

Top Management Team Social Processes And Changes In Organizational Strategy

Devaki Rau

Northern Illinois University

One stream of research on top management teams examines how the demographic characteristics of top managers influence changes in organizational strategy. The study reported in this paper adds to this research by examining how the socio-political processes of trust and conflict within a top management team, in addition to team demographic characteristics, influence changes in organizational strategy. Results from a study of one hundred and eleven top bank management teams indicate that the depth of cognitive resources present in a top management team negatively influences changes in strategy, while trust among members of the team positively influences changes in strategy.

Why do some organizations make strategic changes faster than others in response to changes in their external environment? This question is important because organizations that adapt faster to changing conditions in their external environment have a better chance of survival than slow adapters. One stream of research on this topic has examined the role of top managers in changing organizational strategy (Boeker, 1997; Wally & Becerra, 2001; Wiersema & Bantel, 1992). A central idea supporting this research is that top managers make the key decisions for their firms. Hence, examining top managers' cognitions can help us understand organizational propensities for change (Hambrick & Mason, 1984). Studies in this stream generally use top manager demographics as proxies for measures of managerial cognition (Boeker, 1997; Wally & Becerra, 2001; Wiersema & Bantel, 1992).

Results from empirical studies adopting this approach, however, indicate contradictory influences of team demography on strategy change (e.g., Wiersema & Bantel, 1992; Wally & Becerra, 2001). One reason for this may be that we can make relatively accurate predictions about the influence of team demographics on strategy change only after accounting for interactions among team members (Lawrence, 1997). In this study, this issue will be addressed by examining whether the three socio-political processes of task and relationship conflict and trust, in conjunction with team demographics, can account for changes in strategy. Second, I will focus on conflict and trust since previous research finds that not only do these issues influence top management team decision quality and performance, but also they may have a critical influence on organizational change efforts (Chen, Liu, & Tjosvold, 2005; Goodstein & Burke, 1991). Finally, this will be examined in a field study of one hundred and eleven community bank top management teams over a two-year period.

Studies on top management teams have examined the influence of top management team demographics on changes in firm strategy (Grimm & Smith, 1991; Wally & Becerra, 2001; Wiersema & Bantel, 1992). By focusing on top management team socio-political processes in addition to team demographics, this study provides a more detailed understanding of the role of the top team in initiating strategic change in organizations. A detailed understanding of this role is critical since it may help us better understand why top management teams may differ in their decisions about the need for changes in strategy, and the effect of these decisions on firm survival and profitability.

Theory and Hypotheses

The fundamental idea underlying many studies on strategic change and top management teams is that top management teams with more diverse and higher levels of cognitive resources should be better at changing their organizations' strategies than teams with less diverse and lower levels of cognitive resources (Hambrick & Mason, 1984). A manager's cognitive base consists of his or her knowledge or assumptions about future events, knowledge of alternatives, and knowledge of consequences attached to alternatives (Hambrick & Mason, 1984). Cognitive resources are defined as type and variety of cognitive bases represented by top team members in the strategic decision-making process (Wiersema & Bantel, 1992). Collectively, these bases provide the team with an assorted stock of knowledge and capabilities that the team can draw upon when making complex decisions (Hoffman & Maier, 1961). Since managers' cognitive bases are formed as a result of their experiences both within and outside of their organizations, top management team demographics should capture the diversity and depth of cognitive resources available to the team (Hambrick & Mason, 1984).

The results from many studies on top management teams, however, indicate a rather more complex reality about the relationship between top management team demographics and strategic change (Boeker, 1997; Grimm & Smith, 1991; Wally & Becerra, 2001; Wiersema & Bantel, 1992). Wiersema and Bantel (1992), for instance, find that diversity, with respect to educational specialization, is related to strategic

change, but not diversity with respect to age, organizational tenure, or team tenure. Wally and Becerra (2001), in contrast, find that while the organizational tenure of top management team members influences strategic change, their educational level does not.

One reason for these conflicting findings may be that different studies use different definitions and measures of demographic composition and strategic change. Thus, researchers claim that these results do not really contradict the fundamental reasoning underlying these studies (Wally & Becerra, 2001). Another reason may lie in the fact that diversity has very different effects on the functioning of the top management team, depending on the type of diversity and on the interactions that occur among the team members. On the one hand, diversity provides a top management team with a range of different viewpoints. Exposure to these different viewpoints causes a cohesive team to be more receptive to the need for change (Hambrick & Mason, 1984). On the other hand, diversity reduces team cohesion and increased miscommunications, thereby leading to slower decision making, and correspondingly, a slower pace of strategic change (Hambrick & Mason, 1984). At the same time, however, while low levels of diversity (or greater homogeneity) lead to faster decision making, it may also lead to insular thinking, and therefore, to strategic persistence in conditions when strategic change is appropriate (Finkelstein & Hambrick, 1990; Hambrick & Mason, 1984).

In this study, different effects of diversity are captured by distinguishing between the dispersion and depth (or average amount) of team cognitive resources. Teams will have diverse cognitive resources if members of the team come from different functional backgrounds, or have worked in their organization for different lengths of time, or belong to different age groups. Differences on these dimensions indicate unique work experiences and socialization processes for individual members, leading to a diversity of cognitive resources available to the team. Teams with members having higher industry, organizational, and team tenures, on average, should have deeper cognitive resources than teams whose members have shorter average industry, organizational, and team tenures (Smith et al, 1994).

