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THE EFFECTS OF PAST PERFORMANCE ON TOP MANAGEMENT TEAM CONFLICT IN STRATEGIC DECISION MAKING

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Research into the antecedents of TMT conflict has become increasingly popular in light of the effects that conflict can have on strategic decision making and organizational performance. Of course, such performance becomes a part of the contextual backdrop against which future decisions are made. Thus, organizational performance is itself an important antecedent of TMT conflict. Using data drawn from the TMTs of 44 mid-sized public firms, we demonstrate that cognitive and affective conflict relate differently to past performance. The implications of this research for efforts to effectively manage conflict during strategic decision making are discussed.

Numerous studies have addressed the issue of conflict in strategic decision making (Amason, 1996; Schweiger, Sandberg, & Ragan, 1986; Mintzberg, Raisinghani, & Theoret, 1976; Priem & Price, 1991). While most view conflict as a key antecedent of effective decision making, and so also of organizational performance, few have considered the reciprocal effects of performance on conflict. Thus, in this study we argue that as a component of the context in which strategic decisions take place, past performance influences the conflict experienced during the making of those decisions.

Top management teams, or TMTs, make strategic decisions, and those decisions influence the performance of the organization (Child, 1972; Finkelstein & Hambrick, 1996; Hambrick & Mason, 1984). Because of the complex and consequential nature of strategic decision making, some conflict within the TMT is inevitable (Amason & Schweiger, 1994; Mitroff, 1982). Research has shown that this conflict is multidimensional, with both functional and dysfunctional forms (Amason, 1996; Amason & Schweiger, 1994; Jehn, 1994, 1995). Cognitive con-

flict, which is task oriented and focused on discussing and challenging diverse perspectives is functional. Affective conflict, which is emotional and focused on such things as personal incompatibilities and disputes, is dysfunctional. Given this, many researchers have concluded that the most effective TMTs are those that can gain the benefits of cognitive conflict while avoiding the costs of affective conflict (Amason, Thompson, Hochwarter, & Harrison, 1995; Eisenhardt & Zbaracki, 1992; Tjosvold, Dann, & Wong, 1992). This view has led to research on the antecedents of conflict and their normative implications for TMTs and their strategic decision processes (Amason & Sapienza, 1997).

As a part of this emerging discourse we propose that past organizational performance sets the stage for future decisions and so impacts the conflicts that occurs during strategic decision making (Dutton & Duncan, 1987; Fredrickson, 1985; Hickson, Butler, Cray, Mallory, & Wilson, 1986). Thus, while acknowledging the importance of antecedents like group norms and values, which have been shown to be important in earlier research (Amason & Sapienza, 1997; Jehn, 1995), we suggest that past organizational performance may also be an important determinant of TMT conflict.

Theoretical Development

Over the years, researchers have debated the ability of managers to influence organizational outcomes. Some have argued that managers have a significant impact on organizational performance (Child, 1972; Gupta, 1988; Hambrick & Mason, 1984), while others have held that the environment limits the extent of managerial influence (Bresser & Bishop, 1983; Hannan & Freeman, 1977; Lieberman & O'Connor, 1972). While the debate continues, few studies have shown a firm's future to be fully deterministic. Indeed, most accept that decision making by management matters, even if only to a limited degree (Thomas, 1988).

In this study, we adopt the upper echelon perspective of Hambrick and Mason (1984) and argue that the strategic decision making behaviors of the TMT are important determinants of a firm's success. Furthermore, consistent with the view articulated by Amason (1996), we contend that the level and type of conflict present in the decision making process impacts the overall effectiveness of the decisions reached by the TMT and so impacts the overall effectiveness of the organization.

Interest in the role of conflict in strategic decision making arose with the realization that strategic decisions were often made by groups of top managers called top management teams (Hambrick & Mason, 1984; Hambrick, 1987). When faced with complex and ambiguous issues, these teams have certain advantages over individuals. Specifically, an individual brings only one perspective to a problem, while a team of individuals brings many. Moreover, by including a group of individuals, a team is better able to build understanding and commitment to the decision throughout the organization.

The problem is that the conflict experienced by the TMT makes quality, understanding, and commitment difficult to achieve simultaneously. Because of their diversity and the unstructured, ambiguous, and consequential nature of the problems they address, TMTs inevitably experience conflict. In some ways, that conflict is beneficial (Mason & Mitroff, 1981; Schweiger & Sandberg, 1989; Schwenk, 1989). Conflict can improve decision quality, uncover flawed assumptions, and improve understanding of a decision's rationale (Schweiger et al., 1986; Schweiger, Sandberg, & Rechner 1989). However, conflict can also slow the decision process, undermine satisfaction, and hinder open interaction (Hickson et al., 1986; Mintzberg et al., 1976; Schweiger et al., 1986). Thus, conflict is a double-edged sword, with both beneficial and detrimental effects (Amason & Schweiger, 1994).

