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Abstract

The behavioral theory of the firm predicts that problemistic search and organizational change occurs after comparing performance with the aspiration level, and this prediction has been strongly supported. The bounded rationality assumption in the behavioral theory of the firm suggests that such search is often myopic. However, we still lack theory explaining the source of myopia and how myopia influences decision makers choosing search directions when performance feedback indicates a problem. In this study, we address the relationship between myopia and search direction. We develop theory on how decision maker cognitions and knowledge formed by their past experiences underlie coalitions that direct myopic search, leading to connections between the decision making group composition and the likelihood of choosing different actions when making organizational changes. We apply the theory to a well-known reaction to performance feedback—mergers and acquisitions—and show that the experience of the decision maker and the composition of the key decision making group—board of directors—interacts with performance feedback to affect the choice of action—the type of acquisition target—as an outcome of myopic search.

Introduction

"A Behavioral Theory of the Firm" (Cyert and March 1963) introduced the model of problemistic search, which posits that organizations search for solutions when performance below an aspiration level indicates a problem. This search is initially myopic, or near the organizational unit indicating low performance, but becomes broader if satisfactory solutions cannot be found or do not work. A central theoretical contribution was the shift in focus from rational consideration of problems and opportunities to problem-driven search. A central empirical contribution has been the accumulation of studies showing that organizational changes are indeed driven by performance below the aspiration level (Gavetti, Greve, Levinthal and Ocasio 2012; Shinkle 2012). The progress of such performance feedback research has been impressive, as it predicts outcomes such as product introduction (Gaba and Joseph 2013), innovations (Greve 2003a), market expansion (Barreto 2012), alliance partner choice (Shipilov, Li and Greve 2011), mergers and acquisitions (Iyer and Miller 2008), divestiture (Desai 2016), and risk taking (Kacperczyk, Beckman and Moliterno 2015).

However, the sheer diversity of outcomes modeled in empirical work has revealed a gap in the theory. Each study examines a specific domain and makes predictions on whether performance below aspiration will lead the firm to change in that domain, but not on how firms choose among alternative actions in that domain. Thus, scholars have predicted whether and when firms make a change, but not what action is chosen in the respective change. For example, performance feedback affects divestment (Desai 2016; Shimizu 2007), and it would be of interest to not only examine when organizations choose divestment, but also to explore which business segment they choose to divest. Such examination requires theory of myopic search, which is already in the behavioral theory of the firm, but it has not been sufficiently developed and applied in research so far. The lack of a prediction on actions chosen also originates from a gap between theory and empirical work, as the current

theory of myopic search resulting from low performance has been difficult to operationalize. The most common performance measure is return on assets (ROA) (Shinkle 2012), which is a powerful driver of change because it is tracked both by CEOs and by stakeholders such as stock analysts and investors. However, ROA summarizes the performance of the entire organization, so its scope is too wide to be a source of myopia, making it insufficient to predict the search direction and action chosen. Thus the theory lacks a mechanism to predict how myopia affects decision-making after performance has indicated a need for change.

One potential solution lies in recognizing that myopia can stem from the cognition and knowledge of managers, as shown by research on managerial cognitions and strategic groups (Kaplan 2011; Porac et al. 1995). There is evidence that managerial cognition stemming from their characteristics and experiences guides strategic changes (Bertrand and Schoar 2003; Hambrick and Mason 1984; Jensen and Zajac 2004; Walsh 1988), though the evidence is currently stronger on CEOs (Bigley and Wiersema 2002; Crossland, Jinyong, Hiller and Hambrick 2014; Nadkarni and Chen 2014; Zhu and Westphal 2014). However, what is not sufficiently explained is how the individual managerial experience and their myopic cognitions aggregate to influence firm-level decisions, especially when performance feedback indicates a need for change (e.g., Eggers and Kaplan 2009; Gerstner, König, Enders and Hambrick 2013). Thus, the two literatures have symmetric gaps, with cognition missing from performance feedback research and problemistic search missing from managerial cognition research. The bridge across this gap between managerial cognition research and problemistic search is to use the theory of coalition building (Cyert and March 1963), taking decision-maker cognitions as the building blocks of potential coalitions and performance feedback as activating coalition building to direct search and choose among alternative actions.

We thus have an opportunity to contribute by developing theory specifying a joint effect of performance feedback and decision-making group composition on the action chosen, as a result of decision-maker cognitions and coalition building directing myopic search triggered by performance feedback. We combine three theoretical mechanisms: (1) search is triggered by comparison of performance and the aspiration level; (2) cognitions shaped by decision-maker experience influence the myopia of search; and (3) decision-makers form groups based on the similarity of their individual cognitions in order to reach a firm decision on search direction matching the myopia of their coalition. Thus, our first contribution is to modify the theory of problemistic search to take into account how myopia from the experience of decision-making groups directs the search triggered by performance feedback. In particular, we bring attention to the importance of external experience as a source of managerial cognition and myopic search by organizations. The second contribution is to add coalition formation as an outcome of managerial experience and a mechanism linking managerial myopia to problemistic search direction. The third contribution is to add theory and measures that let the researcher assess potential coalitions, detect the likely dominant coalition, and predict the direction of change that matches the dominant coalition myopia. In sum, the new theory provides problemistic search theory with predictions on what action is chosen in organizational change, not just whether and when the change happens.

We apply the theory to acquisitions, a strategic behavior that is strongly influenced by performance feedback (Haleblian, Kim and Rajagopalan 2006; Iyer and Miller 2008), but past research has not examined whether decisions on what to acquire are the result of myopic search. Acquisitions are approved by the board of directors. We can identify the experience of each board member (director), make inferences on their cognitions when choosing solutions, and predict the potential coalition formation and their likely decisions (Desai 2016; Dowell, Shackell and Stuart

2011; Ocasio 1994). If the experience of directors indicates a likely destination for myopic search, we can identify the sources of myopia and predict the actions chosen as a result of myopia and coalition building. Our context is listed firms in China from 2000 onwards, after market reforms in the 1980s and the growth of the stock market in the 1990s. Firms in our study have a mixture of board members with various degrees of commitment to market competition and state control. Board differences in the proportions of such directors resulted in rich variation in the composition of the decision making group that determines strategic actions such as acquisitions. We examine how choices of acquisition targets can be explained by variables describing performance feedback and the composition of board member experiences and the potential for forming a dominant coalition.

Problemistic Search

The behavioral theory of the firm specified that performance below an aspiration level on an organizational goal triggers problemistic search (Cyert and March 1963). Problemistic search is oriented toward solving the problem of low performance, and it will continue until decision-makers are satisfied with a proposed solution. This in turn leads to organizational change. The theory of low performance leading to problemistic search and organizational change has been supported for a wide range of outcomes (Shinkle 2012), and has been characterized as an essential contribution of the theory due to its foundation in bounded rationality and its goal of predicting the choices in firms (Gavetti et al. 2012). Problemistic search occurs because of bounded rationality; decision makers not only have insufficient information, which could be the case even when fully rational, they also use problems in the form of low performance to judge when they need to search for alternatives to the current actions of the organization (Cyert and March 1963). Problemistic search is consequential because decision makers cannot find the best choice; rather they will settle for the first alternative that has been found and that satisfies their criteria. This role of problemistic

search in the theory shows that the performance level should predict the decision to change (Greve 2003b).

The theory also specifies that search is myopic, which means that it is in the neighborhood of the problem symptom and the current alternative (Cyert and March 1963). The theory predicts that the performance measure can be used to situate the myopic search and orient it toward making incremental changes to specific activities in that unit. However, commonly a broad performance measure such as ROA is used to predict either large-scale strategic change or a wide range of specific changes (Audia, Locke and Smith 2000; Greve 2003a; Salge 2011; Shinkle 2012). This research raises the question of why the same performance measure should influence so many kinds of change. There are studies having a good match such as low market share being used to predict market niche change (Greve 1998) and accidents used to predict safety improvements (Baum and Dahlin 2007), but such studies are rare. With current evidence showing that ROA increases the rate of many organizational changes, but not whether it directs search, a natural next step is to examine what other sources of myopia can effectively predict the action chosen in one type of organizational change.

Cognitive patterns can lead firms to pursue distinct strategic paths, helping some discover strategic positions that are different from those of other firms (Gavetti and Levinthal 2000). To integrate cognition and search theory it is necessary to specify (1) how specific decision makers in a firm differ in cognition and knowledge and (2) how individual decision makers aggregate to a group-level decision on the direction of myopic search. The first point draws on decision-maker experience as a source of cognition and knowledge. For the second point, the behavioral theory of the firm specified that decision makers could form coalitions in favor of an alternative under consideration, even if different decision makers within the same coalition had different reasons for preferring the alternative (Cyert and March 1963).

Cognitive Sources of Myopia

There is already a theoretically grounded alternative path for examining how problemistic search is directed. Cyert and March (1963: 122) posited that one source of bias and myopia is the training and experience that organizational members obtained in their work. This has been overlooked in later theory construction and empirical studies, and is the foundation for our theoretical development. Indeed, decision makers who initiate search need guidance on where to search, and cognitive patterns resulting from their training and experience are prime targets for examining where they get this guidance from. Cyert and March (1963: 124-125) saw simple-minded search as a result of the organization learning from its experience and repeating changes, possibly but not necessarily after observing the success of previous changes (Kelly and Amburgey 1991; March, Sproull and Tamuz 1991). However, that proposal does not specify whether organizations will be biased toward internal experience or will draw from external sources of experience (Levitt and March 1988).

