

## Challengers, Elites, and Owing Families: A Social Class Theory of Corporate Acquisitions in the 1960s

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This paper analyzes data on 461 large U.S. industrial corporations to determine the factors that led large firms to participate in the wave of diversifying acquisitions that peaked in the late 1960s. We elaborate and test a class theory of corporate acquisitions, maintaining that firms pursued acquisitions in this period when they were commanded by well-networked challengers who were central in elite social networks but relatively marginal with respect to social status, isolated from the resistance of established elites, and free from control of owning families. We also consider a wide range of factors highlighted by alternative accounts of acquisition likelihood, including resource dependence, institutional pressures, and principal-agent conflicts. The results provide support for our main theoretical arguments, even when controls related to alternative explanations are taken into account. ●

I am a conglomerate. Me personally.

—Meshalum Riklis, founder of Rapid American, an active acquirer in the 1960s, as quoted in *Forbes* (March 15, 1971)

Corporate acquisitions entail the absorption of one firm by another. The diversifying acquisitions of the 1960s brought together firms producing in different industries that were not linked by buyer-supplier relations. Corporate acquisitions have important economic, social, and political consequences and, for this reason, have been the focus of much past research (cf. Pfeffer, 1972; Burt, 1980; Haunschild, 1993; Haunschild and Beckman, 1998; Davis and Stout, 1992; Davis, Diekmann, and Tinsley, 1994; Zey, 1994). The diversifying acquisitions of the 1960s are considered particularly important, and a number of scholars have attempted to explain them because they ushered in a new conception and form of corporate control (Williamson, 1975; Fligstein, 1990; Palmer et al., 1995).

Much organization theory implicitly treats organizations as actors and managers as instruments through which organizations pursue their interests. Individual managers' attributes are therefore assumed to be irrelevant to organization behavior. Consistent with this approach, the earliest explanations of corporate acquisitions assumed that corporations are situated in environments composed of resource dependence relations, which generate uncertainty and constraint (hereafter, uncertainty) to which firms are averse. In this view, acquisitions are one device to avoid or reduce resource-dependence-based uncertainty. Thus, corporate managers and directors (hereafter, corporate elites) pursue acquisitions to the extent that their firms are exposed to resource-dependence-based uncertainty (Pfeffer, 1972; Pfeffer and Salancik, 1978; Burt, 1980).

Perrow (1972) has criticized such anthropomorphizations of organizations, offering in their place what he called the tool view, which assumes that managers are actors and organizations are instruments through which managers pursue their interests. Consistent with Perrow's critique, but ignoring his point about managerial self-interest, recent organization theory explanations of acquisitions assume that corporate elites

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Mark Granovetter, Michael Schwartz, and Charles Perrow long ago provided the seeds for many of the theoretical ideas in this paper, although they might find it hard to understand (or admit) how. Jerry Ross, Alan Murray, Estella Hopenhayn, Steve Hoeffler, Peter Phillips, and Jim Wallace collected large portions of the data used in the analyses. Anand Swaminathan provided helpful methodological advice. Paul Hirsch, Ranjay Gulati, Jerry Davis, Mark Mizruchi, Toby Stuart, Ronald Burt, and Kate Rusby offered insightful observations on earlier drafts of the paper. Reed Nelson and three anonymous ASQ reviewers gave us very useful criticisms of the manuscript after submission. Finally, Linda Johanson provided numerous editorial suggestions, which greatly improved the presentation.

are situated in environments composed of institutionalized rules, norms, and cognitive frameworks that define the parameters of acceptable business practice. In this view, acquisitions are one of many important business practices regulated by institutional constraints. Thus, corporate elites pursue acquisitions to the extent that the institutional environment in which they are situated prescribes them (Fligstein, 1990; Fligstein and Brantley, 1992; Haunschild, 1993; Haunschild and Beckman, 1998). Yet this new institutional view, like the resource dependency perspective, assumes that managers act in accordance with environmental prescriptions. Neither of these perspectives is helpful in understanding what motives underlie the acquisitions of an active acquirer like Riklis, for example, who is quoted in the epigraph above. The hubris of such a statement indicates that to have a full explanation of the acquisitions of the 1960s, we need to bring managerial self-interest and individual attributes into the study of acquisitions as a corrective.

Our theoretical approach, therefore, also conceptualizes corporate elites as actors, but we assume that these actors possess interests that arise not solely from their position in organizational and institutional environments but also from their position in a multidimensional social class structure. In our view, acquisitions are often innovative and sometimes deviant means by which corporate elites can improve their wealth and status. Corporate elite members pursue acquisitions to the extent that their position in the class structure provides them with the interest and capacity to increase their wealth and status in this way.

We examine how the class position of a firm's top managers and directors influenced its propensity to engage in diversifying acquisitions in the 1960s, while controlling for factors implicated by resource dependence and institutional theory, as well as alternative economic accounts—in particular, agency theory. More specifically, we test the proposition that firms commanded by well-networked challengers, who were central in elite social networks but relatively marginal with respect to social status, isolated from the resistance of established elites, and free from the constraint of owning families, were particularly active acquirers in this period. In the process, we show how a social class theory fills the gaps in previous work on corporate acquisitions.

## **A SOCIAL CLASS THEORY OF CORPORATE ACQUISITIONS**

Our social class theory of acquisitions is based on three assumptions. We assume that corporate elites pursue acquisitions to increase their wealth and social status. The diversifying acquisitions of the 1960s facilitated the ascendance of small, less-established firms in the corporate hierarchy. With the advent of diversifying acquisitions, the range of assets available for purchase increased dramatically. Thus, conglomerate firms grew faster than other firms in the 1960s (Fligstein, 1990: 290).

Following Stearns and Allan (1996), we also assume that acquisition waves are often fueled by corporate innovations that are sometimes considered deviant from the standpoint

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of current business norms. The diversifying acquisitions of the 1960s clearly fit this description. Diversifying acquisitions were relatively rare before the 1960s (Weston, Kwong, and Hoag, 1990) but outpaced other types of acquisitions six to one between 1963 and 1968. The diversifying acquisitions of the 1960s often used a new stock purchasing technique that circumvented the top management teams of target firms. In tender offers, corporations issue public promises to purchase the stock of targets directly from their stockholders at preset prices. The deviant status of tender offers in the 1960s, especially hostile offers, which the target top managers opposed, was reflected in the language used by the business press to describe them. Bidders were labeled "raiders," targets "damsels in distress," and hostile bids "rapes" (Hirsch, 1986). Further, some think that diversifying acquisitions in this period often used new financing devices that largely circumvented major financial institutions. In the price-earnings (PE) ratio game, corporations use cash to purchase firms with low PE ratios. This increases their earnings per share and, by extension, their stock price, making it easier to use their stock to acquire more firms (Espeland and Hirsch, 1990). In corporate raiding, corporations use short-term loans to purchase firms whose stock is undervalued by the market. They then sell off pieces of the acquired firms, whose assets are now more highly valued, to generate cash to repay their loans and pursue more acquisitions.<sup>1</sup>

Finally, building on earlier work by Zeitlin (1974), we assume that corporate elites are situated in a multidimensional social class structure. This structure has a classical Marxian dimension, which pertains to the extent to which corporate elites own the means of production (Marx, 1967; Giddens, 1973: 26–32). It also has dimensions pertaining to the social status into which corporate elite members are born, the educational credentials that they attain, and the social network ties that they forge with other elites (Mills, 1959; Domhoff, 1967, 1970). A corporate elite member's position in the class structure determines his or her interests and capacities with respect to different corporate strategies and structures, contingent on the historical context. Our arguments about the relationships between a corporate elite member's class location and his or her propensity to pursue diversifying acquisitions in the 1960s build on previous theory and research, in particular, the work of Stearns and Allan (1996), Hirsch (1986), and Espeland and Hirsch (1990).

### Social Status

Social status at birth is one dimension of the class system and thus an axis along which corporate elite members can be distinguished from one another (Mills, 1959: 31). Business executives who are born into high-status families are commonly referred to as "old guard," while those born into families of more marginal status are called "nouveau riche." Stearns and Allan (1996) maintained that marginal-status corporate elite members, whom they dubbed "challengers," are interested in pursuing acquisitions because they lack the wealth and status that corporate acquisitions can generate. Further, Stearns and Allan, as well as Hirsch (1986) and Espeland and Hirsch (1990), speculated that such elites are

<sup>1</sup> Despite the fact that it is widely believed that corporations employed these two innovative means of financing acquisitions in the 1960s, there is surprisingly little quantitative empirical evidence to suggest that either was actually employed with great frequency in this period or subsequently. For example, there is no evidence that firms with low price-earnings ratios were more likely than those with high ratios to be acquired in the 1960s (Palmer et al., 1995).

more inclined to pursue acquisitions because they are less thoroughly socialized and socially controlled to conform to accepted business practice, with which innovative acquisitions can conflict. The idea that status marginality stimulates the adoption of innovations has been advanced in other contexts, such as the diffusion of new agricultural practices and radio broadcasting industry strategies (cf. Park, 1950; Menzel, 1960; Cancian, 1967; Leblebici et al., 1991).

Domhoff (1970) argued that social status in the U.S. is reflected in attendance at exclusive secondary schools (such as Groton) and inclusion in restricted metropolitan social registers (such as the *Cleveland Blue Book*). Only descendants of families of longstanding wealth and social prominence gain admission to such schools and listing in such registers. Baltzell (1958, 1964) maintained that social status in the U.S. has been segregated along religious and regional lines. He characterized the upper class as a Protestant and northeastern phenomenon. Thus, it is not surprising that Espeland and Hirsch (1990: 84) described the corporate elite members who pursued diversifying acquisitions in the 1960s merger wave as "self-made men." Hirsch (1986) and Espeland and Hirsch (1990) also described these elite members as being disproportionately Jewish and from the South or West. None of these arguments on social status have been tested empirically. We test them in this paper in the following hypotheses:

**H1:** Firms run by top managers who attended an exclusive secondary school or whose family was listed in a metropolitan social register were less likely than other firms to complete diversifying acquisitions in the 1960s.

**H2:** Firms run by top managers who were Jewish were more likely than other firms to complete diversifying acquisitions in the 1960s.

**H3:** Firms run by top managers situated in the South or West were more likely than other firms to complete diversifying acquisitions in the 1960s.

### **Social Network Embeddedness**

Embeddedness in social networks generated by common memberships in exclusive organizations is another dimension of the class system and thus another axis along which corporate elite members can be distinguished from one another (Domhoff, 1967, 1970). Corporate elite members come to know and develop relationships with one another through common memberships in exclusive social clubs and corporate boards of directors. Domhoff's (1974) in-depth case analysis of one exclusive club clearly demonstrates the social network-generating function of such clubs. Koenig and Gogel (1981) have conducted quantitative empirical analyses that testify to the social network significance of corporate boards. Corporate elite members who belong to many clubs and boards are the most prominent and powerful members of the business community, sometimes referred to as the "inner group" of the capitalist class (Zeitlin, Ratcliff, and Ewen, 1974; Useem, 1979). Several organizational theorists believe that embeddedness in elite social networks is associated with acquisition behavior. The idea that network embedded-

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ness stimulates the adoption of innovations has been advanced in other contexts, such as the adoption of new pharmaceutical treatments and hostile corporate takeover defense tactics (Coleman, Katz, and Menzel, 1957; Rogers, 1962; Davis, 1991; Davis and Greve, 1997).

