. Thousand Oaks: Sage.

Luo, Xueming and CB Bhattacharya (2006), "Corporate Social Responsibility, Customer Satisfaction, and Market Value," *Journal of Marketing*, 70 (4).

Luo, Xueming and Naveen Donthu (2006), "Marketing's Credibility: A Longitudinal Investigation of Marketing Communication Productivity and Shareholder Value," *Journal of Marketing*, 70 (4).

Lusch, R. (1977), "Franchise Satisfaction: Causes and Consequences," *International Journal of Physical Distribution*, 7, 128-40.

Maxham, James G. III, R. G. Netemeyer, and D. R. Lichtenstein (forthcoming), "The Retail Value Chain: Linking Employee Perceptions to Employee Performance, Customer Evaluations, And Store Financial Performance," *Marketing Science*.

McGuire, Jean B., Alison Sundgren, and Thomas Schneeweis (1988), "Corporate Social Responsibility and Financial Performance," *Academy of Management Journal*, 31 (4), 854-72.

McMillan, G. Steven (1996), "Corporate Social Investments: Do They Pay?," *Journal of Business Ethics*, 15 (3), 309-14.

McMillian, G. Steven (1996), "Corporate Social Investments: Do They Pay?," *Journal of Business Ethics*, 15, 309-14.

Milgrom, Paul and John Roberts (1982), "Predation, Reputation, and Entry Deterrence," *Journal of Economic Theory*, 27, 280-312.

---- (1986), "Price and Advertising Signals of Product Quality," *The Journal of Political Economy*, 94 (4), 796-821.

Milne, George R. (1992), "A Marketing Approach for Measuring Product Market Differentiation and Concentration in Antitrust Cases," *Journal of Public Policy and Marketing*, 11 (1), 90-100.

Mitchell, Ronald K., Bradley R. Agle, and Donna J. Wood (1997), "Towards a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts," *Academy of Management Review*, 22 (4), 853-86.

Mittal, Vikas, Eugene W. Anderson, Akin Sayrak, and Pandu Tadikamalla (2005), "Dual Emphasis and the Long-Term Financial Impact of Customer Satisfaction," *Marketing Science*, 24 (4), 544-55.

Mittal, Vikas and Wagner A. Kamakura (2001), "Satisfaction, Repurchase Intent, and Repurchase Behavior: Investigating the Moderating Effect of Customer Characteristics," *Journal of Marketing Research*, 38 (1), 131-42.

Motowidlo, Stephan J (1984), "Does Job Satisfaction Lead to Consideration and Personal Sensitivity?," *Academy of Management Journal,*, 27 (4), 910-15.

Nickell, Stephen and Daphne Nicolitsas (1999), "How does financial pressure affect firms?," *European Economic Review*, 43 (8), 1435-56.

Norton, Seth W. (1988), "An Empirical Look at Franchising as an Organizational Form," *Journal of Business*, 61 (2), 197-218.

Nunnally, Jum C. (1978), Psychometric Theory (2nd ed.). New York: McGraw-Hill.

Ocasio, William (1997), "Towards an Attention-Based View of the Firm," *Strategic Management Journal*, 18 (Summer Special Issue), 187-206.

Ocasio, William and John Joseph (2005), An Attention-Based Theory of Strategy Formulation: Linking Micro- and Macroperspectives in Strategy Process. Janis, IL: JAI Press.

Ocasio, William P. and John Joseph (2006), The Dynamics of Adaptation and Change and the Evolving State-of-the-Art. Janis, IL: JAI Press.

Orlitzky, Marc, Frank L. Schmidt, and Sara L. Rynes (2003), "Corporate Social and Financial Performance: A Meta-analysis," *Organizational Studies*, 24 (3), 403-41.

Paradise-Tornow, Carol A. (1991), "Management Effectiveness, Service Quality, and Organizational Performance in Banks," *Human Resource Planning*, 14 (2), 129-39.

Pava, Moses L. and Joshua Krausz (1996), "The Association between Corporate Social-responsibility and Financial Performance: The Paradox of Social Cost," *Journal of Business Ethics*, 15 (3), 321-57.

Pehrsson, Anders (2006), "Business Relatedness and Performance: A Study of Managerial Perceptions," *Strategic Management Journal*, 27 (3), 265-82.

Peteraf, Margaret A. and Mark E. Bergen (2003), "Scanning Dynamic Competitive Landscapes: A Market-Based and Resource-Based Framework," *Strategic Management Journal*, 24 (10), 1027-41.

Phillips, Joan M., Ben S. Liu, and Thomas G. Costello (1998), "Balance Theory Perspective of Triadic Supply Chain Relationships," *Journal of Marketing Theory & Practice*, 6 (4), 78-91.

