

DOES LEADERSHIP MATTER?: CEO LEADERSHIP ATTRIBUTES AND PROFITABILITY

UNDER CONDITIONS OF PERCEIVED

ENVIRONMENTAL UNCERTAINTY

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**DOES LEADERSHIP MATTER?: CEO LEADERSHIP ATTRIBUTES AND
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The purpose of this research was to address the controversy of whether alternative forms of leadership matter at the level of chief executive officers (CEOs). Using data from 48 Fortune 500 firms, transactional and charismatic leadership of CEOs were assessed as predictors of financial performance, as was the proposed moderator, perceived environmental uncertainty. We hypothesized that the relationship between CEO leadership attributes and performance depends on environmental uncertainty, as reported by immediate subordinates of CEOs. Hierarchical regression revealed that uncertainty was found to have a strong moderating effect on the relationship between both transactional leadership and CEO charisma and performance, the latter measured in later years. However, the interaction of transactional leadership and uncertainty had no significant effect beyond that of the interaction of charisma and uncertainty. Consistent with theoretical expectations, charisma predicted financial performance under conditions of uncertainty but not under conditions of certainty.

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Is it possible for leaders to have a substantive effect on the overall performance of the organizations they lead? Leadership on the part of chief executive officers (CEOs) has been heralded as an important ingredient for the revitalization of organizations (e.g., Tichy & Devanna, 1986), and as critically important to the top management of large organizations (Katz & Kahn, 1978) and nations (Burns, 1978; House, Spangler, & Woycke, 1991). Unfortunately, little empirical evidence exists to support such claims as to the performance-stimulating potential of various forms of leadership at the level of CEO. The purpose of the present study is to examine systematically the effects of CEO transactional and charismatic leadership on firm profitability in environments perceived to be certain, as well as those perceived to be uncertain.

LEADERSHIP AT THE STRATEGIC LEVEL

Strategic management theory has become increasingly concerned with top-level managers and their effects on strategy formulation and firm performance. For example, upper echelons theory suggests that specific characteristics and leadership of top managers do indeed make a difference in strategy formulation and performance (Hambrick & Mason, 1984). Finkelstein (1992) pointed out how “power may emanate from a manager’s personality” (1992: 510). Thus, simple demographic factors (e.g., age and experience), may not go far enough in assessing upper management characteristics. A consideration of personal or leadership characteristics is necessary for a more complete test of upper echelons theory (Hambrick & Mason, 1984; Hitt & Tyler, 1991). We argue below that two potential key leadership characteristics may include: (1) transactional leadership, and (2) charisma.

Transactional Leadership

Pawar and Eastman (1997) proposed that one possible form of strategic leadership is transactional in nature. The transactional leader is one who operates within the existing system or culture (as opposed to trying to change them) by: (a) attempting to satisfy the current needs of followers by focusing on exchanges and contingent reward behavior, and (b) paying close attention to deviations, mistakes, or irregularities, and taking action to make corrections (Bass, 1985; Burns, 1978).

Transactional leadership is similar conceptually to the cultural maintenance form of leadership described by Trice and Beyer (1993) which acts to strengthen existing structures, strategies, and culture in an organization.

In line with upper echelons theory, we propose that transactional or maintenance leadership represents an active form of strategic leadership that may be an important ingredient of organizational effectiveness. That is, leaders that help to shape strategies and structures, reward subordinates efforts and commitment, and take action to correct mistakes and deviations from expectations should help to foster better organizational performance (Tosi, 1982). By so doing, the transactional leader manages the mundane, day-to-day events that comprise the agendas of many leaders. Recent meta-analytic evidence provides overall support for the performance stimulating potential of transactional leadership (Lowe, Kroeck, & Sivasubramaniam, 1996). However, prior findings cannot be readily generalized to the performance of higher level executives because previous studies have mostly involved lower-level managers. The qualitative nature of effective leadership may be substantially different at higher versus lower management levels (Day & Lord, 1988; Katz & Kahn, 1978). In addition, performance has often been assessed by rating or other subjective procedures, rather than objective measures. Taken as a whole, however, the above theoretical arguments and prior research suggest that:

H1: Transactional leadership on the part of CEOs will be positively associated with organizational performance.