Most think that acquisition behavior diffuses through the network of interlocking directorates (Haunschild, 1993; Davis, Diekmann, and Tinsley, 1995; Haunschild and Beckman, 1998). When a corporation's managers sit on another firm's board of directors, they create "sent" interlocks between their corporation and the other firm. In the process, they obtain access to information about and from that firm, which might provide them with knowledge about diversifying acquisitions, the financing strategies and takeover tactics used to complete them, and the identity of willing or vulnerable targets. They also obtain formal authority over that firm, which might provide them with influence over people who control access to capital or hold decision-making authority over specific desired targets.

Stearns and Allan (1996) assumed that acquisition behavior also diffuses through network connections created when corporate elite members obtain memberships in exclusive social clubs. It is known that membership in exclusive clubs and possession of corporate board seats go hand in hand (Bonacich and Domhoff, 1981). Recently Kono et al. (1998) presented evidence suggesting that overlapping club memberships are functional substitutes for interlocking directorates. Thus, it stands to reason that membership in exclusive social clubs might provide corporate elite members with information about and influence over other firms similar to that provided by interlocking. This suggests the following hypotheses:

**H4:** Firms run by top managers who sat on many corporate boards of directors, thereby creating many sent interlocks with other firms, were more likely than other firms to complete diversifying acquisitions in the 1960s.

**H5:** Firms run by top managers who belonged to exclusive social clubs were more likely than other firms to complete diversifying acquisitions in the 1960s.

## **Resistance of the Established Elite**

The potential of the established elite to resist the spread of innovations adopted by challengers is implicit in discussions of status marginality. If challengers had an incentive to pursue diversifying acquisitions in the 1960s, then members of the established elite should have had an equally compelling incentive to squelch these acquisitions. Some believe that the Williams Act of 1969, which helped bring an end to the 1960s merger wave, was engineered by the established corporate elite (Austin and Fishman, 1970; Hirsch, 1986; Espeland and Hirsch, 1990). Among other things, this law required bidders to line up assured financing before announcing a tender offer and extended the time within which targets could arrange a defense after receiving an offer. Established elite members might defend the existing order through their participation in the network of interlocking directorates. Glassberg (1987) showed, for example, that

interlock connections played an important role in undermining LEASCO's attempted hostile takeover of Chemical Bank of New York in 1968. Numerous scholars have characterized interlocking directorates as a means by which corporate elite members are socialized and socially controlled to conform to norms of appropriate business practice—norms that the diversifying acquisitions of the 1960s might have violated (Domhoff, 1967, 1970; Zeitlin, Ratcliff, and Ewen, 1974; Useem, 1979; Koenig and Gogel, 1981).

When a corporation's management invites outsiders to sit on its board, it surrenders decision-making authority to them and often creates interlocking directorates with other firms. Figure 1 provides an example of the kinds of interlocks created in 1966 by one corporate director. Outside directors typically also sit on the board of at least one other firm with which they are principally affiliated. Directors are principally affiliated with a firm when they are an owner, manager, or are otherwise closely tied (e.g., by birth, marriage, or business partnership) to the owners and/or managers of the firm. Outside directors who are principally affiliated with other industrial firms create "received" industrial interlocks between the focal corporation and these other firms. Such directors had a self-interest in dissuading the corporations on whose boards they sat from pursuing acquisitions in the 1960s, insofar as the firms to which they were principally affiliated were potential acquisition targets. Outside directors can also sit on the boards of other firms with which they are not principally affiliated, creating "neutral" industrial interlocks between the focal corporation and these other firms. Outside directors who sit on many boards, and who thus create many neutral interlocks, are considered the most central members of the business elite (Zeitlin, Ratcliff, and Ewen, 1974; Useem, 1979). As such, they should have assiduously guarded the status quo, with which diversifying acquisitions were incompatible in the 1960s. This suggests the following hypotheses:

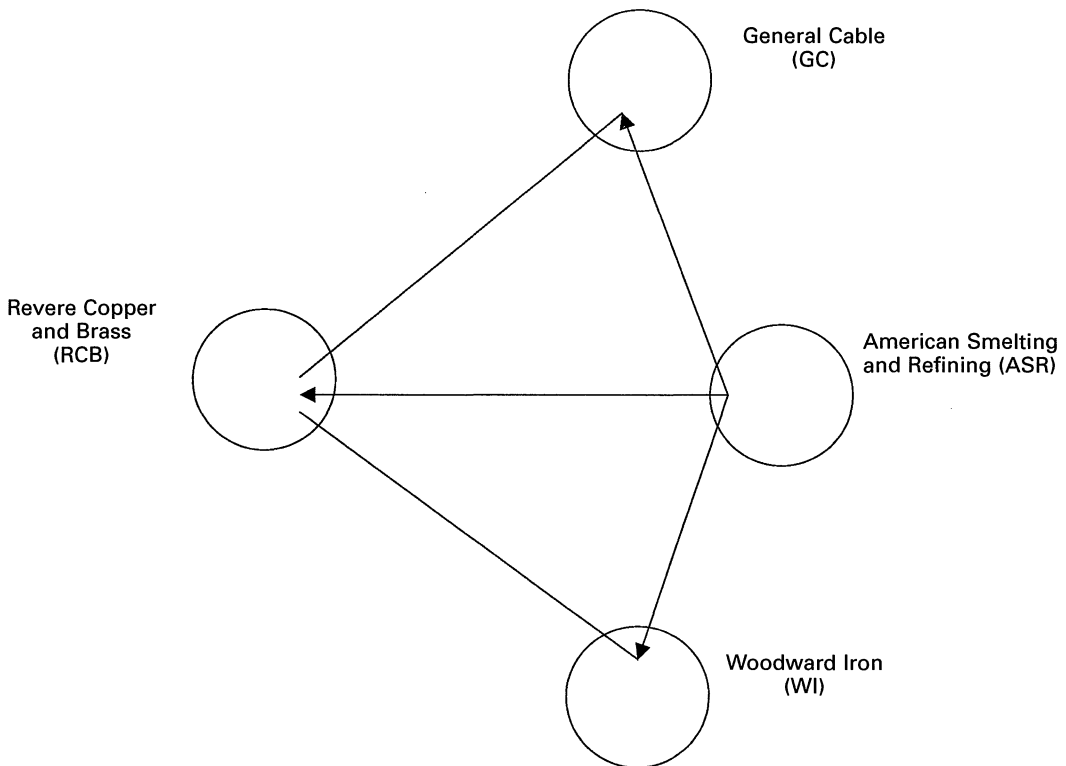
**H6:** Firms whose boards of directors contained many outsiders who were principally affiliated with other industrial corporations, and thus maintained many received interlocks with other firms, were less likely than other firms to complete diversifying acquisitions in the 1960s.

**H7:** Firms whose boards of directors contained many outsiders who were outside directors of many other industrial corporations, and thus maintained many neutral interlocks with other firms, were less likely than other firms to complete diversifying acquisitions in the 1960s.

No one has explored the impact of top managers' club affiliations on acquisition likelihood. Several researchers, though, have examined the impact of top managers' corporate board memberships on acquisition likelihood. Haunschild (1993) and Haunschild and Beckman (1998) found that the number of sent interlocks corporations maintained with other firms was positively related to the likelihood that they completed diversifying acquisitions in the 1980s. But these studies lacked measures of top managers' social status, club memberships, and stock ownership, which are likely related to interlocking (Soref, 1980; Useem and Karabel, 1986; Soref and Zeitlin,

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**Figure 1. Interlocks created in 1966 by Forrest Hamrick, an officer of American Smelting and Refining at the time.**



From the perspective of American Smelting and Refining (ASR), Hamrick created three “sent” interlocks, indicated by the arrows from ASR to General Cable (GC), Revere Copper and Brass (RCB), and Woodward Iron (WI). From the perspective of RCB, Hamrick created one “received” interlock, indicated by the arrow from ASR to RCB. Hamrick also created two “neutral” interlocks, indicated by the non-directional line between RCB and GC and the non-directional line between RCB and WI.

1987) and which we hypothesize (above, here, and below) are related to acquisition likelihood. Davis, Diekmann, and Tinsley (1995) found that interlock centrality was related to acquisition likelihood in the 1980s, even controlling for stock ownership, but their measure of centrality did not distinguish between sent, received, and neutral interlocks, which we predict will have contradictory effects on acquisition likelihood in our period. Thus, previous results pertaining to interlock centrality might be spurious or misleadingly imprecise.

### Elite Undergraduate and Graduate Management Education

Higher educational attainment is another dimension of the class system (Collins, 1979). Thus it is also an axis along which corporate elite members can be distinguished from one another. Degrees from elite universities or professional schools are sometimes considered indicative of upper-class standing, because admission to such schools is more open to persons of high social status and because attendance at such schools socializes students into upper-class norms and plugs them into elite social networks. Adopting this view, Useem and Karabel (1986) have shown that ascendance in the corporate world is partly predicated on elite university degrees.

A corporate executive's higher education might have influenced his or her proclivity and ability to pursue diversifying acquisitions in the 1960s. On the one hand, elite college and professional school attendance might serve to socialize future corporate elite members into conventional business norms that are antithetical to innovative acquisition behavior. On the other hand, it might provide future corporate elite members with nascent social network connections that can be subsequently activated to facilitate acquisitions. It also might expose future corporate elite members to outlooks and technical knowledge conducive to acquisitions. Perhaps for this reason, Hirsch (1986) and Espeland and Hirsch (1990) offered apparently contradictory predictions about the significance of educational attainment on acquisition activity in the 1960s. On the one hand, they asserted that corporate executives pursuing diversifying acquisitions in this period lacked elite college credentials, especially elite business school degrees (see also Barmash, 1971; Vance, 1971; Brown, 1972). On the other hand, they maintained that elite graduate schools of business disseminated a conception of managerial control that fostered acquisition behavior in this period, the "firm-as-portfolio" model. Adherents of the firm-as-portfolio model subscribed to "an 'objective management' ideology, wherein the 'science' of managerial decision-making is thought amenable to all types of operations, regardless of the type of business" (Espeland and Hirsch, 1990: 88). Because previous theory suggests that a chief executive officer's higher education background might influence the likelihood that he or she would pursue diversifying acquisitions but is ambiguous with respect to the ultimate direction of this effect, we offer only non-directional hypotheses:

**H8:** Firms run by top managers who earned an undergraduate degree from an elite college or university were more or less likely than other firms to complete diversifying acquisitions in the 1960s.

**H9:** Firms run by top managers who earned an M.B.A. degree from an elite graduate school of business were more or less likely than other firms to complete diversifying acquisitions in the 1960s.

Haunschild, Henderson, and Davis-Blake (1998) reported that among corporations completing acquisitions in the late 1980s and early 1990s, those run by top managers with elite graduate degrees, but not elite M.B.A.s alone, were more likely to pursue diversifying acquisitions than other types of combinations. But like most of the previous studies cited here, they failed to include measures of top managers' social class background, club memberships, and stock ownership, which are likely related to educational attainment (Soref, 1980; Useem and Karabel, 1986; Soref and Zeitlin, 1987) and which we hypothesize (above, here, and below) are related to acquisition likelihood. Thus, previous results pertaining to educational background might be spurious or erroneous.