In maintaining the fundamental idea behind top management team and strategic change research, it is proposed that teams with a diverse range of cognitive resources will be more likely to initiate strategic change in their organizations. As mentioned earlier, a team with diverse cognitive resources can look at issues from many different perspectives. This, in turn, may direct their attention toward initiating strategic change in their organizations (Cho & Hambrick, 2006).

It is also proposed that teams with a lower depth of cognitive resources will be more likely to initiate strategic change than teams with a greater depth of cognitive resources. Teams with a greater depth of cognitive resources may have smoother interactions as a result of their members' long term and organizational tenures than teams with a lower depth of cognitive resources. Therefore the former teams may be better at implementing strategic changes than the latter teams. At the same time, however, the very smoothness of the interactions in the former teams may also make them more prone to the complacency or insular thinking that leads to strategic inertia, than the latter, leading to a lesser likelihood of initiating strategic change (Finkelstein & Hambrick, 1990; Wiersema & Bantel, 1992). Of course, one could make the counter argument that teams with a lower depth of cognitive resources, such as,

inexperienced teams (teams whose members who are relatively new to the team and / or to the organization), may be more likely to maintain the status quo precisely because of their inexperience and lack of knowledge. Existing empirical evidence, however, supports the former notion. Top management teams with a greater depth of cognitive resources are more likely to retain current strategies, because of a lower tolerance for risk, or because of a greater commitment to the current strategy, than top management teams with a lower depth of cognitive resources (Wally & Becerra, 2001; Wiersema & Bantel, 1992). It is therefore hypothesized that:

H1: The diversity of cognitive resources in an organization's top management teams will positively influence the extent to which that organization changes its strategy.

H2: The depth of cognitive resources in an organization's top management team will negatively influence the extent to which that organization changes its strategy.

The above diversity related arguments suggest that the interactions among the members of a top management team are important in determining the decisions regarding strategic change for the organization. In this study, the influence of three critical team level socio-political processes, namely, task conflict, relationship conflict, and trust within top management teams are examined (Amason & Schweiger, 1994; Mishra, 1996).

Task conflict constitutes disagreements among group members about the content of their decisions, and involves differences in viewpoints, ideas, and opinions. Relationship conflict, in contrast, is perceived as interpersonal incompatibility and typically includes tension, annoyance, and animosity among group members (Jehn, 1995).

The two types of conflict have different consequences for groups. Task conflict is beneficial for groups working on non-routine tasks that involve a high degree of uncertainty, and require a variety of information for problem solving. Task conflict improves the ability of top management teams to formulate and implement a strategic change for their organizations by allowing team members to discuss diverse perspectives, increasing the members' understanding of the issues being discussed (Amason & Schweiger, 1994). Task conflict may also reduce groupthink (Janis, 1972) by allowing consideration of alternatives, and helping people to identify and develop new organizational strategies.

It is important to remember, however, that task conflict need not always be beneficial for all groups. The nature and type of task plays an important role in determining the effects of task conflict on group outcomes. Groups working on routine tasks, for example, may not benefit much from task conflict because task conflict may interfere with efficient information processing. For these groups, task conflict may be interruptive and counterproductive, since members can usually rely on simple operating procedures to complete their tasks (Gladstein, 1984). Although high levels of task conflict have proven to have positive effects, extremely high levels of task conflict can cause inertia, in groups working on non-routine tasks. This is because groups are unable to move into the next stage of productive work efficiently (Gersick, 1989; Jehn, 1995). Given the evidence documenting the importance of task conflict

for groups working on non-routine tasks, however, and given that this study represents a preliminary attempt to identify the types of interactions that may influence top management teams decisions to change their firms' strategies, it is hypothesized that:

H3: Task conflict among the members of an organization's top management team will positively influence the extent to which that organization changes its strategy.

When group members experience relationship conflict, they work less effectively and produce sub-optimal products leading to poor performance (Jehn, 1995). Staw, Sandelands, and Dutton (1981) suggest that the threat associated with relationship conflict inhibits peoples' ability to process complex information. For a top management team considering a change in their organization's strategy, relationship conflict should negatively influence the extent to which they can successfully formulate and implement a change in their organization's strategy. It is hypothesized that:

H4: Relationship conflict among the members of an organization's top management team will negatively influence the extent to which that organization changes its strategy.

The challenge facing a top management team considering a change in strategy is to encourage at least some amount of task conflict without simultaneously triggering relationship conflict among team members. Intra-group trust allows group-wide expectations of truthfulness, integrity and a sense of shared respect for group members' to amplify perceptions of competence among one another. When team members trust each other, they may be more likely to accept stated disagreements at face value and less likely to attribute hidden agendas to task conflict behaviors (Mishra, 1996). As a result, the team as a whole may successfully plan and implement a change in strategy by benefiting from the positive effects of task conflict while avoiding the negative effects of relationship conflict. It is hypothesized that:

H5: Trust among the members of an organization's top management team will positively influence the extent to which that organization changes its strategy.

Note that previous research finds that task conflict, relationship conflict, and trust are interrelated. Studies have found that teams that experience task conflict also typically experience relationship conflict (Amason, 1996; Jehn, 1995). Another study finds that trust moderates the relationship between task conflict and relationship conflict (Simons & Peterson, 2000). It is possible, therefore, that interactions between trust, task conflict, and relationship conflict may influence changes in organizational strategy by top management teams. Given the small amount of evidence regarding the exact effects of these interactions on organizational outcomes, however, it is explored (but not formally hypothesized) whether interactions between trust and task conflict, and trust and relationship conflict influence changes in organizational strategy by top management teams.