Charismatic Leadership

Charisma represents another potentially key component of strategic leadership (Pawar & Eastman, 1997). Our definition of charismatic leadership is based largely on the work of House and colleagues (House, 1977; House & Shamir, 1993; Klein & House, 1995). Specifically, we define charisma as a *relationship* between an individual (leader) and one or more followers based on leader behaviors combined with favorable attributions on the part of followers. Key behaviors on the part of the leader include articulating a vision and sense of mission, showing determination, and communicating high performance expectations. Favorable attributional effects on the part of followers include the generation of confidence in the leader, making followers feel good in his/her presence, and strong admiration or respect

It is very difficult to define charisma without simultaneously considering some of the consequences and attributions resulting from the charismatic relationship. Members identify with a leader's vision and with the organization to which that vision pertains, and thus a high level of collective cohesion is developed. Individuals experience a heightened sense of self-efficacy as a result of their cohesion and the leader's expressions of confidence in their ability to attain the vision (Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Moreover, the charismatic leader may show persistence and enthusiasm in pursuing goals over the long haul, as well as being demanding of others through the communication of high performance expectations (Kanter, 1983; Trice & Beyer, 1993).

The meta-analytic work of Lowe et al. (1996) provides even stronger support for the

performance-stimulating potential of charisma, as compared to transactional leadership. Nevertheless, these findings cannot be readily generalized to the performance of CEOs of large firms for reasons similar to those cited above for transactional leadership, especially with regard to the fact that most prior research has focused on lower levels of management. However, theoretical support for the importance of charismatic leadership at the top executive level can be found in the literature (Day & Lord, 1988; Hambrick & Finkelstein, 1987; Katz & Kahn, 1978; Yukl, 1998). For example, Katz and Kahn (1978) argued that charisma is particularly important at the top executive level as a means of mobilizing an organization to meet the demands of its environment. In sum, despite the theoretical work available, the literature would benefit from systematic empirical study involving CEOs.

The Joint Effects of Transactional and Charismatic Leadership

We have argued that both transactional leadership and charisma are potentially important aspects of leadership at the strategic level. An additional issue involves the connection between these two forms of leadership and how they may operate in tandem with regard to organizational performance. Bass (1985) viewed transactional and charismatic leadership as being somewhat complementary in nature in that both could be displayed by the same individual leader. Similarly, Trice and Beyer (1993) acknowledged that both maintenance- and innovation-oriented leadership could be shown by a given leader over time. Empirically, research has generally shown relationships between charisma and transactional leadership, especially when the latter is operationalized in terms of contingent reward behavior (c.f. Bycio, Hackett, & Allen, 1995).

At the same time, a case can be made that charisma adds to the effect of transactional leadership on outcomes such as performance. Transactional leadership helps maintain a form of employment

contract with followers and provides actions to protect the status quo by making sure that deviations from expectations are corrected, thus helping to ensure expected performance levels. As argued by Podsakoff et al. (1990), the trust, respect, vision, and high performance expectations engendered by the charismatic relationship motivates followers to put forth effort beyond expectations, and to accept organizational change. The result should be heightened commitment to achieve performance beyond expectations. Taken as whole, the above arguments suggest the following hypotheses:

H2a: Charismatic leadership on the part of CEOs will be positively associated with organizational performance.

H2b: Charisma will account for additional, unique effects in performance, beyond the effects of transactional leadership.

The Moderating Effect of Environmental Uncertainty

A "one-best-way" approach to characterizing charisma and performance relationships pervades the literature. At the same time, authors have increasingly questioned such an approach and suggested potential contingency variables (e.g., Pawar & Eastman, 1997; Podsakoff, Mackenzie, & Bommer, 1996; Waldman & Yammarino, 1999). We expect that the effect of CEO charismatic leadership will be moderated by perceived environmental uncertainty on the part of organizational members because uncertainty is stressful to followers, makes organizations more receptive to charismatic effects, and allows leaders more latitude for discretion.

The concept of environmental uncertainty was discussed at length by Milliken (1987). For example, although she considered how uncertainty has been used as an objective characterization of an environment, she argued for its use as a perceptual phenomenon. According to Milliken (1987),

uncertainty can be defined in terms of an individual's perceived inability to understand the direction in which an environment might be changing, the potential impact of those changes on that individual's organization, and whether or not particular responses to the environment might be successful.