### **Ownership and Control**

Marxists believe that ownership of the means of production is the most important dimension of the social class structure. There has been considerable debate over the extent to which corporate elite members still own a substantial part of the



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firms they command or are free from the control of owners not in top management or on the board (Zeitlin, 1974, 1976; Allen, 1975). Managerialists claim that the ownership of large corporations has become widely dispersed among owners who are unrelated to one another and uninvolved in top-level decision making. As a result, control of corporations has passed from owning capitalists to salaried professional managers. Marxists generally argue that the separation of ownership and control has remained minimal and that corporations have thus remained essentially capitalist institutions. Interestingly, even though Marxists contend that ownership of the means of production is the key dimension of the class structure, they typically assume that a top manager's ownership status has little impact on the corporate behavior he or she pursues. This is because Marxists believe that other aspects of a corporate elite member's class position, discussed above, lead non-owning top managers to act like owning managers (Zeitlin, 1974). Thus, theorization of the impact of ownership on corporate behavior has fallen to managerialists and their agency-theory descendants (Berle and Means, 1932; Larner, 1970; Galbraith, 1971; Allen, 1975; Jensen and Meckling, 1976).

From the managerialist standpoint, owners should have more to lose and professional managers more to gain from making acquisitions. Acquisitions can dilute the stock position of a corporation's ownership group because acquiring firms sometimes must issue new stock to finance their purchases. Acquisitions can also restrict the autonomy of a corporation's dominant coalition because acquiring firms sometimes must incur debt to finance their deals. Ownership groups probably view such loss of autonomy with greater disdain than do professional managers because they have a greater affective attachment to their firms. Further, acquisitions tend to diminish the acquiring firm's market value, to which the ownership group's wealth is more directly tied (Benston, 1979; Dodd, 1980; Firth, 1980). Acquisitions almost always increase the acquiring firm's size, however, to which top managers' salaries are linked. The relative preference professional managers have for acquisitions may be greatest in connection with diversifying acquisitions. Amihud and Lev (1981) argued that diversifying acquisitions do not diversify stockholders' financial risk but do diversify managers' employment risk, by smoothing profits and thus reducing the chance of firing. Agency theorists believe that owners' interests tend to prevail over managerial interests when owners have the ability to monitor and discipline managers, as they do when stock is concentrated in the hands of a few related individuals involved in top management. This suggests the following hypotheses:

**H10:** Corporations in which ownership was concentrated in the hands of a few related individuals were less likely than other firms to make diversifying acquisitions in the 1960s.

**H11a:** The negative association between concentrated ownership and acquisition likelihood was strongest when ownership was in the hands of individuals represented in top management.

While Marxists have not theorized the relationship between a firm's ownership structure and its propensity to engage in acquisitions, class theory implies a modification of the predictions outlined above. Owners may vary in the extent to which their social standing hinges on the size of the firms they own. Owners involved in top management are likely to improve their social standing as their firms grow because large firms bring their top managers more media attention and afford them greater opportunities to obtain social club and corporate board memberships than do small firms. Owners not involved in top management are less likely to reap these benefits. Numerous studies have reported that the managers of large firms hold more social club and corporate board memberships than do those of small ones (Soref, 1980; Soref and Zeitlin, 1987). This suggests the following alternative hypothesis:

**H11b:** The negative association between concentrated ownership and acquisition likelihood was weakest when ownership was in the hands of individuals represented in top management.

Amihud and Lev (1981) showed that owner-controlled firms made fewer diversifying acquisitions in the 1960s than did management-controlled firms, but they controlled only for firm size. Fligstein and Brantley (1992), estimating statistical models that were more comprehensive, but not as comprehensive as those we estimate here, found no effect of owner control on acquisitiveness in the 1970s. Neither study, though, distinguished between stockholders on the basis of their occupancy of positions in top management and/or the board of directors. Thus, previous results pertaining to ownership are contradictory, based on incompletely specified statistical models, and are inconclusive.

### Alternative Explanations

**Resource dependence.** Resource dependence and market structure theorists believe that corporations acquire other firms to coopt or avoid sources of uncertainty and constraint associated with problematic resource exchanges. Corporations are thought to purchase firms in different but non-linked industries in order to avoid uncertainty and constraint. Competitors generate uncertainty for corporations by influencing the supply and thus the price of the goods they produce. Uncertainty is thought to be greatest in industries of intermediate concentration. At low concentration levels, the actions of individual competitors have little influence on industry conditions. At high levels, competitors' actions have a substantial influence on industry conditions but can be monitored and predicted. Potential transaction partners constrain corporations by regulating the availability of inputs and demand for outputs. Constraint is greatest in industries that lack structural autonomy. And structural autonomy is thought to be low in industries that are not highly concentrated and that transact with only a few other sectors that are themselves highly concentrated. Under these conditions, corporations have little bargaining power vis à vis buyers and suppliers. Considerable support for this portrait of acquisition behavior has been obtained at the industry level of analysis (Pfeffer, 1972; Pfeffer and Salancik, 1978; Burt, 1980, 1983). Thus, we include in

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our analyses measures of industry concentration and structural autonomy.

**New institutional theory.** New institutional theorists believe that corporations pursue acquisitions when their top managers are immersed in cognitive frameworks and subjected to normative pressures according to which acquisitions are legitimate forms of corporate behavior. New cognitive frameworks and norms emerge when new opportunities or constraints for corporate action are created, often by the state, and new managerial elites rise to power. Passage of the Celler-Kefauver Act in late 1950 and the enforcement of this act during the Eisenhower, Kennedy, and Johnson presidential administrations blocked horizontal, vertical, and geographic market extension acquisitions in the 1960s (Fligstein, 1990). The rise to power of top managers with backgrounds in finance at about the same time is believed to have led firms to pursue acquisitions of the only type permitted in the new legal environment—diversifying combinations (Fligstein, 1987, 1991). These top managers were imbued with the “finance conception of control,” according to which the acquisition of new enterprises, regardless of their industrial character, is the most expedient way to maximize stockholder wealth. They were also more skilled in the techniques needed to complete diversifying acquisitions. Fligstein and Brantley (1992) reported that corporations led by chief executive officers with backgrounds in finance completed more acquisitions than firms led by top managers with other backgrounds in the 1970s. Cognitive frameworks spread through a variety of mechanisms, the most frequently cited of which is mimicry (DiMaggio and Powell, 1983). The finance conception of control and diversifying acquisitions are thought to have diffused quickly as corporations copied fellow industry constituents and interlock partners who were employing this conception of control and pursuing this behavior (Fligstein, 1990; Stearns and Allan, 1996). Although no one has analyzed the potential impact of intraindustry mimicry on acquisition behavior, Haunschild (1993) and Haunschild and Beckman (1998) have shown that corporations interlocked to recently acquisitive firms were more likely to acquire other firms in the 1980s. Thus, we include in our analyses measures of top managers’ functional backgrounds as well as measures of intraindustry and interlock partners’ acquisition behavior.

**Agency theory.** Agency theorists believe that corporate acquisitions, especially diversifying acquisitions, reflect opportunism by top managers that is insufficiently monitored and controlled. Top managers seeking to retain their positions are believed to pursue acquisitions when their firms accumulate large free cash flows, because firms with large free cash flows are themselves attractive acquisition targets, and acquisitions consume free cash (Mitchell and Lehn, 1990). The relationship between free cash flow and acquisition activity is thought to be particularly strong when firms lack the ability to create value through investment in internal positive net-present-value (NPV) projects (Jensen, 1986). Finally, according to agency theory, corporations with a high proportion of outside directors should be less likely to complete diversifying acqui-

sitions, because outside directors serve to monitor and control top managers' opportunism (Jensen, 1986), of which diversifying acquisitions have been considered one form (Berger and Ofek, 1995). Thus, we include in our study measures of free cash flow, free cash flow in the absence of positive NPV projects, and the proportion of outside directors on a firm's board.

## METHOD

### Sample, Dependent Variable, and Statistical Model

We studied the largest 500 publicly traded U.S. industrial corporations in 1962, as reported in *Fortune* magazine (1963). Data comparability and availability considerations reduced our final sample to 461 firms.<sup>2</sup> We tracked the acquisition behavior of these corporations, as reported in the Federal Trade Commission's *Statistical Report on Mergers and Acquisitions* (1976), between January 1, 1963, and December 31, 1968. The 1960s merger wave took off at the end of 1962 and crested in 1968, shortly before the Williams Act of 1969 sapped its energy, as shown in figure 2. The FTC report recorded acquisitions of firms greater than \$10 million in assets and characterized them by type. We coded product extension and conglomerate acquisitions as diversifying acquisitions. In product extension acquisitions, the industries in which combining firms produce are related to one another in some way (as is the case when a corporation that produces crude oil, petroleum, and natural gas purchases a firm that manufactures fertilizer and other agricultural chemicals). In conglomerate acquisitions, the industries of combining firms are essentially unrelated (as is the case when a corporation that produces sewing machines, vacuum cleaners, and other home appliances purchases a firm that manufactures data processing equipment).<sup>3</sup> The date on which each acquisition began was obtained from the *Wall Street Journal Index*. One hundred and fifty (33 percent) of the firms in our data set completed a diversifying acquisition in our period. About two-thirds of these completed only one diversifying acquisition, one-fifth completed two acquisitions, and less than one-tenth completed three or more.

We estimated count and binary regression models of the likelihood that corporations completed diversifying acquisitions between 1963 and 1968. Each firm's acquisition record was divided into six annual spells. For the count models, each firm-year observation was assigned the number of diversifying acquisitions completed by the firm in that year. We used Poisson regression to model this outcome, because diagnostics revealed that the data were not overdispersed (McCullagh and Nelder, 1983). For the binary regression models, each firm-year observation was coded 1 if the firm completed a diversifying acquisition in that year and coded 0 otherwise. We used logistic regression to model this dichotomous outcome (Allison, 1982, 1984). Logit coefficients, which indicate the effect of a one-unit change in a covariate on the log-odds of a firm completing a diversifying acquisition in a year, were translated into values indicating effects on the probability of completing a diversifying acquisition ( $\Delta P$ ) using a formula suggested by Petersen (1985). On the one hand, the binary