Extending the argument of Cyert and March (1963), the experience that individual decision makers have obtained outside the organization, such as through education or past work, should also be considered as a source of myopia. Experience provides ways of thinking that a decision maker may apply when solving problems, causing the decision maker to match past solutions to current problems. It is particularly important for the board of directors, because they are supposed to bring their outside experience to bear when the organization makes important decisions (Baysinger and Hoskisson 1990; Westphal and Fredrickson 2001). There is abundant evidence that experience drawn from other board memberships influence their decision making (e.g., Davis and Greve 1997; Haunschild 1993; Tuschke, Sanders and Hernandez 2014). The key observation needed to add experience to the theory of myopic search is that decision makers assess alternatives based on their cognitive maps of the world and their specific knowledge related to each alternative (Argote and

Miron-Spektor 2011; Dokko and Gaba 2012). Each component impacts cognition because experience affects alternatives considered, estimates of their benefits, and confidence in the estimates. First, cognitive maps influence what alternatives are considered (Gavetti 2005; Kaplan 2011), as seen both in research on firms sharing a myopic view of the industry (Porac, Thomas and Baden-Fuller 1989; Porac et al. 1995) and in work examining divergence in the cognitive maps among industry participants (Fiol 1990; Pegels, Song and Yang 2000). Second, cognitions about each alternative are shaped by specific experiences that build models of how actions are related to consequences and build confidence in the repetition of actions with past success (Argote 1999; Kraatz and Moore 2002). The confidence is rooted in knowledge on what can be done and how it can be done, gained through learning from experience (Argote and Miron-Spektor 2011)

The idea of cognitions and knowledge guiding managerial action has a role in multiple research traditions. Studies of organizational attention have emphasized the interplay between organizational signals that direct attention and executives who are alert to such signals (Ocasio 2011). In strategy, managerial dominant logics are cognitive patterns that are acquired through experience and influence the actions and outcomes of firms (Prahalad and Bettis 1986). In research on knowledge evolution, search is seen as local to the current knowledge of the firm as a result of an emphasis on improving current knowledge rather than exploring unknown areas of knowledge (Rosenkopf and Nerkar 2001; Stuart and Podolny 1996). These lines of research all point to experience as a source of myopic search. For brevity, we will refer to these arguments as the cognitive view in the following discussion, keeping in mind that knowledge is also important.

Potential Coalitions

A key theoretical challenge is to move from the explanations of firm rigidity that are so common in the cognitive view (e.g., Porac et al. 1989; Tripsas and Gavetti 2000) to theory of predictable

change that examines differences between decision makers and coalition formation. Drawing from the theory of coalitions in managerial decision making (Cyert and March, 1963), we go from individual experiences as myopia sources to a prediction on the expected myopia of a decision-making group based on the likely coalitions of members with similar experiences. The mechanism is that some form of majority decision rule will be used, an argument that has been supported by work finding that the cognitive patterns that are most frequent in a decision making group will dominate the discussion, often leading to suppression of alternative views (Bazerman, Giuliano and Appelman 1984; Greve and Zhang 2016; Peterson et al. 1998). Thus, the cognitive pattern most prevalent in a decision making group is likely to steer the problemistic search in a direction that is proximate to its assumptions and knowledge. This finding is the same as a prediction from organizational politics of a powerful dominant coalition determining firm actions (Pfeffer and Salancik 1978), but the mechanism is one of (possibly false) consensus rather than contestation. The theoretical problem that needs to be solved is that dominant coalitions are assembled from members with diversity in their general cognitive patterns and assessment of specific alternatives, so knowing the experience of decision-makers is only the first step in the theory. From there, potential coalitions can be assessed by examining the size of subgroups with shared cognitions that are likely to engage in coalition building, as well as the size of subgroups that are not already committed, and hence can be attracted to coalitions.

The theory and evidence so far suggests that (1) problemistic search is triggered by performance relative to aspiration levels, (2) managerial cognitions and knowledge influence strategic decisions by making some alternatives seem proximate and others distant, and (3) decision-making groups direct search to favor the cognitions and knowledge that are held by a coalition of their members. Based on the three theoretical elements, we have three tasks to obtain a rigorous clear prediction on

the direction of change. First, the experience of each manager can be examined for potential influences on the cognition, and the likely effect on judgments of alternative actions that are proximate from their point of view can be derived. Second, for each potential direction of search that the decision-making group can take, the proportion of managers who see it as proximate can be assessed and used to predict what search direction matches the decision making group, and hence which action is the likely choice in response to performance pressure. Third, the overall composition of the decision-making group can be assessed to estimate the strength of the coalition that can be formed in favor of one search direction – the potential coalition. These steps amount to finding the most prevalent form of myopia and predicting that search will be consistent with it.

In order to test this model of organizational change triggered by performance feedback and directed by cognitions of decision makers, we need to specify what the cognitions are and how they influence judgments of which actions are proximate and which are distant. This is a specific question that should be related to the empirical context and concrete differences among decision makers (Meindl, Stubbart and Porac 1994). To do so, we introduce our empirical context, the acquisition decisions by firms during the transition to a market economy in China. This context and outcome is appealing because the market transition gave the board of directors responsibility for highly consequential M&A decisions that were contentious because of the coexistence and divergence between market and state cognitions in boards, which in turn can be traced to director backgrounds, making it a sharp test of our theory.

State and Market Cognition in Transitional China

Since the 1980s, market reforms have moved China from a system of state socialism with societal goals pursued through state control and redistribution of resources to one of market capitalism based on markets and profit-seeking corporations (Nee 1992). One of the principal market

reforms is partially privatizing State-owned enterprises (SOEs) and allowing entry of firms with no state ownership, giving many firms the goals of private enterprises (Chen, Firth, Gao and Rui 2006). The period from year 2000 to year 2012 was widely regarded as a new stage in the development of the listed firms in China when the private sector became an integral part of the socialist economy (Jiang, Yue and Zhao 2009), and is the time of our study. However, the state retained ownership in many firms, and boards of firms both with and without state ownership may include directors with experience working for state agencies and hence familiarity with the cognitive patterns of state socialism, in addition to board members with training and experience in a market economy. Thus, we are looking at a population of firms with a variety of board compositions, and the composition within each firm also changes over time as the market reform deepens, and for firm specific reasons.

State cognition. In state socialism, firms are seen as an actor in a redistributive economy that channels goods or services to the state, and in turn receives resources from the state (Szelenyi 1978). In the state socialism cognitive pattern, firms are not supposed to interact with the market or earn profits, instead they function as cost centers and redistributive agencies that respond to central decisions through a hierarchy of government control at the local, provincial, regional and national levels. Firms organize the production in their industry and maintain balanced and stable demand and supply. In listed firms in China, the presence of directors who have experience working or are still working for state agencies is quite common. Their cognitions are likely to be influenced by state socialism, so they are used to follow instructions to align firm behaviors with state objectives and seek state opinion and help when making changes (Zhou, Tse and Li 2006).

When comparison of performance and an aspiration level signals a problem or an opportunity, directors with state experience see lobbying for state intervention and favor as an appealing alternative. Even when additional assets are needed for the firm, they prefer asset transfer without

acquisition or a state-bridged acquisition that is initiated by the state's advice over ordinary M&As that require more active search on the equity market. Thus, acquisitions of other firms through the equity market is a distant approach for them because it involves firm initiative and actions in the market. Also, it is distant for state-experience directors because the post-M&A integration can imply seeking efficiency through labor force reductions, which goes against the state goal of labor market stability (Boubakri, Cosset and Saffar 2008). Searching for acquisition targets is also problematic for them because it involves internal power changes, as the financial and managerial expertise required for post-acquisition integration leaves directors with market economy experience with more intra-organizational power (Bunderson 2003; Hickson et al. 1971). As a result, searching on the market for M&A targets is a distant approach for state directors when performance feedback indicates a problem, whereas asset transfer and relying on the state to introduce an M&A target is the more proximate choice.

Market cognition. In market capitalism, firms are independent profit-seeking entities that strive for economic efficiency through market exchange and competition, and their value is determined by the cash flow provided to shareholders (Fligstein 1990). In the market economy cognitive pattern, the firm has significant autonomy because it is based on private ownership and property rights, which are valued and protected, and thus it is not linked with the state except through the effects of regulation. In most listed firms in China, including SOEs, the boards typically include directors who are familiar with markets through their education and experience, and have cognitions influenced by this experience. They see a special role for themselves because they are part of an established corporate governance and management system that preserves shareholder rights and ensures that these rights take priority over those of all other stakeholders (Davis and Stout 1992).

Directors with market related work experience and education have the knowledge necessary to

evaluate growth opportunities in the market and take risk in their decisions in order to increase firm value. Therefore, when comparison of performance and an aspiration level indicates a problem or an opportunity to initiate search, they are willing to search for solutions beyond the local scope, such as acquisitions in the equity market. Indeed, searching for acquisition targets is not a distant approach, but rather a natural search direction given the frequent use of M&As by firms in market economies (Haleblian et al. 2006; Iyer and Miller 2008). Acquisitions are proximate strategic actions that they employ as a potential solution to overcome performance problems or growth constraints. Acquisitions are connected with strategic rationales such as gain in market power (Singal 1996), synergy through transfer of resources between the acquiring and acquired firm (Capron, Dussauge and Mitchell 1998; Capron and Pistre 2002), and rapid entry into high-growth industries (Gaur, Malhotra and Zhu 2013). They are more proximate to directors with market experience as a solution than internal transfer of assets or state-bridged acquisitions.

Firm Acquisitions. In order to examine the direction of search and the corresponding choice of action taken, we go into detailed investigation of the source and form of acquisition target that a firm chooses. The source and form of acquisition targets have characteristics that can be related to board member experience in an acquisition decision. Thus, they can serve as indicators of which group of board members prefer and are likely to advocate the choice of specific acquisition targets, and hence whether board member experience directs myopic search. Briefly, there are three main sources of acquisition target: internal acquisitions within the same corporation; state-bridged acquisition in which the target is introduced and advised by the state; and market-oriented acquisitions, which is the typical M&A in market economy. They follow the order from the least market-oriented to the most. Among market-oriented acquisitions, we further distinguish the form of acquisition targets by asset only, minority equity control and majority equity control, also following the order from the least

market-oriented to the most. To proceed quickly to the hypotheses, we defer to the methodology section the full discussion on how different sources and forms of acquisition targets can be categorized as proximate to market cognitions, or conversely, as state cognitions.

Hypotheses

Even with a mixture of board directors having different cognitive priority, Chinese listed firms are still conventional firms with the goal of higher profitability, among other goals. Performance feedback theory predicts that performance relative to the aspiration level influences the rate of change, with a different effect above and below the aspiration level (Greve 1998). This prediction has been supported for many dependent variables, also for acquisitions (Haleblian et al. 2006; Iyer and Miller 2008), and will just be taken as a baseline in this research, rather than stated as a hypothesis.

Rate of change. The theoretical proposition we develop in this study is that a greater proportion of the decision making groups applying one cognitive pattern will lead to problemistic search that more closely follows its myopic path. Because the performance variable of profitability is especially relevant in a market economy, it is useful to start with the effect that it has on directors with market experience, as they are most focused on this goal. Other directors may be less concerned about profitability, so its effect on problemistic search and organizational change is greater when the board has a higher proportion of directors with market capitalism education and working experience. Thus, boards with a high proportion of directors with market experience can be expected to be more responsive to the performance relative to the aspiration level. This prediction can be made with respect to any kind of change, without distinguishing the direction of search, and then specific predictions on the direction of search can be added.