Environments perceived as highly uncertain will likely be viewed as very risky, whereby a few erroneous decisions could result in severe trouble, and possibly risk the survival of the organization. Obviously, an environment perceived in such a manner would tend to generate a high degree of stress, anxiety, and lack of assuredness on the part of an organization's managers and employees. A charismatic relationship between the CEO and followers will theoretically allay follower concerns and generate confidence. The assuredness, confidence, and vision of the leader is a source of psychological comfort for the followers, thus reducing their stress by showing how uncertainty can be turned into a vision of opportunity and success (Bass, 1985). Thus, in uncertain situations charismatic leaders should theoretically have more influence on their organizations and be more able to achieve success when expressing their personality and behavioral inclinations, including an orientation toward the accomplishment of new visions and goals. These arguments are in line with those of Trice and Beyer (1986) who noted that charismatics can best generate appeal for their mission or vision when there is an appropriate fit between the leader's behavior and the social situation.

Studies suggest that crises, and associated stress and uncertainty, may foster the emergence of charismatic leadership, or alternatively, simply the need for such leadership (e.g., House et al., 1991). However, the evidence in organizational settings is not clear (Pillai, 1995). Perhaps unadaptive organizational cultures (Kotter & Heskett, 1992) may prevent charismatic leaders from being promoted or chosen externally, even though perceived environmental circumstances may necessitate such

leadership. For example, highly politicized or highly rigid cultures may prevent the selection of charismatic CEOs or limit their effectiveness. One purpose of the present study is to make clear empirically the extent to which charismatic leadership may indeed be especially beneficial to organizations facing such environmental conditions. In sum:

H3: CEO charismatic leadership will be highly related to organizational performance when the organization's environment is perceived as uncertain and volatile; conversely, CEO charismatic leadership will be minimally related to organizational performance when the environment is perceived as more certain and lacking volatility.

METHOD

Sample Firms and Participants

Senior managers were chosen as respondents. While all organizational members may be influenced to some extent by the leadership enacted by CEOs (cf. Shamir, 1995), senior managers are likely to be particularly good informants concerning that leadership because of their direct contact with CEOs (cf. Shamir, 1995). A potential sample of 210 executives was generated from Fortune 500 firms surveyed in the middle of 1990. Sixty-six of these individuals were chief financial officers (CFOs), 79 held job titles such as comptroller or treasurer, and 65 were senior vice-presidents representing such areas as marketing, human resources, and legal. These individuals belonged to 130 firms.

Procedures

Early in the summer of 1990 a survey was sent to financial managers of Fortune 500 firms. Code numbers were included on surveys so that respondents could be correctly matched with their respective companies for subsequent data analyses. Confidentiality of completed surveys was assured in the cover

letter. In an attempt to have at least two managers represent each firm, surveys were sent to 433 CFOs and 350 other high-ranking financial managers who represented the same firms as the CFOs. A total of 145 executives completed and returned the initial survey forms. An additional survey followed approximately three months after the initial survey. It was targeted toward non-financial managers from the 115 firms that had only one respondent to the initial survey. The second survey provided an opportunity to obtain perceptions from managers in areas other than Finance (e.g., Marketing, Operations, Human Resources, and Legal). Perhaps more importantly, our purpose was to obtain surveys from at least two managers per firm so that a more representative and reliable firm viewpoint would be assessed. Becker and Gerhart (1996) noted that such a strategy is particularly important where subjectivity or judgment is required. Thus, surveys were sent to 260 non-financial managers, and 65 surveys were returned.

In sum, a total of 210 surveys from 131 firms were returned from a targeted sample of 1043 for an overall response rate of approximately 20 percent. This percentage is, in all likelihood, a conservative estimate because non-respondents included many executives who, for a variety of reasons, could not respond. These reasons included wrong addresses, retirements, company policies of non-response to surveys, surveying conflicting with the executives' vacation schedules, and so forth. Overall, the response rate and the extent of data availability should be considered reasonable, given the high level of the managers and the potential sensitivity of the questionnaire items (Finkelstein, 1992).

Measures

Transactional and charismatic leadership were measured using items from the Multifactor Leadership Questionnaire (MLQ) developed by Bass and colleagues (Bass, 1985; Bass & Avolio,

1990). The MLQ is the only instrument in widespread use that attempts to assess both transactional leadership and charisma (Lowe et al., 1996). Each participant was asked to think about the CEO of his/her respective company, and then to rate that individual on each item on a five-point scale with anchors ranging from "not at all" to "frequently, if not always".