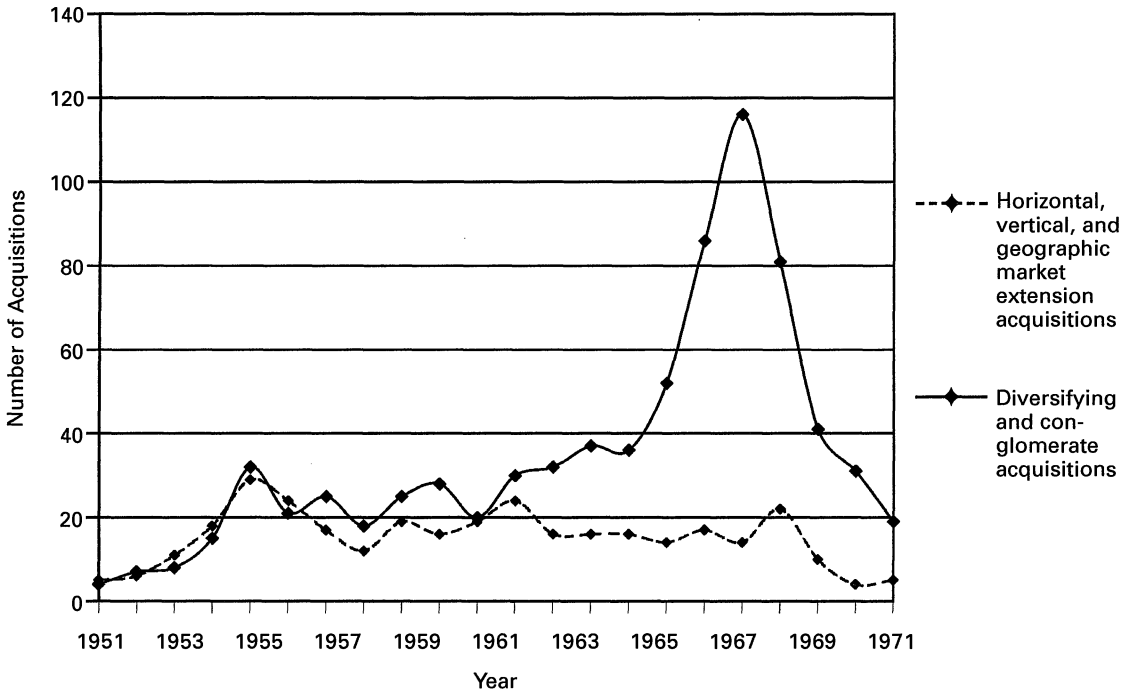
### 2

Twelve firms were dropped from our analysis because they were foreign or domestic subsidiaries or because they were in the process of being liquidated or acquired on January 1, 1963. Another ten firms, for which we were unable to obtain stock ownership data, were also dropped. Thirteen firms were dropped from our analysis because market returns data were missing for one or more years. Finally, four firms were dropped for miscellaneous reasons.

### 3

We grouped product extension and conglomerate acquisitions together because we think these two types of acquisitions are intimately related to one another. Both increase a firm's industrial diversity. In fact, while individual product extension acquisitions do not add unrelated businesses to a firm's complement of activities, a series of product extension acquisitions can produce a firm that many observers would characterize as a conglomerate. Hence, some economists treat both types of acquisitions as instances of conglomerate combination in this period (Weston, Kwong, and Hoag, 1990: 13). If product extension acquisitions were not intimately related to conglomerate combinations, it would be hard to understand why the 1960s merger wave is generally categorized as a conglomerate movement. The Federal Trade Commission report that we used to track acquisitions coded only 18 percent of all large acquisitions in this period and only 21 percent of the diversifying acquisitions in our data set as conglomerate acquisitions. Still, it is true that pure conglomerate acquisitions are the most extreme variety of diversifying acquisition. We did separate analyses to see if the determinants of this extreme form of diversification are different from the factors leading to less extreme forms (available on request), but we found few statistically significant predictors of conglomerate acquisition likelihood. This may reflect the fact that there are relatively few pure conglomerate acquisitions in our period (only 2 percent of the 2,510 firm-year observations in our sample registered a pure conglomerate acquisition) and that, as a consequence, our separate analysis of these acquisitions lacked sufficient power.

Figure 2. Corporate acquisitions greater than \$10 million, 1951–1972.\*



\*In 1951 constant dollars.

**4** To ensure that our results are otherwise robust with respect to analytic method, we also employed three alternative analytic designs. In one, we estimated count and binary regression models of the number of diversifying acquisitions firms completed over the entire six-year period. In the second, we estimated count and binary regression models with three biannual spells. In the third, we estimated continuous-time event history models in which new spells were created each time new information on independent variables became available, and acquisitions were coded to the exact day. In each case, we analyzed the full data set and a subset of that data set, which excluded four firms that were clear outliers on our dependent variable (each of which acquired 7 or more firms between 1963 and 1968). The results obtained from these alternative analyses (available on request) differed little from the results reported here.

**5** It is possible that the likelihood that a firm completed an acquisition and the likelihood that it dropped out of our study between 1963 and 1968 are related. Some have speculated that corporations engage in acquisitions because the acquisition of other firms consumes resources that might otherwise make them attractive acquisition targets. Failure to take this potential relationship into account could bias our results. We have explored and implicitly taken this possibility into account in two ways. First, we estimated models that included measures of the number of other firms in a corporation's

regression models can be considered inferior to the count models because they ignore information about multiple acquisitions in the same year. On the other hand, they can be considered superior to the count models because they are less sensitive to the impact of acquisitive outliers. Only 27 of the 2,510 spells in our data set registered multiple acquisitions, and just four firms were responsible for 10 of these spells. We consider support for hypotheses to be strong when both types of models provide confirmatory results and to be tentative when only one type of model provides confirmatory evidence.<sup>4</sup>

About one-fifth of the 461 firms in our sample dropped out of the study for reasons of acquisition, merger, bankruptcy, or liquidation by the end of 1968. These firms contributed observations to the sample until they were censored. Thus, the number of firm-years included in the study (2,510) was less than the maximum possible ( $461 \times 6 = 2766$ ). Right censoring of observations is common in analyses such as these and does not in and of itself bias parameter estimates.<sup>5</sup> We used one-tailed tests to evaluate the statistical significance of coefficients pertaining to directional hypotheses (e.g., H1) and two-tailed tests to evaluate the significance of non-directional hypotheses (e.g., H8 and H9).

### Independent Variables

Measurements of top manager characteristics were based on the attributes of a firm's chief executive officer or, when a chief executive officer could not be identified, the president.

Data on chief executive officers and presidents (hereafter, simply CEOs) were updated annually, with the likelihood of acquisition in a particular year (e.g., 1964) considered a function of data collected for the previous year (e.g., 1963). One dummy variable indicates whether CEOs possessed a finance background. We included a small number of CEOs with legal backgrounds in this category, given that Hayes and Abernathy (1980) equated these two backgrounds. Two dummy variables indicate whether CEOs possessed an undergraduate degree from an elite college or university and/or an M.B.A. from an elite graduate school of business, with elite designations taken from Useem and Karabel (1986).<sup>6</sup> One dummy variable indicates whether CEOs were listed in a social register and/or attended an exclusive secondary school, with exclusive secondary school designations taken from Domhoff (1970). Another dummy variable indicates whether CEOs were members of at least one of the 40 most exclusive social clubs in America, with exclusive club designations also taken from Domhoff (1970). One dummy variable indicates whether CEOs were Jewish. Another indicates whether their firms were headquartered in the South or West. Information was sometimes missing for CEOs' social, educational, or functional backgrounds and social club memberships. A separate dummy variable was created for each of these variables to signify when data were missing. Exploratory analyses indicated that only the missing data variables associated with CEOs' social and educational backgrounds and social club memberships had effects on acquisition likelihood that approached statistical significance at conventional levels. These variables were included in all analyses reported below.

Measurements of interlocking directorates were updated biannually at the end of 1962, 1964, and 1966, with the likelihood of acquisition in a particular year (e.g., 1966) considered a function of data collected for the most recent available year (e.g., 1964). We computed separate measures of the number of sent, received, and neutral interlocks each corporation maintained with other firms identified by *Fortune* magazine as being among the largest 500 industrials in any year between 1962 and 1975. Updating interlock variables on a biannual basis as opposed to annually should introduce little measurement error, insofar as interlock counts such as those used here were essentially stable over two-year periods in the 1960s (Mariolis and Jones, 1982).

Our measures of elite social network embeddedness, especially our social club variable, are limited in two respects. First, they are relatively crude. Our interlock variables are simple counts. Others have constructed more sophisticated measures, which take into account the extent to which a firm's interlock partners are themselves interlocked with other firms (cf. Mintz and Schwartz, 1985). Further, our club variable is a simple dichotomy. We used simple interlock count variables because previous research has shown that such count measures are highly correlated with more sophisticated alternatives (Mizruchi and Bunting, 1981) and because substantive interpretation of these measures' effects is more straightforward. We used the social club dummy variable

industry that were recently acquired and the number of other firms to which a corporation was interlocked that were recently acquired. These measures proxy the objective attractiveness of a corporation's industry to acquirers and the subjective fear that corporations might experience about being acquired. The results (available on request) indicate that neither measure influenced the likelihood that corporations made diversifying acquisitions in our period. Second, all of our models include key economic predictors of the likelihood that corporations would be acquired, most importantly excess free cash flow and profitability.

###### 6

Elite business schools included Columbia University, Dartmouth College, Harvard University, Massachusetts Institute of Technology, Northwestern University, Stanford University, University of California–Berkeley, University of California–Los Angeles, University of Chicago, University of Michigan, and the University of Pennsylvania. A similar effect was not observed for possession of a non-elite M.B.A. degree. We hesitate to draw inferences from this result, though, because relatively few of the CEOs tracked in our study received M.B.A.s from non-elite graduate schools of management.

## Social Class Theory

because relatively few CEOs belonged to more than two clubs, and an alternative measure that tallied the number of clubs to which CEOs belonged produced substantively identical results. Still, it is important to remember that neither of our embeddedness measures pick up variation in the extent to which CEOs were central or peripheral (e.g., old or new) members of the boards and clubs to which they belonged. Second, our measures of social network embeddedness might tap other attributes of CEOs, such as their interests or ambitions with respect to social advancement. They might also proxy variation in the social status of CEOs. Nevertheless, we believe that club and board memberships do tap social network embeddedness, independent of aspirations and status. Not all people who want club and board memberships obtain them.<sup>7</sup> Further, we include several measures of status in our analyses.

Stock ownership data were collected primarily for 1964. We recorded the percentage of outstanding common stock greater than 3 percent held by a group of individuals related by kinship or partnership. We distinguished between ownership groups according to whether they were represented in the CEO position, represented in other top management positions, or were outsiders (who were typically represented on the board of directors). These data should provide reliable estimates of stock ownership concentration throughout our period, insofar as major non-institutional stock ownership positions are highly stable over time (Mikkelsen and Partch, 1989).

Measures of the extent to which firms were free from competitive uncertainty and transaction-partner constraint were based on the concentration levels and transaction patterns of the primary 2-digit input-output (IO) industries in which they produced. Firm primary IO sector affiliations were updated annually. Industry concentration levels and interindustry transaction patterns were based on data from 1963. We measured the extent to which a firm's primary industry was free from competitive uncertainty by the absolute value of the difference between its IO sector's concentration score and the mean manufacturing sector concentration score (.3901). A high value indicates that an industry was relatively competitive or oligopolized. The extent to which a firm's primary industry was free from transaction-partner constraint was measured directly by structural autonomy scores provided by Burt (1986: 16–17). These two measures, although based on 1963 industry attributes and interindustry relations, should be representative of the entire period we study, insofar as these attributes and relations have been shown to be highly stable in the 1960s (Burt, 1988).

