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Examining the Link Between Diversity and Firm Performance: The Effects of Diversity Reputation and Leader Racial Diversity

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Keywords
CAHRS, ILR, center, human resource, studies, advanced, link, diversity, firm performance, racial diversity, market, performance, demography, top management teams, reputation

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Abstract

Given the scarcity of empirical research on the impact of diversity on organizational performance, we used longitudinal data for 100 firms to test hypotheses related to the effects of diversity reputation and leader racial diversity on firm financial outcomes. The results showed a positive relationship between diversity reputation and book-to-market equity, and a curvilinear U-shaped relationship between leader diversity and revenues, net income and book-to-market equity. Our analyses suggest that economic benefits generated from diversity reputation may primarily derive from capital rather than product markets. Further, firm performance declines with increases in the representation of racial minorities in leadership up to a point, beyond which further increases in diversity are associated with increases in performance.

Keywords: diversity, demography, top management teams, reputation, firm performance.

Examining the Link between Diversity and Firm Performance: The Effects of Diversity Reputation and Leader Racial Diversity

Consistent with prior predictions, the 21st century workforce is typified by more women and employees with diverse ethnic backgrounds, alternative lifestyles, and intergenerational differences than in the past (Langdon, McMenamin & Krolik, 2002). Moreover, many leaders have realized that the extent to which these demographic workforce changes are effectively and efficiently managed will impact organizational functioning and competitiveness (Von Bergen, Soper & Parnell, 2005). To chart their success in fostering diverse and inclusive work environments, firms typically benchmark against companies that are considered to be diversity leaders in employee relations, such as those included in *Fortune* magazine's annual list of "Top 50 Companies for Minorities" (e.g., Daniels, 2004). Here, the assumption is that firms appearing on such lists are more diverse and have better-than-average diversity programs, and that diversity and diversity management are beneficial to organizations. Some research suggests that receiving a "best company" distinction is associated with good relative market and financial performance (Filbeck & Preece, 2003; Fulmer, Gerhart & Scott, 2003; Lau & May, 1998). However, little attention has been given to the performance effects of being recognized for diversity (for exceptions, see Hannon & Milkovich, 1996 and Wright, Ferris, Hiller & Kroll, 1995). Given that companies invest substantial resources in diversity management and generating reputations for being diversity leaders (Daniels, 2004), research is needed to understand the effects of diversity reputation on firm performance.

Both researchers and practitioners have also assumed that leadership diversity is critical to firm financial success. Specifically, they suggest that diversity in senior management will help firms to effectively align business strategies with current and future demographic and market trends to achieve organizational growth and profitability (McCuiston, Wooldridge & Pierce, 2004). Strategy research highlights a link between diversity in leadership and organizational performance (see Milliken & Martins, 1996). However, our understanding of the effects of demographic diversity at higher levels of the firm is limited given that research in this area has been largely focused on the effects of skill-based or cognitive diversity. Although diversity research provides some evidence of the effects of cultural diversity in management and strategic choices on firm performance (see Richard, 2000; Richard, Barnett, Dwyer & Chadwick, 2004; Richard, McMillan, Chadwick & Dwyer, 2003), little attention has been given the performance effects of racial diversity in firm top management teams. Considering the increasing representation of racial minorities in corporate leadership (Rosen, 1999), as well as the importance of organizational leadership and strategy to the realization of diversity as a source of competitive advantage (Richard, 2000), research is needed to understand how leader racial diversity is related to organizational financial performance.

We use a longitudinal data set to examine the influences of corporate diversity reputation and leader racial diversity on firm financial performance. We define diversity reputation as stakeholders' perceptions about an organization's ability to facilitate diverse work environments. Further, we operationalize diversity reputation using media rankings of firms based on an evaluation of their minority representation at different levels and diversity management practices. Based on corporate reputation and social responsibility research, we develop hypotheses relating diversity reputation to various financial indices. We also investigate the relationship between leader racial diversity and firm performance. We conceptualize leader racial diversity as the representation of ethnic minorities within a firm's top management team, and operationalize this construct as the racial composition of the 25 top-paid positions in a firm. Based on the findings of past strategy and diversity research, we explore a potential nonlinear relationship between leader racial diversity and financial performance.

