Exploring the agency consequences of ownership dispersion among the directors of private family firms

Michael Lubatkin, William S. Schulze, Richard N. Dino

EXPLORING THE AGENCY CONSEQUENCES OF OWNERSHIP DISPERSION AMONG THE DIRECTORS OF PRIVATE FAMILY FIRMS

WILLIAM S. SCHULZE
Case Western Reserve University

MICHAEL H. LUBATKIN
University of Connecticut and Ecole de Management de Lyon

RICHARD N. DINO
University of Connecticut

Using an agency-theoretic lens and insights drawn from the behavioral economics and family business literatures, we developed hypotheses concerning the effect of dispersion of ownership on the use of debt by private family-owned and family-managed firms. A field study of 1,464 family firms was conducted. Results suggest that, during periods of market growth, the relationship between the use of debt and the dispersion of ownership among directors at family firms can be graphed as a U-shaped curve.

The principal-agent model has had a profound influence on corporate governance theory (Jensen, 1998). A central premise of this theory is that management decisions are strongly influenced by the ownership status of each decision maker who serves on a corporation's board of directors. The agency positions of outside owners and owner-managers differ. Outside owners prefer growth-oriented risk taking because they benefit solely from the appreciation of shareholder value. They are also indifferent to the level of risk that is specific to any particular investment made by a given firm because they can reduce that risk by holding diversified portfolios. Owners who manage a private firm, in contrast, define its value in terms of utility, and so they will undertake risks that are commensurate with their preferences for certain outcomes. These outcomes not only include financial and nonfinancial benefits, but also include the utility generated by the ability to exercise authority, dictate strategy, and choose which investments the firm will undertake.

Should an owner-manager relinquish equity to outside owners, the agency theory prediction is that changes in the incentives facing the owner-manager will cause the firm's value to decline. Specifically, because inside owners would now bear only a fraction of the cost of the benefits they receive, they have incentive to act opportunistically and make decisions that promote their self-regarding interests as opposed to the interests of outside shareholders (Demsetz, 1973; Jensen & Meckling, 1976; Fama & Jensen, 1983a). In this way, fractional ownership creates agency problems: it gives inside owners incentive to free ride on outside owners' equity and to favor consumption over investment.

But what if there are no outside shareholders and firm equity is instead distributed among family members? Will fractional ownership create agency problems, as the conventional agency model implies, or do family relationships promote the within-group alignment of ownership interests and encourage investment? This and other questions about the governance of private family firms has been largely glossed over in the management literature, yet family firms account for 40 to 60 percent of U.S. gross national product and employ upwards of 80 percent of the workforce (Gomez-Mejia, Nuñez-Nickel, & Gutierrez, 2001). Answers to these questions can enrich corporate governance theory, which heretofore has focused primarily on public firms and the challenge of aligning insider goals with those of outside investors (Morck, Shleifer, & Vishny, 1988; Wright, Ferris, Sarin, & Awasthi,

1996), while overlooking private firms and the challenge of achieving within-group goal alignment.

In this study, we examine how ownership dispersion among family directors influences a firm's use of debt in 1,464 medium-sized, private, family-owned and -managed firms; the average firm in our sample had annual sales of $36 million, had 182 employees, and had been in business for 49 years. Our thesis is that both market conditions and the dispersion of ownership influence the agency position of individual directors in such a way that they are more willing to use debt and bear the attendant risk it poses to their individual wealth when (1) market growth rates are high and (2) control rests in the hands of a controlling owner or with a coalition of minority shareholders, rather than being more equally dispersed. Consistent with our hypotheses, our finding is that the relationship between a family firm's use of debt and the dispersion of ownership among its directors forms a U-shaped function when market growth is high, but not when market growth is low.