The five items used to assess transactional leadership are shown in the Appendix. Items 2, 3, and 5 represent contingent reward behavior, which has consistently been shown to relate to performance behavior and outcomes (Lowe et al., 1996). Items 1 and 4 represent *active* management-by-exception behavior. The relationship between management-by-exception and performance has not been as clearly established in the literature. However, Lowe et al. (1996) noted recently that this aspect of transactional leadership has been refined over time into two subcomponents: one active in nature, and the other passive (e.g., is content to let subordinates continue doing their jobs in the same way as always). Lowe et al. (1996) suggested that the active component of management-by-exception represented by items 1 and 4 may indeed be positively related to performance outcomes, and thus, fit together with contingent reward behavior to form active transactional leadership. One overall measure of transactional leadership was formed with an alpha coefficient of .81.

Charisma items are also shown in the Appendix. Consistent with the definition of charisma stated previously, items 6, 9, 11, and 12 describe leader *behaviors* which help maintain a charismatic relationship (House, 1977; House et al., 1991). Items 7, 8, and 10 represent consequential or attributional aspects of the relationship. The charisma measure displayed an alpha coefficient of .90.

Perceived environmental uncertainty was measured using four items from an instrument developed by Khandwalla (1976, pp. 641-643). This measure was similar to that used by Singh (1986) which he

labeled environmental turbulence. The four items used to measure environmental uncertainty follow from our earlier definition and are listed in the Appendix. Responses were on a five-point scale with anchors ranging from "strongly disagree" to "strongly agree". The alpha coefficient for environmental uncertainty was .63. This coefficient compares in magnitude to those reported for similar perceptual measures of uncertainty (c.f., Pillai, 1995; Singh, 1986). Moreover, an alpha greater than .60 is considered reasonable for moderately broad, organizational or environmentally-focused variables such as environmental uncertainty (Finkelstein, 1992; Powell, 1995; Van de Ven & Ferry, 1980).

We operationalized organizational performance in terms of a financial measure, net profit margin (NPM). NPM data, computed as net income divided by net sales, were obtained for each firm for the years 1989, 1990 (the year of survey administration), 1991, 1992, 1993, and 1994 from the COMPUSTAT tapes. Data were extracted from COMPUSTAT for 90 percent of the firms. *Disclosure* was used when a firm had missing values for at least one of these years. In these cases, the data for all five years were obtained from *Disclosure*. The industry-adjusted measure of NPM was obtained by subtracting the industry (two-digit SIC code) NPM average from a respective firm's own NPM.

The 48 firms represented 15 industry groupings. Examples of industries represented by the sample firms include food and kindred products, chemical and allied products, metals (mills and processing raw metals), machinery and computers, and transportation equipment. There was no evidence of clustering in that the average concentration ratio (defined as number of firms from our sample in a group industry divided by the total number of firms in a group industry) was 5.14 percent. The sample included one coal mining firm, an industry represented by only four total firms in the

COMPUSTAT tapes, i.e., a concentration ratio of 25 percent. If that organization is excluded, the average concentration ratio among sample firms is 3.72 percent.

Industry-adjusted NPM data from 1990 through 1994 were averaged for each firm to form a composite measure. As explained by Youndt, Snell, Dean, and Lepak (1996), averaging a performance measure across time periods helps guard against random fluctuations and anomalies in the data. Thus, a five-year time frame helped to provide a reliable assessment of performance, subsequent to the measurement of leadership and environmental uncertainty. In addition, Lord and Maher (1991) proposed that at least with regard to charisma, performance linkages should be viewed on a long-term basis. That is, the results of change, especially cultural change, may not be felt immediately and indeed, may take some years to develop. Long-term effects should be expected since the charismatic leader emphasizes an optimistic vision of what lies ahead for an organization, rather than simply focusing on the status quo.

Organizational size, measured in terms of total assets for each firm, was entered as a control variable in regression analyses, as was years of tenure as CEO at the time of the survey. Virany, Tushman, and Romanelli (1992) argued that size and CEO tenure should be controlled in research seeking to relate CEO characteristics to firm performance. Meindl and Ehrlich (1987) argued that leadership is more illusionary than real in that people tend to attribute performance to the qualities of leaders. Accordingly, we also controlled for performance in 1989, the year prior to survey administration.