Conceptual Background and Hypotheses

Diversity Reputation and Firm Performance

Corporate reputation, defined as stakeholders' perceptions about an organization's ability to create value relative to competitors, is considered to be one of the most important intangible resources of firms and a source of sustainable competitive advantage (McMillan & Maheshkumar, 1997; Roberts & Dowling, 1997). Although reputations develop over time and therefore cannot be easily imitated by competitors (Hall, 1992, 1993), the value in corporate reputations is in reducing stakeholder uncertainty, as suggested by signaling theory. Specifically, the theory suggests that because market transactions occur under conditions in which buyers and sellers possess asymmetric information, buyers will rely on *signals*, or indicators of the sellers' productive capacity, to reduce their uncertainty (Spence, 1974). In other words, stakeholders will interpret information they receive as signals about an organization given that they do not have complete information about an organization's true attributes, such as goods and services and working conditions (Fombrun & Shanley, 1990; Shapiro, 1983; Weigelt & Camerer, 1988). Thus, corporate reputations may be used to estimate and evaluate firms' capabilities, strategic choices, and positions in organizational fields (Rindova et al., in press).

Although researchers have conceptualized corporate reputation in a variety of ways including the quality of a firm's products and services, long-term investment value, and the ability to attract and retain talent (Chun, 2005), no research to date has examined the concept of diversity reputation. A large body of research has explored the effects of firm's reputation for social values and ethics, or corporate social performance, which incorporates a diversity dimension (Berman, Wicks, Kotha & Jones, 1999). In fact, diversity, defined in such research as a firm's treatment of its employees and the hiring of women and minorities, has been highlighted as one of the critical dimensions of stakeholder impressions of corporate social performance (Berman et al., 1999; Waddock & Graves, 1997). Research provides evidence of an association between corporate social and financial performance (see Simpson & Kohers, 2002). Such research suggests that corporate social performance signals a firm's responsiveness to social and environmental issues and subsequently, effective stakeholder management (Clarkson, 1995). As a result, stakeholders may be induced to purchase goods and services from, and invest in, socially responsible firms. We anticipate that such effects will also result from a firm's diversity reputation. Specifically, given the performance effects of corporate social performance and given diversity as a relevant dimension of social performance, we propose a relationship between diversity reputation and firm financial performance.

Although reputation may be indicated by a variety of signals, researchers have highlighted the role of media rankings as measures of organizational reputation (Deephouse, 2000; Roberts & Dowling, 2002). Because such rankings are compiled from an assessment of firms on a relevant attribute (e.g., diversity and diversity management), they minimize the need for stakeholders to conduct their own evaluation and reduce stakeholder uncertainty (Rindova & Fombrun, 1999). Related to diversity reputation, stakeholders may use media rankings as an overall evaluation of whether a firm is a diversity leader. Further, stakeholders may interpret such rankings as a signal of a firm's ability to earn above-average returns through its diversity and diversity management actions. Research provides some empirical support for a relationship between diversity reputation and firm financial performance. For example, Hannon and Milkovich (1996) found an association between a "best company" announcement and firm share prices. Specifically, firms that were rated as one of the "Best Company for Working Mothers" had higher shareholder returns in the post-announcement event period. Similarly, the results of a study examining the effects of diversity announcements on stock price valuations showed that affirmative action awards were related to stock price increases, while discrimination settlements were associated with decreases in stock price (Wright et al., 1995).

Despite some support for an association between corporate diversity reputation and firm performance, little empirical research has investigated this relationship. However, we expect diversity reputation to provide stakeholders with information about diversity and diversity management practices within firms, and therefore to be related to financial performance. For example, a positive diversity reputation may signal that a firm actively recruits women and minorities and focuses on the fair treatment of all employees. Further, diversity reputation may signal a firm's ability to effectively manage diversity among stakeholder groups (e.g., consumers, suppliers, etc.). Therefore, stakeholders may be induced to purchase goods and services from, and invest in, firms with positive diversity reputations. We hypothesize:

Hypothesis 1: Diversity reputation will be positively related to firm performance.

Leadership Diversity and Firm Performance

Although the relationship between diversity and firm performance may occur through a firm's diversity reputation, such effects may also be manifested through heterogeneity at various organizational levels. For example, research has highlighted a relationship between gender diversity and organizational performance (Dwyer, Richard & Chadwick, 2003; Frink et al., 2003; Richard et al., 2004). Similarly, the results of studies examining the relationships between workforce racial diversity and firm performance in the banking industry show that diversity interacts with business strategy to impact organizational effectiveness (Richard, 2000; Richard et al., 2003). Beyond a focus on workforce racial diversity, recent empirical work has explored the performance effects of cultural diversity in management (Richard et al., 2004). The results of such research demonstrated a relationship between management diversity and firm productivity based on a firm's entrepreneurial orientation, thus highlighting the importance of strategy formulation and implementation.