Methodology

Sample

The population from which the sample in this study was drawn consists of 487 community banks present in an upper mid-western state in the United States at the time of this study (2000-2001). Community banks are defined as commercial banks that serve a local community and have less than \$1 billion in assets (Critchfield, et al., 2005). The list of these banks was obtained from the Bankers Association of that state. There were two advantages to using this sample. First, selecting banks in a single area standardized on industry and geographic location. This eliminated some variance in the types of strategic issues handled by the top management teams, and in the forces in the external environment facing these teams. It is reasonable to expect that all top management teams would have to make similar strategic decisions about the loan mix of their banks based on some common economic indicators. Second, the size of the population was large enough that it had the potential to generate a reasonable sample size, even assuming that the survey would meet with low response rates.

The timing of this study was also particularly appropriate to studying issues of strategic change. FDIC reports on the outlook for the banking industry indicate that the year 2000 was the last year of a long period of economic expansion. Most banks reported record profits, healthy capital cushions, and good asset quality. By the end of the fourth quarter of 2000, however, imbalances were beginning to appear in the economy, and just a year later, by the fourth quarter of 2001, banks were responding to a mild economic recession. The specific challenges that banks faced included increasing competition, pressures on net interest margins, and a change in the yield curve environment from inverted to normal. In addition, the banks in this study faced the additional challenge that, as a result of their location, they were exposed to the risk resulting from poor conditions in the agricultural industry at the end of 2000. In response, many banks tried to attract higher-yielding assets by changing their portfolios, and increasing loan-to-asset ratios to historically high levels (FDIC National Edition Regional Outlook, Fourth Quarter 2000, & Fourth Quarter 2001; FDIC Outlook, 2006, from www.fdic.gov).

Data Collection

This study used two major sources of data. Individual responses to a questionnaire in the first quarter of 2000 provided data on top management demographics, task conflict, relationship conflict, and trust. The Federal Deposit Insurance Corporation (FDIC) provided data on bank strategy from 2000 to 2005 (www.fdic.gov).

The CEOs of the 487 banks belonging to the Bankers Association were contacted over the phone and asked for their top management teams' participation in the study. If the CEO of a bank agreed to participate in the study, he or she was asked to provide a list of members in the bank's top management team. After cross-checking against the list provided in the bank directory of the Bankers Association, additions or deletions of names were re-confirmed with the CEO or the president. Finally, the CEO or the president was requested to forward the survey to other members of his or her team. Where the president or CEO declined to provide the names of the members of the top

management team, they were asked to specify the total number of questionnaires they would like sent to them for completion by team members. In all, the CEOs of 148 banks agreed to participate, and CEO's of 339 banks either declined or could not be contacted after at least two attempts.

The study yielded usable responses from 468 individuals belonging to 126 top management teams. Of these teams, 111 had at least two or more of their team members respond to the survey (representing a minimum response rate of 40% per team; of the 111 teams, 21 teams provided 2 responses per team, 30 teams provided 3 responses per team, and the remaining 60 teams provided 4 or more responses per team). The analysis used data only from these 111 teams with at least two respondents. The average team size was 5.05 (s.d. = 2.2). On average, 86.2% of team members per team responded to the questionnaire. A large sample means test indicated that the 111 banks in the data set did not differ significantly in either size or profitability from banks not included in the data set.

Measures

Dependent variable: Change in organizational strategy

Organizational strategy was measured as the loan mix of a bank. Loan mix is a critical indicator of the bank's strategic scope, and more specifically, of the extent to which the bank is involved in different markets such as agriculture, real estate, etc. (Mehra, 1996). Loan mix was measured by five variables namely, commercial loans, real estate loans, individual loans, agricultural loans, and other loans, each measured as a percent of total assets. Following previous research on organizational change (Boeker, 1997; Wiersema & Bantel, 1992), these five measures of loan mix were condensed into one measure using Jacquemin and Berry's (1979) entropy measure of diversification. Change in strategy was measured as the absolute percentage change in the banks' loan mix over one year (between the years 2000 and 2001). In addition, since one year may not be enough time to determine whether or not a strategic change has occurred, also measured was change in loan mix over a period of 2, 3, and 5 years.

Change in loan mix is an appropriate indicator of change in strategy since this study examines community banks. The loan portfolios of community banks are linked to the local economies in which they are located and are stable indicators of bank strategy, with even a 4% change in loan mix representing a major change in strategy for these banks. Data on community banks, for example, indicate that the loan to asset ratio for community banks increased from 57% in 1994 to more than 63% in 2003. This increase in loan-to-asset ratio reflected more lending from commercial community banks, and other types of real estate lending. From 1994 to 2003, commercial community banks increased their commercial real estate lending (and their risk taking) from 9.2 to 15.2% and construction lending from 2.5 to 5.2%, while farm operating loans declined from 2.5 to 2.3% and multi family loans remained constant at 1.9%. While these changes in loan mix undoubtedly reflect the lending opportunities associated with the economic expansion of the 1990s, they also reflect community banks' need to change strategies in order to continue to generate earnings and maintain profitability in the face of competition from large and midsize banks (Critchfield, et al., 2005).