Porter, Michael E. (1980), Competitive Strategy: Techniques for Analyzing Industries and Competitors. New York, NY: Free Press / Simon & Schuster, Inc.

Porter, Michael E. and Mark R. Kramer (2002), "The Competitive Advantage of Corporate Philanthropy," *Harvard Business Review*, 80 (12), 56-69.

Posner, Barry Z. and Warren H. Schmidt (1984), "Values and the American Manager: An Update," *California Management Review*, 26 (3), 202-16.

Preston, Lee E. and Douglas P. O'Bannon (1997), "The Corporate Social-Financial Performance Relationship: A Typology and Analysis," *Business & Society*, 36, 419-29.

Pugh, S. Douglas (2001), "Service with a Smile: Emotional Contagion in the Service Encounter," *Academy of Management Journal*, 44 (5), 1018-27.

Ramanujam, Vasudevan and P. Varadarajan (1989), "Research on Corporate Diversification: A Synthesis," *Strategic Management Journal*, 10 (6), 523-51.

Ramsey, Rosemary P. and Ravipreet S. Sohi (1997), "Listening to Your Customers: The Impact of Perceived Salesperson Listening Behavior on Relationship Outcomes," *Academy of Marketing Science*, 25 (2), 127-37.

Rao, Akshay R., Qu Lu, and Robert Ruekert (1999), "Signaling Unobservable Product Quality through a Brand Ally," *Journal of Marketing Research,* , 36 (2), 258-68.

Rao, Vithala R., Manoj K. Agarwal, and Denise Dahlhoff (2004), "How Is Manifest Branding Strategy Related to the Intangible Value of a Corporation?," *Journal of Marketing*, 68 (4), 126-41.

Raudenbush, Stephen W. and Anthony S. Bryk (2002), Hierarchical Linear Models: Applications and Data Analysis Methods (2nd ed. ed.). Thousand Oaks, CA: Sage Publications.

Ravid, S. Abraham and Oded H. Sarig (1991), "Financial Signaling by Committing to Cash Outflows," *Journal of Financial and Quantitative Analysis*, 26 (2), 165-80.

Roberts, Robin W. (1992), "Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory," *Accounting, Organizations and Society*, 17 (6), 595-612.

Roman, Ronald M., Sefa Hayibor, and Bradley R. Agle (1999), "The Relationship between Social and Financial Performance: Repainting a Portrait," *Business & Society*, 38, 109-25.

Rucci, Anthony J., Steven P. Kirn, and Richard T. Quinn (1998), "The Employee-Customer-Profit Chain at Sears," *Harvard Business Review*, 76 (1), 82-97.

Ruekert, Robert W. and Gilbert A. Jr. Churchill (1984), "Reliability and Validity of Alternative Measures of Channel Member Satisfaction," *Journal of Marketing Research*, 21, 226-33.

Ruf, Bernadette M., Krishnamurty Muralidhar, Robert M. Brown, Jay J. Janney, and Karen Paul (2001), "An Empirical Investigation of the Relationship between Change in Corporate Social Performance and Financial Performance: A Stakeholder Theory Perspective," *Journal of Business Ethics*, 32 (2), 143-56.

Rust, Roland T., Katherine N. Lemon, and Valarie A. Zeithaml (2004), "Return on Marketing: Using Customer Equity to Focus Marketing Strategy," *Journal of Marketing*, 68 (1), 109-27.

Rust, Roland T., Christine Moorman, and Peter R. Dickson (2002), "Getting Return on Quality: Revenue Expansion, Cost Reduction, or Both?," *Journal of Marketing*, 66, 7-24.

Rust, Roland T. and Anthony J. Zahorik (1993), "Customer Satisfaction, Customer Retention, and Market Share," *Journal of Retailing*, 69 (2), 193-215.

Safieddine, Assem and Sheridan Titman (1999), "Leverage and Corporate Performance: Evidence from Unsuccessful Takeovers," *The Journal of Finance*, 54 (2), 547-80.

Schlesinger, Leonard A. and J. Zornitsky (1991), "Job Satisfaction, Service Capability, and Customer Satisfaction: An Examination of Linkages and Management Implications," *Human Resource Planning*, 14 (2), 141-49.

Schmit, Mark J. and Steven. P. Allscheid (1995), "Employee Attitudes and Customer Satisfaction: Making Theoretical and Empirical Connections," *Personnel Psychology*, 48 (3), 521-36.

Schneider, Benjamin and David E. Bowen (1995), Winning the Service Game. Boston: Harvard Business School Press.