Research by Jehn (1994, 1995), Amason (1996) and others (Cosier & Rose, 1977; Priem & Price, 1991) provides evidence that this double-edged effect is attributable to different dimensions of conflict. The cognitive dimension of conflict, that portion that is task oriented, is functional. The affective dimension of conflict, that portion that is personally oriented, is dysfunctional. Thus, from a normative perspective, the issue for TMTs is how to manage the decision making process so as to encourage cognitive conflict yet discourage affective conflict (Amason, Thompson, Hochwarter, & Harrison, 1995; Amason & Sapienza, 1997; Tjosvold et al., 1992).

The evidence, however, is that such discriminant management of conflict is not easy. Indeed, early research into conflict's antecedents did not consider conflict as being multidimensional. For example, Deutsch (1949, 1968) and others (Tjosvold, 1985; Tjosvold & Deemer, 1980), studied the effects of decision context on conflict in general. Their findings suggested that cooperation among group members decreased conflict while competition among group members increased conflict.

Later studies employed multidimensional measures (Jehn, 1994; Pinkley, 1990) yet still found common antecedents at the root of most conflicts. For instance, Jehn (1994) examined the effects of value consensus and value fit on cognitive (task) and affective (emotional) conflict. The results showed that value consensus and fit were negatively correlated with both dimensions. In a separate study, Jehn (1995) also found that group norms held similar relations to both types of conflict. Specifically, norms that were open to and tolerant of disagreement were positively related to both the task and relationship dimensions. A similar pattern of dual arousal has been evidenced in studies of TMT diversity (Hambrick, Cho, & Chen, 1996) and conflict-inducing interaction procedures (Schweiger et al., 1986).

What this all seems to suggest is that many of the factors that arouse cognitive conflict can also trigger affective conflict. In fact, for some time now researchers have expressed doubt that decision makers could effectively embrace one type of conflict, while simultaneously resisting the other. For example, Brehmer (1976) argues that, because decision makers cannot fully justify their preferences, suspicion and distrust often creep into decision processes and cause purely cognitive

disagreements to degrade into personal conflict. Similarly, Baron (1984) explains that "often, what starts as a rational exchange of opposing views deteriorates into an emotion-laden interchange . . . in which strong negative feelings are aroused" (p. 272).

In a recent study, however, Amason and Sapienza (1997) offer evidence that the effects of conflict can be separated and influenced differently by norms of mutuality and openness. Mutuality is the extent to which group members see themselves as being mutually responsible and accountable for their actions. Openness is the TMT's willingness to engage in frank and tolerant interaction. Consistent with Jehn's (1995) results, Amason and Sapienza (1997) found openness to be positively related to both cognitive and affective conflict. They also found mutuality to be negatively related to both cognitive and affective conflict. When the two were combined, however, there was a strong negative interaction with affective conflict but no effect with cognitive conflict. In interpreting these findings, Amason and Sapienza reason that "if mutuality is established before cognitive conflict is encouraged, cognitive disagreements may be less likely to trigger affective conflict" (p. 513).

Past Performance and TMT Conflict

While recognizing the value of the research to date, we suspect that variables like values and norms coexist with another, equally powerful, influence. Specifically, we believe past organizational performance sets the stage for future decision making. In so doing, past performance becomes a contextual factor, just like team values or norms, that impacts the nature of the conflict that occurs within the TMT.

A literature review reveals some interesting linkages between past performance and decision making. For instance, early theorists like Ansoff (1965), Hofer and Schendel (1978), and Hambrick and Snow (1977) include past performance in models of strategic management. Evidence of this relationship is provided by Lant, Milliken, and Batra (1992), who found that strategic reorientations were related to poor past performance and Johnson, Hoskisson, and Hitt (1993), who link changes in performance to board involvement in firm management. Bateman and Zeithaml (1989) link such organizational constructs to individual decisions by explaining that the success or failure of past events is part of the psychological context that impacts the way managers make current decisions. This argument is supported by the work of Weldon, Jehn, and Pradhan (1991), who found that group performance was affected by past performance as well as by Jehn, Northcraft, and Neale (1999), who found that high performance can lead to high morale and low conflict in groups.