Measures of intraindustry and interlock-partner mimicry pressures were updated annually. We counted the number of large acquisitions (\$10 million or more) completed by other firms in a corporation's primary 2-digit SIC industry over the previous three years (beginning in 1963). We also counted the number of sent, received, and neutral interlocks that corporations maintained with other firms that completed large acquisitions in the previous three years (beginning in 1963). The likelihood of acquisition in a year (e.g., 1967) was consid-

7

Stuart (1991: 164–165), in his book about the insider trading scandals of the 1980s, described an instance that well illustrates the difficulties ambitious social climbers sometimes confront when seeking to obtain an exclusive social club membership.

ered a function of mimicry variable counts over the previous three years (e.g., 1964, 1965, and 1966).

The agency theory variables were also updated annually. Free cash flow was measured according to a ratio developed by Lehn and Poulsen (1989).<sup>8</sup> Free cash flow in the absence of positive net-present-value projects was measured by the value of free cash flow when the q-ratio was less than one. The q-ratio was measured according to Amit, Livnat, and Zarowin (1989).<sup>9</sup> The percentage of outside directors on a firm's board was computed using the ratio of non-principally affiliated (non-manager and non-owner) directors to total directors on a firm's board.

To ensure that our statistical models were well specified, we included a large number of other variables in our analyses that have been hypothesized to influence acquisition likelihood. The rationale for including these controls in our study, the measures used to operationalize them, and the effects they had on acquisition likelihood are all discussed in Appendix A. The data sources used to collect information on all the variables used in this study are provided in Appendix B.

**8**

The numerator of this ratio is operating income less interest expense, less income taxes, less dividends to common shareholders, less dividends to preferred stockholders, less change in deferred taxes. The denominator is the book value of total assets.

**9**

The numerator of this ratio is the sum of market value of common equity, the book value of long-term debt, debt due within one year, and the liquidating value of preferred stock. The denominator is the book value of total assets.

**RESULTS**

Means and standard deviations for the full sample and correlations among the independent variables for 1966, the middle of our period, are presented in table 1. Results for count and binary regression models predicting the likelihood that corporations completed diversifying acquisitions between 1963 and 1968 are presented in table 2. Overall, these results pro-

Table 1

**Means, Standard Deviations, and Correlations among Variables\***

Variable	Mean	S.D.	2	3	4	5	6	7
1. Social register/elite secondary school CEO	.163	.370	-.07	-.07	.32	.11	-.01	.05
2. Jewish CEO	.046	.210		-.07	-.02	-.05	-.02	-.09
3. South/West corporate H.Q.	.172	.378			.02	.00	.00	-.07
4. Exclusive social club CEO	.353	.478				.23	.11	.19
5. Sent industrial interlocks	.955	1.604					.39	.25
6. Received industrial interlocks	.883	1.495						.46
7. Neutral industrial interlocks	4.331	4.343						
8. Elite undergrad. degree CEO	.284	.451						
9. Elite MBA degree CEO	.055	.228						
10. Ownership assoc. with outsiders	1.147	.061						
11. Ownership assoc. with CEO	6.594	.151						
12. Ownership assoc. with other top mgrs.	3.979	.116						
13. Structural auto. primary industry	.107	.044						
14. Mean-deviated concentration in primary industry	.128	.107						
15. Finance CEO	.185	.388						
16. Recent acquisitions by other firms in industry	3.505	4.368						
17. Sent interlocks to recent acquirers	.049	.253						
18. Received interlocks from recent acquirers	.080	.403						
19. Neutral interlocks with recent acquirers	.320	.784						
20. Free cash flow	.063	.038						
21. Agency problems	.025	.037						
22. Percentage outside directors	56.800	17.900						
23. Diversification strategy	3.325	2.279						
24. MDF structure	.457	.498						
25. Size (log 100,000 assets)	5.542	1.043						
26. Market/book ratio	1.888	1.531						
27. Market returns	-.039	.324						
28. Leverage	.146	.109						



## Social Class Theory

Table 1 (continued)

Variable	8	9	10	11	12	13	14	15	16	17
1. Social register/elite secondary school CEO	.36	.00	-.03	.17	-.07	.12	-.12	-.04	.00	.05
2. Jewish CEO	-.06	.00	.03	.17	-.07	.02	-.03	-.02	-.06	.04
3. South/West corporate H.Q.	-.05	-.05	.05	.08	.08	-.14	-.07	-.04	-.11	-.05
4. Exclusive social club CEO	.19	-.02	-.01	.04	-.07	.06	.05	.07	-.03	.08
5. Sent industrial interlocks	.12	.04	-.05	-.07	.10	.02	.00	.09	.00	.12
6. Received industrial interlocks	-.01	.08	-.01	-.16	.07	.12	.02	.07	-.06	.03
7. Neutral industrial interlocks	.04	.12	-.02	-.16	-.10	.14	.10	.05	-.05	.03
8. Elite undergrad. degree CEO		.08	.01	.11	.06	-.03	.08	.01	-.02	.05
9. Elite MBA degree CEO			.05	-.02	.00	.07	-.04	.02	-.06	.01
10. Ownership assoc. with outsiders				-.08	-.07	.13	.00	-.03	-.10	.03
11. Ownership assoc. with CEO					-.15	-.03	.10	-.15	-.05	.01
12. Ownership assoc. with other top mgrs.						.00	-.03	.07	.03	-.05
13. Structural auto. primary industry							-.07	.03	-.10	-.01
14. Mean-deviated concentration in primary industry								.08	-.04	-.03
15. Finance CEO									.00	.11
16. Recent acquisitions by other firms in industry										.01

Variable	18	19	20	21	22	23	24	25	26	27	28
1. Social register/elite secondary school CEO	-.01	-.02	-.02	.03	.01	.04	.03	.08	-.04	-.07	.03
2. Jewish CEO	.00	-.05	-.04	.04	-.12	-.09	-.10	-.05	-.04	-.02	.47
3. South/West corporate H.Q.	-.09	-.02	.07	-.02	-.01	-.05	.02	.05	-.05	.04	.17
4. Exclusive social club CEO	.12	.04	.03	-.04	.07	.02	.02	.18	-.05	-.03	-.01
5. Sent industrial interlocks	.09	-.02	.01	-.06	.05	.07	.14	.29	.12	-.02	.05
6. Received industrial interlocks	.30	.06	.00	.01	.25	.10	.06	.33	.00	-.12	.01
7. Neutral industrial interlocks	.20	.42	-.05	-.07	.42	.12	.19	.39	-.01	-.12	.01
8. Elite undergrad. degree CEO	-.08	-.05	-.06	.00	.01	.05	.07	.03	-.07	-.03	.03
9. Elite MBA degree CEO	.00	-.01	.08	-.06	.06	.03	.10	.03	.08	.00	.07
10. Ownership assoc. with outsiders	-.04	.00	.05	.01	.12	.00	-.09	.06	-.05	-.06	.03
11. Ownership assoc. with CEO	-.05	-.11	.02	.05	-.23	-.10	-.07	-.12	-.02	.08	.06
12. Ownership assoc. with other top mgrs.	.00	-.06	.05	.04	-.18	-.07	-.05	-.04	.13	-.03	-.07
13. Structural auto. primary industry	.03	.11	.02	-.01	.08	.00	-.13	.09	-.03	-.27	-.01
14. Mean-deviated concentration in primary industry	.06	.09	-.05	.00	.12	.10	.00	.01	-.06	.03	-.01
15. Finance CEO	.03	.07	-.03	-.01	.09	.07	.02	.04	.03	-.01	.04
16. Recent acquisitions by other firms in industry	.04	-.01	-.02	-.12	-.03	.07	.13	-.19	.16	.10	-.14
17. Sent interlocks to recent acquirers	.12	.02	-.03	-.06	.00	.07	.08	.01	.06	.02	.01
18. Received interlocks from recent acquirers		.14	.08	-.02	.11	-.03	.03	.12	.06	.00	-.02
19. Neutral interlocks with recent acquirers			.02	.03	.25	-.05	.04	.05	-.05	.02	.00
20. Free cash flow				.14	-.07	-.06	-.05	.20	.35	.10	-.16
21. Agency problems					-.04	-.01	-.06	-.05	-.41	-.08	.08
22. Percentage outside directors						.16	.15	.06	-.10	-.05	.03
23. Diversification strategy							.25	.13	-.06	.10	.07
24. MDF structure								.05	.07	.10	.05
25. Size (log 100,000 assets)									.09	-.19	.09
26. Market/book ratio										.26	-.23
27. Market returns											.07

\* Correlation coefficients are computed for the 1966 panel. Coefficients equal to or greater than .10 are statistically significant at the .05 level (two-tailed test)

vide support for the class theory hypotheses advanced here. Models 2 and 4, which include the class theory variables, significantly improve on the explanatory power of models 1 and 3, their respective baseline models.

### Social Status

Corporations managed by CEOs with upper-class social origins were less likely than other firms to complete diversifying acquisitions in the 1960s. The upper-class-CEO effect was statistically significant in both the Poisson and logistic regression analyses. The probability of completing a diversifying acquisition was .084 for the average firm in this period. Having a CEO who was listed in a metropolitan social register and/or had graduated from an exclusive private secondary school decreased the probability of completing a diversifying

Table 2

**Determinants of the Likelihood That Corporations Completed Diversifying Acquisitions between 1963 and 1968**

Variable	Poisson Regression		Logistic Regression	
	Model 1	Model 2	Model 3	Model 4
Social register/elite school CEO		-.525***		-.521**
Jewish CEO		.464*		.548*
South/West corporate H.Q.		.237*		.297*
Exclusive social club CEO		.409***		.462***
Sent industrial interlocks		.061*		.045
Received industrial interlocks		-.152***		-.133**
Neutral industrial interlocks		-.038**		-.028
Elite undergrad. degree CEO		.088		.092
Elite MBA degree CEO		.482***		.641***
Ownership assoc. with CEO		-.919*		-.012**
Ownership assoc. with other top mgrs.		-3.111***		-.030***
Ownership assoc. with outsiders		-8.851***		-.090***
Structural autonomy in primary industry	-.734	.667	-2.111	.883
Mean-deviated concentration in primary industry	1.713***	1.449***	1.418**	1.229**
Finance CEO	.330**	.294**	.187	.141
Recent acquisitions by other firms in industry	.025**	.024**	.024*	.027*
Sent interlocks to recent acquirers	.022	.000	-.016	-.006
Received interlocks from recent acquirers	-.011	.025	.033	.038
Neutral Interlocks with recent acquirers	-0.010	.042	-.043	-.007
Free cash flow	.474	-.045	2.164	.900
Agency problems	-4.235**	-2.954	-4.765**	-3.718
Percentage outside directors	.010***	.014***	.011***	.015***
Diversification strategy	.059**	.069**	.079**	.096**
MDF structure	.505***	.431***	.450***	.369**
Size (log 100,000 assets)	.116**	.220***	.104	.181***
Market/book ratio	.054	.055	.070	.078
Market returns	.389***	.429***	.341	.337
Leverage	1.464***	1.170**	1.152**	.928
Missing social register/elite school data		-1.136**		-1.183**
Missing exclusive social club data		-.578		-.571***
Missing undergrad./MBA degree data		.914**		1.186
Recent acquisitions completed by firm	.225**	.010	.263*	.070
1964	-.667***	-.636***	-.678***	-.663***
1965	-.250	-.211	-.162	-.137
1966	-.280	-.227	-.260	-.218
1967	.292	.330	.341	.390
1968	.256	.308	.425	.478
Constant	-4.723	-5.370***	-4.620	-5.159***
Log likelihood (DF)	-759.222 (23)	-724.539 (38)	-666.920 (23)	-638.730 (38)
Log likelihood difference (DF)†		69.366 (15)***		56.38 (15)***

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ ; one-tailed test except where otherwise noted.

