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Top Management Team Prestige and Organizational Legitimacy: An Examination of Investor Perceptions*

S. Trevis Certo
Associate Professor of Management and Mays Research Fellow
Texas A&M University

Frank Hodge
Associate Professor of Accounting and Lane A. Daley Faculty Fellow
The University of Washington

The examination of top management teams represents one of the more significant areas of research in strategic management (Buchholtz *et al.*, 2005; Finkelstein and Hambrick, 1996; Hambrick and Mason, 1984). Despite the prominence of this stream of research, a construct that has received relatively little theoretical or empirical attention in the TMT context is prestige. According to D'Aveni, prestige represents the "property of having status" (1990: 121). While recent work has investigated prestige in the context of boards of directors (e.g., Certo, 2003; Certo *et al.*, 2001), studies of prestige have been notably absent from the TMT literature over the past decade (for a notable exception, see Higgins and Gulati, 2003).

The basic premise of D'Aveni's study is that "managerial prestige contributes to the legitimacy of firms" (1990: 121). Organizational legitimacy, which Kostova and Zaheer (1999) define as the acceptance of an organization by its environment, is an important construct in both institutional and resource dependence theories. Several authors suggest that acceptance by key environmental members is as an important organizational resource (Pfeffer and Salancik, 1978; Suchman, 1995).

One of the most significant shortcomings of research examining TMT prestige and organizational legitimacy is the inattention to the individual investors responsible for constructing perceptions of these constructs (e.g., Zuckerman, 1999);

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we know little about how investors gauge and respond to TMT prestige and organizational legitimacy. To address this shortcoming, we use the resource-based view of the firm (Barney, 1991) to examine two broad research questions. First, do indicators of a firm's TMT prestige and organizational legitimacy serve as intangible resources that investors take into account when evaluating the firm, its top management, its future financial performance (i.e., future earnings potential), and its future financial performance risk (i.e., the predictability of future financial performance)?[1] Second, do investor perceptions of TMT prestige directly influence their perceptions of financial performance and financial performance risk, or do investor perceptions of organizational legitimacy mediate these relationships?

To examine the link between TMT prestige and organizational legitimacy, it is important to recognize and overcome the methodological difficulties associated with each construct. Sociological literature, for example, suggests that individuals subjectively attribute prestige to another's objective characteristics (for a review of prestige studies in sociology, see Wegener (1992)). The same arguments are true for organizational legitimacy. As noted by Ashforth and Gibbs, "Legitimacy is conferred upon or attributed to the organization by its constituents . . . like beauty it resides in the eye of the beholder" (1990: 177). As such, we employ a survey to directly measure investor perceptions of TMT prestige and organizational legitimacy and examine how these perceptions influence assessments of future financial performance and future financial performance risk. We believe that our work provides insights that may inform both the investment community as well as firms attempting to appeal to the investment community.

The remainder of our paper proceeds as follows. First, we provide our theoretical framework and derive specific hypotheses regarding TMT prestige and organizational legitimacy. Second, we describe our research methodology. Finally, we present and discuss the implications of our results.

CONCEPTUAL BACKGROUND AND HYPOTHESES

The resource-based view of the firm (Barney, 1991) represents one of the more well-established theoretical frameworks in strategic management. Extensions of the resource-based perspective have distinguished between tangible and intangible resources (Hall, 1993). Recent empirical work, in particular, has highlighted the importance of a number of intangible resources. For example, Roberts and Dowling (2002) found a positive relationship between a firm's reputation (derived from data in *Fortune Magazine's* America's Most Admired Corporations report) and its ability to sustain superior profits among a sample of *Fortune 1000* firms. Lee and Miller (1999) studied a sample of Korean firms and found that an organization's commitment to its employees

[1] Strategic management researchers generally use the term "risk" to mean "*unpredictability or downside unpredictability of business outcome variables* such as revenues, costs, profits, market share, and so forth" (Bromiley *et al.*, 2001: 261, emphasis in the original). Consistent with this definition, we define "future financial performance risk" as the predictability of future financial performance.

influenced its return on assets. These studies demonstrate across a variety of contexts that intangible resources influence both firm processes and outcomes.

Based in part on the theoretical and empirical work examining the resource-based view of the firm, we examine how investor perceptions of a firm's intangible resources influence their perceptions of the firm's future financial performance and future financial performance risk. When making investment-related decisions, investors must evaluate a firm's current tangible and intangible resources for the purpose of predicting how these resources will help the firm generate future income. Typically, such evaluations combine objective analysis (e.g., what assets does a firm possess) with subjective judgments (e.g., how much future income will these assets generate).