Dependent variables

Top management team diversity: Dispersion and depth of team cognitive resources

Multiple measures, many of which have been used in previous research on change (Boeker, 1997; Wally & Becerra, 2001; Wiersema & Bantel, 1992), were used to capture the dispersion and depth of cognitive resources. The dispersion of cognitive resources was measured as dispersion in functional background, organizational tenure, and age of team members. Functional background was measured as a categorical variable (primary functional responsibilities coded based on self-report by respondents (Chattopadhyay, Glick, Miller, & Huber, 1999)). Dispersion in functional background was calculated using Teachman's index (1980). Dispersion in organizational experience and age were measured by the coefficients of variation (standard deviation divided by mean) for the two variables (Allison, 1978). The depth of cognitive resources available to the team was measured by average industry experience, organizational tenure, and team tenure.

Two team composite indices were created using principal components factor analysis (with varimax rotation) on the six composition variables. These two indices explained 58% of the variance of the original six measures. The first index loaded on the three measures of the depth of cognitive resources (average industry experience, organizational tenure, and team tenure). The second index loaded on the measures of the diversity of cognitive resources (dispersion in functional background, organizational experience, and age). The factor scores, or estimated values of the common factors, were calculated for each bank in the sample using the regression method, and in subsequent analysis.

Task conflict

Task conflict was measured with a four-item scale from Jehn (1995) (see Table 2). This scale had a coefficient alpha of .82, indicating sufficient reliability.

Relationship conflict

Relationship conflict was measured with a four-item scale from Jehn (1995) (see Table 2). This scale had a coefficient alpha of .94, indicating sufficient reliability.

Trust

Trust was measured with a seven-item scale from Robinson (1996) (see Table 2). This scale had a coefficient alpha of .85, indicating sufficient reliability.

In order to mitigate the issue of social desirability in survey responses (Huber and Power, 1985), the identity of the respondents was kept partially anonymous. In addition, respondents signed confidentiality agreements before completing the survey. While a survey like this one could not overcome cognitive limitations of respondents as well as a lab study, this shortcoming was mitigated by limiting respondents to the banking industry. Finally, the average tenure of team members within the team was about 8 years. Such long tenured teams should have members who can respond to the questions about task and relationship conflict and trust within the team.

Controls

The study controlled for the past performance of the organization and organizational size (Boeker, 1997; Boss & Golembiewski, 1995; Tushman & Romanelli, 1985), leadership style, and the banks' ratio of time deposits to total deposits, since this measure captures a critical dimension of the strategic scope of a bank, namely, the time horizon of a banks' funding base (Mehra, 1996).

Past performance and organizational size

Past performance as the coefficient of variation of return on assets (ROA) for the three years preceding the study, weighted by the average asset size of the banks (to account for variations in performance due to differences in bank size) was used. The coefficient of variation instead of the average past performance measure used in prior studies (e.g., Wiersema and Bantel, 1992) to account for dispersions of past performance around the mean was used. This is important because two banks with the same average past performance may differ in their decisions to change strategies depending on the amount of variation or unpredictable change they observe in their performance (see, for example, Snyder & Glueck, 1982). Data for 3 years preceding the study was used since banks may not ordinarily change strategies immediately in response to poor performance in any one year (Wiersema & Bantel, 1992). In order to increase the comparability of the results of this study with previous studies, a regression analysis with separate measures of average past performance and organizational size was run.

Leadership style

Research on organizational change indicates that the extent to which a CEO encourages participation influences the success of any change effort in an organization (Boss & Golembiewski, 1995). The study controlled the extent to which the leader used a participative leadership style (Bass, 1990) with the following scale from Module 5 (Supervision) of the Michigan Organizational Assessment Questionnaire: a) My team leader encourages team members to participate in important decisions; b) My team leader encourages people to speak up even when they disagree with a decision; c) My team leader makes most decisions without asking team members for their opinions (reverse scored); and d) My team leader makes important decisions without involving team members (reverse scored). The coefficient alpha of this scale was .84, indicating sufficient reliability.

Results

Table 1 presents the mean, standard deviations, and correlations for the variables used in this study.

Table 1 indicates that, as expected, task conflict and relationship conflict are significantly correlated with each other ($r = .719, p < .01$), and that trust is negatively correlated with both ($r = -.564, p < .01$ for task conflict, and $r = -.676, p < .01$ for relationship conflict). This is consistent with the reasoning behind Hypothesis 5. By reducing conflict, trust may allow the team to accept and discuss different viewpoints

at face value. The dependent variable, change in strategy after 1 year, negatively correlates with the index measuring the depth of cognitive resources available to the team ($r = -.213$, $p < .05$).

Table 1: Correlations, Means, and Standard Deviations

	Mean (Standard deviation)	1	2	3	4	5	6	7	8
1. Depth of cognitive resources	3.17x10 ⁻¹⁶ (1.000)	1.000							
2. Dispersion of cognitive resources	-7.43x10 ⁻¹⁶ (1.000)	.000	1.000						
3. Task conflict	12.329 (1.985)	-.236*	.006	1.000					
4. Relationship conflict	10.742 (3.172)	-.061	-.048	.719**	1.000				
5. Trust	41.996 (3.707)	.097	-.208*	-.564**	-.676**	1.000			
6. Leadership	21.628 (2.912)	-.143	-.037	-.320**	-.411**	-.520**	1.000		
7. Weighted past performance	1.513x10 ⁻¹ (2.666x10 ⁻³)	-.264**	.155	.188*	.101	-.088	.199*	1.000	
8. Time deposits / Total deposits	.505 (.108)	.117	.101	.028	.022	-.123	-.177	-.009	1.000
9. Change in strategy (1 year)	3.245 (3.123)	-.213*	-.057	.152	.103	.040	-.094	-.132	-.277*

* $p < .05$; ** $p < .01$; $N = 11$

Since task conflict, relationship conflict, and trust were correlated, an exploratory factor analysis (extraction of factors with maximum likelihood and oblimin rotation) was carried out to check if the respondents to the survey could distinguish among the three constructs. Table 2 presents these results.