\* Two-tailed test.

† Model 1 is the comparison model for model 2, and model 3 is the comparison model for model 4 in this table.

acquisition for the average firm by .032. Put another way, the probability of completing a diversifying acquisition for firms run by an upper-class CEO was about 38 percent (.032/.084) less than it was for firms run by a non-upper-class CEO, assuming that the firms were average in all other respects.

There is some evidence that the top managers of acquisitive corporations were marginal with respect to religious affiliation and regional location as well. The Jewish CEO effect was statistically significant in both the Poisson and logistic regression analyses, although only at the .10 level. Having a Jewish CEO increased the probability of completing a diversifying acquisition by .066 (79 percent) for the average firm. The southern/western CEO effect was also statistically significant in both the Poisson and logistic regression analyses, although

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again only at the .10 level. Being headquartered in the South or West increased the probability of completing an acquisition by .026 (31 percent). Thus, the results provide strong support for H1 and somewhat weaker support for H2 and H3. Overall, the results suggest that CEOs of relatively low social status, dubbed challengers by Stearns and Allan (1996), were more inclined to pursue diversifying acquisitions in the 1960s, perhaps because they had more to gain from these acquisitions and were less constrained by institutionalized norms from pursuing them.

## **Social Network Embeddedness**

Corporations whose CEOs belonged to an exclusive social club were more likely than other firms to complete diversifying acquisitions during our period. The social club CEO effect was statistically significant in both the Poisson and logistic regression analyses. Having a CEO who belonged to at least one exclusive club increased the probability of completing a diversifying acquisition by .043 (51 percent) for the average firm. But corporations whose top managers sat on many other industrial corporate boards of directors—firms that maintained many sent industrial interlocks—were probably no more likely to engage in diversifying acquisitions. The sent-interlock effect was only significant in the Poisson regression analysis and, even here, only at the .10 level. Thus, the results provide strong support for H5 but only minimal support for H4. Overall, these results suggest that well-networked elite members were more capable of pursuing diversifying acquisitions in the 1960s, perhaps because social network connections, at least those facilitated by exclusive social club memberships, provided them with the information and/or resources needed to complete these acquisitions.

We can refine our understanding of the effects of CEO social status and network embeddedness on corporate acquisition likelihood by reading Stearns and Allan (1996) more closely. They implicitly viewed marginal social status as a necessary but not sufficient condition leading corporate CEOs to pursue acquisitions. Marginal status provides CEOs with an interest in but not the capacity to complete acquisitions. Social network connections provide marginal members of the elite with the capacity to translate their interests into action. We evaluated this more fine-grained argument by grouping corporate CEOs into categories by whether they had upper-class origins and exclusive social club memberships and used these categories to create three dummy variables for an analysis that paralleled models 1 and 3 in all other respects. The variable signifying firms managed by CEOs expected to have the least interest in diversifying acquisitions—CEOs with upper-class origins—was used as the baseline (omitted) category. The results are shown in table 3. Only the variable signifying firms managed by CEOs who were not listed in a social register and did not attend an exclusive secondary school, but who belonged to an exclusive social club, had a statistically significant effect on acquisition likelihood. Apparently, only well-networked challengers were both inclined and able to pursue diversifying acquisitions in the 1960s. Having such a CEO increased the probability of completing a diversifying acquisition by .073 (87 percent) for the average firm.

Table 3

**Effect of Different Combinations of CEO Social Status and Social Network Connections on the Likelihood That Firms Completed Diversifying Acquisitions between 1963 and 1968\***

CEO type	CEO was listed in a social register or attended an elite secondary school	CEO had exclusive social club memberships	Poisson regression	Logistic regression	
				Logit	ΔP
Old guard CEO	Yes	Yes and No	–†	–†	–†
Challenger CEO without network	No	No	.227	.171	
Challenger CEO with network	No	Yes	.691***	.709***	.073

\* $p < .10$ , \*\* $p < .05$ , \*\*\* $p < .01$ ; one-tailed test.

\* Parameter estimates were taken from a model that included all of the terms in models 3 and 4 in table 2, with the exception of main effects for social register listing or elite secondary school attendance and upper-class club memberships. Only the effects of different combinations of CEO social status and network connections are shown here.

† Old guard CEO, social register listing, or elite secondary school attendance, irrespective of upper-class club memberships, is the baseline (omitted) category.

Because theorists believe that status and embeddedness go hand in hand (Mills, 1959; Domhoff, 1970) and because research has shown the two to be correlated (Soref, 1980; Soref and Zeitlin, 1987), some might suspect that the joint effect of social status and network embeddedness on acquisition likelihood is the product of a small number of corporate elite members responsible for a relatively small number of acquisitions. But this does not appear to be the case. In 1963, the correlation between CEO upper-class background and social club membership was positive, but relatively modest ( $r = .32$ ). Further, as shown in table 4, well-networked challengers made up the second largest group of corporate executives in our sample (representing 26 percent of the sample). Finally, well-networked challengers were responsible for 79 (36 percent) of the 212 firm-year observations in which corporations completed diversifying acquisitions. Thus, the joint effect of CEO social status and network embeddedness is both substantively and statistically significant.

### Resistance of Established Elite

Corporations whose boards included the directors of many other industrial firms—corporations that maintained many

Table 4

**Cross-tabulation of Spells by Type of CEO in Command of Firm**

CEO type	CEO was listed in a social register or attended an elite secondary school	CEO had exclusive social club member- ships	Number of spells in data set	Number of spells in data set with		Probability of spell having a diversifying acquisition
				diversifying acquisitions	Percent of spells with diversifying acquisitions	
Old guard CEO without network	Yes	No	122	11	5.2	.09
Old guard CEO with network	Yes	Yes	288	18	8.5	.06
Challenger CEO without network	No	No	1502	104	49.1	.07
Challenger CEO with network	No	Yes	598	79	36.3	.13
Total			2510	212	100.0	.08

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received and neutral interlocks—were less likely to complete diversifying acquisitions in the 1960s. The received interlock effect was statistically significant in both the Poisson and logistic regression analyses. The neutral interlock effect, though, was only significant in the Poisson regression analysis. For the average corporation, adding one received interlock decreased the probability of completing a diversifying acquisition by .009 (11 percent). The magnitude of this effect is comparable to those reported above, insofar as the number of received interlocks firms maintained ranged from 0 to 13 in our period. Falling in the 99th percentile of the sample with respect to received interlocks (maintaining 8 received interlocks) decreased the probability of completing a diversifying acquisition by .072 (86 percent) for the average firm. Thus, the results provide strong support for H6 but only weak support for H7. As such, they suggest that the representatives of large industrial firms discouraged the corporations on whose boards they sat from pursuing diversifying acquisitions, perhaps because their firms were at risk of becoming the targets of such acquisitions.

## **Elite Undergraduate and Graduate Management Education**

In H8 and H9 we predicted that firms whose top managers held undergraduate and M.B.A. degrees from elite institutions would pursue diversifying acquisitions at a different rate than firms whose top managers did not hold such degrees. We did not predict a direction for the hypothesized associations because we allowed that elite undergraduate and graduate management education might have multiple contradictory effects on a CEO's proclivity to pursue acquisitions. The results fail to confirm H8, which pertains to the CEO's undergraduate education, but they do support H9, which pertains to the CEO's graduate management education. The elite M.B.A. degree effect was positive and statistically significant in both the Poisson and logistic regression analyses. This result is consistent with the speculation that CEOs with elite M.B.A. degrees were more capable of pursuing diversifying acquisitions because they had superior social network connections. It is also consistent, though, with the claim that such CEOs were more inclined to pursue diversifying acquisitions because they were steeped in the firm-as-portfolio model of corporate control. Having a CEO with an elite M.B.A. degree increased the probability of completing a diversifying acquisition by .063 (75 percent) for the average firm. The small percentage of CEOs who held an elite M.B.A. degree in our data set (about 6 percent), though, compromises the accuracy of this point estimate (although not the test of its statistical significance). Parameter estimates have high standard errors and are sensitive to measurement error when dichotomous independent variables are highly skewed, as is the case with our variable for the CEO's elite M.B.A. degree.

## **Ownership and Control**

The more a corporation's stock was concentrated in the hands of a few related individuals, the less likely it was to complete diversifying acquisitions during the 1960s. The magnitude of the stock ownership effect varied depending

on the identity of the owning group. The relative magnitude and statistical significance of the three ownership effects were virtually identical in the Poisson and logistic regression analyses. For the average corporation, the probability of completing a diversifying acquisition decreased by .001 for each additional percentage of stock owned by the CEO. The probability of completing a diversifying acquisition decreased by slightly more, by .002, for each additional percentage of stock owned by other top managers. And the probability of completing an acquisition decreased even more, by .006, for each additional percentage of stock owned by outsiders (who typically held seats on the board). The magnitudes of these effects are quite large compared with the effects of other variables examined here. For example, falling in the 99th percentile of the sample with respect to CEO ownership (64 percent CEO ownership) decreased the probability of completing a diversifying acquisition by .064 (a 76-percent decrement in acquisition probability) for the average firm. Falling in the 99th percentile of the sample with respect to outsider ownership (32 percent) decreased the probability of completing a diversifying acquisition by .192 (229 percent) for the average firm. Thus, our results support H10 and H11b, but not H11a. Family ownership groups were more likely than salaried professional managers to eschew diversifying acquisitions in the 1960s, presumably because they were less likely to benefit and more likely to lose from these acquisitions. A subset of family ownership groups, those represented in top management, however, were less averse to acquisitions in this period, presumably because they stood to obtain greater and more valued status and network embeddedness benefits from acquisition-induced corporate growth. We suspect that the impetus to pursue such benefits was greatest among first-generation owner-CEOs, whose status and embeddedness was less well established. Several first-generation owner-CEOs included in our data set (e.g., Charles "Tex" Thornton of Litton Industries, Norton Simon of Hunt Foods and Industries, and James Ling of Ling-Tempeco-Vought) were tied to aggressive acquisition campaigns in the 1960s.

### **Alternative Accounts: Resource Dependence, New Institutional, and Agency Theories**

We found no support for the resource dependence perspective account of diversifying acquisitions in our 1960s data. Corporations producing in structurally autonomous industries were no less likely than other firms to complete diversifying acquisitions. This might reflect the fact that structural autonomy influences acquisition behavior through its impact on corporate strategy and structure. In reduced-form models that excluded our strategy and structure variables (available on request), structural autonomy reduced acquisition rates. Corporations producing in industries in which concentration levels differed from the manufacturing sector's average were also no less likely to complete diversifying acquisitions. In fact, firms producing in competitive or oligopolized industries were more likely to complete diversifying acquisitions—the industry concentration effect being statistically significant in both the Poisson and logistic regression analyses, although only at the .10 level in the latter. This might reflect the fact

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that U.S. antitrust enforcement in the 1960s targeted a few highly concentrated industries, most notably automobile manufacturing (Bittlingmayer, 1995), making diversification the only viable growth strategy in these industries. Supplemental analyses that examined industry differences in acquisition rates (available on request) appear to confirm this speculation. This suggests that future tests of the resource dependence perspective should take into account the historical specificity of hypothesized relations as well as the processes through which they operate (Dobbin and Dowd, 2000).