The intangible resources that we examine are TMT prestige and organizational legitimacy. Research suggests that investors view intangible resources as being important to a firm's success. For example, Hall (1993) suggests that any premium reflected in a company's stock market capitalization as compared to the tangible resources reported in its balance sheet is due, in part, to the company's intangible resources. Hitt *et al.* highlight the importance of intangible resources:

> Because they are socially complex and more difficult to understand and imitate, intangible resources are more likely to lead to a competitive advantage than are tangible resources (2001: 483).

In the following sections, we argue that two intangible resources, TMT prestige and organizational legitimacy, serve as signals that influence investor perceptions of a firm's future financial performance (e.g., Spence, 1973). We hypothesize that investors will associate higher future financial performance and lower future financial performance risk with firms they perceive to have more prestigious TMTs and higher levels of organizational legitimacy.

TMT Prestige as a Resource

Hambrick and Mason (1984) contend that TMTs serve as reflections of their organizations; firms with high quality TMTs should enjoy higher performance than firms with lower quality TMTs. Unfortunately, however, external stakeholders such as investors are not able to directly observe a TMT's "true" quality. D'Aveni (1990) suggests that one way external stakeholders assess a TMT's quality is through assessing the TMT's prestige. To proxy for prestige, D'Aveni aggregates a number of executive-level variables—such as education and external board seats—and affiliations with prestigious organizations—such as educational institutions, law firms, and government agencies.

TMT Prestige and Future Financial Performance. We suggest that investors consider the prestige of a firm's TMT when assessing an organization's future financial performance. From a rational perspective, TMT prestige may improve future performance by positively influencing organizational transactions (D'Aveni, 1990). For example, organizations with more prestigious TMTs may be better able to form relationships with new exchange partners, because these partners will likely enjoy higher status from such affiliations (Higgins and Gulati, 2003; Stuart *et al.*, 1999). As Podolny points out, "ties to higher-status actors enhance the prestige with which one is viewed" (1993: 833). In addition to helping organizations form relationships, prestige may allow TMTs to negotiate more favorable terms with its exchange partners. External stakeholders may accept better contracting terms from organizations with prestigious TMTs because the external parties may receive prestige benefits from such interactions (Podolny, 1993).

Complementing the perspective that perceptions of TMT prestige improve future performance by facilitating organizational transactions, prestigious TMTs may also improve investor perceptions of future performance through a largely symbolic role (D'Aveni, 1990). According to status characteristics theory (Berger *et al.*, 2002), individuals ascribe different values, skills, and abilities to different status characteristics (education, work experience, age, etc.). As such, individuals attribute different abilities to individuals with alternative status profiles.

As applied to the TMT context, the status characteristics perhaps most salient are the education, work experience, and social networks of the TMT. As summarized by D'Aveni, these background characteristics are not perfectly correlated with managerial abilities, but "the general assumption is that going to the proper schools, having impressive prior work experience and associating with the right people indicate higher status, aggregated prestige and skill" (1990: 124). This suggests that when evaluating a firm investors may associate a prestigious TMT with higher levels of future financial performance because they perceive prestigious executives to be somehow "better" than less prestigious executives.

TMT Prestige and Future Financial Performance Risk. Similar to our arguments regarding future financial performance, we propose that investors will consider the prestige of a firm's TMT when evaluating a firm's future financial performance risk. Even when a firm faces financial difficulties, we suggest that important external stakeholders will derive benefits from interacting with these prestigious executives and will be reluctant to dissolve such relationships (Podolny, 1993). As a result, TMT prestige enables firms to maintain long-term working relationships with customers and suppliers, which decreases variation in a firm's future performance. This reasoning is consistent with D'Aveni's (1990) finding that failing firms added prestigious top executives in an effort to circumvent bankruptcy.

In sum, we suggest that TMT prestige represents an important intangible resource that investors evaluate when assessing a firm's future financial performance and future financial performance risk. We therefore expect that investor perceptions of TMT prestige will be positively related to perceptions of financial performance and negatively related to perceptions of financial performance risk.

H1: TMT prestige will be positively associated with investor perceptions of the firm's future financial performance.

H2: TMT prestige will be negatively associated with investor perceptions of the firm's future financial performance risk.