Decision-maker myopia influencing the direction of search could influence the organizational response to performance both below and above the aspiration level, but there are theoretical reasons

to expect the effect to be stronger above the aspiration level. Performance below the aspiration level means that the firm strategy gets questioned (Tuggle, Sirmon, Reutzel and Bierman 2010; Westphal and Bednar 2005), resulting in lower managerial discretion (Hambrick and Finkelstein 1987). The difference in discretion is seen in the greater range of actions taken by high-performing organizations, which span from cautious adherence to the current strategy to acts of hubris such as risky acquisitions and corporate illegality (Hayward and Hambrick 1997; Mishina, Dykes, Block and Pollock 2010). If the decision-making group has greater authority and less external pressure, its composition will have more influence over the decision, thus leading to stronger group experience effects above the aspiration level than below it. Interestingly, this increasing authority could allow the group to selectively emphasize actions that fit its cognitive myopia even though the performance above the aspiration level reduces problemistic search. This could result in the favored action of the group becoming more likely when a change is made, even if changes are less frequent because problemistic search is reduced. The prediction on the rate of change is:

Hypothesis 1: The rate of acquisitions will be more strongly influenced by performance relative to aspiration levels when a greater proportion of directors have market experience.

We can also make hypotheses on the effect of directors who have experience with the state and have adopted its cognitive patterns. Although they could also pursue profits when acting as directors of a firm listed in the stock market, unfamiliarity with the market cognitive pattern and commitment to state socialism ways of thinking make this more difficult. Moreover, directors are particularly sensitive to low performance as a threat that could trigger dominant responses (Staw 1981; Zajonc 1980), so they will search for a familiar solution that they see as the safest and most effective approach: seek state advice and help. This is also the approach that best uses their knowledge on how to gain attention and resources from state actors. This can be specified as a separate effect because a

board is not split between directors who have state experience and market experience; some directors have neither one, and some have both. Directors with state experience and directors with market experience can thus be seen as holding the most extreme views of the board and as being sources of influence on the other directors. This means that the proportion of directors with state experience has a dampening effect on the rate of change in response to performance feedback. Thus we predict:

Hypothesis 2: The rate of acquisitions will be more weakly influenced by performance relative to aspiration levels when a greater proportion of directors have state experience.

Choice of change. These predictions state the effect of a decision making group composition and its cognitions on the rate of change, but do not take advantage of the theory on how the direction of search is influenced by cognitions. Although acquisitions are typical firm actions in market capitalism, some types of acquisitions are still distant choices for managers with market experience. The internal acquisitions and state-bridged acquisitions that result from state intervention are clearly distinct from market-oriented acquisitions in the equity market, and the market-oriented acquisitions are clearer reflections of a market cognitive pattern. Indeed, internal acquisitions and state-bridged acquisitions could be intended to maintain employment levels in an area when a large firm is in risk of failing, which is a very distant mindset from the market cognition (Wang 2014). Also, directors with market experience will have knowledge on how to execute market-oriented acquisitions, but will be less familiar with state-bridged acquisitions.

Members of decision-making groups will apply their experience to the judgment of which direction of search is the best match to the problem or opportunity, leading to potential conflict between subgroups of decision makers with different kinds of cognitive myopia. The coalition-based solution to such conflicts is that the subgroup that has the higher proportion of the decision making group is able to direct search towards alternatives that are proximate according to its cognitions. For

directors with market experience, market based solutions are cognitively proximate solutions to performance problems and growth constraints. Thus, directors with market experience are likely to advocate market based actions in response to performance relative to the aspiration level (Haleblian et al. 2006; Iyer and Miller 2008). It is more likely that their direction of myopic search will be implemented by the organization when they have a high proportion in the board membership. Conversely, directors with state experience are reluctant to apply market based actions, and are more likely to back state-endorsed acquisitions. Thus, the hypotheses are:

Hypothesis 3: Choices proximate to market-oriented solutions will be more strongly influenced by performance relative to aspiration levels when a greater proportion of directors have market experience.

Hypothesis 4: Choices proximate to market-oriented solutions will be more weakly influenced by performance relative to aspiration levels when a greater proportion of directors have state experience.

Coalition building. So far the predictions have examined the proportion of directors on each of two opposing sides, but this approach overlooks important elements of group decision making. First, although one can form groups with similar backgrounds, coalitions still need to be built through recognition of common interest and rallying around it. Second, decision-making groups are often fractured among members with strong, weak, and no affiliation with a specific background, which means that common backgrounds are not sufficient to partition a decision-making group into a dominant coalition and a minority. Because boards are split among directors who have multiple kinds of experience, and any group can attempt to build a coalition, it is important to develop theory on how the overall configuration of board experience affects the decision making. Coalition building can fail both for rational and boundedly rational actors (Banerjee, Konishi and Sönmez 2001; Cook and Rice 2006), and has greater likelihood of success when members of a potential coalition are

more numerous and have more intense preferences. A key element of this theory is to identify the commitment to specific cognitions by each board member and the cohesion of each group of board members holding the same cognition. Theoretically we should expect a board member with multiple sources of experience giving the same cognition to be the most committed to a coalition around this cognitive pattern; a board member with a single source of experience to be less committed; and a board member with experiences from conflicting cognitions to the least committed. Based on this simple idea, it should be possible to identify the proportion of board members with each level of commitment, yielding a more precise measure of dominant coalition potential.

The strength of the potential state coalition is of special interest to us because it is likely to resist the firm transition to the market-based actions. It can be assessed by multiple factors. First, some board members may have multiple types of state experience, resulting in especially rigid state cognition. In comparison, board members with type of state experience are likely to hold state cognitions but with lower commitment, hence becoming weaker part of the state coalition building. Third, some board members may have both state and market experience, and thus may hold dual cognitions, becoming even weaker parts of the state coalition building. Indeed, during the market transition, the state had dual agendas of both maintaining stable state control and boosting economic growth through the merit of market capitalism (Yiu, Hoskisson, Bruton and Lu 2014), so any director with state experience can hold elements of both cognitions, though one with market experience would be especially likely to do so. Finally, from the state coalition point of view, directors with only market experience are adversaries, while directors holding neither kind of cognition are potential allies. Conversely, for directors building a market coalition, directors with neither kind of experience and directors with both state and market experience would be the most promising potential allies. Thus, we examine the following hypotheses:

Hypothesis 5: The rate of acquisitions will be more weakly influenced by performance relative to aspiration levels when the board has a stronger potential state coalition.

Hypothesis 6: Choices proximate to market-oriented solutions will be more weakly influenced by performance relative to aspiration levels when the board has a stronger potential state coalition.

Data and Methodology

Data sources. The data sources are the China Stock Market and Accounting Research (CSMAR) database and WIND database. The CSMAR database is maintained by Guo Tai An Technology Company in collaboration with the University of Hong Kong and the China Accounting and Finance Research Center of Hong Kong Polytechnic University, and covers the ownership, board, and financial data of all listed firms in China to date since 1992 (Li, Moshirian, Nguyen and Tan 2007; Lin and Su 2008; Rousseau and Xiao 2008). The WIND database, produced by Shanghai-based Wind Information, provides detailed information on firm M&As, including the date of announcement, the acquisition target, and the nature of the acquisition (asset, equity or both). We merged the WIND database on acquisitions with one-year lagged CSMAR ownership data, board data and fiscal year performance data. The resulting dataset covered every M&A between 2000 and 2012 by nearly all Chinese listed firms.

Estimation method and dependent variables. Firm factors influence both the acquisition rate and choice of acquisition target, and different targets are competing risks because each acquisition is just one of multiple alternatives. This problem can be analyzed sequentially by first estimating the hazard rate of all acquisitions, including internal, state-bridged, and market-oriented acquisitions, then the choice of what target to acquire (Petersen 1995). Although some of the acquisitions were legally defined as mergers, the data allow us to identify those with a clear acquiring and acquired partner and specify that the acquiring partner acts to acquire. Thus, all events only occur once in the

data. For simplicity we refer to all events as acquisitions.

The data allowed continuous-time event-history analysis, as the timing of each announcement was the exact announcement date of an acquisition. The dependent variable was defined as deals classified by WIND as mergers or acquisitions, with no limit on the proportion shares acquired. After missing data deletions, the sample consisted of 2,337 firms and 30,469 observations after splitting spells annually to update covariates for years 2000 to 2012. Acquisitions are treated as repeated events, and the firm is at risk of a new acquisition the day after announcing one. The data have 12,395 days in which a firm announced at least one acquisition. We did not have any priori assumption about the baseline hazard rate, so we employed the Cox proportional hazards model controlling for historical time (Cox 1972).

Source of acquisition target. In the early stage of the privatization process and stock market in China, most acquisitions were done internally between subsidiaries and subunits within the same enterprise, aiming to dispose of bad assets, write off debt, and aggregate resources in order to prepare SOEs for privatization. Such internal transfers were typically directed and supported by the state. Gradually, in addition to internal transactions, many inter-firm transactions were done to solve financial or operational problems of firms, maintain employment levels, restructure the acquired firms, and integrate them into the acquiring firm. The acquirer and the target were typically picked by the state. Merger and acquisition under state direction was like the combination of two administrative units under state control. These state-bridged acquisitions met the state's objective of supervising the market and employing the market mechanism to grow the firms. Both internal acquisitions and state-bridged acquisitions continued during our study period, although at a decreasing rate due to the deeper penetration of market economy. However, they remain viable choices for all the firms, and especially for directors with previous working experience with the state.

From year 2000, following the enactment of the Securities Law that formalized the issuance, listing, and trading of securities and ensured the efficiency of equity transactions, SOEs and partially privatized SOEs became more market-oriented. In addition, a growing population of private firms with no state origin emerged on the stock market. All firm categories increasingly engaged in market-oriented acquisitions, defined as M&As initiated by the firm. In these acquisitions, targets were no longer proposed by the state, they were chosen as potentially providing long-term financial returns or growth opportunities to the acquiring firms. Market-oriented acquisitions are no longer a combination of units under a controlling state; they are one firm acting as an independent actor acquiring another and eliminating it as an independent actor.