GOVERNANCE EFFICIENCIES IN THE FAMILY FIRM

Agency costs arise whenever ownership and control are separated. Agency theorists, beginning with Fama and Jensen (1983a, 1985), have long presumed that family governance minimizes these costs. For example, the need to monitor family agent conduct is reduced because familiarity and the intimate knowledge gained from long association facilitate communication and promote cooperation among family owners and family agents. Fama and Jensen noted that "family members have many dimensions of exchange with one another over a long horizon that lead to advantages in monitoring and disciplining family-related decision agents" (1983b: 306). The need to incur bonding costs is also reduced because family ties link them to a kinship network that is characterized by norms of reciprocity, strong social ties, a shared identity, and a common history (Ouchi, 1980). Kinship thus tempers self-interest—and the conflict it can cause—by fostering loyalty and commitment to the family and the firm.

Self-interest is further tempered by parental altruism. This trait, which economists model as a utility function in which the welfare of individuals is positively linked to the welfare of others (Becker, 1981; Lunati, 1997), compels parents to be generous to their children. It also encourages family members to be considerate of one another and to care for each other in time of need, even to the point of sacrifice. The result, Fama and Jensen concluded, is that "special relations with other decision agents allow agency problems to be controlled without separation of the management and control decisions" (1983b: 306).

Altruism and kinship offset some of the inefficiencies in risk bearing that otherwise accompany private ownership. All else being the same, private ownership limits access to capital, forcing a private, family-owned and -managed firm to rely on internal sources to fund investments. The fact that most of their wealth is invested in the firm also tends to make private firm owners reluctant to use debt. Should the owners be linked to the same kinship network, however, their individual calculus for framing investment decisions changes. Specifically, altruism and kinship can make them more willing to use debt and bear the threat it poses to their individual wealth, because they temper their self-interest with concern for the welfare of the family and firm. Altruism and kinship thus make family directors more willing to use debt to fund investment and pursue growth than agency theorists would predict, especially when market conditions are promising. The assumption that ownership will remain within the family also gives family directors incentive to make investments that will benefit the next generation of owners. This long-term perspective, combined with the type of deep knowledge that family directors acquire from life-long involvement in the principal industry of their family firm, makes them better able to evaluate risk and make strategic investments (Kang, 1999).

It is tempting to conclude that family ownership and management naturally minimize agency costs while giving family directors the incentive to make investment decisions that serve the best interests of a firm and family. However, this positive portrait is at odds with evidence suggesting that these firms are "plagued by conflicts" that can cause them to flounder, if not fail (Levinson, 1971: 90) and that they are vulnerable to a form of inertia that can paralyze decision making and threaten firm survival (Meyer & Zucker, 1989).

This positive portrait is also at odds with the recent study by Schulze, Lubatkin, Dino, and Buchholtz (2001), who found indirect support for the thesis that altruism has a dark side. Although it can temper self-interest and engender loyalty, commitment, and a long-term perspective, altruism can also alter the incentive structure of a firm so that some of the agency benefits gained are offset by free riding and other agency problems. For example, altruism can create a sense of entitlement among family members by encouraging CEOs (usually a parent and/or head of household of the controlling family) to use the firm's resources to provide family

members with employment, perquisites, and privileges that they would not otherwise receive. Altruism can also bias CEOs' perceptions of their employed children, which hampers their ability to monitor and discipline them. The result, Schulze and colleagues concluded, is that family-owner management does not necessarily minimize the agency cost of fractional ownership and, in some cases, can exacerbate it.

We expand this argument in the following sections. Our thesis is that just as the separation of ownership from control in widely held firms drives a wedge between the interests of principal and agent, the dispersion of ownership in family-held firms drives a wedge between the interests of those who lead a firm—and often own a controlling interest—and other family owners. We begin by proposing that, contrary to the tenets of agency theory, inside ownership and board oversight do not efficiently resolve the agency problems experienced by private, family-owned and -managed firms. Drawing on behavioral economics theory, we then explain how private ownership and family management can combine to raise the agency costs of fractional ownership, and thereby influence family director conduct and a firm's use of debt.