Organizational Legitimacy as a Resource

Organizational legitimacy has received a great deal of attention in organization theory research (e.g., for excellent reviews see Scott (2003)). One of the most frequently cited definitions of organizational legitimacy originates from Suchman, who suggests that "Legitimacy is a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (1995: 574). In other words, firms gain organizational legitimacy when they successfully conform to institutional environments, which take the form of political and legal typologies, rules guiding market behavior, and general belief systems (Scott, 2003).

Extant research indicates that three elements of institutional environments apply pressures to organizations: regulative, normative, and cognitive (Aldrich and Fiol, 1994; Scott, 2003; Zimmerman and Zeitz, 2002). Simply stated, conformity with pressures emanating from regulatory bodies, professional norms, and cognitive beliefs deems organizations "desirable, proper, or appropriate" (Suchman, 1995: 574). When an organization is proper and appropriate, it is more likely to be accepted by and receive support from its environment (Kostova and Zaheer, 1999).

We propose that a firm's perceived level of organizational legitimacy will positively influence investor perceptions of a firm's future financial performance. Organization theorists highlight the importance of organizational legitimacy for firm growth and survival (e.g., Meyer and Rowan, 1977). Similar to the aforementioned arguments regarding TMT prestige, Deephouse (1996) suggests that firms with higher levels of legitimacy are able to obtain resources of higher quality and at more favorable terms as compared to firms with lower levels of legitimacy.

A firm's perceived level of organizational legitimacy may also influence the risk that investors associate with a firm's future financial performance. More specifically, we argue that investors will associate less risk with firms they perceive to have higher levels of organizational legitimacy. As we developed previously, firms with higher levels of organizational legitimacy are more accepted by their environments compared to firms with lower levels of organizational legitimacy (Kostova and Zaheer, 1999). Due in part to this environmental acceptance some scholars argue that legitimate firms are less likely to fail (e.g., Singh *et al.*, 1986), suggesting that investors will associate less financial performance risk with legitimate organizations.

H3: Organizational legitimacy will be positively associated with investor perceptions of the firm's future financial performance.

H4: Organizational legitimacy will be negatively associated with investor perceptions of the firm's future financial performance risk.

Organizational Legitimacy as a Mediator

In the previous discussion, we argued that both perceptions of TMT prestige and organizational legitimacy represent important intangible resources that investors evaluate when analyzing firms. While we proposed that both perceptions of TMT prestige and organizational legitimacy directly influence investor perceptions of financial performance and the predictability of financial performance, some authors suggest that the relationship between these variables may be more complex. In particular, D'Aveni (1990) suggests that TMT prestige directly influences organizational legitimacy. Higgins and Gulati reaffirm this relationship between legitimacy and TMT prestige by suggesting that investors will be more willing to invest in firms "with higher legitimacy, as indicated by the type and amount of upper-echelon experience" (2003: 245). When combined with our previous hypotheses, this reasoning suggests that perceptions of organizational legitimacy mediate the relationship between perceptions of TMT prestige and perceptions of future financial performance and future financial performance risk.

Consistent with D'Aveni (1990), we previously argued that perceptions of TMT prestige influence investor perceptions of future financial performance via two broad mechanisms: by facilitating organizational transactions and by serving a symbolic role. From an institutional perspective, the organizational transactions that TMT prestige facilitates reduce normative pressures, expand organizational networks, and help organizations receive important endorsements (D'Aveni and Kesner, 1993; Zimmerman and Zeitz, 2002). In addition, the symbolic role of TMT prestige helps reduce pressures from cognitive rules (Zimmerman and Zeitz, 2002), which involve taken-for-granted assumptions that structure everyday routines (Suchman, 1995). Zimmerman and Zeitz argue that "the presence of a top management team with degrees from a top business school indicates that the firm is aware of the most effective management techniques" (2002: 420). Of course, similar arguments apply to prestigious affiliations with past employers and directorate networks.

In sum, we propose that perceptions of organizational legitimacy mediate the relationship between investor perceptions of TMT prestige and investor perceptions of a firm's future financial performance and future financial performance risk. More formally, we hypothesize that:

H5: Investor perceptions of organizational legitimacy will mediate the relationship between their perceptions of TMT prestige and the firm's future financial performance.

H6: Investor perceptions of organizational legitimacy will mediate the relationship between their perceptions of TMT prestige and the firm's future financial performance risk.

METHODOLOGY

We use survey data to test for our hypothesized relationships. We collected our survey data by sending individual investors a case that contained a brief description of a fictional firm and its TMT, as well as the firm's financial statements. In the following sections we discuss our investor sample and details of the case.