Based on the distinction of three sources of acquisitions, each acquisition target can be categorized in terms of how distant it is from the cognitions of the state versus market cognitions, and hence what type of board member would see it as a more proximate option of change. From the perspective of the state cognition director, the most proximate source is (1) internal acquisitions, which is movement of assets or equity within a group of firms with at least one common shareholder. This operation is common from a state point of view, as firm assets were reorganized under state socialism by transferring them from one unit to the other. The middle is (2) state-bridged acquisitions, which are like M&As by two independent firms, but with the acquiring and target firm chosen by the state. The most distant source for the state cognition directors is (3) market-oriented acquisitions, which are initiated because the target is seen as an opportunity for growth and value creation by the acquiring firm. These often involve scouting targets on the market, evaluating them using financial metrics, and taking risks in the acquisition decision. Accordingly, *Source of acquisition target* is zero for an internal acquisition, one for a state-bridged acquisition, and two for a market acquisition.

Form of acquisition target. For firms that engaged in market-oriented acquisitions, the commitment also evolved as the corporate governance system matured, from only asset transaction to equity transaction, from minority shareholding to majority control. We hence further analyze the form of market-oriented acquisition as an alternative approach to capture the acquisition target's proximity to market-oriented solutions. From the perspective of the state cognition directors, the most proximate form of acquisition is (1) asset acquisitions, which were familiar under state socialism and involved less knowledge and managerial effort to integrate into the acquiring firm. The middle is (2) minority ownership (less than 50 percent shares), which became more and more common as the corporate governance system developed. It is qualitatively different because it requires consideration of the current equity value and its future potential. The most distant form is (3) majority ownership (50 percent or more of shares), which can lead to full integration of the firms. Majority ownership implies substantial financial risk and expensive integration, which the state cognition directors are unfamiliar with, but in the market cognition these are a familiar form of investments with high but uncertain returns, and hence not something to avoid if the decision makers assess the target as sufficiently promising. Thus, *Form of acquisition target* is zero for market-oriented acquisition of assets without any equity stake, one for acquisition of minority equity, and two for acquisition of a controlling equity stake.

We analyze these choices as an ordered logit with variables in which higher values mean greater distance from state cognition. For this analysis, simultaneous acquisitions by the same firm could be analyzed as distinct observations. Table 1 shows a cross-tabulation of *source of acquisition target* and *form of acquisition target* for all 31,442 acquisitions of equity or assets in the data. As the table shows, the rare category in this time period was state-bridged acquisitions, with only 12.38 percent in total. Because all analyses have repeated observations of the same firm, we use robust standard

errors with clustering on the firm.

=== Insert Table 1 about here ===

Independent variables. Following the performance feedback literature (Greve 1998), we calculate the performance as return on assets (ROA), and subtract aspiration levels calculated either as the weighted average of the past performance with most of the weight (0.9) assigned to the most recent ROA (historical aspiration level), or as the average ROA of all firms listed in the stock market (social aspiration level). This performance is divided into performance above and below each aspiration level and interacted with the variables indicating board member experience.

To test the hypotheses, we first calculated the proportion of board members with market or state experience. From the CSMAR database we had complete data on the resumes of each director, including a wide range of information that could be used to make indicators of director training and experience, but given our emphasis on market cognition versus state cognition we narrowed the information down to the four indicators that were most closely related to each of these cognitive patterns. For market experience, we calculate the proportion of board members owning shares in the company or having education or work experience in an Anglo-Saxon nation. For state experience, we calculate the proportion of board members with work experience in a state agency or in a state-owned bank. These variables serve as indicators of experience and comfort with the market and the state, respectively, and will be used to form interactions with the performance for tests of H1 through H4.

To test H5 and H6 on coalition formation, we made aggregate variables indicating the state dominant coalition potential. The first variable is made by a factor analysis of all boards using the proportions of board members with two sources of state experience (mean 0.03), one source of state experience (0.38), both state and market experience (0.09), and market experience (0.28). A principal

factors analysis yielded a first factor with positive loading of all proportions and a second factor with positive loading of two and one sources of state experience, and negative loading of market and state/market experience. The second factor aligns well with the theory, as it suggests that boards can be ordered by their potential for forming a coalition of members with state experience. We use this factor as a *stateness factor* coalition variable, and interact it with the performance. In addition we made a *stateness score* using heuristic weights of 2 for two sources of state experience, 1 for one source of state experience, 0.5 for state and market experience, and -1 for market experience only. We also interact this variable with the performance. Note that the heuristic weights are reasonable, though clearly not the only alternative, but the greatest uncertainty is around the rare categories of mixed experience and two sources of state experience. Altering the weights of these categories will thus have minor effects on the overall score. As the correlation table shows, these two distinct approaches produced similar measures, but we still show the findings of both as an indicator of their robustness.

Our control variables include 84 industry and 31 province fixed effects. We controlled for the age of the firm in case older firms have lower propensity to merge. We controlled for firm size by taking the logarithm of the firm's total assets. We also considered the impact of a firm's growth opportunities on acquisitions, using the market-to-book ratio. We included the debt-to-equity ratio to capture the potential impact of a firm's financial leverage on acquisition decisions. Prior acquisition experience is positively related to the likelihood of subsequent acquisitions (Haleblian et al. 2006), so we calculated the cumulative number of acquisitions of assets only, a minority stake, and a controlling stake of equity. We enter these three because correlation among the cumulative acquisition variables is too high to allow entry of more than two, and preliminary analysis showed that state-bridged acquisitions had the lowest explanatory power. We employed the measure used by

Haleblian and Finkelstein (1999) for the percentage of free cash flow to control for some of the inefficient investments that firms may make driven by excess resources. We also included the diversification level of a firm, operationalized as the count of industries a firm engages in.

Results

Descriptive statistics and correlations for the event history dataset are shown in Table 2, which shows that none of the correlations are at levels that cause estimation problems. The descriptive statistics and correlations for the other analyses are very similar, so we do not display separate tables for them. Table 3 shows the analysis of the rate of acquisitions. The results demonstrate that the rate of finding an acquisition solution is not dependent on the proportion of each director type, so Hypotheses 1, 3 and 5 lack support. This is not because the rate is independent of the performance; in fact there is the frequent finding of a positive relation from performance to the rate of acquisition for the social aspiration level. This effect is contrary to problemistic search, but has been found before and been explained either by threat rigidity (Audia and Greve 2006) or local search directed toward incremental improvements (Iyer and Miller 2008). A third explanation, consistent with the fact that this effect is only seen for social aspiration levels, is that performance below the industry average makes acquisitions difficult to implement. Thus, the findings repeat an earlier finding that performance relative to aspiration levels can influence the acquisition rate, indicating that the firms in the sample react in the same way as firms in developed economies, but the theoretical extension to myopic search is not supported.

=== Insert Tables 2 and 3 about here ===

Table 4 shows the ordered logit of the source of acquisition target. The main effects indicate a shift toward market-oriented acquisitions when the performance increases relative to the historical aspiration level, but a decline relative to the social aspiration level. The effect signs are interesting, as

higher than historical performance produces the confidence to choose more market-oriented acquisitions, whereas higher performance than other firms induces caution. The interaction variables for different sources of state and market cognition do not predict well when entered one at a time, as they are often insignificant, but when they are significant they indicate higher sensitivity to performance relative to aspiration levels for market-oriented directors, and lower for state-oriented directors, in support of Hypotheses 2 and 4. Thus, directors with market experience show reactions to performance relative to historical aspiration levels that are consistent with research on the link between hubris and acquisitions (Hayward and Hambrick 1997; Pangarkar and Lie 2004).

=== Insert Table 4 about here ===

The final two models test Hypothesis 6 on the effect of the potential state dominant coalition. Here, the results indicate strong support for the hypothesis, as every coefficient estimate of the interactions shows that a stronger state coalition weakens the effect of performance on the choice of market-oriented acquisitions. Indeed, the coefficient magnitudes are so strong that they indicate the potential for a reversed (opposite-signed) effect for firms with a strong state coalition. To examine the results in more detail, we show graphs of the effect of the stateness factor (Figure 1) and the stateness score (Figure 2), drawing curves for the effect of firms that have stateness two degrees below and above the mean, and mean stateness.[1] Figure 1 shows that the main-effect shift toward market orientation when performance is above historical aspiration levels and below social aspiration levels holds true for average stateness, and is even stronger for high stateness. For low stateness the curves are flat (and tests show that the slopes are not significantly different from zero). Thus, the aggregate stateness factor gives much clearer findings than the individual state or market experience scores. Figure 2 shows similar result for the stateness score, and for this measure too, the curve has a slope

[1] Showing the probabilities of each outcome requires assumptions on the base rates for the conditional logit, so for simplicity the figures show the regression function prediction (bX).

not significantly different from zero for firms with low stateness.

=== Insert Figures 1 and 2 about here ===

The findings show that the effects of board composition are stronger above the aspiration level, as one would expect from the greater board discretion when the firm has high performance. The findings below the aspiration levels are weak for firms with high or average stateness, whereas they are strong above the aspiration level for firms with average or low stateness. The findings are consistent with past studies showing that changes are highly likely when performance is below the aspiration level, but do not become more likely as the performance declines further below the aspiration level, while the likelihood of changes declines steadily as performance increases if it is above the aspiration level (e.g., Greve 1998, 2003a; Miller and Chen 2004). The juxtaposition of the findings from the rate of change and the type of change is informative because it shows a lower rate of change when high performance reduces problemistic search, but greater likelihood of change consistent with the cognitive patterns of directors with market experience.

=== Insert Table 5 about here ===

Table 5 shows the ordered logit of the form of acquisition target, with the analysis restricted to market-oriented acquisitions. This analysis thus provides additional evidence on a set of acquisitions that already are highly market-oriented. Again the analyses taking individual measures of market or state experience show few findings, though each finding is consistent with Hypothesis 4. The final two models have two main findings, both above the aspiration level. For historical aspiration levels, there is a clear shift toward market-oriented acquisitions as a main effect, but with interaction effects showing that the state coalition works against this effect. For social aspiration levels, there is a shift away from market-oriented acquisitions for high performance, and again the effect is much weaker (and statistically insignificant) for firms with high stateness. Table 4 has clearer findings, as one may

expect from its broader analysis of all acquisitions, but the subset analysis in Table 5 also shows some support of Hypothesis 6. As in Table 5, there are clear indications that a weak state coalition is an opportunity for the market coalition, and especially when high performance gives managerial discretion (e.g., Hambrick and Finkelstein 1987).