The analysis extracted three distinct factors with Eigen values greater than 1, corresponding to task conflict, relationship conflict, and trust. Then individual responses for task and relationship conflict, trust, and leadership to the team level were aggregated. These aggregations were justified by the value of the eta-squared statistic (.439 for task conflict, .527 for relationship conflict, .397 for trust, and .376 for leadership). These results exceed Georgopoulos' (1986) minimum criterion of .20 for aggregating individual responses to the team level.

Hypotheses 1 through 5 posit different types of influences (positive and negative) of the dispersion and depth of top management team cognitive resources, task conflict, relationship conflict, and trust on the extent to which an organization changes its strategy. These hypotheses were tested using multiple regression analysis. Task conflict, relationship conflict, trust, and leadership were centered before carrying out the analysis in order to reduce multicollinearity (Neter, Kutner, Nachtsheim, & Wasserman, 1996). Table 3 presents the results of the regression analysis for changes in strategy over 1, 2, 3, and 5 years.

Table 2: Results of the Exploratory Factor Analysis: Pattern Matrix

	Relationship conflict	Trust	Task conflict
a. I believe my team members have high integrity.	5.183E-02	.771	4.636E-02
b. I can expect my team members to treat me in a consistent and predictable fashion.	-5.443E-02	.681	2.481E-02
c. My team members are not always honest and truthful ^R .	-6.744E-02	.531	-8.939E-02
d. In general, I believe my team members' motives and intentions are good.	8.862E-02	.714	9.952E-03
e. I don't think my team members treat me fairly ^R .	-5.458E-02	.686	-2.333E-03
f. My team members are open and upfront with me.	1.663E-02	.729	-1.996E-02
g. I am not sure I fully trust my team members ^R .	-.123	.672	-3.990E-02
a. How often do people in your team disagree about opinions regarding the work being done?	3.790E-02	2.149E-02	.676
b. How frequently are there disagreements about ideas in your team?	-7.555E-02	6.403E-02	.912
c. How much do your team members disagree about the content of your team's decisions?	1.618E-02	-7.827E-02	.692
d. To what extent are there differences of professional opinion in your team?	7.850E-02	-7.744E-02	.574
e. How much personal friction is there among members in your team?	.824	-5.890E-02	1.784E-02
f. How much are personality clashes evident in your team?	.891	3.976E-02	2.888E-03
g. How much tension is there among members in your team?	.919	-3.318E-02	-1.392E-02
h. How much emotional conflict is there among members in your team?	.883	1.606E-02	3.063E-02

Extraction method: Maximum likelihood, Rotation method: Oblimin with Kaiser Normalization.

$X^2 = 171.072$, $df = 63$, $p=0.000$

Cumulative percentage of explained variance = 66.591%

^RReverse scored

For changes in strategy over 1 year, the model explained 22% of the variance in changes in strategy ($F = 3.546$). Results of this model are discussed below (column 1 of Table 3).

Hypothesis 1, stating that the diversity of a top management team's cognitive

resources should positively influence the extent to which their organization changes its strategy, is not supported ($b = .18, p > .05$). Hypothesis 2, stating that the depth of a top management team's cognitive resources should negatively influence the extent to which their organization changes its strategy is supported ($b = -.80, p < .01$). This result is consistent with that of previous studies on organizational change indicating that teams whose members have long organizational and industry tenures are less likely to initiate strategic change, possibly because of a reluctance to challenge the status quo (Grimm & Smith, 1991; Wiersema and Bantel, 1992).

Table 3: Regression Results
Dependent variable: Change in organizational strategy

	1 2000-2001	2 2000-2002	3 2000-2003	4 2000-2005
INDEPENDENT VARIABLES				
Constant	7.633 (1.369)	13.615 (2.376)	20.499 (4.028)	24.130 (5.874)
Depth of cognitive resources	-.800** (.302) -.256	-.689 (.523) -.132	-.503 (.887) -.059	-.614 (1.299) -.052
Dispersion of cognitive resources	.180 (.298) .057	-.117 (.518) -.022	-.615 (.878) -.071	.236 (1.290) .020
Task conflict	.172 (.213) .110	-.079 (.373) -.030	-.294 (.633) -.068	.757 (.947) .124
Relationship conflict	.169 (.151) .168	.222 (.263) .132	.086 (.445) .031	.970 (.664) -.253
Trust	.236* (.117) .278	.271 (.203) .192	-.177 (.344) -.076	-.074 (.498) -.023
CONTROL VARIABLES				
Leadership	-.194 (.119) -.181	-.386† (.212) -.212	-.126 (.360) -.042	-.563 (.522) -.137
Past performance weighted by firm size	-253.620* (113.504) -.217	5.044 (197.358) .003	-260.322 (334.534) -.081	-212.643 (522.767) -.045
Time deposits / Total deposits	-7.904** (2.614) -.276	16.154** (4.539) -.337	-23.371 (7.694) -.298	-18.244 (11.153) -.169
R-square	.221	.165	.103	.064
N	109	108	108	102
F	3,546**	2,443*	1,422	.792