Given that top managers are responsible for a firm's strategic decisions, researchers have proposed that the characteristics of such managers influence organizational functioning. According to upper echelons theory, a firm's leaders have a critical impact on firm performance given the significant organizational decisions they are empowered to make (Finkelstein & Hambrick, 1996). Further, Hambrick and Mason (1984) argue that strategic choices made by senior-level managers (i.e., top management teams) are outcomes of their cognitive and behavioral characteristics. They suggest that top managers' values and cognitive orientations influence the perceptual processes behind strategic decision making by limiting and filtering available information. Accordingly, strategic decisions are reflective of top managers' beliefs, assumptions, and values. In studies of decision-making in top management teams, researchers have ascribed executives' cognitive orientations from more readily observable characteristics, such as education, functional background, and organizational tenure (see Milliken & Martins, 1996). Demographic diversity is assumed to be associated with cognitive diversity, which expands a team's informational resources and enhances its problem-solving capacity (Dutton & Duncan, 1987). Thus, within the context of top management teams, diversity broadens the range of cognitive perspectives needed to recognize strategic opportunities and consider various strategic alternatives, which enhance a team's ability to identify and deal with environmental conditions (Wiersma & Bantel, 1992).

Although research has examined the relationship between top management team diversity and organizational performance, the results have been equivocal. For example, some studies have found a positive association between top management team diversity (in the form of educational background, functional background, or tenure) and performance, indicating that diversity may enhance the breadth of perspectives and information and the problem-solving capacity of the team (Bantel & Jackson, 1989; Hambrick, Cho & Chen, 1996; Smith et al. 1994). However, research also shows that diversity may reduce social cohesion, decision-making speed and consensus-seeking behaviors, thus limiting a firm's ability to effect strategic change and impeding organizational performance (Ferrier, 2001; Hambrick et al., 1996; Murray, 1989). Thus, the relationship between leadership diversity and firm performance may be more complex than has been articulated in past theorizing.

Although research to date has primarily examined the effects of skill-based leadership diversity (for a review, see Milliken & Martins, 1996), we propose that leader diversity on more observable characteristics, such as racial diversity may also influence firm performance. In addition, we argue that the relationship between racial diversity and firm performance may be nonlinear. Given that top management team diversity is indicative of cognitive diversity, the representation of ethnic minorities in firm leadership may create value for a firm by enhancing its strategic decision-making capabilities. Specifically, diversity may broaden the range of informational resources and perspectives on which leadership teams have to draw. In addition, leader racial diversity may extend a firm's professional and social network ties, which may improve its access to resource and diverse stakeholder groups (Finkelstein & Hambrick, 1996). Consequently, racial diversity in firm leadership may be related to improved firm performance. Despite these positive effects of leader diversity, research suggests that moderate levels of diversity also have the potential for subgroup or coalition formation (Lau & Murnighan, 1998). In such contexts, subgroups may develop based on leaders' racial group membership, which can hinder communication and decision-making within the larger group (Murnighan & Brass, 1991). Consequently, moderate levels of leader racial diversity may limit the potential performance effects of such diversity. As the proportional representation of racial minorities rises, however, barriers to social interaction among leaders may decrease, thus increasing the likelihood that the firm may draw on such diversity as a unique resource. Firms with highly diverse leadership teams may have a broader range of perspectives and skills, which may enhance strategic problem-solving and decision-making capabilities. Further, firms with racially diverse leadership may have broader networks and thus, access to resources and diverse stakeholder groups. Consequently, such firms may experience higher financial performance. Overall, we propose that very low and very high levels of racial diversity will be associated with increased firm performance, whereas moderate levels of racial diversity will relate to lower levels of firm performance. We hypothesize:

Hypothesis 2: Leader racial diversity will have a U-shaped curvilinear relationship with firm performance.

Methods

Data

Firms included in this study were obtained from *Fortune* magazine's annual (1998-2003) lists of the best companies for minorities, which refers to blacks, Hispanics, Asians and Native Americans. Working with the Center for Responsibility in Business, the list is based on a survey sent to all of the *Fortune* 1,000 plus the 200 largest privately-held firms in the country. Companies are surveyed on 15 quantitative and qualitative dimensions including minority representation in the workforce and at different managerial levels, the rate at which minority employees are hired, and how managers are made accountable for hiring, promotion, and retention. Each dimension is assigned a weight varying in value according to its importance as determined by a panel of diversity experts. Each company is then scored by comparing its performance with those of other respondent firms. Based on these scores, companies are ranked and the list of top 50 companies is published in the July issue of *Fortune* magazine.