Analyses

The firm was chosen as the unit of analysis for the present study. Despite attempts to obtain at least two managers per firm, many of the 210 respondents were the sole representatives of their firms. For the current analyses, only firms that had at least two respondents were used. The final sample consisted of 48 firms with survey data provided by two or three managers per firm; although a few firms were represented by four managers. For the transactional leadership, charisma, and uncertainty measures, between-firm variances were significant, and Bartlett's tests showed that intra-firm variances were homogeneous. In addition, the average r_{wg} (James, Demaree, & Wolf, 1984) across firms for transactional leadership, charisma, and environmental uncertainty were .92, .85, and .86, respectively. In total, these tests provided support for combining managers' perceptions to produce averaged, aggregated scores for respective firms.

Moderated hierarchical regression analyses were conducted to test the hypotheses. Since interaction terms create severe multicollinearity problems (because of their correlations with main effects), Cronbach's transformation was used whereby such terms are created by centering the variables about their means before multiplying them (Kleinbaum, Kupper, Muller, & Nizam, 1998). Multicollinearity diagnostics indices were thus brought within acceptable limits.

RESULTS and DISCUSSION

Means, standard deviations, and correlations are shown in Table 1. CEOs were generally seen as exhibiting a higher degree of charisma as compared to transactional leadership, a finding in line with the results of Lowe et al. (1996). The correlations revealed only marginal and statistically insignificant relationships between transactional leadership or charisma and environmental uncertainty, despite the fact that they were measured using common methods, and there is some evidence suggesting that they

may covary (c.f., House et al., 1991). Transactional leadership was not significantly correlated with performance, $r = .14$, $p > .05$. The correlation between charisma and performance was marginally significant, $r = .22$, $p < .10$.

Insert Tables 1 and 2 about here

Results of the regression analysis are shown in Table 2. After controlling for organizational size (i.e., total assets), CEO tenure, and 1989 performance, neither transactional leadership nor charisma predict significant variance in performance, although the signs of the Betas are as expected. Thus, no support was found for hypotheses 1, 2a, or 2b. However, in the fifth step, the transactional leadership X uncertainty interaction does add significant variance (i.e., 9 percent). Moreover, in support of hypothesis 3, the charisma X uncertainty interaction contributes an additional 5 percent of significant, unique variance in the sixth step.

Table 2 reveals some additional interesting findings. As shown in the lower portion of the table, when the ordering of variables is altered such that the charisma X uncertainty interaction is added in the fifth step, it accounts for 13 percent of the variance. However, in the sixth step, the transactional leadership X uncertainty interaction adds insignificant variance beyond that contributed by the charisma X uncertainty interaction. Further, when both the charisma X uncertainty and transactional leadership X uncertainty terms are entered together in the equation, only the coefficient of the charisma X uncertainty term is significant. These results suggest that charisma, in its interaction with uncertainty, is the key variable in the prediction of performance.

Following procedures performed in recent research (e.g., Podsakoff et al., 1996), Figure 1 displays a plot that illustrates the significant charisma X uncertainty interaction. The figure was constructed by plotting charisma scores 1 *SD* below the mean (low charisma) and 1 *SD* above the mean (high charisma) for low perceived environmental uncertainty (-1.00 *SD*) and high perceived environmental uncertainty (+1.00 *SD*). Figure 1 illustrates clearly the nature of the charisma X uncertainty interactions. In line with hypothesis 3, a strong relationship is evident between charisma and NPM under conditions of high perceived uncertainty. The effects of charismatic leadership under conditions of low perceived uncertainty are also of interest. As shown in Figure 1, the slope of the relationship between charisma and firm profitability is negative in form. This suggests that charismatic leadership may actually be somewhat dysfunctional under such conditions. Perhaps charisma generates unnecessary change or new directions when uncertainty is perceived as low.

Insert Figure 1 about here

Implications for Theory

The present findings suggest that the upper echelons theory (Hambrick & Mason, 1984) should be extended beyond simple demographic characteristics to encompass such personal qualities as charismatic leadership. The connection between top managers and firm outcomes may depend to a large extent on the managers' charismatic leadership, but only under conditions of perceived environmental uncertainty. Thus, our findings are also consistent with recent theories of charismatic

leadership which have suggested that such leadership will only have effects under conditions of environmental uncertainty (Shamir et al., 1993; Trice & Beyer, 1986).