Regression parameter appears above the standard error (in parenthesis) and then the standardized coefficient. † $p < .10$, * $p < .05$, ** $p < .01$

Hypotheses 3 and 4 are not supported. The extent to which team members experience task or relationship conflict does not influence the extent to which their organizations change their strategies ($b = .17$, $p > .05$ for both task and relationship conflict). Instead, supporting Hypothesis 5, the amount of trust among the members of a team positively influences the extent to which their organization changes its strategy ($b = .24$, $p < .05$). The power of this test is approximately .80 at $\alpha = .01$, for an effect size (f^2) of .10 (Cohen, 1988). The power of the overall regression is approximately .61 at $\alpha = .01$, for an effect size (f^2) of .13 (Cohen, 1988).

In order to increase the comparability of these results with those of previous studies, the above regression was rerun with two separate measures for average past performance and organizational size (instead of a single control for the coefficient of variation of return on assets weighted by asset size). The results presented above did not change significantly ($b = -.693$, $p < .05$ for depth of cognitive resources, and $b = .255$, $p < .05$ for trust).

For changes in strategy over 2 years (2000-2002), neither top management team cognitive resources nor socio-political processes influenced the extent to which an organization changed its strategy (refer to the second column in Table 3). Instead, the extent to which the CEO used a participatory leadership style had a marginally significant effect on strategy change ($b = -.386$, $p < .10$). For changes in strategy over 3 years (2000-2003) and 5 years (2000-2005), neither cognitive resources nor socio-political processes influenced changes in strategy (see columns 3 and 4 of Table 3). In addition, the regression equations were not significant ($F = 1.422$ and $F = .792$, respectively). These results are discussed in the next section.

In addition to examining the direct effects of task conflict, relationship conflict, and trust, it was also explored whether the interactions between trust and task conflict, and trust and relationship conflict influence the extent to which an organization changes its strategy over one year. The results indicate that neither of the interaction terms was significant ($b = -.028$ for the trust x task conflict term, and $b = -.016$ for the trust x relationship conflict term, $p > .05$ for both), and that including these terms did not substantially change the results presented in Table 3.

Discussion

From a top management team perspective, this study explored the reasons why some organizations change their strategies faster than others in response to changes in their external environment than others. The results of this study indicate that teams whose members have, on average, fewer years of industry, organizational, and team tenure, and higher levels of trust change their organizations' strategies faster, in the short term, than teams whose members have more years of experience and lower levels of trust. These results are consistent with previous studies on change that find that firms are more likely to change their strategies if they have top management teams whose members have short organization and team tenures and less industry experience (Boeker, 1997; Wiersema & Bantel, 1992). In addition, by highlighting the importance of trust among the members of a top management team, the results of this study

provides some empirical evidence in support of assertions about the criticality of trust by earlier researchers (Goodstein & Burke, 1991). Trust among the members of a top management team may encourage participation in change, eliminate unnecessary risks or pressure, and lead to fewer dysfunctional interactions, leading to successful changes in strategy (Goodstein & Burke, 1991).

Taken together, the results indicate the intriguing possibility that trust among team members can help overcome the resistance to change generated by long tenure. A post hoc correlation analysis of average team tenure, leadership, conflict, and trust hints at how this might happen. Average team tenure correlates negatively with task conflict ($r = -.19, p < .05$), suggesting that longer tenured teams may resist change, perhaps as a result of some form of groupthink (Janis, 1972). Average team tenure, however, does not correlate significantly with trust ($r = .14, p > .10$). One explanation for this lack of correlation is that tenure may result in trust only for some kinds of teams (e.g., teams with low levels of conflict and high levels of participation and involvement). Alternatively, it may be that the measure of tenure used in this study (the average length of time for which members of the team have been part of the team) is not fine grained or sensitive enough to capture the effects of tenure on trust. What may matter, instead, is the length of time that the team as a whole has been together. Developing a measure of team tenure that captures this data, and at the same time is not too sensitive about missing data, may clarify this issue. The data suggest one other explanation for the lack of a significant correlation between tenure and trust. The correlation data reveal that participatory leadership style is positively correlated with trust ($r = .52, p < .01$). This suggests that by simply working together for a long time, by itself, is not sufficient to generate trust. Instead, the extent to which the leader asks for suggestions from the group, and treats everyone as equals, helps develop trust within the group. This, in turn, may allow the group to consider a change in their organizations' strategies.

Related to the above, the results of regression for changes in strategy over two years suggest another intriguing possibility, that participatory leadership, in and of itself, may not necessarily lead to a change in organizational strategy. Indeed, the results of this regression indicate that the extent to which a CEO uses a participatory leadership style has a significant but negative influence on the extent to which the organization changes its strategy over a two-year period. One explanation of this result is that while participatory leadership may help to elicit suggestions from team members, it may also lead to team members perceiving the CEO as providing inadequate leadership or direction, especially over a longer time period in an increasingly hostile environment. A perception of inadequate direction is a leading cause of the unsuccessful implementation of strategic decisions in small community banks (Kargar & Blumenthal, 1994).