Investor Sample

Participants were alumni of a major business school in the United States who earned an undergraduate or graduate business degree between 1965 and 1990. Prior research has used business school alumni as proxies for individual investors and has shown that these individuals typically have experience reading financial statements and analyzing financial information (e.g., Hodge *et al.*, 2006; Frederickson *et al.*, 2006). We sent case materials to a random sample of 1,051 addresses. Forty-nine mailings were returned as undeliverable. From the remaining 1,002 mailings, we received 110 responses for a response rate of approximately 11 percent.

The median age of participants was between 40-49 years. Sixty-seven percent of participants were male and 27 percent of participants held graduate degrees.[2] On average, participants had been analyzing the financial performance of firms for nine years, investing in mutual funds for 11 years, and investing in individual debt or equity securities for seven years.[3]

Case Materials

Each participant received a seven-page booklet that contained a case about a hypothetical company (Bransford Sensors). Prior to distributing the booklets, we pilot tested the experimental materials and questionnaires using 93 MBA students. We used feedback from the pilot test to clarify the materials and questionnaires. Accompanying the case was a letter of introduction describing the general purpose of the case and a consent form. The opening page of the case provided general information about Bransford and its business as well as biographical sketches of Bransford's top three executives (chief executive officer, chief operating officer, and chief financial officer). We formatted the biographical sketches to resemble those found in most *Fortune 500* firms' proxy filings with the SEC. The next two pages contained Bransford's statement of income and balance sheet for three years.[4] After reading the case materials, participants answered our questions regarding the firm's future operating performance as well as questions about Bransford's TMT prestige and its organizational legitimacy. Lastly, participants provided demographic information. After completing the survey, participants returned all materials in a postage-paid return envelope.[5]

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[2] Given our sampling criteria, all participants have completed their undergraduate degrees. Our age and gender statistics are consistent with statistics reported in a recent Harris Interactive poll of individual investors: Harris reports that the current age of an average American shareholder is just under 50 years old and that approximately 60 percent of investors are male (Ritt, 2004).

[3] Due to our use of a proprietary alumni database, we do not have access to demographic data that would allow us to examine in detail whether our final sample suffers from non-response bias. If we assume that graduates in our sample were 22 years old when they graduated, however, we would expect 23 percent of our responses to be between 30-39 years old and the remainder (77%) to be between the ages of 40-59. Twenty-five percent of our sample reported being 30-39 years old and 73 percent reported being 40-59 years old (the remaining 2 percent of our sample indicated they were between 60-69 years old). A chi-squared test indicates that our sample distribution is not significantly different from the expected distribution, providing some evidence that our sample does not suffer from non-response bias.

[4] We designed the financial statements in an effort to convey moderate levels of firm financial performance. Analysis of Bransford's financial statements in the most recent of the three years would reveal the following ratios: return-on-assets (ROA) of .02, return-on-equity (ROE) of .03, and return-on-sales (ROS) of .02.

[5] On an exploratory basis, we altered our description of Bransford's "TMT prestige" and its "organizational legitimacy" to evaluate whether describing management as having low versus high prestige or low versus high organizational legitimacy would affect investors' survey responses. Varying our descriptions did not influence investors' perceptions of future financial performance or future financial performance risk (all p-values $> .51$). In addition, including low/high dummy variables for TMT prestige and organizational legitimacy in our subsequent regressions produces inferentially identical results. For ease of exposition, we do not discuss our exploratory analysis in subsequent discussions.

Dependent Variables

As discussed previously, deriving an equity value for a firm often begins with investors analyzing a firm's performance over the last several quarters or years for the purpose of predicting its future earnings potential (Palepu *et al.*, 2000). We measured *Financial Performance* by asking participants to respond to two statements related to Bransford's future earnings potential using seven-point scales with endpoints labeled "very weak" and "very strong" (see items 10-11 in Table 1, under our results).

As described in footnote 1, strategic management researchers generally uses the term "risk" to mean "*unpredictability or down-side unpredictability of business outcome variables* . . ." (Bromiley *et al.*, 2001: 261, emphasis in the original). Consistent with this definition, we measured *Financial Performance Risk* by asking participants to respond to three statements about the predictability of Bransford's future earnings potential using seven-point scales with endpoints labeled "strongly disagree" and "strongly agree" (see items 12-14 in Table 1, under our results).