We found more support for the new institutional theory account. A rising number of acquisitions by other firms in a corporation's industry increased acquisition likelihood—this mimicry effect being statistically significant in both the Poisson and logistic regression analyses, although only at the .10 level in the latter. The probability of completing a diversifying acquisition increased by .002 with each additional acquisition completed in the previous three years by other firms in a corporation's primary industry. Falling in the 99th percentile with respect to the intraindustry acquisition variable (primarily producing in an industry in which firms completed 24 acquisitions in the previous three years) raised the probability of acquisition by .048 (57 percent). Being run by a finance-oriented CEO also increased acquisition likelihood, although this finance-CEO effect was only statistically significant in the Poisson regression analysis. We think we failed to find stronger evidence of a finance-CEO effect because this effect partly operates indirectly through its effects on corporate financial structure and organizational strategy and structure. In reduced-form logistic regression models that excluded these variables (available on request), having a CEO with a financial background increased the likelihood that corporations completed diversifying acquisitions. There is no evidence, though, that a rising number of acquisitions completed by other firms to which a corporation was interlocked increased its acquisition likelihood. This result contradicts convincing evidence presented by Haunschild (1993) and Haunschild and Beckman (1998), who studied acquisitions in the 1980s, that firms mimicked the acquisition behavior of firms with which they were interlocked, but it is consistent with the findings of Davis, Diekmann, and Tinsley (1995), who found no evidence of interlock partner mimicry in the same period.

Lastly, we found no support for the non-ownership-related predictions of agency theory. Large free cash flows (that some believe feed fears of acquisition by other firms), even in the absence of positive net-present-value investment opportunities (that some believe lead managers to engage in self-aggrandizing investments) failed to stimulate acquisition likelihood in our period. Further, the percentage of outsiders sitting on a corporation's board of directors increased rather than decreased the likelihood that it completed diversifying acquisitions in the 1960s. The outside-directors effect was statistically significant in both the Poisson and logistic regression analyses. This unexpected effect was among the largest observed here. Falling in the 99th percentile with respect to the percentage of outside directors increased the probability

of completing a diversifying acquisition by .090 (107 percent) for the average firm.

## DISCUSSION

A number of implications can be drawn from the results of our study. At the most general level, our results are consistent with what Perrow (1972) called the "tool view of organizations," according to which top managers are actors, corporations are instruments, and top managers use these instruments to pursue their interests in proportion to their capacities. At a slightly less general level, our results are consistent with what Zeitlin (1974) called the class theory of the firm, according to which top managers' interests and capacities can be fruitfully conceptualized as being shaped by their social class position.<sup>10</sup> Further, they support our extension of Zeitlin's theory, which assumes that corporate elite members vary in their social class position and that such variation influences the behavior of the firms they command. Some might expect the top managers of the largest corporations to be, for all practical purposes, essentially equivalent in their class position. For them, the fact that we found consequential variation in the class character of the corporate elite members studied here should be quite surprising.

At a more specific level, our results speak to the importance of a variety of attributes of top managers that have been overlooked or discounted to varying extents by prior researchers. Political sociologists have long argued that the social class background, religious affiliation, geographic location, and social club memberships of top managers shape their behavior (Mills, 1959; Domhoff, 1970; Useem, 1979). To the best of our knowledge, however, no one has previously examined the impact of top managers' social status, religion, or location on corporate behavior. And only one series of studies has explored the impact of top managers' social club memberships on corporate behavior (Ratcliff, 1980a, 1980b). Our results indicate that upper-class background (and possibly religious affiliation and regional location) as well as social club memberships influenced a firm's propensity to complete diversifying acquisitions in the 1960s. The various CEO attributes examined here are undoubtedly intimately related to one another, as well as to the many characteristics of firms and the industries in which they produce also measured here. For example, CEOs who were listed in a social register or who attended an elite secondary school tended to have elite undergraduate degrees and belong to exclusive social clubs. Further, such CEOs tended to command firms that were large and maintained many sent interlocks. Supplemental analyses (available on request) revealed that the negative effect of CEO social status on corporate acquisition likelihood was suppressed (not statistically significant at the .05 level) in models that excluded those of these variables that also increased acquisition likelihood (social club membership, sent interlocks, and firm size). The fact that we isolated separate effects for the CEO attributes examined here, even in multivariate analyses that controlled for a large number of potential confounds, provides strong validation of the presumed importance of top managers' status and network embeddedness for corporate behavior.

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Zeitlin (1974) attributed particular importance to finance capitalists, the managers and directors of commercial and investment banks. For this reason, we explored the possible impact of sent, received, and neutral bank interlocks on acquisition likelihood, but we found no impact of these types of interlocks.



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In addition, while researchers have previously examined the impact of concentrated ownership on corporate behavior, several scholars have recently discounted the importance of ownership. In perhaps the most influential statement, Fligstein and Brantley (1992) asserted that institutional change—in particular, the rise of the finance conception of control—has homogenized the outlook and behavior of owners and non-owners alike. Perhaps for this reason, some of the most important studies of corporate acquisitions have failed to include stock ownership in their analyses (Haunschild, 1993; Haunschild and Beckman, 1998). Our results indicate that ownership concentration influenced a firm's acquisitiveness in the 1960s—a time by which the homogenizing effect of the rise of the finance conception of control is theorized to have taken hold (Fligstein, 1990). In conjunction with recent findings by Kang (1996), our results testify to the enduring importance of ownership for corporate behavior.

The pattern of CEO-social-class effects also has implications for the study of the diffusion of innovation. First, many assume that social status and network embeddedness influence the adoption of innovations in the same way. This is apparent both in the general literature on the diffusion of innovations (Menzel, 1960) and in observations about the spread of diversifying acquisitions in the 1960s. For example, in describing the executives most likely to pursue diversifying acquisitions in the 1960s, Hirsch (1986: 807) wrote, "By such criteria as flamboyance, regional location, ethnicity, lack of formal education, and humble background, they remained outside the business mainstream and relatively devoid of conventional ties, networks, and linkages." In contrast, we show that status and network embeddedness influenced acquisition likelihood in opposite directions. Corporations run by chief executives who were marginal with respect to status but central in social networks were more likely than other firms to complete diversifying acquisitions in the 1960s. We believe that status and embeddedness effects are most likely to diverge when an innovation is deviant from the standpoint of the established order. In such circumstances, high-status individuals have little interest in adopting the innovation and may even be socialized in ways that lead them to eschew it. Such was the case with respect to diversifying acquisitions in the 1960s. These acquisitions were motivated by a cognitive framework (the firm-as-portfolio model) and were associated with strategies (diversification) and tactics (the P/E game, asset raiding, and hostile takeovers) that deviated from accepted business norms. If this interpretation of our results is correct, it reinforces the admonition that researchers should take the normative character of an innovation into account when investigating the factors that lead to its diffusion (Burt, 1982).

Second, many assume that social network connections universally speed the diffusion of innovation. Our results indicate that different types of social network connections can have opposing impacts on diffusion. While corporations whose CEOs belonged to exclusive social clubs (and possibly firms whose top managers belonged to many boards of directors) were prone to complete diversifying acquisitions,

corporations whose boards contained many outside directors affiliated with other firms were less likely to complete such acquisitions. These results suggest that social network connections do not always facilitate, but sometimes inhibit, the adoption of innovations. As such, they provide additional evidence of what Gulati and Westphal (1999: 501) called the "dark side" of embeddedness. Our results also suggest that corporate elites can inhibit the spread of an innovation when it threatens their interests. As Hayes and Taussig (1967: 135) observed, "One must never underestimate the moral suasion that the business and financial communities can bring to bear on those who engage in practices of which they disapprove." In this respect, our results provide additional evidence that intraclass conflict shapes corporate behavior (Mintz and Schwartz, 1985).

### **Caveats**

Still, our results are ambiguous in at least two respects. First, some of our class theory hypotheses are consistent with alternative theoretical perspectives. For example, while class theory motivated our focus on ownership relations, managerialism and agency theory provided the rationale for our prediction that concentrated ownership would depress acquisition rates. It is worth noting, though, that the fine-grained results on the impact of ownership on acquisition likelihood depart from agency theory expectations in two respects. Agency theory would predict concentrated ownership to depress acquisition likelihood even when the owning entity was another firm or financial institution, but supplemental analyses (available on request) did not reveal this to be the case. Thus, apparently, it was not concentrated ownership per se but, rather, ownership in the hands of capitalist families that reduced a firm's propensity to complete diversifying acquisitions in the 1960s. Further, agency theory would predict that concentrated ownership would depress acquisition rates most when in the hands of the CEO or other top managers, as opposed to outsiders, but, as reported above, we found the reverse to be the case.

Overall, we found very little support for any of the agency theory hypotheses examined here, despite the fact that agency theory provides arguably the most accepted account in the social sciences of corporate acquisitions. We do not know why free cash flow, even in the absence of positive net-present-value investment opportunities, failed to influence acquisition likelihood. We can speculate, though, about why a high percentage of outside directors increased, rather than decreased, acquisition likelihood. Controlling for the number of outside directors principally affiliated with other large industrial firms (the number of received interlocks), the percentage of outside directors on a corporation's board might index the number of outside directors who are not principally affiliated with a dominant economic institution. In the 1960s, such outside directors were often silent partners of entrepreneurial capitalists in top management who aided and abetted these owner-managers' aggressive acquisition campaigns. If this is correct, it suggests that agency theory should take into account not just the proportion of outsiders on a firm's board but also the organizational and social affilia-

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tions of those outsiders if it is to develop a complete understanding of the impact of board structure on firm behavior.

Second, the results provide only weak support or no support for several of our class-theory hypotheses. For example, while our results indicate that firms run by Jewish CEOs and headquartered in the South or West had a greater propensity to complete diversifying acquisitions, these effects were only marginally significant. Perhaps we did not find clearer evidence of the predicted effects of CEO religious affiliation and regional location on acquisition likelihood because our sample included only the 500 largest U.S. industrial firms in 1962. Some of the aggressive acquirers commanded by Jewish CEOs and headquartered in the South or West might have been too small in 1962 to be included in our sample.

Similarly, we found little evidence that the number of boards on which a corporation's managers sat influenced the number of diversifying acquisitions it completed in the 1960s. This contradicts previous findings that sent interlocks and interlock centrality were associated with the pursuit of acquisitions in the 1980s (Haunschild, 1993; Haunschild and Beckman, 1998; Davis, Diekmann, and Tinsley, 1995). We suspect that we unearthed only weak evidence that sent interlocks stimulated acquisition behavior in the 1960s because we included CEO club membership in our analyses, and CEO club memberships, rather than the interlocking with which it is related, is the more proximate social network stimulant of acquisition behavior. Considerable prior research has demonstrated that the number of boards on which top managers sit is related to the likelihood that they belong to an exclusive social club (cf. Bonacich and Domhoff, 1981). The number of sent interlocks corporations maintain and the likelihood that their CEOs belong to an exclusive social club are associated with one another here as well ( $r = .23$  in the 1966 panel). Further, supplemental analyses (available on request) indicate that the effect of sent interlocks is greater and more statistically significant when the measure of club membership is removed from the analysis.