This study finds a non-significant influence of dispersion of cognitive resources on changes in organizational strategy. Recent research provides one potential explanation for this result. Cronin and Weingart (2007) suggest that functional diversity in teams, while potentially beneficial, increases the likelihood that individual team members will perceive the team's task differently, leading to gaps between teammates' interpretations of what is needed for the team to be successful. In the context of this study, this suggests that while the dispersion of cognitive resources within a team may

direct the attention of the team toward the need for strategic change, it may also hinder the team from actually taking steps toward initiating change. An alternative explanation for the non-significant results relating to the dispersion of cognitive resources is that more fine-grained measures of functional background may be necessary to capture the effects of dispersion in cognitive resources. Other measures of cognitive dispersion, for example, dispersion in educational backgrounds, may also better capture the effects of dispersion in cognitive resources than the measures used in this study.

The non-significant influence of team demographics and socio-political processes on strategy change over a longer time period (3 years and 5 years) observed in this study is also noteworthy. These results suggest that while top management team demographics and processes have an effect on the extent of strategy change in the short term (one year period), over a longer period of time, the effect of previous changes in strategy on firm performance may matter more. In other words, top management team characteristics influence the decision to change strategy, and therefore, performance. The change in performance resulting from the change in strategy may influence the team's decision about whether any further changes in strategy are needed. This explanation is consistent with Boeker's (1997) finding that although managerial characteristics may themselves cause organizations to change strategy, poor performance increases their motivation to do so.

The results of this study need to be interpreted in the context of the community banking industry. Community banks are, by nature, small banks that are dwarfed by the giants of the banking industry. Though the number of community banks has declined as a result of changing industry conditions, these banks still account for 94% of all banks in the U.S. Many community banks have survived primarily because of their ability to handle soft information and provide personal customer service (Critchfield et al, 2005). While this study did not examine the sources of competitive advantage of the banks in the sample, the results of this study suggest that the adaptability and competitiveness of community banks depends to some extent on the demographic characteristics and interactions among the members of the top management teams of these banks (Hambrick & Mason, 1984).

It is interesting to note that the amount of task conflict and relationship conflict among team members did not significantly influence the extent to which the organization changes its strategy. Prior studies discovered that these constructs influence decision quality and performance (e.g., Amason & Sapienza, 1997). One reason why this study did not find a significant influence may lie in the different effects these constructs exert on different types of decisions. Thus, while task conflict may encourage superior performance by allowing team members to explore different issues and avoid groupthink (Amason, 1996), it may also signal that not all team members are convinced of the need for change. Indeed, some research suggests that it is not conflict per se that is important; rather, it is the way that conflict is handled that determines a top management team's effectiveness (Chen, Liu, & Tjosvold, 2005). This also suggests a reason why trust matters for organizational change efforts.

As with all research, this study has some limitations. Confining the sample to a single industry in a single region helps control for differences in external environments, but limits the homogeneity of the results to other organizations in other

industries. Second, this study focused on the magnitude of change in a firm's strategic position in certain product market domains. Other dimensions of strategic change (e.g., the nature of change, whether radical or incremental) may be influenced by other types of top team social processes than those identified in this study. Finally, the scope of this study was limited to identifying some critical top management team related causes of change. While the results of this study suggest a causal link between top management team demographic characteristics and social processes, proving this link would require explicit theorizing and measurement of the influence of demographics on social processes. Future research could perhaps approach this issue using a combination of research techniques such as case studies and surveys.

This study has some important practical implications. The results of this study indicate that top management teams of organizations considering a change in strategy should develop high levels of trust among the members of their team. A number of interventions are available for this purpose (Woodman & Sherwood, 1980). The results of this study also indicate that CEOs of organizations contemplating changes in their organizations' strategy should consider inducting some new team members to their teams, since teams whose members have relatively less experience in their industry, organization, or team are more likely to change strategy than teams whose members have a greater depth of expertise. However, it is important to note that "less" and "more" experience is relative. The respondents to this survey had, on average, 22 years of experience in the industry, 15 years of experience in their banks, and 8 years of experience in their top management teams. This is comparable to the respondents in Wiersema and Bantel's (1992) study, where "short" organizational tenures referred to tenures of 11.5 years or less.

Taken together, the results of this study have one other important implication: Top executives may need to pay attention to the timing of strategic change (Huy, 2001). Inducting new members into the top management team may make it more difficult for the team to develop the trust that is needed to change strategy successfully. In order to implement this strategy successfully, CEOs need to coordinate the two actions (inducting new members and developing trust) to ensure that these actions precede any attempts to change organizational strategy.

References

- Allison, P. D. (1978). Measures of inequality. *American Sociological Review*, 43: 865-880.
- Amason, A. C. (1996). Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of Management Journal*, 39: 123-128.
- Amason, A. C., & Sapienza, H. (1997). The effects of top management team size and interaction norms on cognitive and affective conflict. *Journal of Management*, 23 (4): 495-516.
- Amason, A. C., & Schweiger, D. M. (1994). Resolving the paradox of conflict, strategic decision making, and organizational performance. *International Journal of Conflict Management*, 5: 239-253.