Schul, Patrick L., Taylor E. Little, and William M. Pride (1985), "Channel Climate: It's Impact on Channel Members' Satisfaction," *Journal of Retailing*, 61 (2), 9-38.

Seifert, Bruce, Sara A. Morris, and Barbara R. Bartkus (2004), "Having, Giving, and Getting: Slack Resources, Corporate Philanthropy, and Firm Financial Performance," *Business & Society*, 43, 135-61.

Sen, Sankar and C. B. Bhattacharya (2001), "Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility," *Journal of Marketing Research*, 38 (2), 225-43.

Sen, Sankar, C. B. Bhattacharya, and Daniel Korschun (2006), "The Role of Corporate Social Responsibility in Strengthening Multiple Stakeholder Relationships: A Field Experiment," *Journal of the Academy of Marketing Science*, 34 (2), 158-66.

Servaes, Henri (1996), "The Value of Diversification during the Conglomerate Merger Wave," *Journal of Finance*, 51 (4), 1201-25.

Shane, Scott (1996), "Hybrid Organizational Arrangements and their Implications for Firm Growth and Survival: A Study of New Franchisors," *Academy of Management Journal*, 39 (1), 216-34.

Sharfman, Mark (1996), "The Construct Validity of the Kinder, Lydenburg & Domini Social Performance Ratings Data," *Journal of Business Ethics*, 15, 287-96.

Sharfman, Mark and Chitru Fernando (2008), "Environmental Risk Management and The Cost of Capital," *Strategic Management Journal*, 29, 569-92.

Sheridan, John E. and John W. Jr. Slocum (1975), "The Direction of the Causal Relationship between Job Satisfaction and Work Performance," *Organizational Behavior and Human Performance* 14 (2), 159-72.

Silvestro, Rhian and Stuart Cross (2000), "Applying the Service Profit Chain in a Retail Environment: Challenging the "Satisfaction Mirror"," *International Journal of Service Industry Management*, 11 (3), 244-68.

Simon, Herbert A. (1976), Administrative Behavior : A Study of Decision-Making Processes in Administrative Organization (3rd ed.). New York: Free Press.

Simpson, W. Gary and Theodor Kohers (2002), "The Link Between Corporate Social and Financial Performance: Evidence from the Banking Industry," *Journal of Business Ethics*, 35 (2), 97-109.

Sims, Christopher A. (1998), "Implications of Rational Inattention," *Journal of Monetary Economics*, 50 (3), 665-90.

Singer, Judith D. (1998), "Using SAS PROC MIXED to Fit Multilevel Models, Hierarchical Models, and Individual Growth Models," *Journal of Educational and Behavioral Statistics*, 23 (4), 323-55

Smith, Amy K. and Ruth N. Bolton (2002), "The Effect of Customers' Emotional Responses to Service Failures on Their Recovery Effort Evaluations and Satisfaction Judgments," *Journal of the Academy of Marketing Science*, 30 (1), 5-23.

---- (1998), "An Experimental Investigation of Customer Reactions to Service Failure and Recovery Encounters," *Journal of Service Research*, 1 (1), 65-81.

Smith, Amy K., Ruth N. Bolton, and Janet Wagner (1999), "A Model of Customer Satisfaction with Service Encounters Involving Failure and Recovery," *Journal of Marketing Research*, 36 (3), 356-72.

Smith, Patricia, C., Loring M. Kendall, and Charles L. Hulin (1969), The Measurement of Satisfaction in Work and Retirement: A Strategy for the Study of Attitudes. Chicago: Rand McNally.

Snell, Scott A. (1992), "Control Theory in Strategic Human Resource Management: The Mediating Effect of Administrative Information," *Academy of Management Journal*, 35 (2), 292-397.

Sobel, M. E. (1982), Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models. Washington, DC: American Sociological Association.

Spence, Michael (1973), "Job Market Signaling," *Quarterly Journal of Economics*, 87 (3), 355-74.

Spreng, Richard A., Scott B. MacKenzie, and Richard W. Olshavsky (1996), "A Reexamination of the Determinants of Consumer Satisfaction " *Journal of Marketing*, 60 (3), 15-32.

Sproull, Lee S. (1984), The Nature of Managerial Attention. Greenwich, CT: JAI Press.

SustainAbility (2002), "Good News and Bad: The Media, Corporate Social Responsibility and Sustainable Development."

Swaminathan, Vanitha, Chris Groening, and Vikas Mittal (2007), "Financial Payoffs from Customer Satisfaction-Productivity Tradeoffs: The Strategic Role of Mergers ": Katz Graduate School of Business, University of Pittsburgh.