When taken together, these examples provide strong indication of a reciprocating set of relationships where past performance becomes part of the context in which current decisions are made. Those decisions impact future performance which forms the context of subsequent decisions. The reinforcing effect of this feedback loop is related to the phenomenon of "path dependence" where success in the past produces a tendency towards similar behavior in the future (Cyert &

March, 1963; Helfat, 1994; Nelson & Winter, 1982). Successful behaviors are repeated; unsuccessful behaviors are not.

This relationship might also be viewed as a manifestation of Prospect Theory (Tversky & Kahneman, 1983), which argues that individuals are more concerned with risk of loss than with potential for gain. When past performance is good, managers are more likely to view arising issues as discretionary opportunities. Insulated by past performance, they have the luxury of choosing from among these opportunities or choosing to do nothing. At the same time, when past performance is poor, managers have no such insulation and so are likely to view themselves as being under eminent threat. Thus are created different propensities for action by different levels of performance.

Other research supports this reasoning. For example, Fredrickson (1985) proposed that strategic decision processes are more comprehensive in firms that perform poorly than in those that perform well. Although his results were mixed, Fredrickson argued that they supported his general contention. The issue is relevant because comprehensiveness suggests effort and concern with making the right choice. Based on Fredrickson's study, poor performance seems to motivate more concerted effort on current strategic decisions. In another study, Dutton and Duncan (1987) argued that past performance affects the diagnosis of strategic issues such that with strong performance, organizations tend to experience a "fat cat syndrome" (p. 290). Managers in organizations with strong past performance "are likely to feel more confident in their views of the causes and solutions for issues, and to consequently, rely heavily on past issue interpretations" (Dutton, 1993, p. 349).

Additional support can be found in the work of Miller and Lieblin (1996) and Bromiley (1990), who contend that managers have asymmetric perceptions of risk and return. Whereas an objectively rational view would hold that all decisions with equal expected values and variances represent equal levels of risk, managerial perceptions are often quite different. From the perspective of the manager, downside risks are to be vigorously avoided. As such, prospects for loss, even though they be small, command high levels of managerial attention. On the other hand, upside risks are merely potential, which need not necessarily be pursued. As such, prospects for gain, even though they be large, may well be ignored. What this suggests is that, as performance worsens, the context for strategic decision making becomes increasingly demanding.

This all appears to indicate that a history of strong performance works to insulate managers from perceiving the need to act. Indeed, as others have argued, strong past performance tends to make managers more confident, and so, less threatened by any specific issue that may arise (Dutton, 1993). Conversely, poor past performance makes managers more concerned about the issues and decisions at hand and thus, more likely to direct attention and action to them.

The existing literature then provides strong support for the position that past organizational performance will impact strategic decision making. Moreover,

inasmuch as conflict is an important part of that process, it follows that past performance would impact the level and type of conflict experienced by the TMT.

Hypotheses

Our contention is that past organizational performance will explain a significant amount of variation in the conflict experienced by a TMT during strategic decision making, over and above that which is explained by group norms like openness and mutuality. In addition, we expect the relationship to be consistently negative for both forms of conflict. As Fredrickson (1985) explains, there is "an odd dichotomy in the relationship between organizational performance and the actions that managers take in a strategic decision process" (p. 824). While performance provides resources that allow an extensive information search and analysis of multiple alternatives, managers often do not take full advantage of those resources. Instead, such resources seem to become organizational slack that is used to cushion the effects of poor decisions. Indeed, Fredrickson states that such a use of slack "may help explain why managers in historically successful firms sometimes make a series of what appear to be inadequately considered, intuitive decisions that in combination have significant negative consequences" (p. 824).

This issue is similar to that discussed earlier and reinforces our belief that managers have a stronger propensity to act in the face of perceived threat than in the face of perceived opportunity (Dutton & Jackson, 1987; Jackson & Dutton, 1988). Jackson and Dutton (1988) explain that managers characterize opportunities as being controllable and threats as being uncontrollable. With a history of strong past performance and the cushion of resources such a history provides, managers are likely to feel in control and so are likely to perceive few threats. As a consequence, they may take an increasingly detached approach to decision making.

This would explain Fredrickson's (1985) finding of reduced decision making comprehensiveness in the face of improved organizational performance. Insulated from the perception of threat by the benefits of past success, managers may take less interest in the rigors of high quality decision processes. They may be less willing to invest the effort needed to explore various alternatives and to surface hidden assumptions. They may be less willing to invest themselves in persuading others to decide one way or another. Indeed, Moch and Pondy (1997) describe a situation where the resources generated by past performance provide "choice opportunities" for all decision-makers (p. 356). In the face of such opportunities, competition within the group is diminished and bargaining and negotiating become less necessary. The effect would be to reduce the sources of contention from the decision making process.