- Bass, B. M. (1990). *Bass and Stogdill's Handbook of Leadership*. The Free Press.
- Boeker, W. (1997). Strategic change: The influence of managerial characteristics and organizational growth. *Academy of Management Journal*, 40 (1): 152-170.
- Boss, R.W., & Golembiewski, R. T. (1995). Do you have to start at the top? The chief executive officer's role in successful organization development efforts. *Journal of Applied Behavioral Science*, 31 (3): 259-277.
- Chattopadhyay, P., Glick, W. H., Miller, C. C. & Huber, G. P. (1999). Determinants of executive beliefs: Comparing functional conditioning and social influence. *Strategic Management Journal*, 20: 763-789.
- Chen, G., Liu, C., & Tjosvold, D. (2005). Conflict management for effective top management teams and innovation in China. *Journal of Management Studies*, 42 (2): 277-300.
- Cho, T. S., & Hambrick, D. C. (2006). Attention as the mediator between top management team characteristics and strategic change: The case of airline deregulation. *Organization Science*, 17 (4): 453-469.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Critchfield, T., Davis, T., Davidson, L., Gratton, H., Hanc, G., & Samolyk, K. (2005). FDIC Banking review: Community banks: Their recent past, current performance, and future prospects. <http://www.fdic.gov/bank/analytical/banking/2005jan/article1.html>
- Cronin, M. A., & Weingart, L. R. (2007). Representational gaps, information processing, and conflict in functionally diverse teams. *Academy of Management Review*, 32 (3): 761-773.
- Finkelstein, S., & Hambrick, D. C. (1990). Top management team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, 35: 484-503.
- Georgopoulos, B.S. (1986). *Organizational Structure, Problem Solving, and Effectiveness*. San Francisco: Jossey-Bass.
- Gersick, C.J.G. (1989). Marking time: Predictable transitions in task groups. *Academy of Management Journal*, 32: 274-309.
- Gladstein, D. L. (1984). Groups in context: A model of task group effectiveness. *Administrative Science Quarterly*, 29: 499-517.
- Goodstein, L. D., & Burke, W. W. (1991). Creating successful organization change. *Organizational Dynamics*, 19 (4): 5-17.
- Grimm, C. M., & Smith, K. G. (1991). Management and organizational change: A note on the railroad industry. *Strategic Management Journal*, 12: 557-562.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9: 193-206.
- Hoffman, L. R., & Maier, N. R. F. (1961). Quality and acceptance of problem solutions by members of homogeneous and heterogeneous groups. *Journal of Abnormal and Social Psychology*, 58: 27-32.
- Huber, G., & Power, D. (1985). Retrospective reports of strategic level managers: Guidelines for increasing accuracy. *Strategic Management Journal*, 6: 171-180.
- Huy, Q. N. (2001). Time, temporal capability, and planned change. *Academy of Management Review*, 26 (4): 601-623.

- Jacquemin, A. P., & Berry, C. H. (1979). Entropy measure of diversification and corporate growth. *The Journal of Industrial Economics*, XXVII (4): 359-369.
- Janis, I. L. (1972). *Victims of Groupthink*. Boston: Houghton Mifflin.
- Jehn, K. A. (1995). A multi method examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, 42: 530-557.
- Kargar, J., & Blumenthal, R. A. (1994). Successful implementation of strategic decisions in small community banks. *Journal of Small Business Management*, April issue: 10-22.
- Lawrence, B. S. (1997). The black box of organizational demography. *Organization Science*, 8 (1): 1-22.
- Mehra, A. (1996). Resource and market based determinants of performance in the U.S. banking industry. *Strategic Management Journal*, 17 (4): 307-322.
- Mishra, A. K. (1996). Organizational responses to crisis: The centrality of trust. In R. Kramer & T. Tyler (Eds.), *Trust in Organizations: Frontiers of Theory and Research* (pp. 261-287). Thousand Oaks, CA: Sage Publications.
- Neter, J., Kutner, M. H., Nachtsheim, C. J., & Wasserman, W. (1996). *Applied Linear Statistical Models*. Chicago: Richard D. Irwin Inc.
- Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative Science Quarterly*, 41: 574-599.
- Simons, T. L., & Peterson, R. S. (2000). Task conflict and relationship conflict in top management teams: The pivotal role of intra-group trust. *Journal of Applied Psychology*, 85 (1): 102-111.
- Smith, K. G., Smith, K. A., Olian, J. D., Sims, H. P., O'Bannon, D. P., & Scully, J. A. (1994). Top management team demography and process: The role of social integration and communication. *Administrative Science Quarterly*, 39: 412-438.
- Snyder, N. H., & Glueck, W. F. (1982). Can environmental volatility be objectively measured? *Academy of Management Journal*, 25: 185-192.
- Staw, B., Sandelands, L., & Dutton, J. (1981). Threat-rigidity effects in organizational behavior: A multilevel analysis. *Administrative Science Quarterly* (26): 501-524.
- Teachman, J. D. (1980). Analysis of population diversity. *Sociological Methods and Research*, 8: 341-362.
- Tushman, M. L., & Romanelli, E. (1985). Organizational evolution: A metamorphosis model of convergence and reorientation. In B. M. Staw & L. L. Cummings (Eds.), *Research in Organizational Behavior* (vol. 7, pp.171-222).
- Wally, S., & Becerra, M. (2001). Top management team characteristics and strategic changes in international diversification: The case of U.S. multinationals in the European community. *Group and Organization Management*, 26 (2): 165-188.
- Wiersema, M. F., & Bantel, K. A. (1992). Top management team demography and corporate strategic change. *Academy of Management Journal*, 35 (1): 91-121.
- Woodman, R., & Sherwood, J. (1980). The role of team development in organizational effectiveness: A critical review. *Psychological Bulletins*, 88: 166-186.