Questionnaire

We developed scales to gauge investor perceptions of TMT prestige and organizational legitimacy. After participants read the case information describing Bransford and its TMT they completed the scales. We then used regression analysis to better understand the relationships between these scales and investor perceptions of financial performance and financial performance risk, as well as to test whether perceptions of organizational legitimacy mediate the relationship between perceptions of TMT prestige and our dependent variables. In the following sections we describe our TMT prestige and organizational legitimacy scales as well as a number of control variables.

TMT Prestige. Prestige is subjectively determined by considering an individual's human and social capital (Certo, 2003). Research in sociology suggests that individuals subjectively attribute prestige to another's objective characteristics (for a review of prestige studies in sociology, see Wegener (1992)). We attempted to capture participants' subjective perceptions of Bransford's TMT's prestige by asking them to respond to five statements related to prestige using seven-point scales with endpoints labeled "strongly disagree" and "strongly agree" (see items 1-5 in Table 1).

Organizational Legitimacy. Although research has used a number of objective indicators as proxies for organizational legitimacy, to our knowledge extant research has not attempted to directly capture perceptions of organizational legitimacy. We suspect that such studies do not exist because of the difficulty associated with measuring such a nebulous construct. We based our organizational legitimacy items on Kostova and Zaheer's (1999) assertion that legitimate organizations are accepted by their environments. We attempted to capture participants' perceptions of whether Bransford was accepted by various environmental constituents by asking them to respond to four statements related to organizational legitimacy using seven-point scales with endpoints labeled "strongly disagree" and "strongly agree" (see items 6-9 in Table 1).

Control Variables. It is appropriate to use control variables that previous research has established as having a theoretical relationship with our variables of interest. The relationships that we are examining, however, have to our knowledge never before been studied empirically. Consequently, there does not exist an established stream of research from which to garner control variables. We discuss the control variables that we include in our regression below.

Consistent with theoretical work examining prestige (Certo, 2003), we attempted to control for the prestige of each investor participating in our study. First, we included *Advanced Degree*, which is an indicator variable denoting whether each participant holds a graduate degree. We also included *Personal Prestige*, which reflects an individual's agreement with the statement "I consider my business and educational background to be prestigious" (1 = Strongly Disagree to 7 = Strongly Agree).

RESULTS

In the following sections we describe our results. We first describe the results of the factor analysis used to determine the appropriateness of our scales. We then describe our regression results.

Factor Analysis

We relied on factor analysis and confirmatory factor analysis to understand how well the items in our questionnaire represented our constructs of TMT prestige, organizational legitimacy, financial performance and financial performance risk. Specifically, we examined how well our items loaded on our hypothesized constructs, the internal consistency of the items that determined our constructs, and the extent to which our items discriminated between our hypothesized constructs and the remaining constructs (Finkelstein, 1992). In our factor analysis, we used oblique rotation since the constructs are likely interrelated. As shown in Table 1, the factor analysis retained four factors. We retained those items with factor loadings exceeding .70 (Finkelstein, 1992). We omitted all items that either cross-loaded on a second factor with a value of .30 or greater or if the difference between the two factors' loadings was less than .20 (Chattopadhyay, 1999).

Given these criteria, we created an average of the resulting items to create four composite constructs. We assessed the internal consistency of the constructs by calculating Cronbach alphas. As shown in Table 1, our alpha scores range from .81 to .90. To assess discriminant validity, we examined the factor loadings. As illustrated in Table 1, the items retained in our constructs loaded in a manner consistent with our hypothesized constructs. We also used confirmatory factor analysis to ensure discriminant validity. Consistent with Fornell and Larcker (1981), we confirmed that the average shared variance estimates for each pair of constructs exceeded the square of their inter-construct correlations. In sum, our items loaded on our four hypothesized constructs, our constructs were internally consistent, and the items demonstrated discriminant validity.

Survey Results

In this section we test whether participants' general beliefs about TMT prestige and organizational legiti-

Table 1
Factor Analysis Results

Items	TMT Prestige	Organizational Legitimacy	Financial Performance	Financial Performance Risk
1. The top executives enjoy positive reputations.	.86			
2. The top executives are smart.	.81			
3. The top executives are successful individuals.	.87			
4. The top executives are prestigious.	.87			
5. The top executives are prominent members of society.	.76			
6. Customers highly value the products produced by Bransford Sensors.		-.83		
7. Suppliers want to do business with Bransford Sensors.		-.88		
8. Employees are proud to tell others they work at Bransford Sensors.		-.81		
9. Competitors view Bransford Sensors with respect.		-.90		
10. I believe Bransford's earnings potential over the next *three* years will be:			.90	
11. I believe Bransford's earnings potential over the next *ten* years will be:			.87	
12. Bransford's ability to generate positive earnings over the next *three* years is unpredictable.				.82
13. Bransford's ability to generate positive earnings over the next *ten* years is unpredictable.				.84
14. Bransford's ability to generate stock returns exceeding the average return of the overall market over the next *ten* years is unpredictable.				.85
Cronbach's Alpha	.90	.89	.84	.81