The *Fortune* diversity rankings were chosen for several reasons. First, given *Fortune's* circulation and readership of approximately one and five million respectively, (www.fortune.com/fortune/information/Presscenter/0,,contacts,00.html), we presumed that the list would be available to a variety of audiences whose actions could influence firm financial performance (e.g., consumer and investor markets). Second, because there is little available information on company diversity initiatives and programs, the *Fortune* list provides comparable diversity data over an extended period of time for a large number of firms across a variety of industries. Third, the *Fortune* survey provides some evaluation of diversity management programs in organizations. Rather than focus solely on the representation of minorities in organizational workforces, it incorporates a number of diversity management practices. For example, companies are assessed on their awareness and sensitivity training programs, minority promotion rates, accountability and responsibility systems, integration of minorities into succession planning, level of charitable contributions to minority-based organizations, purchasing programs for minority-owned businesses, and use of minority-owned underwriters or pension-management firms.

In total, 100 individual companies appeared on *Fortune*'s list from 1998 through 2003. However, the number of individual companies collapsed to 97 due to mergers between six companies during the period of observation. Of the 97 companies, 28.9% of companies were listed once over the six-year period while the majority of companies in the sample appeared on the lists multiple times – 16.5% two years, 14.4% three years, 10.3% four years, 17.5% five years, and 12.4% all six years. Companies appearing on the list represented a variety of industries (classified by SIC codes) – 45.4% in manufacturing; 17.5% in finance, insurance, and real estate; 16.5% in transportation, communications, electric, gas and sanitary services; 11.3% in retail trade; 8.3% in services; and 1% in agriculture, forestry, and fishing.

Independent Variables

Diversity reputation. Diversity reputation was coded based on a firm's inclusion on the *Fortune* list each year. A firm was coded with "1" for each year (i.e., 1998, 1999, 2000, 2001, 2002, 2003) it was included on the list, and with "0" for each year the firm did not appear on the list. To allow for the temporal effects of appearing on the list to be manifested in organizational outcomes, reputation was lagged by one year (t – 1). Accordingly, we assume that inclusion in *Fortune*'s lists should work to influence company outcomes in the following year. Also, the inclusion of lagged variables as explanatory variables avoids potential endogeneity problems (Hsiao & Tahmiscioglu, 1997).

Leader diversity. Hambrick and Mason's (1984) upper echelons theory suggests that researchers can identify members of top management teams simply by equating executive titles with membership in the team. However, researchers have defined this concept in various ways. For example, Finkelstein and Hambrick (1990) defined top management team as all corporate officers who are also board members. In contrast, Hoffman and colleagues (1997) included corporate officers who were board members as well as members of executive management with the title of vice-president or above. Although the Securities and Exchange Commission considers the five top-paid officers of an organization to compose its top management team (http://www.sec.gov/info/edgar.shtml), research shows that racial minorities compose less than 2.5% of senior-level managers in the private sector (Datz, 2000). Given the low representation of racial minorities in executive positions and consistent with *Fortune*'s diversity data, we considered a firm's leadership to be represented by the 25 top-paid positions in a firm. Demographic data on the racial composition of the 25 top-paid positions for each company was obtained from the *Fortune* lists although such information was only available for the year(s) that a company appeared on the list. Consequently, the sample size for the leadership diversity variable was substantially lower than for the other variables included in this study.

Consistent with past research, we used a variation of the Herfindal-Hirshman index to measure heterogeneity (Blau, 1977),

$$H = 1 - \sum p_i^2$$

where *H* is the leadership racial diversity measure and *p* the percentage of employees in each racial category. Although the conceptual range of the index is 0 to 1, the actual range is dependent upon the number of categories (*k*) included in the calculation and is equal to (*k*-1)/*k* (Harrison & Sin, 2005). Because firm leaders were either classified as an ethnic majority (i.e., white) or ethnic minority (i.e., black, Hispanic, Native American) in the available data, only two groups were used in calculating the leader racial diversity index. Therefore, the diversity index ranged from 0 to .50 in this study.

Control variables. Firm size was assumed to have a direct effect on financial performance, as large organizations may benefit from economies of scale, market power, and access to resources to a greater extent than smaller organizations (Pfeffer & Salancik, 1978). In the analyses, firm size was the logarithmic transformation of the total number of employees in the company workforce. Given potential differences in minority representation across industry sectors, we also controlled for industry effects in the analyses. Industry was coded using a dichotomous variable for each of the six industries represented in the sample.