Szymanski, David M. and David H. Henard (2001), "Customer Satisfaction: A Meta-Analysis of the Empirical Evidence " *Journal of the Academy of Marketing Science*, 29 (1), 16-35.

The Wall Street Journal (2006), "Corporate Social Responsibility - Good Citizenship or Shareholder Rip-Off?."

---- (2005a), "Living with Sarbanes-Oxley," in Gullapalli, Diya. New York.

---- (2005b), "More Boards May End Staggered Terms," in Murti, Bhattiprolu. New York.

---- (2005c), "The Rise of the Boards," in Barrionuevo, Alexei. New York.

Thomas, James B. and Reuben R. Jr. McDaniel (1990), "Interpreting Strategic Issues: Effects of Strategy and the Information-Processing Structure of Top Management Teams," *Academy of Management Journal*, 33 (2), 286-306.

Tornow, Walter W. and Jack W. Wiley (1991), "Service Quality and management Practices: A Look at Employee Attitudes, Customer Satisfaction, and Bottom-Line Consequences," *Human Resource Planning*, 14 (2), 105-15.

Turban, Daniel B. and Daniel W. Greening (1997), "Corporate Social Performance and Organizational Attractiveness to Prospective Employees," *Academy of Management Journal*, 40 (3), 658-72.

Ullmann, Arieh A. (1985), "Data in Search of a Theory: A Critical Examination of the Relationships among Social Performance, Social Disclosure, and Economic Performance of U. S. Firms," *The Academy of Management Review*, 10 (3), 540-57.

Urwick, Lyndall F. (1956), "The Manager's Span of Control," *Harvard Business Review*, 34 (3), 39-47.

van Duijn, Marijtje A. J., Joosske T. van Busschbach, and Tom A. B. Snijders (1999), "Multilevel Analysis of Personal Networks as Dependent Variable," *Social Networks*, 21, 187-209.

Vargo, Stephen L. and Robert F. Lusch (2004), "Evolving to a New Dominant Logic for Marketing," *Journal of Marketing*, 68 (1), 1-17.

Verhoef, Peter C. (2003), "Understanding the Effect of Customer Relationship Management Efforts on Customer Retention and Customer Share Development," *Journal of Marketing*, 67 (4), 30-45.

Vroom, Victor H. (1964), Work and Motivation. New York: Wiley.

Waddock, Sandra A. and Samuel B. Graves (1997), "The Corporate Social Performance-Financial Performance Link," *Strategic Management Journal*, 18 (4), 303-19.

Wadsworth, Frank H. and D. C. Haines (2000), "Franchisee Satisfaction: A Measurement Approach," in Conference Papers of the 14th Annual International Society of Franchising Conference International Society of Franchising (Ed.). San Diego: Minneapolis.

Wangenheim, Florian v., Heiner Evanschitzky, and Maren Wunderlich (2007), "The Employee-Customer Satisfaction Link: Does It Hold For All Employee Groups?," *Journal of Business Research*, 60 (forthcoming).

Weigelt, Keith and Colin Camerer (1998), "Reputation and Corporate Strategy: A Review of Recent Theory and Application," *Strategic Management Journal*, 9 (5), 443-54.

Welker, Donald L. (1986), "Thrift Competition: Does it Matter?," *Economic Review*, 72 (1), 2-10.

Westbrook, Robert A. (1981), "Sources of Consumer Satisfaction with Retail Outlets," *Journal of Retailing*, 57 (3), 6-85.

White, Allen L. (2005), "New Wine, New Bottles: The Rise of Non-Financial Reporting," in Business for Social Responsibility.

Wiley, John W. (1991), "Customer Satisfaction: A Supportive Work Environment and its Financial Cost," *Human Resource Planning*, 14 (2), 117-27.

Winer, Russell S. (1983), "Attrition Bias in Econometric Models Estimated with Panel Data," *Journal of Marketing Research*, 20 (2), 177-87.

Worrell, Dan L., Wallace N. Davidson, and Varinder M. Sharma (1991), "Layoff Announcements and Stockholder Wealth," *Academy of Management Journal*, 34 (3), 662-78.

Yoon, Yeosun, Zeynep Gurhan-Canli, and Norbert Schwarz (2006), "The Effect of Corporate Social Responsibility (CSR) Activities on Companies with Bad Reputations," *Journal of Consumer Psychology*, 16 (4), 377-90.

Zeithaml, Valarie A. (2000), "Service Quality, Profitability and the Economic Worth of Customers: What We Know and What We Need to Learn," *Journal of the Academy of Marketing Science*, 28 (1), 67-85.