Additional results. In addition to the analysis reporting tests of the hypotheses, we also exploited the rich data to examine some relations that could further test the underlying theory. First, SOEs' access to financing from the state through loans has not disappeared after the market reforms, and it offers a potential direction of search that will let SOEs avoid market-oriented acquisitions. We have access to major loan applications by firms through the CSMAR database, and we can examine whether SOEs used loan applications in response to low performance in the same way that listed firms used acquisitions. In this analysis (available from the authors), we found that directors with market experience had virtually no effect on the loan applications of SOEs. Directors with state experience had strong effects, however, with significant and strong increases in loan applications when the board had many directors with state agency experience in general, or experience specifically in agencies with economic or commercial focus, or state-owned bank background. Further analysis of whether the loan application stated that the loan was needed to solve a problem showed similar results, with loans having such justification being more frequent following low performance and boards with many directors with a state agency and state-owned bank background. Analysis of firms that were not state-owned showed weak performance effects on loan applications from state-owned banks. Thus, SOEs were sensitive to performance when applying for loans, and were particularly driven by directors with a state background in making loan applications in response to low performance.

Discussion

This study started with a theoretical gap in the behavioral theory of the firm, which has kept a research stream on how the rate of change in organizations is determined from making more specific findings on the direction of organizational search. Further progress calls for addressing three problems. First, the problemistic search producing organizational change is triggered by performance below the aspiration level, but it is not clear whether and how it actually is myopic rather than broad. Second, the type of goal signaling a problem was viewed as a key driver of myopia, but empirically firms have been observed to change following low performance on broad goals such as return on assets. These cannot be a source of myopia because the performance they measure encompasses all firm activities. Third, just as the performance measures have been very broad, so have the responses examined empirically been highly varied across studies.

We address this problem by looking at cognitive patterns based on experience as sources of myopia. This gives general theory on how problemistic search is directed by decision makers, which provides a solution to the problem of performance measures being too broad to give guidance. The general theory can be turned into specific hypotheses in a context with decision maker experiences linked with cognitive patterns, and we use the market transition in China as an opportunity to examine how a specific group of decision makers – boards of directors – act differently depending on the firm performance and the proportion of directors with market versus state experience. The boards can be characterized even more precisely by considering how coalition formation depends on the proportions of members with allegiance to each side, including different levels of allegiance. This is a good example of how the general theory can be turned into specific hypotheses on how firms respond to performance in ways that match the experience of most decision makers.

The findings were clear. Whereas regular measures of performance relative to aspirations guided

the frequency of change, as usual, their interactions with board characteristics did not have such effects. Board experience appears unrelated to rates of change. However, when distinguishing between changes that were more or less consistent with market cognition, the models showed higher likelihood of changes that matched a market economy when the board had more members with market experience, and lower when the board had more members with state experience. The findings were particularly clear when using comprehensive measures based on theory of coalition formation. These are novel findings in support of new theory that fills a gap in research on how performance affects organizational actions.

The findings did show some inconsistent results across the different measures of market experience and state experience, which can in part be attributed to imperfections of the measures, especially because there are more kinds of market experience than what our measures capture. Indeed, the stronger findings when making comprehensive measures of dominant coalition formation potential indicate that partial measures have weaknesses. However, our model of how individual orientations towards search add up to a group decision is also simplified because acquisitions cannot just be chosen off the shelf; even boards with a clear search pattern needs to find a firm that can be acquired and that fits the search pattern.

The findings are not just of theoretical interest, they also show that cognitive patterns guide very consequential organizational behaviors. For example, in each step from internal to state-bridged to market-oriented acquisitions, the board is moving the firm closer to a market orientation in its acquisition activities. The choice between a state-bridged and a market-oriented acquisition is important for the firm. State-bridged acquisitions have a safety valve because the state is willing to support a firm that gets economic difficulties after taking over a weak firm as a rescue operation. They also have limited upside because it is understood that the purpose of taking over such firms is

not to go through restructuring to greatly increase efficiency and decrease labor use. Market-oriented acquisitions are the opposite. The acquiring firm has relatively free hands in what it can do to profit from the acquisitions, but it is on its own if the acquisition fails.

There are great opportunities for extending this type of investigation to other cognitive patterns and other behaviors. For example, firms founded on financial, technological, and market considerations will have top management teams with clear affiliation to different organizational units and different education. Just as such differences have been shown to influence changes in the selection criteria of CEOs over time (Fligstein 1990), one can also examine whether top management teams direct the organization differently as a result of experience and education steering myopic search (Cho and Hambrick 2006; Hambrick, Cho and Chen 1996; Nielsen and Nielsen 2013). There are already clear suggestions that backgrounds matter for firm choices, such as responses to deregulation (Cho and Hambrick 2006), engagement in corporate social responsibility (Chin, Hambrick and Treviño 2013), initiation of competitive moves (Hambrick et al. 1996), and strategic change (Haynes and Hillman 2010), but these have not been coupled with the behavioral theory of the firm in the way done here. A distinct feature of the theory developed here is that cognitive patterns are especially important for directing problemistic search, and they matter more when organizational performance triggers search. This idea should lead to more fruitful investigations of leadership background effects on organizational behaviors.

This investigation started with an important theoretical question that has not been answered well so far. Although myopic search has been seen as an important component of the behavioral theory of the firm, it has not been theoretically described in a way that translates readily into empirical work, making giving myopic search the position of an important but hard-to-use mechanism for predicting how organizations will change. This is different from the successful predictions of when

organizations will change that have resulted from examination of problemistic search as a result of comparing performance and aspiration levels. The solution proposed here is a closer link to theory of cognition and knowledge, and to how decisions in groups are made. The result is novel from the viewpoint of both theories. Problemistic search theory gains predictions on how organizations will change, not just when. Cognitive theory gains predictions on how organizations will change, not just which organizations have difficulty changing. Both theories can be combined with research on top management teams to investigate the triggers and direction of search, and resulting strategic changes. These theoretical additions are highly general and useful for additional empirical work. This investigation only scratches the surface of the theoretical and empirical progress that can be made by adding cognition to the theory of problemistic search and myopia.

References

Argote, L. 1999. *Organizational Learning: Creating, Retaining, and Transferring Knowledge*. Kluwer Academic Publishers, Boston.

Argote, L., E. Miron-Spektor. 2011. Organizational learning: From experience to knowledge. *Organization Science* **22**(5) 1123-1137.

Audia, P.G., H.R. Greve. 2006. Less likely to fail? Low performance, firm size, and factory expansion in the shipbuilding industry. *Management Science* **52**(1) 83-94.

Audia, P.G., E.A. Locke, K.G. Smith. 2000. The paradox of success: An archival and a laboratory study of strategic persistence following a radical environmental change. *Academy of Management Journal* **43**(5) 837-853.

Banerjee, S., H. Konishi, T. Sönmez. 2001. Core in a simple coalition formation game. *Social Choice and Welfare* **18**(1) 135-153.

Barreto, I. 2012. A Behavioral Theory of Market Expansion Based on the Opportunity Prospects Rule. *Organization Science* **23**(4) 1008-1023.

Baum, J.A.C., K.B. Dahlin. 2007. Aspiration performance and railroads' patterns of learning from train wrecks and crashes. *Organization Science* **18**(3) 368-385.

Baysinger, B., R.E. Hoskisson. 1990. The Composition of Boards of Directors and Strategic Control: Effects on Corporate Strategy. *Academy of Management Review* **15**(1) 72-87.

Bazerman, M.H., T. Giuliano, A. Appelman. 1984. Escalation of commitment in individual and group decision making. *Organizational Behavior and Human Decision Processes* **33** 141-152.

Bertrand, M., A. Schoar. 2003. Managing with style: The effect of managers on firm policies. *Quarterly Journal of Economics* **118**(4) 1169-1208.

Bigley, G.A., M.F. Wiersema. 2002. New CEOs and corporate strategic refocusing: How experience as heir apparent influences the use of power. *Administrative Science Quarterly* **47**(December) 707-727.

Boubakri, N., J.-C. Cosset, W. Saffar. 2008. Political connections of newly privatized firms. *Journal of Corporate Finance* **14**(5) 654-673.

Bunderson, J.S. 2003. Team member functional background and involvement in management teams: Direct effects and the moderating role of power centralization. *Academy of Management Journal* **46**(4) 458-474.

Capron, L., P. Dussauge, W. Mitchell. 1998. Resource redeployment following horizontal acquisitions in Europe and North America, 1988-1992. *Strategic Management Journal* **19**(7) 631.

Capron, L., N. Pistre. 2002. When Do Acquirers Earn Abnormal Returns? *Strategic Management Journal* **23**(9) 781.

Chen, G., M. Firth, D.N. Gao, O.M. Rui. 2006. Ownership structure, corporate governance, and fraud: Evidence from China. *Journal of Corporate Finance* **12** 424-448.

Chin, M.K., D.C. Hambrick, L.K. Treviño. 2013. Political Ideologies of CEOs: The Influence of Executives' Values on Corporate Social Responsibility. *Administrative Science Quarterly* **58**(2) 197-232.

Cho, T.S., D.C. Hambrick. 2006. Attention as the Mediator Between Top Management Team Characteristics and Strategic Change: The Case of Airline Deregulation. *Organization Science* **17**(4) 453-469.

Cook, K.S., E. Rice. 2006. Social Exchange Theory *Handbook of Social Psychology*. Springer, 53-76.

Cox, D.R. 1972. Regression models and life-tables. *Hournal of the Royal Statistical Society* **34** 187-220.

Crossland, C., Z. Jinyong, N.J. Hiller, D.C. Hambrick. 2014. CEO career variety: Effects on firm-level strategic and social novelty. *Academy of Management Journal* **57**(3) 652-674.

Cyert, R.M., J.G. March. 1963. *A behavioral theory of the firm*. Prentice-Hall, Englewood Cliffs, NJ.

Davis, G.F., H.R. Greve. 1997. Corporate elite networks and governance changes in the 1980s. *American Journal of Sociology* **103**(July) 1-37.

Davis, G.F., S.K. Stout. 1992. Corporate elite networks and governance changes in the 1980s. *American Journal of Sociology* **103** 1-37.

Desai, V.M. 2016. The behavioral theory of the (governed) firm: Corporate board influences on organizations' responses to performance shortfalls. *Academy of Management Journal* **59**(3) 860-879.

Dokko, G., V. Gaba. 2012. Venturing into new territory: Career experiences of corporate venture capital managers and practice variation. *Academy of Management Journal* **55**(3) 563-583.

Dowell, G.W.S., M.B. Shackell, N.V. Stuart. 2011. Boards, CEOs, and surviving a financial crisis: Evidence from the internet shakeout. *Strategic Management Journal* **32**(10) 1025-1045.