Dependent Variables

Data on accounting and market-based measures of firm performance were obtained from the Standard & Poor's Compustat database. In order to analyze the lagged effects of diversity reputation and leadership diversity on organizational performance outcomes, we collected financial performance data for sample companies beginning in 1999 (t) in order to correspond to the *Fortune* lists which began in 1998 (t-1). Financial performance data were collected through 2003, as this was the final year of available reliable data. Because *Fortune* surveys both public and private firms for its annual survey, financial information was unavailable for some of the companies appearing on the lists. Financial data for 1999 – 2003 from Compustat was missing for approximately 7.2% of the companies included in our sample, which influenced the number of companies included in the analyses.

Revenues were used to indicate consumer market expansion and profitability. This measure also represented a diversity-related measure of organizational performance, as research suggests that the effects of diversity as a source of competitive advantage occur in the areas of marketing and resource acquisition (Cox & Blake, 1991). Net income was used to indicate firm profitability as well as a firm's ability to leverage its human and capital resources for profit. Book-to-market value of common equity was used as a measure of firm value, given that it indicates firms' expected returns to shareholders as well as the perceived value of stockholders' investment in a firm (Fama & French, 1992). Firms that are judged by the market as having poor prospects, signaled by high ratios of book-to-market equity, have lower expected returns (i.e., higher costs of capital) (Chan & Chen, 1991). Therefore, a lower book-to-market equity ratio indicates a higher perceived value of stockholders' investment. The natural log transformation of this ratio was taken to ensure the normal distribution necessary for regression analysis.

Analyses

We used a pooled cross-sectional time series regression analysis procedure to test our hypotheses. This analysis technique, which is primarily used for econometric modeling, allows the study of causal dynamics across multiple cases. For example, management researchers have utilized similar techniques to examine the effects of CEO and top management team characteristics on firm performance in multiple industries across time (see Murray, 1989; Rajagopalan & Datta, 1996). In this study, we conducted pooled cross-sectional time series analyses to examine the effects of our dependent variables (i.e., diversity reputation and leader racial diversity) on financial performance across 97 firms, six industries, and six years.

Our data has a panel structure with multiple firms observed at a series of discrete points in time (Blossfeld & Rohwer, 1995). The cross-sectional information reflects changes between firms and the time-series information reflects changes within firms over time. There are several advantages to this design. Because traditional cross-sectional analyses examine relationships of interest at only one time period, there is an increased possibility that relationships are spurious due to the particular time period in which the data were collected. By incorporating both between- and within-subjects variance into the analysis (Stimson, 1985), many of the possible threats to valid inferences of a cross-sectional design can be controlled. In addition, time series analyses helps to address multicollinearity between the study's variables of interest. The use of longitudinal data allowed us to both explore the strength of the relationships of interest in our sample and determine the robustness of these relationships across multiple time periods. The use of multiple cross sections also enlarges the sample size and enhances the power of tests based on the sample (Murray, 1989).

We used a random-effects GLS estimator, which is a matrix-weighted average of the between-subjects and within-subjects estimators for our models in our longitudinal analyses

(Stata Reference Manual, 2001). Because estimators that are sensitive to both within- and between-subjects variance will produce more efficient estimates (Hsiao & Tahmiscioglu, 1997; Jacobs & Carmichael, 2002), we chose a random-effects estimator, which takes into account both kinds of variation. To test the hypotheses, separate analyses were conducted to determine the relationships between diversity reputation and financial performance and between leadership diversity and financial performance. Given that the manufacturing industry was the largest industry sector represented in our sample, we used it as the base standard for the industry control variable. Stata Statistical Software: Release 8.0 was used to conduct the analyses.

Results

Table 1 provides the sample sizes, means, and standard deviations for all independent and dependent variables. Although it is possible to produce a cross-sectional correlation table, the interpretability of correlations is limited given that the analytical procedure used treats each year of data for each company as a unique data point. Because the calculation of cross-sectional correlations disregards the relationships within companies across panels (i.e., years), it is difficult to determine how much of the relationship is within-subjects and how much is between-subjects. Therefore, the interpretability of correlations for the total longitudinal data is limited.

Table 2 presents the results of the panel analysis for testing the effects of diversity reputation on firm performance. As shown by the results, diversity reputation was significantly related to book-to-market. As demonstrated by the negative coefficient, firms appearing on the list had lower book-to-market ratios, thus indicating higher firm value. The results did not show significant relationships between diversity reputation and revenue or net income. Thus, hypothesis 1 was only partially supported.