By reducing the level of competitiveness among the group's members, the availability of such choice opportunities would also remove much of the risk of personal loss from the decision making process (Deutsch, 1968; Tjosvold & Deemer, 1980). High levels of past performance could produce high levels of managerial side payments (Cyert & March, 1963), which would insulate managers

from one another. As a consequence, individual decision making episodes would be less threatening, personally, to the managers involved, which might reduce the tendency towards suspicion and mistrust. Suspicion and mistrust have been associated with affective conflict. Thus, the buffering effect of past performance should reduce all conflict, both cognitive and affective. Accordingly, we offer the following hypotheses.

Hypothesis 1: Controlling for the effects of group norms, past performance will be negatively related to cognitive conflict during strategic decision making.

Hypothesis 2: Controlling for the effects of group norms, past performance will be negatively related to affective conflict during strategic decision making.

Method

Our sample included the TMTs of 44 mid-sized public firms in the computer software (SIC 7372; $n = 32$) and restaurant (SIC 5812; $n = 12$) industries. We chose public firms because of the availability of secondary data including audited financial statements that have been reviewed by the SEC. We chose mid-sized firms because they are likely to allow better access to their TMTs. These two industries were chosen because they represent groups of firms that conduct business in different ways, offer different products, serve different markets, and have different capital structures. The restaurant business is capital intensive, requiring investment in real estate and equipment. The software business, on the other hand, is knowledge intensive, requiring investment in people and know-how. Given these differences, we felt that these two industries would provide a robust test of our theory.

Using Compact Disclosure, we identified a list of nearly 400 firms. We then called the CEO of each to request his or her participation. For a variety of reasons, we were able to reach the CEOs of only 238 firms. Of the others, some had been merged, had been taken private, were no longer in business, or simply chose not to return our calls. Of these 238, 120 or 50.4% agreed to participate. In each of these firms we spoke either with the CEO or with his or her direct assistant and we described the study and data gathering procedure. We explained that the CEO and other members of the TMT would complete a questionnaire and that the CEO would also complete a supplemental questionnaire. We explained that, while answering the questions, the members of each TMT would need to focus on a specific strategic decision. Thus, the CEO would need to identify that decision to the members of his or her TMT. To minimize bias in the selection of this decision, we asked the CEO to focus on the most recent strategic decision his or her firm had made and could now reflect upon. When necessary, we offered descriptions of decisions we considered strategic. This technique is patterned after Amason (1996)

and is designed to minimize recollection bias while providing contextual continuity across each team's responses (Flanagan, 1954; Podsakoff & Organ, 1986).

We asked each CEO how many top managers were typically involved in strategic decision making. We defined this group, along with the CEO, as the TMT. In some cases, the CEO gave us the names of these individuals and asked that we mail the surveys to them directly. In other cases, all the surveys were sent to the CEO, who distributed them on our behalf. In every case, each survey had its own cover letter identifying the firm and CEO by name and directing that the team members see the CEO, who would identify a decision to them. The letter also insured complete confidentiality and instructed that the surveys be completed individually and returned separately in the prepaid business reply envelopes provided.

We sent 628 surveys to the TMT members of the 120 firms. After a second mailing and a round of phone calls, we received a total of 147 responses from 53 firms. To be included in the sample, however, we needed responses from the CEO and from at least one other top manager, as well as 3 years of financial data (1994–1996). Forty-four firms supplied all of this information. To check for respondent bias, we compared the 1996 sales of the respondents and non-respondents using ANOVA and found no significant difference ($p = .86$). We also found no systematic industry or location variation between the respondents and non-respondents. The final sample then included 136 managers from 44 firms, a usable team-level response rate of 36.6%. Among the 44 firms, TMT size averaged 4.8 managers. We received 3.1 responses per firm, a within-team response rate of 64.5%. This response profile and sample size correspond to other recent studies of TMT decision processes using primary data collected from multiple respondents (Amason, 1996; Smith et al., 1994).

Sales for the 44 firms averaged \$76.6 million for the three-year period ended 1996. The software firms had mean sales of \$51.2 million while the food service firms had mean sales of \$48.3 million. There were two outliers, one with sales of nearly a billion dollars and the other with sales of just over \$4 million. Removing the outliers reduces the sales average to \$50.9 million. However, because we adjust for size in our analysis and because the removal of the outliers did not affect the results, we chose not to delete them.