It may be useful to more specifically compare the present results to the numerous studies of transactional and charismatic leadership at the individual or small group levels of analysis reviewed earlier. Two key issues are worth noting. First, in our study, leadership demonstrated no significant main effects on performance. We should note that the correlation that we obtained between charisma and financial performance, $r = .22$ ($p < .10$), is somewhat lower in magnitude than the .29 mean correlation between charisma and hard measures of performance extracted from the data of Lowe et al. (1996), as reported by Lowe (personal communication, January 2, 2000). However, none of the studies meta-analyzed by Lowe et al. (1996) used hard measures of actual financial performance. The present research thus adds to the literature by incorporating a hard measure of financial performance.

Second, the present findings are also relevant to previous research showing how the effects of transactional leadership may be subsumed by charisma. Specifically, Waldman et al. (1990) showed how charisma would add unique variance to the prediction of performance beyond the effects of transactional leadership. Conversely, transactional leadership did not add unique variance to the prediction of performance beyond that of charisma. The present findings confirm their results, but only if the moderating effect of perceived environmental uncertainty is taken into account. It is possible that our findings represent a levels of analysis effect in that at higher levels, environmental uncertainty must be taken into account. However, as an alternative explanation, we may be witnessing a methodological artifact since our dependent variable was a hard, financial measure. In contrast, Waldman et al. (1990) examined leadership effectiveness as rated by supervisors of the focal leaders. Future research is

necessary to more completely examine the extent to which charisma subsumes the effects of transactional leadership at different levels of analyses.

Limitations and Conclusions

Both the CEO charisma and environmental uncertainty measures exhibited restriction of range in that their standard deviations were somewhat low, and the mean score for charisma was toward the high end of the scale. These distributions represent conservative biases with respect to our hypotheses, as does the relatively low reliability attained for environmental uncertainty. Moreover, controlling for prior performance accounted for a substantial portion of the variance in our dependent measure of performance. Despite these issues, we were able to account for significant variances in a financial measure of organizational performance, especially with regard to the interaction of charisma and environmental uncertainty. The strength of our findings may be due partly to our use of a continuous measure of performance, i.e., net profit margin. Podsakoff, MacKenzie, Ahearne, & Bommer (1995) argued that one reason that moderators of leader behavior have not often emerged in the literature may be the predominant use of Likert rating scales to measure more finely distributed dependent variables such as performance.

We should also note that 16 of the 48 CEOs were not in place throughout the entire performance period, i.e., 1990-1994. However, the extent to which such CEO turnover should affect the interpretation of our results is minimal for four reasons. First, no turnover occurred in year 1, and only 4 of the CEOs left their firms by the end of year 2. Second, as mentioned earlier, the charismatic leadership that can be observed at a point in time should set in motion performance effects for some time period in the future, regardless as to whether the leader stays in the CEO position (Lord & Maher,

1991). Third, if in fact CEO turnover resulted in less charismatic leadership (and the new CEOs were able to have immediate, negative performance impact), then the inclusion of these firms would constitute a conservative error in that we still find strong effects associated with charisma despite the turnover. Fourth, as a check on the robustness of our findings, analyses were redone using only those firms whose CEOs who were in place throughout the entire performance period. Results of these analyses showed no substantial differences regarding tests of our theoretical predictions, as compared to the analyses reported above using the larger sample of 48 firms.

While the present study cannot demonstrate conclusively that charismatic CEOs in environments that are perceived to be uncertain have positive effects on firm performance, the inclusion of firms from a number of industries strengthens the case for external validity. Nevertheless, we recognize that our sample of firms is relatively small and that the leadership and environmental uncertainty data were collected approximately 10 years ago. Accordingly, we recommend that our findings be replicated across a larger database of firms in future research. The present research, viewed collectively with prior studies, indicates that the charismatic leadership paradigm is rather broadly generalizable. Further, this study contributes by providing firm-level data and by specifying the boundary conditions within which charismatic leadership theory holds, thus drawing question to the notion of a one-best-way approach.

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APPENDIX

Survey Measures

For both transactional leadership and charisma respondents were instructed as follows: “Think about the chief executive officer of your company. To what extent does each of the following statements characterize this individual.” Note that transactional leadership and charisma items were interspersed, i.e., provided in mixed order.