Table 1
Sample Statistics for Variables

Variable	Definition	*M*	*SD*	*n*
	Independent Variables			
Diversity reputation	Inclusion on Fortune's list of the top 50 companies for minorities (t-1)	.52	.50	483
Leadership diversity	Racial heterogeneity among the top-paid officers of an organization (t-1)	.22	.09	232
Industry	Manufacturing	.45	.50	697
	Finance, insurance & real estate	.18	.38	697
	Transportation, communications, electric, gas & sanitary services	.17	.37	697
	Retail trade	.11	.32	697
	Services	.08	.28	697
	Agriculture, forestry & fishing	.01	.10	697
Firm size	Number of employees in an organization (thousands) – natural log	3.83	1.29	497
	Dependent Variables			
Revenue	Revenue of an organization ($ millions)	20,548.06	26,840.72	298
Net income	Net income of an organization ($ millions)	1,626.40	28,75.60	500
Book-to-market equity	Book value of stock/market value of stock ($) – natural log	-1.24	-.94	464

Table 2
Effects of Diversity Reputation on Firm Financial Performance

	Revenue	**Net Income**	**Book-to-Market**
Finance, insurance & real estate	18,468.76* (8,066.19)	1,441.07* (664.97)	.76** (.25)
Transportation, communications, electric, gas & sanitary services	1,743.42 (7,615.98)	-733.55 (663.38)	.94*** (.26)
Retail trade	-18,094.61* (9,066.69)	-1,557.13 (817.03)	.22 (.33)
Services	-14,446.79 (10,081.05)	-2,584.91*** (883.70)	1.16*** (.34)
Firm size	13,470.96*** (1,654.84)	1,217.92*** (194.85)	-.04 (.07)
Diversity reputation	717.98 (811.57)	44.86 (278.49)	-.13* (.060)
Constant	-30,088.74*** (7,638.71)	-2,898.05*** (819.17)	-1.34*** (.30)
R^2 (overall)	.39	.26	.25
X^2 (Wald)	77.92***	54.92***	28.70***
Sample Size	161	329	307

Note: Standard errors are in parentheses; * *p* < .05, ** *p* < .01, *** *p* < .001

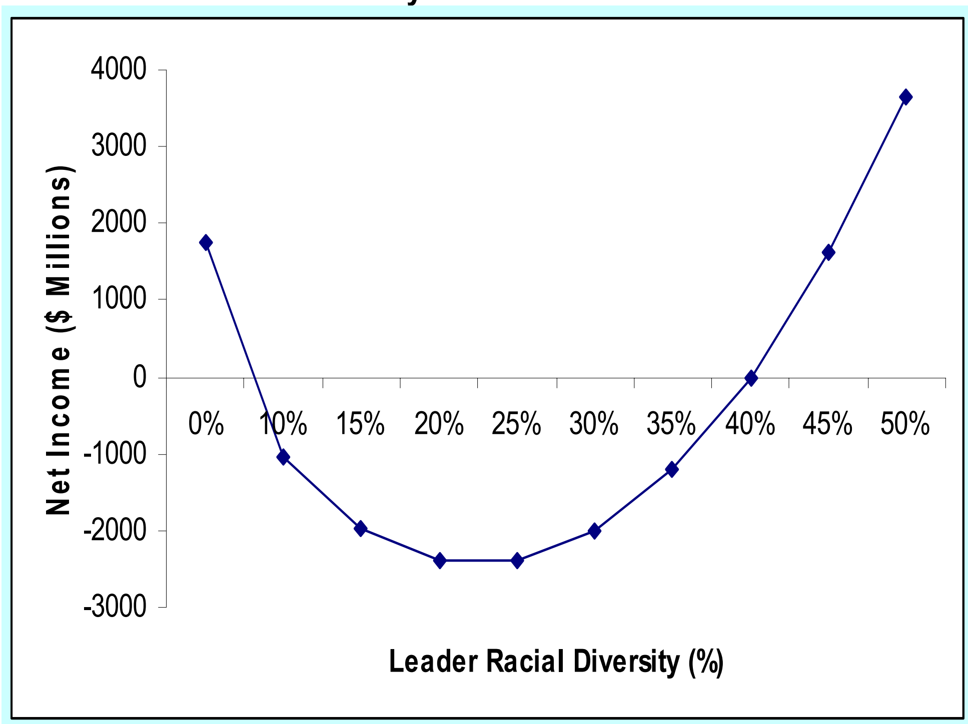
Table 3 presents the results of the panel analysis for testing the effects of leader racial diversity on firm performance. As shown by the results, leadership diversity and leadership diversity squared were significantly related to revenues, net income and book-to-market equity – thus providing support for hypothesis 2. As depicted in Figure 1, which represents the relationship between leader racial diversity and net income, the form of the relationship is U-shaped with the low point occurring at approximately the 22% minority representation point. This form of the relationship and inflection point was consistent for all of the dependent variables. There, overall financial performance decreases with increases in leader racial diversity up to a point, beyond which further increases in racial diversity are associated with increases in performance.