Recent research on the relationship between social club and corporate board memberships suggests even more fine-grained implications. Kono et al. (1998) found that corporations headquartered in cities that had an exclusive social club maintained more local but fewer non-local interlocks than firms headquartered in cities without such a club. They speculated that exclusive social clubs are the basis of local corporate elite social organization. Exclusive clubs facilitate interaction among locally situated corporate elite members, and this interaction in turn increases locally headquartered corporations' abilities to interlock with one another and reduces their need to interlock with non-locally headquartered firms. Perhaps diversifying acquisitions spread through local rather than non-local corporate elite contacts. If so, it would be consistent with Davis and Greve's (1997) speculation, based on results pertaining to the diffusion of golden parachutes, that non-normative innovations spread through local rather than national social networks. At the very least, though, these results suggest that attempts to assess the effect of either of these two types of social network connections on corpo-

rate behavior should take into account the possible effects of the other.

## CONCLUSION

That was then and this is now. The structure of U.S. capitalism has changed dramatically since the 1960s. On the one hand, the class structure of U.S. society is likely quite different today than it was in the 1960s. About 16 percent of the CEOs in our data set were listed in a social register and/or attended an exclusive secondary school. It is quite possible that this percentage has declined over the last forty years. About 6 percent of the CEOs in our data set held an elite M.B.A. degree. Certainly, this number has dramatically increased since the 1960s. Further, the meaning of exclusive secondary school and business school degrees might be quite different today than in the 1960s, as admission to these educational institutions has become more open. As early as the 1970s, some observers maintained that social pedigree was less important for advancement in investment banking (Hayes, 1971). In the 1960s, when stock ownership was concentrated, it tended to be concentrated in the hands of capitalist families. Over the last forty years, institutional investors have become major stockholders of large industrial corporations, with pension funds alone controlling 23 percent of outstanding shares as of 1996.

On the other hand, economic and institutional constraints on corporate behavior, which we discount here, might have become more salient or changed since the 1960s. Much has been written about the stockholder rebellion, which is ultimately rooted in shifting stock-holding patterns and public policy changes (Davis and Thompson, 1994). Predatory acquisitions have become institutionalized. A legal framework for carrying out these acquisitions has solidified, and both law firms and investment banks have merger and acquisition practices that orchestrate them in increasingly routinized ways. Thus, predatory tactics are employed more frequently and across the board by large and small firms alike (Hirsch, 1986). Finally, conglomerate acquisitions no longer dominate other types of acquisitions numerically (Davis, Diekmann, and Tinsley, 1995), and the finance conception of control that gave rise to them might no longer dominate management thinking (Ocasio and Kim, 1999).

Can the ideas elaborated here help explain corporate behavior in the contemporary period? We think so, although researchers will have to theorize concepts such as social status, network embeddedness, and the resistance of established elites in ways that are sensitive to the contemporary historical context—a context that has been shaped by the developments enumerated above. Further, researchers will need to critically examine popular characterizations of the contemporary period. For example, while Davis, Diekmann, and Tinsley (1994) have shown that large firms became more focused around their core businesses in the 1980s, Kogut, Walker, and Anand (1998) have demonstrated that diversification remains the dominant growth strategy for firms in the advanced capitalist economies. Much has been made of the increasing separation of ownership and control in the large

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corporation over the twentieth century. But recent evidence suggests that average managerial and director ownership has actually increased, from 13 to 21 percent, over the last sixty years (Holderness, Kroszner, and Sheehan, 1999). To repeat Zeitlin's (1974) admonition of a quarter century ago, researchers should be wary of "pseudo-facts," such as incorrect assumptions about the popularity of diversification and levels of family ownership among large firms, when studying corporate America.

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## APPENDIX A: Control Variables

### Organization Theory Controls

Some would expect industrial diversity to lead firms to pursue diversifying acquisitions. Strategic inertia can lead firms that have diversified in the past to continue to do so in the future (Amburgey and Miner, 1992). Others would expect use of the multidivisional form (MDF) to lead firms to pursue diversifying acquisitions. The MDF is well suited to the coordination of diverse enterprises (Chandler, 1962; Williamson, 1975; Fligstein and Brantley, 1992). Population ecologists might expect older firms to be less acquisitive, because they equate aging with structural inertia. Ecologists might also expect large size to influence acquisition likelihood, although the direction in which this effect might operate is unclear. Large size might depress acquisition likelihood by increasing structural inertia, or it might elevate acquisition likelihood by increasing the supply of resources available to overcome the consequences of structural inertia (Hannan and Freeman, 1977, 1984).

We took into account diversification, indexed by the number of 3-digit Standard Industrial Classification (SIC) industries in which firms produced, use of the MDF, indexed by a dichotomous variable coded according to a protocol modeled after Rumelt (1974), and size, indexed by logged total assets, because exploratory analyses indicated that each influenced acquisition likelihood in the 1960s. Our final model indicates that falling in the 99th percentile with respect to the diversification measure (producing in 11 3-digit SIC industries) increased the probability of completing an acquisition by .088 (105 percent) for the average firm. Using the MDF increased the probability of completing a diversifying acquisition by .033 (39 percent) for the average firm. Falling in the 99th percentile with respect to our size measure increased the probability of completing a diversifying acquisition by .128 (153 percent) for the average firm. For acquisitions in the 1960s, apparently, the resource availability benefits large size can provide outweighed the structural-inertia constraints it can impose. We dropped firm age (measured alternatively by the number of years since first incorporation and by a dichotomous variable indicating post-WWII founding) from consideration, though, because preliminary analyses indicated that it was unrelated to acquisition likelihood in our period.

### Economic Theory Controls

Some maintain that high stock prices fueled the acquisition drives of challenger firms in the 1960s by making it easier for bidders to purchase target firms through the exchange of stock (Fligstein, 1990; Espeland and Hirsch, 1990; Stearns and Allan, 1996). Mueller (1980) claimed that growth was associated with acquisitions in the 1960s because it reflected a desire to expand operations that acquisitions could fulfill. He also claimed that leverage was associated with acquisitions in the 1960s because it indexed the capacity to obtain capital needed to engage in acquisitions. Hayes and Tausig (1967) maintained that liquidity was associated with acquisitions in the 1960s because it increased a firm's capacity to exploit the cash tender offer tactic that proliferated in this period. Some think that corporate performance



## **Social Class Theory**

is related to acquisition activity, although the direction of the relationship is subject to dispute. Good performance might increase a top management team's confidence that it can handle large and risky investments of the sort that diversifying acquisitions sometimes entail (Roll, 1986). Poor performance, however, might lead a top management team to take on risky investment opportunities, such as diversifying acquisitions, in an attempt to turn performance around (Morck, Shleifer, and Vishny, 1990).

We took into account high stock prices (indexed by the market-to-book ratio), leverage (measured by the debt-to-equity ratio), and performance (indexed by market returns) because exploratory analyses indicated that these economic factors sometimes had statistically significant effects on acquisition likelihood. As it turned out, though, the effects of these variables fell just short of statistical significance at the .10 level in the final model. We dropped growth (indexed by prior three years average sales growth) and liquidity (measured by the quick ratio) from consideration, because exploratory analyses revealed that these factors were not related to acquisition likelihood. We suspect that none of the economic controls influenced acquisition likelihood in our final model because we included many variables in our analyses that have been ignored by prior researchers. Every economic control except growth had a statistically significant effect on acquisition likelihood when we controlled only for firm size, prior firm acquisitions, and the five calendar-year dummy variables described above and below.

### **Other Controls**

Acquisitions are widely believed to come in waves of rapidly increasing and then decreasing numbers (Weston, Kwong, and Hoag, 1990; but see Shugart and Tollison, 1984). The pace of acquisitions, relatively flat in the 1950s, appears to have dramatically increased between 1964 and 1966 and peaked in 1968. We used a series of dummy variables for each year between 1964 and 1968 (with 1963 serving as the reference category) to capture the expected variation in acquisition rates over the period. In addition, we used a count of the number of acquisitions each firm completed in the previous three years (ignoring acquisitions completed before the period began), updated annually, to capture unmeasured firm-specific factors that might influence acquisition rates. In reduced-form models (available on request), the annual dummy variables influenced acquisition likelihood roughly as expected, with the 1967 and 1968 dummies having statistically significant positive effects. The 1967 and 1968 effects, however, washed out as additional independent and control variables were added to the model. Further, a negative 1964 dummy variable effect became statistically significant in the full model, indicating that when all other factors are taken into account, conditions were less conducive to the pursuit of acquisitions in this year relative to the prior year. Similarly, in reduced-form models, the past acquisition variable influenced acquisition likelihood as expected, having a statistically significant positive effect. This effect also washed out, however, as additional hypothesized predictors of acquisitiveness were added to the model. We think this indicates that our final model of acquisition likelihood is relatively well specified, accounting for salient time-specific and firm-specific effects on acquisition likelihood in our period.

## **APPENDIX B: Data Sources**

### **CEO characteristics**

*Biographical Index* (1961–1970)

*Current Biography* (1961–1970)

*Dun and Bradstreet's Register of Corporate Managements* (1968)

*Master Biographical and Genealogy Index* (1975)

*Moody's Industrial Manual* (1961–1968)

*National Cyclopaedia of American Biography* (1984)

*Standard and Poor's Register of Managers, Directors, and Corporations* (1962–1968)

*Who's Who in Commerce and Industry* (1961, 1966–1967, 1968–1969)

### **Corporate headquarters location**

*Standard and Poor's Directory of Corporations, Managers, and Directors* (1962–1968)

### **Interlocking directorates and board composition**

Mathematical Analysis of Corporate Networks (MACNET) data set, generously provided by Michael Schwartz, Department of Sociology, State University of New York at Stony Brook; described in detail by Atwood et al. (1985)

### **Ownership and control**

Burch, P. *Managerial Revolution Reassessed*. Lexington, MA: D.C. Heath, 1972

*Moody's Industrial Manual* (1962–1968)

*Wall Street Journal* (various dates)

### **Intraindustry and interlock partner acquisitions**

Federal Trade Commission. *Statistical Report on Mergers and Acquisitions*. Washington, DC: U.S. Government Printing Office, 1976

### **Industry location**

CRISP NYSE/AMEX Master Stock File (1991)

Bureau of the Budget. *Standard Industrial Classification Manual*. Washington, DC: U.S. Government Printing Office, 1967, 1972.

### **Competitive uncertainty and intraindustry constraint**

Burt, R.S. "Data on aggregate markets during the 1960s and 1970s." Research Program in Structural Analysis, Center for the Social Services Technical Report #TR4, Columbia University, 1986

### **Corporate strategy and structure**

*Standard and Poor's Register of Managers, Directors, and Corporations* (1961–1968)

*Moody's Industrial Manual* (1961–1968)

### **Founding date**

*Moody's Handbook of Common Stocks* (1964)

*Moody's Industrial Manual* (1961–1968)

### **Accounting and financial variables**

Industrial COMPUSTAT annual data file

Center for Research in Stock Prices (CRSP) historical data file

*Moody's Industrial Manual* (1961–1968)

*Wall Street Journal* (various dates)