Eggers, J.P., S. Kaplan. 2009. Cognition and Renewal: Comparing CEO and Organizational Effects on Incumbent Adaptation to Technical Change. *Organization Science* **20**(2) 461-477.

Fiol, C.M. 1990. Explaining strategic alliance in the chemical industry. A.S. Huff, ed. *Mapping Strategic Thought*. John Wiley and Sons, New York, 227-249.

Fligstein, N. 1990. *The Transformation of Corporate Control*. Harvard University Press, Cambridge, MA.

Gaba, V., J. Joseph. 2013. Corporate Structure and Performance Feedback: Aspirations and Adaptation in M-Form Firms. *Organization Science* **24**(4) 1102-1119.

Gaur, A.S., S. Malhotra, P. Zhu. 2013. Acquisition announcements and stock market valuations of acquiring firms' rivals: A test of the growth probability hypothesis in China. *Strategic Management Journal* **34**(2) 215-232.

Gavetti, G. 2005. Cognition and Hierarchy: Rethinking the Microfoundations of Capabilities' Development. *Organization Science* **16**(6) 599-617.

Gavetti, G., H.R. Greve, D.A. Levinthal, W. Ocasio. 2012. The Behavioral Theory of the Firm: Assessment and Prospects. *Academy of Management Annals* **6** 1-40.

Gavetti, G., D.A. Levinthal. 2000. Looking forward and looking backward: Cognitive and experiential search. *Administrative Science Quarterly* **45**(March) 113-137.

Gerstner, W.-C., A. König, A. Enders, D.C. Hambrick. 2013. CEO Narcissism, Audience Engagement, and Organizational Adoption of Technological Discontinuities. *Administrative Science Quarterly* **58**(2) 257-291.

Greve, H.R. 1998. Performance, aspirations, and risky organizational change. *Administrative Science Quarterly* **44**(March) 58-86.

Greve, H.R. 2003a. A behavioral theory of R&D expenditures and innovation: Evidence from shipbuilding. *Academy of Management Journal* **46**(6) 685-702.

Greve, H.R. 2003b. *Organizational Learning from Performance Feedback: A Behavioral Perspective on Innovation and Change*. Cambridge University Press, Cambridge, UK

Greve, H.R., C.M. Zhang. 2016. Institutional logics and power sources: Merger and acquisition decisions. *Academy of Management Journal* **Forthcoming**.

Haleblian, J., S. Finkelstein. 1999. The influence of organizational acquisition experience on acquisition performance: A behavioral learning experience. *Administrative Science Quarterly* **44**(March) 29-56.

Haleblian, J., J. Kim, N. Rajagopalan. 2006. The influence of acquisition experience and performance on acquisition behavior: Evidence from the U.S. commercial banking industry. *Academy of Management Journal* **49** 357-370.

Hambrick, D.C., T.S. Cho, M.-J. Chen. 1996. The influence of top management team heterogeneity on firms' competitive moves. *Administrative Science Quarterly* **41**(December) 659-684.

Hambrick, D.C., S. Finkelstein. 1987. Managerial discretion: A bridge between polar views of organizational outcomes. *Research in Organizational Behavior* **9** 369-406.

Hambrick, D.C., P.A. Mason. 1984. Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review* **9**(2) 193-206.

Haunschild, P.R. 1993. Interorganizational imitation: The impact of interlocks on corporate acquisition activity. *Administrative Science Quarterly* **38**(December) 564-592.

Haynes, K.T., A. Hillman. 2010. The effect of board capital and CEO power on strategic change. *Strategic Management Journal* **31**(11) 1145-1163.

Hayward, M.L.A., D.C. Hambrick. 1997. Explaining the premiums paid for large acquisitions: Evidence of CEO hubris. *Administrative Science Quarterly* **42**(March) 103-128.

Hickson, D.J., R.C. Hinings, C.A. Lee, R.E. Schneck, J.M. Pennings. 1971. A strategic contingencies theory of intraorganizational power. *Administrative Science Quarterly* **16** 216-227.

Iyer, D.N., K.D. Miller. 2008. Performance feedback, slack, and the timing of acquisitions. *Academy of Management Journal* **51**(4) 808-822.

Jensen, M., E.J. Zajac. 2004. Corporate elites and corporate strategies: How demographic preferences and structural position shape the scope of the firm. *Strategic Management Journal* **25**(6) 507-524.

Jiang, G., H. Yue, L. Zhao. 2009. A re-examination of China's share issue privatization. *Journal of Banking & Finance* **33** 2322-2332.

Kacperczyk, A., C.M. Beckman, T.P. Moliterno. 2015. Disentangling Risk and Change: Internal and External Social Comparison in the Mutual Fund Industry. *Administrative Science Quarterly* **60**(2) 228-262.

Kaplan, S. 2011. Research in Cognition and Strategy: Reflections on Two Decades of Progress and a Look to the Future. *Journal of Management Studies* **48**(3) 665-695.

Kelly, D., T.L. Amburgey. 1991. Organizational inertia and momentum: A dynamic model of strategic change. *Academy of Management Journal* **34** 591-612.

Kraatz, M.S., J.H. Moore. 2002. Executive migration and institutional change. *Academy of Management Journal* **45**(1) 120-143.

Krause, R., M. Semadeni, A.A. Cannella. 2013. External COO/presidents as expert directors: A new look at the service role of boards. *Strategic Management Journal* **34**(13) 1628-1641.

Levitt, B., J.G. March. 1988. Organizational learning. W.R. Scott, J. Blake, eds. *Annual Review of Sociology, 14*. Annual Reviews, Palo Alto, CA, 319-340.

Li, D., F. Moshirian, P. Nguyen, L.-W. Tan. 2007. Managerial ownership and firm performance: Evidence from China's privatizations. *Research in International Business and Finance* **21** 396-413.

Lin, C., D. Su. 2008. Industrial diversification, partical privatization and firm valuation: Evidence from publicly listed firms in China. *Journal of Corporate Finance* **14** 405-417.

March, J.G., L.S. Sproull, M. Tamuz. 1991. Learning from samples of one or fewer. *Organization Science* **2** 1-13.

Meindl, J.R., C. Stubbart, J.F. Porac. 1994. Cognition Within and Between Organizations: Five Key Questions. *Organization Science* **5**(3) 289-293.

Miller, K.D., W.-R. Chen. 2004. Variable organizational risk preferences: Tests of the March-Shapira model. *Academy of Management Journal* **47**(1) 105-115.

Mishina, Y., B.J. Dykes, E.S. Block, T.G. Pollock. 2010. Why "good" firms do bad things: The effects of high aspirations, high expectations, and prominence on the incidence of corporate illegality. *Academy of Management Journal* **53**(4) 701-722.

Nadkarni, S., J. Chen. 2014. Bridging yesterday, today, and tomorrow: CEO temporal focus, environmental dynamism, and rate of new product introduction. *Academy of Management Journal* **57**(6) 1810-1833.

Nee, V. 1992. Organizational Dynamics of Market Transition: Hybrid Forms, Property Rights, and Mixed Economy in China. *Administrative Science Quarterly* **37** 1-27.

Nielsen, B.B., S. Nielsen. 2013. Top management team nationality diversity and firm performance: A multilevel study. *Strategic Management Journal* **34**(3) 373-382.

Ocasio, W. 1994. Political dynamics and the circulation of power: CEO succession in U.S. industrial corporations, 1960-1990. *Administrative Science Quarterly* **39**(June) 285-312.

Ocasio, W. 2011. Attention to attention. *Organization Science* **22**(5) 1286-1296.

Pangarkar, N., J.R. Lie. 2004. The impact of the market cycle onthe performance of Singapore acquirers. *Strategic Management Journal* **25**(12) 1209-1216.

Pegels, C.C., Y.I. Song, B. Yang. 2000. Management heterogeneity, competitive interaction groups, and firm performance. *Strategic Management Journal* **21**(9) 911-923.

Petersen, T. 1995. Models for interdependent event-history data: Specification and estimation. P.V. Marsden, ed. *Sociological Methodology*. Blackwell, Cambridge, MA, 317-375.

Peterson, R.S., P.D. Owens, P.E. Tetlock, E.T. Fan, P. Martorana. 1998. Group dynamics in top management teams: Groupthink, vigilance, and alternative models of organizational failure and success. *Organizational Behavior and Human Decision Processes* **73** (2/3) 272-305.

Pfeffer, J., G.R. Salancik. 1978. *The external control of organizations*. Harper and Row, New York.

Porac, J.F., H. Thomas, C. Baden-Fuller. 1989. Competitive groups as cognitive communities: The case of Scottish knitwear manufacturers. *Journal of Management Studies* **26** 397-416.

Porac, J.F., H. Thomas, F. Wilson, D. Paton, A. Kanfer. 1995. Rivalry and the industry model of Scottish knitwear producers. *Administrative Science Quarterly* **40**(June) 203-227.

Prahalad, C.K., R.A. Bettis. 1986. The Dominant Logic: a New Linkage Between Diversity and Performance. *Strategic Management Journal* **7**(6) 485-501.

Rosenkopf, L., A. Nerkar. 2001. Beyond local search: Boundary-spanning, exploration, and impact in the optical disc industry. *Strategic Management Journal* **22**(4) 287-306.

Rousseau, P., S. Xiao. 2008. Change of control and the success of China's share-issue privatization. *China Economic Review* **19** 605-613.

Salge, T.O. 2011. A Behavioral Model of Innovative Search: Evidence from Public Hospital Services. *Journal of Public Administration Research and Theory* **21**(1) 181-210.

Shimizu, K. 2007. Prospect theory, behavioral theory, and threat-rigidity thesis: Combinative effects on organizational divestiture decisions of a formerly acquired unit. *Academy of Management Journal* **50**(6) 1495-1514.

Shinkle, G.A. 2012. Organizational Aspirations, Reference Points, and Goals. *Journal of Management* **38**(1) 415-455.

Shipilov, A.V., S.X. Li, H.R. Greve. 2011. The Prince and the Pauper: Search and Brokerage in the Initiation of Status-Heterophilous Ties. *Organization Science* **22**(6) 1418-1434.

Singal, V. 1996. Airline mergers and multimarket contact. *Managerial and Decision Economics* **17** 559-574.

Staw, B.M. 1981. The escalation of commitment to a course of action. *Academy of Management Review* **6**(4) 577-587.