Table 3
Effects of Leadership Diversity on Firm Financial Performance

	Revenue	Net Income	Book-to-Market
Finance, insurance & real estate	10,681.94 (10,927.75)	887.64 (727.50)	.96*** (.29)
Transportation, communications, electric, gas & sanitary services	-850.48 (9,249.03)	-438.91 (612.67)	1.02*** (.26)
Retail trade	-23,744.51 (13,465.78)	-1,213.99 (960.66)	.71 (.44)
Services	-17,837.60 (1,345.65)	-4,308.20*** (926.89)	1.10** (.38)
Firm size	14,594.24*** (1,450.48)	938.02*** (216.58)	-.16 (.09)
Leadership diversity	-38,293.31** (13,497.99)	-36,935.73*** (10,367.08)	4.72* (2.30)
Leadership diversity ^{2}	96,314.44*** (26,491.96)	81,430.60*** (21,043.65)	-11.09* (4.65)
Constant	-28,787.46*** (8,528.95)	1,745.71 (1,602.14)	-1.56*** (.47)
R^2 (overall)	.37	.29	.35
X^2 (Wald)	162.05***	51.03***	32.26***
Sample Size	95	147	137

Note: Standard errors are in parentheses; * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 1
Graphical Depiction of Relationship between
Leader Racial Diversity and Firm Financial Performance



Discussion

Although researchers have examined the relationship between a firm's reputation for social values and ethics, or corporate social performance, and its financial performance, the effects of diversity reputation have received little attention. However, both scholarly and practical research suggests that economic advantages may accrue to organizations that are recognized for their diversity and diversity management. Given that diversity reputation may signal important information about a firm's ability to create value through diversity, we explored the association between diversity reputation and firm performance. In addition, because top management teams are responsible for formulating and implementing strategic decisions that may impact diversity reputation, we also considered how leader characteristics might influence firm financial performance. More specifically, because minority representation on firms' top management teams may enhance strategic decision-making and extend network ties, we examined the relationship between leader racial diversity and firm performance.

Hypothesis 1 predicted a positive relationship between diversity reputation and firm performance. The results showed support for a relationship between diversity reputation and book-to-market equity, which suggests that being recognized as one of the top companies for diversity and diversity management may serve as an effective signal to investors about a firm's future earnings prospects. Such a designation may suggest that a company is less of a financial risk given a reduced likelihood that earnings and stock returns will be influenced by financial losses associated with not managing diversity (e.g., discrimination lawsuits, lost sales from diverse customers, inability to retain top talent). In addition, investors may view recognition as a diversity leader as an intangible asset with future economic value, thus positively influencing their expectations for future growth. Because positive diversity reputations may signal firms' attention to and/or concern for social issues, firms with such reputations may also be attractive investment prospects for shareholders interested in social responsibility. As such, investors may be willing to pay a premium for firms recognized for their diversity and diversity management efforts.

Although research suggests that diversity may enhance firms' marketing and service capabilities, and therefore result in product market benefits (Cox & Blake, 1991; Thomas & Ely, 1996), the results of this study did not show diversity reputation to be significantly related to firm revenues and net income. Research suggests that reputation may convey information about firms' underlying capabilities to produce quality products or services (Rindova et al., in press). However, because recognition for diversity does not provide consumers with information about whether a firm is a producer of high or low quality goods and services, it may not reduce stakeholders' uncertainty when making purchasing decisions. Therefore, diversity reputation may not be an effective signal to product markets. Given that an association between reputation and net income was not found, the results also suggest that diversity reputation may not be related a firm's ability to leverage its human and capital resources for profit. Specifically, such recognition may not indicate management's capabilities for incorporating diversity into business processes and leveraging its benefits to enhance organizational growth and profitability. Thus, the economic benefits generated from being recognized as a diversity leader may primarily derive from capital rather than product markets.