Measures

Cognitive and Affective Conflicts were measured with seven items from Jehn's Interpersonal Conflict Scale (1994). Four items gauged the level of affective conflict and 3 items gauged the level of cognitive conflict. The response format was a 5-point Likert scale with anchors ranging from 1– "none" to 5– "a great deal." Given that previous studies have shown that, while distinct, the cognitive and affective dimensions of conflict often occur together, we assessed the performance of the scale using a Promax factor rotation, which allows correlation of the factors. Consistent with past research, a 2 factor solution, with each item loading on its own factor yet not on the other, emerged. The factors were positively correlated (.47) and together explained approximately 71% of the variation in the 7

items. The subscale reliability coefficient for the four-item, affective conflict scale was .88 (Cronbach, 1951). The coefficient for the three-item cognitive conflict subscale was .73. Given this level of agreement, the affective items were averaged to form a single measure of affective conflict, and the cognitive items were averaged into a single measure of cognitive conflict.

Firm Performance was measured three ways. The first measure was the three-year average of the firms' Return on Assets or ROA. The second measure was the three-year average of Return on Sales or ROS. The third measure was the level of organization slack. Slack is that cushion of resources an organization possesses in excess of its immediate needs (Cyert & March, 1963). Thus, the presence of slack may reflect resources that have accumulated as a result of past profitability. To measure slack, we calculated the 3-year average of cash and marketable securities, again adjusted for sales for the same period.

Because we have data from two different industries and because performance levels across those industries are relative, we adjusted each of the measures in the following manner. Using Dun & Bradstreet's (1997) *Industry Norms and Key Business Ratios* we calculated the average level of ROS, ROA, and slack (as defined above) for the two industries for the 3-year period for which we had financial data. To make these referent figures more applicable to our sample, we included only those firms with assets of more than \$1 million but less than \$50 million. Thus, these industry averages reflect data from firms of similar size to those in our sample. We then subtracted these industry averages from our firm level measures. Thus, the final performance measures were ROA, ROS, and slack, relative to the average for similar sized firms in that industry.

Openness and Mutuality were measured with scales developed and used by Amason and Sapienza (1997). The openness measure employed 4 items which all loaded on a single factor explaining 58.8% of the variation. The Cronbach's alpha coefficient for the items was .65. Mutuality was also measured with four items that all loaded on a single factor explaining 58.6% of the total variation and which produced a coefficient alpha of .82. Again, we averaged the two sets of items to form composite measures of openness and mutuality. We should also mention that, consistent with Amason and Sapienza (1997), the norms measures were separate and distinct from the conflict measures on the questionnaire and carried their own set of instructions directing that the respondents not associate norms with any single decision but rather think about their teams in general.

Finally, we also measured and controlled for industry differences, firm size, TMT size, and CEO tenure. Industry was measured with a dummy variable, coded "1" for the software industry and "0" for the food service industry. Firm size was measured as the natural log of the 3-year average of firm sales. TMT size was the number of managers that the CEO told us were involved in strategic decision-making. CEO tenure was taken from each firm's 10-K report and was the number of years the CEO had held the position.

Consistent with our theory and with previous research, we conducted our analyses at the team level. Thus, we aggregated individual team members'

responses into team-level variables. Before so doing, however, we assessed the level of within-team agreement on cognitive and affective conflict as well as on norms of openness and mutuality using a one-way ANOVA, with team affiliation as the independent variable. In each case, the between-team variation was significantly larger than the within-team variation, suggesting acceptable within-team agreement.

The use of team-level variables also served to moderate the effects of any self-report biases. Research has shown that managers do not always accurately perceive reality and may frequently embellish past decisions (Golden, 1992). By using multiple respondents, we hoped to control for such biases as it is less likely that all of a team's members would share the same misperceptions. It is also important to note that while conflict and norms are team-level variables, performance is an organizational-level variable and was collected from a separate source. None of the participants knew that we were collecting the financial data and none knew that we were considering its relationships to decision making. Moreover, the financial data came from 1994, 1995, 1996, while the decision process data came from a specific episode that took place either in late 1996 or early 1997. Thus, not only was there no contamination of the decision making and performance data, but consistent with our theory, the variables were operationalized in a temporal order reflecting their causality, with past performance preceding decision processes.