Stuart, T.E., J.M. Podolny. 1996. Local search and the evolution of technological capabilities. *Strategic Management Journal* **17**(Summer special issue) 21-38.

Szelenyi, I. 1978. Social Inequalities in State Socialist Redistributive Economies. A. Etzioni, ed. *Policy research*. Brill.

Tripsas, M., G. Gavetti. 2000. Capabilities, cognition, and inertia: Evidence from digital imaging. *Strategic Management Journal* **21**(10) 1147-1161.

Tuggle, C.S., D.G. Sirmon, C.R. Reutzel, L. Bierman. 2010. Commanding board of director attention: Investigating how organizational performance and CEO duality affect board members' attention to monitoring. *Strategic Management Journal* **31**(9) 946-968.

Tuschke, A., W.M.G. Sanders, E. Hernandez. 2014. Whose experience matters in the boardroom? The effects of experiential and vicarious learning on emerging market entry. *Strategic Management Journal* **35**(3) 398-418.

Walsh, J.P. 1988. Selectivity and selective perception: An investigationof managers' belief structure and information processing. *Academy of Management Journal* **31**(4) 873-896.

Wang, D. 2014. The state, government officials' political incentives and corporate diversification in an emerging economy *Manuscript*, INSEAD.

Westphal, J.D., M.K. Bednar. 2005. Pluralistic ignorance in corporate boards and firms' strategic persistence in response to low firm performance. *Administrative Science Quarterly* **50**(June) 262-298.

Westphal, J.D., J.W. Fredrickson. 2001. Who directs strategic change? Director experience, the selection of new CEOs, and change in corporate strategy. *Strategic Management Journal* **22**(12) 1113-1137.

Yiu, D.W., R.E. Hoskisson, G.D. Bruton, Y. Lu. 2014. Dueling Institutional Logics And The Effect On Strategic Entrepreneurship In Chinese Business Groups. *Strategic Entrepreneurship Journal* **8**(3) 195-213.

Zajonc, R.B. 1980. Feeling and thinking: Preferences need no inferences. *American Psychologist* **35**(2) 151-175.

Zhou, K.Z., D.K. Tse, J.J. Li. 2006. Organizational changes in emerging economies: drivers and consequences. *Journal of International Business Studies* **37**(2) 248-263.

Zhu, D.H., J.D. Westphal. 2014. How directors' prior experience with other demographically similar CEOs affects their appointments onto corporate boards and the consequences for CEO compensation. *Academy of Management Journal* **57**(3) 791-813.

Table 1: Tabulation of Source and Form of Acquisition Target

		Acquisition Target Form		
Acquisition Target Source		Asset only	Minority share	Majority share
Internal	11,769 (37.43)			
State-bridged	3,894 (12.38)			
Market-oriented	15,779 (50.18)	3,217 (10.23)	7,298 (23.21)	5,264 (16.74)
Total	31,442 (100.00)			

Cells show number of events and percentage (in parenthesis).

Table 2: Descriptive Statistics and Correlations [a]

	Mean	s. d.	1	2	3	4	5	6	7	8	9	11	12	13	14	15	16	17
1. Age	10.77	5.81	1															
2. Size	21.45	1.36	.13	1														
3. Market to book	1.95	1.52	-.12	-.38	1													
4. Debt to equity	1.86	17.44	.03	.04	-.04	1												
5. Free cash flow	1.73	7.73	-.22	-.02	.09	.01	1											
6. Diversification level	1.97	1.43	.22	.11	-.15	.00	.02	1										
7. Cumulative asset	3.96	6.02	.35	.23	-.11	.01	.04	.19	1									
8. Cumulative minority	2.47	4.66	.26	.32	-.10	.02	.02	.15	.25	1								
9. Cumulative control	2.07	3.62	.30	.30	-.10	.01	.03	.19	.70	.32	1							
10. Holding shares	.19	.24	-.18	-.05	.07	-.02	-.02	-.07	-.19	-.07	-.13	1						
11. Anglo-Saxon educ	.03	.07	.02	.19	.00	-.00	-.01	-.02	.04	.11	.05	-.03	1					
12. State experience	.38	.24	.11	.28	-.15	.02	.02	.06	.10	.06	.06	-.14	.11	1				
13. State-owned bank	.20	.40	.11	.19	-.05	.02	.01	.04	.05	.13	.08	-.09	.10	.23	1			
14. Stateness factor	.39	.13	.16	.18	-.14	.03	.03	.07	.14	.05	.08	-.57	-.10	.65	.29	1		
15. Stateness score	.10	.38	.16	.12	-.13	.03	.03	.08	.14	.04	.07	-.66	-.16	.56	.20	.97	1	
16. ROA – hist. AL	.03	.09	-.08	.10	.17	-.02	-.01	-.04	.01	.02	.02	.07	.04	.02	-.02	-.07	-.07	1
17. ROA – soc. AL	-.01	.09	-.07	.10	.05	-.02	-.01	.02	-.03	.00	-.02	.07	.01	.01	-.01	-.05	-.06	.87

[a] A total of 2,337 firms and 33,369 spells comprise the data.

Table 3: Cox model of acquisition rate

	Board composition interaction variable							
Variable			Holding Shares	Anglo-Saxon experience	State experience	State-owned Bank	Stateness factor	Stateness score
Region fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Age	-0.018**	-0.017**	-0.016**	-0.017**	-0.017**	-0.017**	-0.017**	-0.016**
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Size	0.209**	0.198**	0.197**	0.194**	0.199**	0.195**	0.198**	0.197**
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
Market to book value	0.049**	0.034**	0.029**	0.029**	0.031**	0.032**	0.032**	0.031**
	(0.008)	(0.008)	(0.009)	(0.009)	(0.009)	(0.009)	(0.008)	(0.009)
Debt to equity	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Free cash flow	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Diversification level	0.018*	0.021**	0.021**	0.021**	0.020**	0.020**	0.021**	0.021**
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Cumulative asset experience	0.015**	0.015**	0.016**	0.015**	0.015**	0.015**	0.016**	0.016**
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Cumulative minority exper.	0.021**	0.021**	0.021**	0.021**	0.021**	0.020**	0.021**	0.021**
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Cumulative control exper.	0.019**	0.019**	0.019**	0.019**	0.019**	0.019**	0.018**	0.018**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Proportion state ownership	-0.293**	-0.289**	-0.275**	-0.277**	-0.273**	-0.272**	-0.270**	-0.266**
	(0.044)	(0.044)	(0.045)	(0.045)	(0.046)	(0.045)	(0.045)	(0.045)
Board composition variable			-0.057	0.206	-0.036	0.595**	-0.032	-0.007
			(0.074)	(0.224)	(0.060)	(0.186)	(0.127)	(0.044)
ROA- historical AL, < AL		-0.003	-0.341	-0.001	0.415	0.020	0.800	0.310
		(0.398)	(0.435)	(0.418)	(0.694)	(0.443)	(1.441)	(0.477)
X Board composition			4.973*	0.633	-1.268	-1.055	-1.721	-0.973
			(2.138)	(6.363)	(1.597)	(5.118)	(3.205)	(1.144)
ROA- historical AL, > AL		1.161**	0.729*	1.080**	1.525**	0.996**	3.146**	1.376**
		(0.320)	(0.368)	(0.338)	(0.552)	(0.372)	(0.933)	(0.329)
X Board composition			3.258*	1.490	-1.024	1.265	-5.151*	-2.041**
			(1.356)	(3.708)	(1.139)	(3.193)	(2.247)	(0.780)

ROA- social AL, < AL		0.419	0.487	0.376	0.250	0.411	0.295	0.279
		(0.378)	(0.424)	(0.397)	(0.653)	(0.416)	(1.257)	(0.431)
X Board composition			-1.833	0.858	0.480	1.392	0.152	0.232
			(1.723)	(5.333)	(1.428)	(5.020)	(2.820)	(0.988)
ROA- social AL, > AL		-0.418	-0.051	-0.374	-0.916	-0.324	-2.125+	-0.503
		(0.346)	(0.407)	(0.368)	(0.630)	(0.389)	(1.107)	(0.359)
X Board composition			-2.418	0.556	1.358	1.035	4.521+	1.440
			(1.535)	(4.253)	(1.355)	(4.432)	(2.697)	(0.921)
Log likelihood	-87,843.40	-87,782.12	-86,432.04	-86,437.50	-86,437.97	-86,431.73	-87,233.76	-87,231.30
Likelihood ratio test	2399.92**	2436.3**	2437.84**	2426.92**	2425.98**	2438.46**	2438.78**	2443.7**
Degrees of freedom	123	127	132	132	132	132	132	132

+p<.10; *p<.05; **p<.01; two-sided hypothesis tests. Robust standard errors below coefficient estimates. 30,469 observations.

Table 4: Ordered logit model of source of acquisition target

	Board composition interaction variable							
Variable			Holding Shares	Anglo-Saxon experience	State experience	State-owned Bank	Stateness factor	Stateness score
Region fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Age	-0.018**	-0.016**	-0.011**	-0.014**	-0.014**	-0.014**	-0.012**	-0.011**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Size	0.166**	0.123**	0.125**	0.129**	0.134**	0.130**	0.129**	0.124**
	(0.012)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
Market to book value	0.159**	0.124**	0.117**	0.126**	0.127**	0.123**	0.115**	0.113**
	(0.009)	(0.009)	(0.010)	(0.010)	(0.010)	(0.009)	(0.010)	(0.010)
Debt to equity	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Free cash flow	0.002	0.001	0.001	0.001	0.001	0.002	0.001	0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Diversification level	-0.016+	-0.011	-0.012	-0.010	-0.011	-0.011	-0.011	-0.010
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
Cumulative asset experience	-0.037**	-0.039**	-0.037**	-0.038**	-0.038**	-0.038**	-0.036**	-0.036**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Cumulative minority exper.	0.029**	0.030**	0.028**	0.030**	0.030**	0.030**	0.029**	0.029**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Cumulative control exper.	0.035**	0.034**	0.034**	0.034**	0.033**	0.033**	0.032**	0.032**
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Proportion state ownership	-0.848**	-0.800**	-0.726**	-0.791**	-0.776**	-0.800**	-0.723**	-0.709**
	(0.054)	(0.054)	(0.055)	(0.055)	(0.055)	(0.055)	(0.055)	(0.055)
Board composition variable			-0.216*	0.165	0.130+	-0.137	-0.118	-0.024
			(0.100)	(0.319)	(0.076)	(0.272)	(0.160)	(0.057)
ROA- historical AL, < AL		2.524**	2.323**	1.717**	3.582**	2.184**	7.048**	3.589**
		(0.506)	(0.616)	(0.542)	(0.956)	(0.545)	(1.945)	(0.618)
X Board composition			3.984	24.698**	-3.908+	8.222	-10.821*	-4.765**
			(3.053)	(8.851)	(2.079)	(8.111)	(4.425)	(1.576)
ROA- historical AL, > AL		4.580**	1.968**	3.962**	7.012**	5.545**	11.906**	5.862**
		(0.431)	(0.469)	(0.460)	(0.783)	(0.483)	(1.324)	(0.490)
X Board composition			17.927**	8.469	-6.219**	-27.331**	-17.467**	-6.601**
			(1.894)	(5.502)	(1.481)	(4.271)	(2.924)	(1.024)
ROA- social AL, < AL		-0.756+	-0.878	-0.259	-1.234	-0.457	-4.181*	-1.691**
		(0.459)	(0.565)	(0.488)	(0.868)	(0.488)	(1.674)	(0.552)