Hypothesis 2 predicted that leader racial diversity would be associated with firm financial performance. Our findings offer support for a curvilinear relationship between these two variables, with the point of inflection occurring at between 20-25% minority representation on firm top management teams. Given that significant relationships were found for all of the financial outcome variables, the results suggest that racial diversity in leadership may similarly impact firms' ability to generate revenue, income and stock price premiums. Specifically, financial performance decreases with increases in minority representation on top management teams up to a point, beyond which greater balance in the racial composition of such teams is associated with increases in performance. These results are consistent with the theorizing of Lau and Murnighan (1998), who suggest that diversity at low levels creates stronger faultlines than higher levels of diversity which diminish faultline strength. As suggested by our results, firms with few racial minorities in leadership may experience decreases in performance as such individuals may serve as tokens without have their unique perspectives and skills integrated into decision-making processes. In addition, low to moderate levels of leader racial diversity may weaken strategic decision-making through decreased communication and increased conflict among organizational leaders, thus negatively influencing firm performance. As the proportional representation of racial minorities rises, however, barriers to social interaction among leaders may decrease, thus increasing the likelihood that the firm may draw on such diversity as a unique resource. Firms with highly diverse leadership teams may have a broader range of perspectives and skills, which may enhance strategic problem-solving and decision-making capabilities. Further, firms with racially diverse leadership may have broader networks and thus, access to resources and diverse stakeholder groups. Consequently, such firms may experience higher financial performance.

Practically, the results of this study suggest that there is some value in efforts and expenditures devoted to attaining a “best company” designation for diversity and diversity management. Such recognition may serve as an effective signal about a firm’s future earnings prospects, thereby enhancing a firm’s perceived value among investors. Consequently, firms may realize economic benefit from dedicating its resources to increasing workforce diversity and to diversity management initiatives. This is not to say that firms should recruit, hire and retain minorities for the sake of being included in media rankings, as such efforts may negatively impact the company’s reputation among potential and current employees. However, efforts that demonstrate a commitment to diversity and help firms to achieve a “best company” distinction may enhance its valuation among investors and subsequently, financial performance. The results also suggest that firms may improve financial performance by taking actions to increase leader racial diversity. For example, by expanding its executive search processes or utilizing proactive approaches to succession planning, firms may be able to identify high-potential minority candidates for leadership positions and develop in-house minority talent, which may increase the diversity of its available leadership pool. Similarly, providing diverse leaders with access to and involvement in formal and informal networks may help firms to eliminate selection biases that may create obstacles to executive appointments for ethnic minorities. However, firms should be careful not to focus on the promotion of racial minorities to leadership positions just to increase leader diversity, given that the representation of racial minorities must reach a critical mass in order for such diversity to be integrated into decision-making processes and the true benefits of diversity to be potentially realized.

There are several limitations to this study. Given that we assumed a single construct of diversity reputation produced from a secondary source, our sample was influenced by response rates for the *Fortune* study and the study’s methodology. Although the *Fortune* rankings provide a useful measure of firms' diversity management efforts, the reliability and validity of diversity reputation as a construct requires further examination. Because the *Fortune* rankings recognize firms for programs and initiatives designed to increase the representation and participation of underrepresented minorities and to manage diversity among stakeholder groups, this study may also be limited by a focus on firms with positive diversity reputations. Although our findings provide a conservative test of the relationship between diversity reputation and firm performance, conducting similar research with a comparison sample (i.e., firms not included in media diversity rankings) may provide additional insight into the relationship. Further, given the findings of prior research which highlights the effects of discrimination settlement announcements on stock price valuations (Wright et al., 1995), additional research is needed to examine whether the effects of negative diversity reputation on firm financial performance are consistent with those of positive diversity reputations. Although the results of this study provide evidence of performance effects of leader racial diversity, our results do not allow insight into how such diversity translates into lower-level outcomes that drive strategy formulation and implementation, such as cognitive flexibility, problem-solving and decision-making. Research combining strategic and psychological perspectives of diversity *as well as in-depth qualitative methods* is needed to examine how leadership diversity contributes to the intervening processes and outcomes that drive financial performance. Future research should also explore the interactive effects of other types of leader diversity (e.g., gender, tenure, age) with leader racial diversity on firm financial performance.

Despite these limitations, this study makes several contributions. We extend previous research by examining a different form of the diversity-performance relationship. Specifically, we introduce the concept of diversity reputation and highlight how it may be a source of competitive advantage for firms – particularly, within capital markets. Our use of longitudinal data and panel analyses also allowed us to examine the causal effects of diversity reputation and leader racial diversity on firm performance over time. Although there may be other potential explanations for our findings, the causality and directionality of the empirical relationships indicated here provide some insight into the effects of diversity reputation and racial diversity in leadership on firm financial outcomes. We also advance the study of the effects of demography on organizational performance by examining the form and magnitude of the relationship between leader racial diversity and different types of financial performance. Our findings highlight the complexity of the demography-performance relationship and the critical point at which minority representation on top management teams may positively influence financial performance. Overall, our study suggests that both researchers and practitioners should acknowledge the potential for organizational competitiveness through diversity management.

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