Results

Table I contains correlations and descriptive statistics for the variables. As in earlier studies, cognitive and affective conflict were positively correlated, suggesting that they often occur together. As expected, mutuality and openness were positively related. Affective conflict was negatively related to mutuality, however, it was unrelated to openness. Interestingly, openness was negatively related to both ROA and ROS, suggesting a less interactive decision process in the presence of higher past performance. Consistent with our expectations, both types of conflict were strongly and negatively related to ROA and ROS. While ROS and ROA were highly correlated, neither was correlated with organizational slack. Moreover, slack was not significantly related to any variable in the study. While surprising, this suggests that our measure of slack captures something different than the profitability measures. All of the relationships are consistent with our expectations and offer some initial support for our contentions.

It is also interesting to examine the means of the performance measures. Recall that these numbers represent the firms' ROA, ROS, and slack, adjusted by the industry average for comparably sized firms. Thus, as the means of these measures approach zero, our sample reflects the industry at large. While the numbers are quite close, our sample appears to have performed, as a group, just below the industry average on both ROA and ROS. This was true across both industries. It is also interesting to note that the sampled firms had somewhat higher slack than the average. Again, this was true across both industries. While these numbers bear no

Table 1
Zero-Order Correlations and Descriptive Statistics

	1	2	3	4	5	6	7	8	9	10	11
1. Industry	1.00										
2. Firm size	-.11	1.00									
3. CEO tenure	-.09	.03	1.00								
4. TMT size	.31*	-.06	.02	1.00							
5. Affective Conflict	.21	-.01	-.31*	-.05	1.00						
6. Cognitive Conflict	-.04	.01	-.13	-.08	.42**	1.00					
7. Openness	.13	-.17	-.04	-.18	-.07	-.07	1.00				
8. Mutuality	-.05	.15	.14	-.05	-.36**	-.12	.47**	1.00			
9. ROA	-.16	.11	.23+	.03	-.37**	-.21+	-.27*	.05	1.00		
10. ROS	.08	.24+	.26*	.07	-.42**	-.25*	-.28*	.17	.84**	1.00	
11. Slack	.07	-.20	-.15	.02	-.10	-.06	-.13	.06	.06	.02	1.00
<i>M</i>	1.72	10.67	6.45	4.86	1.99	2.97	5.27	5.56	-.05	-.02	.08
<i>SD</i>	.45	.84	5.44	1.54	.73	.50	.78	.65	.14	.11	.24

Note: $n = 44$

+ $p < .10$. * $p < .05$. ** $p < .01$. (two-tailed)

particular relationship to our research question, it is interesting nonetheless in light of the general belief that higher performing firms are the ones most likely to participate in studies of this kind.

Hypotheses Tests

Hypotheses 1 stated that while controlling for the effects of group norms, organizational performance would be negatively related to cognitive conflict. Similarly, Hypothesis 2 stated that, while controlling for the effects of group norms, organizational performance would be negatively related to affective conflict. We tested these relationships in a series of regression equations designed to predict cognitive and affective conflict. The equations contained the control variables along with the variables for openness and mutuality. To each equation, we then added the individual measures of performance.

As shown in Table 2, none of the models for cognitive conflict was significant. Thus, Hypothesis 1 was not supported. To examine affective conflict, we first tested the model including organizational slack, which produced an adjusted R^2 of .13 and was marginally significant ($p = .09$). However, while slack was negatively related to affective conflict, the relationship did not reach significance ($p = .15$). We next tested the model including Return on Assets (ROA), which produced an adjusted R^2 of .20 and was significant ($p < .04$). As expected, ROA was significantly and negatively related to affective conflict ($p < .03$). Finally, we tested the model including Return on Sales (ROS), which produced an adjusted R^2 of .28 and was significant ($p < .01$). As expected, ROS was significantly and negatively related to affective conflict ($p < .002$). We then compared the full model, including all three performance measures, to the baseline model, which included the control and group norms variables. The incremental difference in the models was tested and found to be significant ($F = 3.02, p < .03$). Thus, Hypothesis 2 was supported.

To ascertain the cumulative strength of the relationships between the conflict and performance variables, we developed a multivariate regression model. Multivariate regression is a canonical correlation analysis that allows the effects of control variables to be partial led out. After controlling for industry, firm size, TMT size, CEO tenure, and TMT norms, the first canonical combination of the conflict and performance variables was found to be significant ($F = 3.07, p < .05$). Canonical redundancy analysis revealed that the three performance measures explained 12.16% of the variation in the conflict measures. As indicated by the regression analysis, the strongest effects were between ROA, ROS and affective conflict.