* For items regarding TMT Prestige, Organizational Legitimacy, and Financial Performance Risk constructs, participants responded using seven-point scales with endpoints labeled "Strongly Disagree" and "Strongly Agree." For items regarding the Financial Performance construct, participants responded using seven-point scales with endpoints labeled "Very Weak" and "Very Strong."

macy are associated with their assessments of future financial performance and future financial performance risk. The means, standard deviations, and correlations corresponding to our hypothesized and control variables are displayed in Table 2.

We used multiple regression analysis to test our hypotheses. The regression results corresponding to the tests of Hypotheses 1 through 6 are displayed in Table 3; we report standardized regression coefficients to clarify the interpretation of our results. As demonstrated in Models 1 and 4, the control variables explain little of the variance in the dependent

Table 2
Means, Standard Deviations, and Correlations

	Mean	SD	1	2	3	4	5
1. TMT Prestige	4.69	1.16					
2. Organizational Legitimacy	4.25	.99	.43**				
3. Financial Performance	3.82	1.18	.30**	.29**			
4. Financial Performance Risk	4.37	1.45	-.23*	-.10	-.11		
5. Personal Prestige	5.33	1.23	-.02	.14	.03	-.09	
6. Advanced Degree	.27	.45	-.08	-.08	.00	.00	.29**

*p < .05, **p < .01.

variables. As displayed in Model 3, investor perceptions of both TMT prestige ($p < .05$) and organizational legitimacy ($p < .10$) are positively associated with their perceptions of future financial performance. As shown in Model 6, investor perceptions of TMT prestige are negatively ($p < .05$) associated with their perceptions of financial performance risk. Investor perceptions of organizational legitimacy, however, are insignificantly related to their perceptions of future financial performance risk. Thus, we find support for Hypotheses 1, 2, and 3, but not for Hypothesis 4.

We tested Hypotheses 5 and 6, which propose that investor perceptions of organizational legitimacy mediate the relationships between investor perceptions of TMT prestige and our dependent variables, following the method proposed by Baron and Kenny (1986). Again, our mediation tests are consistent with theory suggesting that organizational legitimacy mediates the relationships between TMT prestige and firm outcomes (e.g., D'Aveni, 1990).

Table 3
Multiple Regression Results

	Financial Performance			Financial Performance Risk			Organizational Legitimacy
Model	1	2	3	4	5	6	7
Advanced Degree	-.03 (.27)	-.01 (.26)	.03 (.26)	.02 (.32)	.04 (.32)	.04 (.32)	-.08 (.20)
Personal Prestige	.02 (.10)	.03 (.09)	-.01 (.09)	-.12 (.12)	-.12 (.12)	-.12 (.12)	.16† (.07)
TMT Prestige		.30** (.10)	.21* (.10)		-.23* (.12)	-.23* (.13)	.43*** (.07)
Organizational Legitimacy			.20† (.13)			.02 (.16)	
F	.05	3.29*	3.47**	.70	2.42†	1.80	9.25**
R^2	.00	.09	.12	.01	.07	.07	.21
ΔR^2		.09	.03		.06	.00	
N	108	105	105	110	106	106	106

†p < .10, *p < .05, **p < .01, ***p < .001.

According to Baron and Kenny's (1986) methodology, we must demonstrate three relationships to support mediation. First, there must exist a significant relationship between the mediator and the independent variable. As shown in Model 7, there exists a positive and significant relationship between investor perceptions of TMT prestige and investor perceptions of organizational legitimacy ($p < .01$). Second, there must exist a significant relationship between the independent variable and the dependent variable. As shown in Models 2 and 5, there exist significant relationships between investor perceptions of TMT prestige and both financial performance ($p < .01$) and financial performance risk ($p < .05$). Finally, the mediating variable must significantly influence the dependent variable when the dependent variable is regressed on both the independent variable and the proposed mediator. As shown in Model 3, investor perceptions of organizational legitimacy are significantly ($p < .10$) related to perceptions of firm financial performance. It is also important to note that the standardized coefficient corresponding to TMT prestige remains significant but falls from .39 (Model 2) to .30 (Model 3) when organizational legitimacy enters the regression equation; this suggests that organizational legitimacy partially mediates the relationship between TMT prestige and financial performance. In contrast, as shown in Model 5, investor perceptions of organizational legitimacy are not significantly related to perceptions of financial performance risk. In sum, our regression results support Hypotheses 1, 2, 3, and 5, but not Hypotheses 4 and 6. We discuss these results in the next section.