Transactional Leadership

- (1) takes actions if mistakes are made
- (2) points out what people will receive if they do what needs to be done
- (3) reinforces the link between achieving goals and obtaining rewards
- (4) focuses attention on irregularities, exceptions, or deviations from what is expected
- (5) talks about special commendations and/or promotions for good work

Charisma

- (6) shows determination when accomplishing goals
- (7) I have complete confidence in him/her
- (8) makes people feel good to be around him/her
- (9) communicates high performance expectations
- (10) generates respect
- (11) transmits a sense of mission
- (12) provides a vision of what lies ahead

For perceived environmental uncertainty respondents were instructed as follows: “How would you characterize the external environment within which your corporation functions? In rating your environment, where relevant, please consider not only the economic but also the social, political, and technological aspects of the environment.”

Perceived Environmental Uncertainty

- (13) very dynamic, changing rapidly in technical, economic, and cultural dimensions
- (14) very risky, one false step can mean the firm's undoing
- (15) very rapidly expanding through the expansion of old markets and the emergence of new ones
- (16) very stressful, exacting, hostile, hard to keep afloat

TABLE 1
Descriptive Statistics and Correlations (N=48)

<u>Variables</u>	<u>M</u>	<u>SD</u>	<u>Corr. NPM</u> <u>1989</u>	<u>TA</u>	<u>EU</u>	<u>Ten</u>	<u>TR</u>	<u>CH</u>	<u>Corr. NPM</u> <u>Composite</u> <u>(1990-94)</u>
Corr. NPM ^a 1989	.02	.05	--						
Total Assets (TA)	6.61 ^b	9.86	.15	--					
Environmental Uncertainty (EU)	3.11	.53	.11	.00	--				
CEO Tenure (Ten)	6.18	5.30	.05	.09	.00	--			
Transactional Leadership (TR)	3.40	.69	.15	.22 ⁺	.15	-.21 ⁺	--		
Charisma (CH)	4.15	.52	.28 [*]	.26 [*]	.12	.10	.49 ^{**}	--	
Corr. NPM Composite(1990-94)	.02	.05	.64 ^{**}	.25 [*]	-.01	.30 [*]	.14	.22 ⁺	--

^aNPM refers to Net Profit Margin. It is computed as net income divided by net sales, and is corrected by subtracting industry averages from NPM for respective firms.

^bTotal Assets is in billions of dollars.

⁺ p < .10

^{*} p < .05

^{**} p < .01

TABLE 2
Hierarchical Regression Analyses Predicting Net Profit Margin Composite (1990-94) Corrected for Industry Averages (N=48)

Variables	Step 1 ^a	Step 2	Step 3	Step 4	Step 5	Step 6
Primary Ordering:						
Total Assets	.17	.13	.13	.13	.11	.05
CEO Tenure	.27*	.32*	.34*	.34*	.36**	.42**
Corr. NPM 1989	.65**	.64**	.66**	.66**	.55**	.44**
Transactional Leadership (TR)		.18	.23	.23	.22	.26+
Charisma (CH)			-.08	-.06	.00	.11
Environmental Uncertainty (EU)				-.09	-.13	-.28*
TR X EU					.33*	.13
CH X EU						.39*
ΔR^2	.56	.03	.00	.01	.09	.05
Total R ²	.56	.59	.59	.60	.69	.74
ΔF	13.84**	2.22	.31	.61	8.71**	5.07*
Alternative Ordering:						
Total Assets	.17	.16	.13	.13	.04	.05
CEO Tenure	.27*	.27*	.34*	.34*	.43**	.42**
Corr NPM 1989	.65**	.65**	.66**	.66**	.43**	.44**
CH		.04	-.08	-.06	.12	.11
TR			.23	.23	.28*	.26+
EU				-.09	-.32*	-.28*
CH X EU					.50**	.39*
TR X EU						.13
ΔR^2	.56	.00	.03	.01	.13	.01
Total R ²	.56	.56	.59	.60	.73	.74
ΔF	13.84**	.10	2.37	.61	14.19**	.87

^a Standardized regression coefficients are shown.

+ p < .10; * p < .05; ** p < .01

FIGURE 1

The Moderating Effects of Perceived Environmental Uncertainty on the Relationship between CEO Charisma and Net Profit Margin Corrected for Industry Averages