Discussion

To better understand our findings and so appreciate their implications, we should focus first on those issues where they converge and diverge from previous research. Our analysis shows mutuality to be negatively related to affective conflict. Indeed, in 2 of the 3 the performance models involving affective conflict, mutuality was significant and negative (see Table 2). This confirms a finding of

Table 2
Regression Analysis Results & Hypothesis Tests (N = 44)

A. Tests of Individual Effects: Hypothesis 1

	Cognitive Conflict				
	Model 1	Model 2	Model 3	Model 4	Model 5
Industry	-.09	-.09	-.10	-.04	-.05
Firm size	.05	.05	.05	.06	.07
CEO tenure	-.01	-.01	-.01	.01	-.01
TMT size	-.01	-.11	-.01	-.01	-.01
Openness	.12	.12	.08	.06	.05
Mutuality	-.16	-.16	-.14	-.11	-.11
Slack				.11	.18
ROA			-.60		-.21
ROS				-.86	-.68
R^2	.06	.06	.09	.09	.10

B. Tests of Individual Effects: Hypothesis 2

	Affective Conflict				
	Model 1	Model 2	Model 3	Model 4	Model 5
Industry	.36*	.36*	.31	.51*	.60*
Firm size	.06	.03	.06	.10	.10
CEO tenure	-.03*	-.034*	-.02	-.02	-.02
TMT size	-.06	-.06	-.06	-.08	-.08
Openness	-.02	.04	-.07	-.17	-.18
Mutuality	-.38*	-.38*	-.32*	-.21	-.18
Slack		-.44			-.29
ROA			-1.55*		1.02
ROS				-2.73**	-3.78*
R^2	.13*	.13*	.20*	.28**	.25*

Note: F-ratio $df = 6,37$ for model 1
 $df = 7,36$ for models 2, 3, & 4
 $df = 9,34$ for models 5
 df for each $\beta = 1, 42$

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

Amason and Sapienza (1997), as well as work by other researchers who have held that cooperativeness in one form or another should reduce conflict (Duetsch, 1949, Amason and Sapienza (1997), as well as work by other researchers who have held 1968; Tjosvold & Deemer, 1980). Our findings appear to also support those of Fredrickson (1985) who suggests that high levels of performance should reduce conflict by lessening the intensity with which managers' search for solutions. Recall that we found significant negative correlations between performance and openness. What this indicates is that, in those firms that perform better, the decision making norms within the TMT are less open and tolerant. A less comprehensive process would be similarly somewhat less open and tolerant, thus the congruence with Fredrickson (1985).

At the same time, our findings are not completely consistent with earlier work. The most noticeable divergence is in the area of cognitive conflict. Unlike Amason and Sapienza (1997), we were unable to predict any variation in cognitive conflict. Indeed, while ROS showed a negative relationship to cognitive conflict in the bivariate correlations (Table 1), that relationship did not persist in the presence of other variables. Thus, while it is clear that we understand much about the cognitive and affective dimensions of conflict, it is also clear that there is much that we do not yet understand.

When taken together, we believe our findings offer one clear new implication. That is that past organizational performance is differently related to cognitive and affective conflict in strategic decision making. While the non-finding for cognitive conflict is, in one sense, unfavorable, in another sense, it is actually an important result. Recall that it is the normative potential of conflict research that has attracted the attention of strategic management researchers. As Eisenhardt and Zbaracki (1992) argue, TMTs must learn to gain conflict's benefits, without incurring its costs. To date, however, research has offered few examples of antecedent conditions that influence one dimension while leaving the other unaffected. Organizational performance, however, seems to be different. Past performance appears to be strongly and negatively related to affective conflict. Stated plainly, when performance has been low, affective conflict is likely to be high. When performance has been high, affective conflict is likely to be low. All the while, cognitive conflict appears unaffected.

From this we can draw some potentially meaningful inferences. For instance, it might be that efforts to encourage cognitive conflict should not be attempted when performance is low. Indeed, as we earlier discussed, much of the literature on conflict cautions against the propensity for cognitive disputes to arouse affective conflict. Our findings suggest that such mutation is more likely when performance is poor than when it is good. Thus, when performance is good, and when the tendency towards affective conflict is low, perhaps that is when managers should be building the sorts of open and cooperative norms described by Amason and Sapienza (1997) or implementing the sorts of conflict inducing interactions described by Schweiger and Sandberg (1989) or Schwenk (1989). In effect, good perform-

ance appears to widen the margin of error around the TMT's use of conflict in making strategic decisions.