DISCUSSION

The influence of TMT demographics on firm outcomes remains an important area of research (e.g., Lyon and Ferrier, 2002; Williams *et al.*, 2005). In this study we examined whether TMT prestige and organizational legitimacy represent intangible resources that investors consider when analyzing a firm. We measured these constructs by asking investors to evaluate a fictional organization and answer questions about the organization's TMT prestige, organizational legitimacy, future financial performance, and future financial performance risk. Our survey approach allowed us to address important research questions that are difficult to address relying solely on archival data.

Results largely support our hypotheses. We found direct relationships between investor perceptions of a firm's TMT prestige and its future financial performance and its future financial performance risk. We also found that investor perceptions of organizational legitimacy were directly related to perceptions of future financial performance but were not related to perceptions of future financial performance risk. Taken together, we found support for our hypotheses that TMT prestige and organizational legitimacy represent intangible resources that investors take into account when assessing firm performance.

Using the methodology proposed by Baron and Kenny (1986), we also found evidence that organizational legitimacy mediates, but only partially, the relationship between TMT prestige and future financial performance. This finding contrasts with D'Aveni's (1990) implicit assertion that organizational legitimacy fully mediates the relationships between TMT prestige and firm outcomes.

We found little evidence of a relationship between organizational legitimacy and future financial performance risk. Apparently, investors did not believe that the acceptance of a firm by its environment reduced the risk associated with its financial performance. We can speculate that investors associated little risk with the financial performance of Bransford Sensors, the fictional firm used in our experiment. This may result from the fact that Bransford Sensors, a manufacturing firm, markets its products to "industrial and utility customers," which investors may associate with little overall risk. Moreover, our description of Bransford Sensors notes that the company manufactures and sells a wide array of products. Perhaps investors associated low risk with the fact that the company's sales do not rely on only a limited number of products.

We feel that our study provides both theoretical and methodological contributions. Theoretically, our study contributes to research examining both the resource-based view of the firm and institutional theory. According to D'Aveni (1990), TMT prestige influences a firm's organizational legitimacy. Our results demonstrate, however, that TMT prestige maintains its influence on investor perceptions of both firm financial performance and financial performance risk even after controlling for the influence of organizational legitimacy. These findings provide a new perspective in that TMT prestige appears to operate as an intangible resource outside of its influence through organizational legitimacy. Moreover, the positive effects of TMT prestige appear despite recent corporate scandals (i.e., Enron) that may cause investors to discount TMT credentials.

Our study provides methodological contributions as well. Most importantly, we present scales that measure perceptions of both TMT prestige and organizational legitimacy. This represents an important contribution, as "prestige" and "legitimacy" are constructs defined by an individual's perceptions of a firm's characteristics (e.g., Ashforth and Gibbs, 1990). As noted in our results section, these scales load on their hypothesized factors and demonstrate both discriminant validity and internal consistency. We hope that providing such scales will encourage others to continue examining how TMT prestige and organizational legitimacy influence perceptions of firm outcomes.

Finally, we believe that our work has practical implications. We found evidence suggesting that individuals associate higher levels of performance and lower levels of risk with prestigious TMTs. These findings highlight the potential benefits of adding prestigious individuals to TMTs. Although our results do not suggest that TMTs actually improve performance or lower risk, our results do suggest that at the margin individuals associate positive firm attributes with prestigious TMT credentials.

Limitations and Future Research

Our results should be considered within the context of our case setting. Though we modeled our financial statements after an actual firm's disclosures, the amount of information presented to participants in our setting was less than the amount of information that investors typically consider when evaluating potential investments. We limited the amount of information participants analyzed in order to allow them to complete the task in a reasonable amount of time. Future research could examine whether providing investors with additional information results in their relying more or less on information about TMT prestige and organizational legitimacy when making investment-related judgments and decisions.