X Board composition			-0.720	-15.756*	1.927	-9.925	7.862*	3.358*
			(2.471)	(7.372)	(1.812)	(7.405)	(3.776)	(1.332)
ROA- social AL, > AL		-4.666**	-2.657**	-4.032**	-5.378**	-5.436**	-8.045**	-4.706**
		(0.460)	(0.530)	(0.495)	(0.824)	(0.507)	(1.453)	(0.501)
X Board composition			-10.216**	-5.850	2.163	24.662**	8.724**	2.457*
			(2.143)	(5.704)	(1.691)	(5.715)	(3.362)	(1.160)
Likelihood ratio	-27,481.09	-27,350.33	-26,829.94	-26,894.47	-26,884.18	-26,882.22	-27,105.61	-27,090.18
Log likelihood test	2296.66**	2515.02**	2671.04**	2541.98**	2562.56**	2566.48**	2623.36**	2654.22**
Degrees of freedom	123	127	132	132	132	132	132	132

+p<.10; *p<.05; **p<.01; two-sided hypothesis tests. Robust standard errors below coefficient estimates. The models contain the same control variables as the models of Table 3 including fixed effects for industry and region, but these are not displayed in the table. 28,842 observations

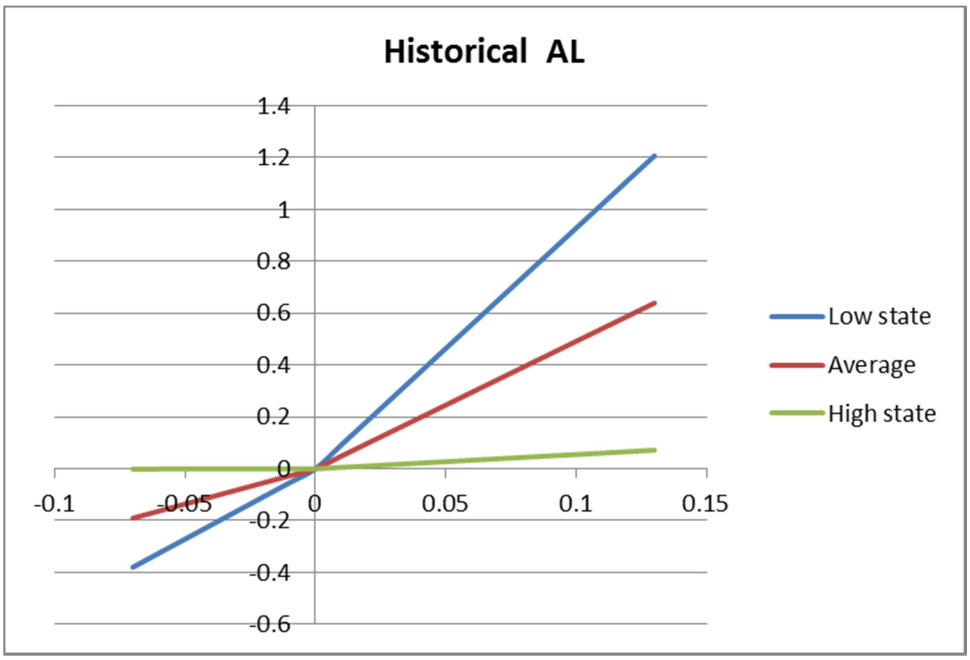
Table 5: Ordered logit model of form of acquisition target

	Board composition interaction variable							
Variable			Holding Shares	Anglo-Saxon experience	State experience	State-owned Bank	Stateness factor	Stateness score
Region fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Age	0.004	0.005	0.007+	0.005	0.006+	0.005	0.008*	0.008*
	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Size	0.041*	0.033+	0.028	0.036*	0.042*	0.027	0.040*	0.038*
	(0.017)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)	(0.018)
Market to book value	0.037**	0.024*	0.017	0.025*	0.023+	0.022+	0.026*	0.027*
	(0.011)	(0.012)	(0.013)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Debt to equity	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Free cash flow	0.006	0.005	0.005	0.005	0.006	0.005	0.006	0.006
	(0.005)	(0.005)	(0.004)	(0.004)	(0.005)	(0.004)	(0.005)	(0.005)
Diversification level	-0.004	0.001	0.004	0.002	0.001	0.002	-0.004	-0.004
	(0.013)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
Cumulative asset exper.	-0.009**	-0.009**	-0.009**	-0.010**	-0.009**	-0.009**	-0.008*	-0.008*
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Cumulative minority exper.	-0.020**	-0.020**	-0.021**	-0.020**	-0.021**	-0.020**	-0.021**	-0.021**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Cumulative control exper.	0.035**	0.033**	0.033**	0.033**	0.033**	0.033**	0.032**	0.032**
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Proportion state ownership	-0.778**	-0.756**	-0.722**	-0.760**	-0.714**	-0.765**	-0.701**	-0.697**
	(0.078)	(0.078)	(0.080)	(0.080)	(0.081)	(0.080)	(0.080)	(0.080)
Board composition variable			-0.250+	0.492	-0.320**	0.260	-0.345	-0.139+
			(0.136)	(0.412)	(0.107)	(0.338)	(0.223)	(0.080)
ROA- historical AL, < AL		-0.513	-0.306	-0.685	-1.254	-0.294	-0.634	-0.753
		(0.779)	(0.966)	(0.855)	(1.373)	(0.855)	(2.649)	(0.857)
X Board composition			0.068	3.252	2.360	-16.854	0.362	1.362
			(4.572)	(10.708)	(3.091)	(11.253)	(6.264)	(2.220)
ROA- historical AL, > AL		2.203**	0.658	1.618*	2.226*	2.023**	6.394**	2.145**
		(0.596)	(0.702)	(0.648)	(1.022)	(0.677)	(1.677)	(0.651)
X Board composition			9.639**	2.131	-0.423	7.448	-11.852**	-4.117**
			(2.319)	(6.433)	(1.916)	(8.523)	(3.849)	(1.352)
ROA- social AL, < AL		0.208	0.008	0.598	0.650	-0.410	-2.482	-0.029
		(0.689)	(0.870)	(0.746)	(1.208)	(0.738)	(2.195)	(0.749)

X Board composition			-0.625	-9.052	-1.516	26.872**	6.510	1.307
			(3.397)	(9.113)	(2.528)	(10.385)	(5.141)	(1.811)
ROA- social AL, > AL		-2.801**	-1.313+	-1.854**	-3.424**	-2.372**	-10.846**	-3.140**
		(0.634)	(0.789)	(0.694)	(1.033)	(0.691)	(1.831)	(0.656)
X Board composition			-7.816**	-23.230**	2.184	-13.975	21.844**	7.968**
			(2.616)	(7.060)	(2.188)	(10.874)	(4.537)	(1.588)
Likelihood ratio	-14,638.23	-14,618.24	-14,325.41	-14,323.32	-14,326.81	-14,329.25	-14,467.86	-14,467.57
Log likelihood test	968.7	986.86	1003.6	1007.78	1000.8	995.92	1041.06	1041.64
Degrees of freedom	122	126	131	131	131	131	131	131

+p<.10; *p<.05; **p<.01; two-sided hypothesis tests. Robust standard errors below coefficient estimates. The models contain the same control variables as the models of Table 3 including fixed effects for industry and region, but these are not displayed in the table. 14,153 observations.

Figure 1: Interaction Effects of Stateness Factor



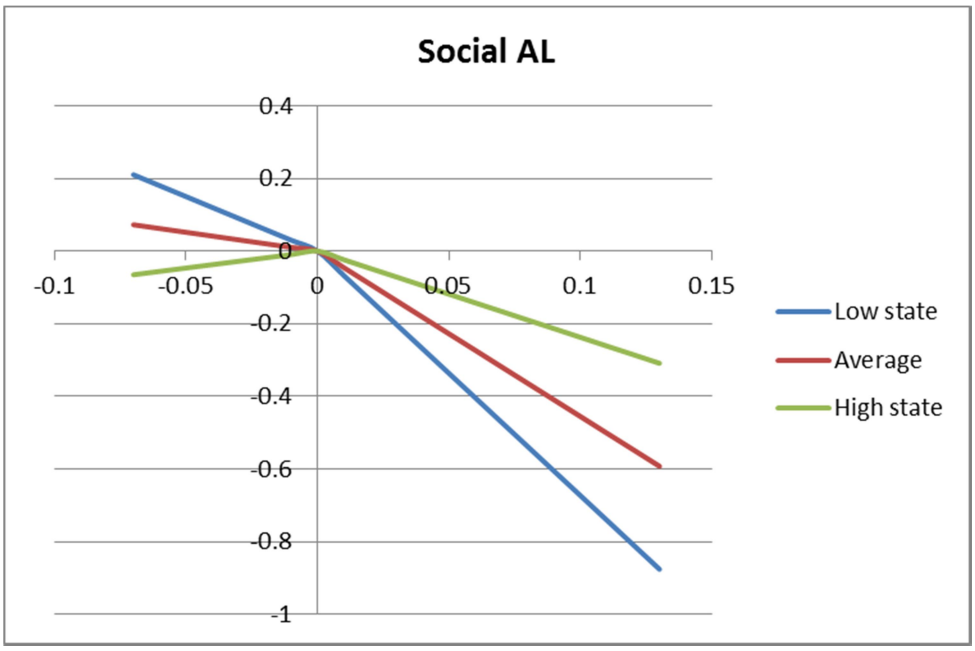


Figure 2: Interaction Effects of Stateness Score