Moreover, given our arguments on the effects of past performance on decision framing, it might also make additional sense to motivate cognitive conflict in TMTs whose firms have been performing well. Such teams may well be falling prey to the "fat cat syndrome" described by Dutton and Duncan (1987, p. 290) or to the "odd dichotomy" mentioned by Fredrickson (1985, p. 824). Thus, not only is a context of strong past performance likely to make cognitive conflict more effective, it is also likely to make cognitive conflict more necessary.

Our findings also appear to substantiate and provide some detail to the "downward spiral" effect described by Hambrick and D'Aveni (1992). Essentially, there appears to be strong evidence of a reciprocal process at work in organizational declines whereby inadequacies of the team produce poor performance, which then aggravates conditions within the TMT, which then leads to further deterioration of performance. Perhaps that deterioration is a result of increased affective conflict. In other words, as firm performance worsens, affective conflicts increase. As a result, the TMT performs less well, which leads firm performance to worsen still, which provokes still more affective conflict. Such conflict could take the form of unfair criticizing and "scapegoating" which Hambrick and D'Aveni (1992) describe as being characteristic of the downward spiral. It could also lead to the sort of avoidance and departure behavior that would undermine TMT effectiveness and lead to further organizational decline.

Our findings may also say something about the nature of strategic decision making in public versus private firms. The sample employed by Amason and Sapienza (1997) and by Amason (1996) consisted of private firms, whereas the firms in our sample are public. Surely the pressure to perform and perform quickly is different in public firms, which must publish periodic results and are subject to public scrutiny. Perhaps the managers of such firms are less willing to invest the time and effort necessary to learn how to handle conflict. Recall that Schweiger and Sandberg (1989) found experiential variation in the way teams handle conflict. Teams that are inexperienced with conflict are much more likely to see their cognitive disputes trigger affective conflict than are teams that are more experienced. Perhaps what our findings indicate is that, in these public firms, when performance is good, there is very little conflict at all. However, when performance turns bad, the only conflict that occurs is affective.

Our findings also offer evidence of an industry effect on TMT decision processes beyond the effect attributed to performance. Recall our performance variables included information on industry-wide performance. Yet, in the presence of this information, our industry variable remained significant in 4 of 5 affective conflict models. That the coefficients were consistently positive indicates that, in general, the TMTs in the software industry experienced more affective conflict than those in the restaurant industry. One explanation for this may have been that the software TMTs were slightly larger than the restaurant TMTs, as indicated by the positive correlation between TMT size and industry (see Table 1). Others have suggested

that team size and team heterogeneity are related (West & Anderson, 1996). Perhaps heterogeneity contributes to affective conflict. It is also possible that there are industry-level differences, such as differences in the levels of environmental dynamism or complexity. At the very least, these findings suggest the necessity of examining multiple industries.

Finally, it bears noting that the effects of performance on affective conflict persisted across two of three different performance measures, despite our inclusion of several control variables (i.e., industry, firm size, TMT size, and CEO tenure) and despite our inclusion of variables designed to reflect team's norms (i.e., openness and mutuality). What that suggests to us is that the relationship between performance and affective conflict is robust. The tendency towards affective conflict in the face of poor performance is strong indeed. As researchers and managers alike work to discover ways to better gain the benefits of conflict without incurring the costs, they would do well to remember the presence of such a pervasive force.

Like all research, this work has limitations that should be kept in mind when attempting to draw inferences or make generalizations. Specifically, although comparable to similar studies, our sample is relatively small. While that does suggest that the effects we see are strong, we should remain cautious in our interpretations. Moreover, we rely on self-reported data concerning issues like conflict and team norms. In light of this, we should point out that all of our performance data came from objective, secondary sources and was collected without the knowledge of the study participants. As such, there was no contamination among the independent and dependent variables. In addition, all of our self-report data was gathered from multiple respondents. Finally, it is altogether possible that there are other sources of influence on cognitive and affective conflict that are more powerful than those reported here. However, the variables that we chose were those that have appeared in the literature and have been thought to be important determinants of strategic decision processes.

The reciprocation among poor performance, affective conflict, and poor decision making is likely a vexing problem for managers and firms. Yet, such reciprocating relationships are rarely studied. Thus, we encourage others to do as we have done and to look backwards as well as forward in an effort to better understand TMT decision making over time. Top management teams must work together, over and over again. As such, their decisions about the present affect and constrain the decisions that they will make in the future. In working to understand important issues like conflict, we should not lose sight of the fact that the effects of context are significant indeed.

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