Future research might also examine more closely the relationship between TMT prestige and organizational legitimacy. As reported earlier, we found a significant relationship between these two constructs. The strength of the relationship between these two constructs is not surprising given our hypothesized mediating relationships. As Baron and Kenny (1986) note, hypothesized relationships between independent and mediator variables should be significant. Despite this significant association, questions remain regarding the direction of the relationship. Consistent with D'Aveni (1990), we hypothesized that TMT prestige influences organizational legitimacy. It may be, however, that organizational legitimacy also influences TMT prestige. In other words, investors may believe that executives of more legitimate firms are more prestigious than executives of less legitimate firms.

Another area of future research may involve examining investors with more contrasting personal prestige profiles. As noted by some authors examining status (e.g., Certo, 2003; Wegener, 1992), it may be that investor perceptions of a TMT's level of prestige are a function of the investors' individual prestige profiles. Specifically, these studies note that more prestigious audiences may be better able to discern the prestige of another individual or group. The participants in our study all attended the same university. Future work might examine how investors graduating from a more diverse group of schools (e.g., more prestigious vs. less prestigious schools) may differ in their perceptions of TMT prestige and how these different perceptions influence perceptions of financial performance and risk. In addition, future research might also examine other types of decision makers. Our sample included business school alumni; examining active stock traders or institutional investors, for example, might help to extend our research.

It is also important to note that we asked individuals for their perceptions of future financial performance and future financial performance risk. A promising avenue for future research would be to examine investor allocation decisions. Such a study, for example, might instruct participants to allocate a certain amount of capital over various potential investments. In addition, this type of design might allow researchers to better understand how such factors influence investor perceptions of the cost of capital.

We believe that another potentially fruitful avenue of future research involves assessing more fully the benefits derived from TMT prestige. In the development of our hypotheses, we noted that TMT prestige aids organizational legitimacy and investor perceptions of firm characteristics for both rational and symbolic reasons (D'Aveni, 1990). While our results support the hypothesis that TMT influences investor perceptions, we are unable to fully dissect why investors respond to TMT prestige. To better understand how investors distinguish between these two benefits of TMT prestige, we asked our subjects to indicate the extent to which they agreed with the statement: "The prestige of a firm's top executives facilitates relationships with customers, suppliers, and other business constituents." The average score of investors in our sample is 5.12, which differs from the item's midpoint (4.0) in a statistically significant manner ($p < .01$). This result indicates that investors agree that TMT prestige provides rational benefits to firms. While this represents a potentially important finding, it does not rule out that investors also associate symbolic benefits with TMT prestige. Future research could distinguish more clearly between the rational and symbolic benefits of prestige.

Finally, future research could more fully examine the determinants of TMT prestige. For example, our study does not address whether investors find an executive's educational background, work experience, or external directorships differentially informative about TMT prestigious. Having a better sense of the relative importance of these factors would provide a compelling contribution to the prestige literature.

Conclusion

In this study we examined whether investors view TMT prestige and organizational legitimacy as intangible resources. We found evidence suggesting that investor perceptions of both TMT prestige and organizational legitimacy influence their perceptions of a firm's future financial performance. We believe our results contribute to extant research by furthering our understanding of the subjective constructs of TMT prestige and organizational legitimacy, and how these constructs influence investor perceptions of future financial performance and future financial performance risk.

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The *JMI* In Brief

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In this study we use survey data to examine the influence of two intangible resources, top management team (TMT) prestige and organizational legitimacy, on investor perceptions of a firm's future financial performance and future financial performance risk. Results show that investors' general perceptions of TMT prestige and organizational legitimacy are associated with their perceptions of future financial performance. We also find that organizational legitimacy partially mediates the relationship between TMT prestige and firm financial performance. We find no such effects when examining investor perceptions of future financial performance risk.

In this article, the traditional cost-volume-profit (CVP) model is expanded to incorporate the cost of capital. Using the principles of activity-based costing, the opportunity cost of invested funds is traced to a product and is used to determine its operating income after taxes less the cost of capital or economic income each period. When a product's economic income over its useful life is discounted to when production will begin, it is equivalent to a product's net present value (NPV) (see Hartman, 2000; Shrieves and Wachowicz, 2001). The NPV equation, or model, developed in this manner is based on accounting, rather than cash flow, variables. Consequently, it provides a framework for performing CVP analysis. As demonstrated in the article, the CVP model incorporating the cost of capital can be used to compute a product's breakeven sales quantity, to measure the range of a product's discounted economic income with respect to its sales, and to determine the rate of change in its discounted economic income with respect to a unit change in sales. The CVP model also facilitates measuring the trade-offs in alter-