THE GOVERNANCE EFFECTS OF PRIVATE OWNERSHIP AND FAMILY MANAGEMENT

According to the principal-agent model, inside ownership and board oversight efficiently resolve the conflicts caused by fractional ownership because: (1) ownership aligns inside owners' risk preferences with those of outsiders while increasing communication and cooperation among them; (2) liquid markets limit the cost of board conflict by making it possible for disputing parties to buy or sell shares at a market-determined price; and (3) voting generates economically efficient outcomes since it reflects the proportionate distribution of risk and reward among a firm's owners (e.g., Alchian & Woodward, 1988; Fama & Jensen, 1983a; Jensen, 1998; Jensen & Smith, 1985). We argue in this section that none of these three governance mechanisms operates as theorized when firms are privately owned and family managed.

First, the agency theory assumption that increased inside ownership aligns owner preferences implies that individuals are economically rational wealth maximizers. In contrast, behavioral economists, like O'Donoghue and Rabin (2000) and Thaler and Shefrin (1981), have argued that individuals are motivated by an idiosyncratic set of preferences—some economic and some noneconomic in character, and some self-regarding (egois-

tic) and some other-regarding (altruistic)—and are driven to maximize the utility they gain from each. Taken together, these assertions suggest that goal alignment within any board would be difficult to attain and sustain. Further, they suggest that conflicts of interest arise because resource constraints prevent board members from maximizing their different types of preferences simultaneously. For example, actions taken to promote wealth can prevent actions taken to promote leisure, while actions motivated by self-interest can prevent actions taken to promote the welfare of others.

Unlike public firms, which can rely on external governance mechanisms to minimize the adverse effects of these internal conflicts, family firms cannot do so because private ownership isolates them from the discipline that external markets provide. Moreover, altruism hampers the ability of a family firm's principal owner (who is usually the CEO) to use internal governance mechanisms like monitoring to minimize internal conflicts and the agency threats they engender (Schulze et al., 2001). Field study findings concur: family-firm CEOs tend to rely on informal monitoring and control mechanisms (Daily & Dollinger, 1992; Geeraerts, 1984) and are notorious for avoiding disciplinary issues that might have repercussions for familial relations both inside and outside the firms (Meyer & Zucker, 1989; Ward, 1987). In sum, whereas the agency theory assumption is that ownership and monitoring efficiently align shareholder interests in public firms, behavioral economic perspectives suggest that ownership can have the opposite effect when firms are private and family-managed.

Second, agency theory also suggests that market liquidity, and hence the ability to exit a firm at low cost, limit the potential cost of settling conflicts of interests among the directors of public firms, because those who disagree with the majority opinion can simply sell their shares at the current market price and exit the firm. Of course, this claim rests on the assumption that the only transaction cost that matters is the cost of selling equity. Behavioral agency theorists, like Wiseman and Gomez-Mejia (1998), would take exception to this statement. According to their theory, which melds insights from prospect theory with agency theory, insiders face a number of noneconomic exit costs, including the value of the firm-specific knowledge, experience, and social networks that they accumulated while employed in the firm's upper-management ranks, as well as the emotional costs associated with a change in status, the possible relocation of the family, and so on.

Family-member inside directors arguably face higher exit costs. There are no liquid markets for

their stock. Even if there were, exiting the firm would still mean forgoing certain rights, perquisites, and other privileges that generally come with being employed by one's family (Schulze et al., 2001). Moreover, exiting might not only entail forgoing (or at least reducing) the share one expects to inherit in the firm and/or the family's estate, but also forgoing or reducing benefits that might accrue from continued close association with the firm and family (Holtz-Eakin, Joulfian, & Rosen, 1993). Finally, and perhaps most importantly, leaving a family firm entails significant emotional costs associated with lost intimacy, reduced status, breaking familial expectations and, in some cases, a severing of family ties (Gersick, Davis, Hampton, & Lansberg, 1997).

Thus, if market liquidity (along with monitoring and voting) is necessary for an efficient resolution of conflicts among members of a board of directors, then higher exit costs should make board conflict resolution more costly in family firms. High exit costs, therefore, tend to lock insider directors into a firm, thereby making the conflicts that arise more persistent and a convergence of interests more difficult to achieve. Thus, we again infer that a different set of incentives is at play among inside family directors (those who are both directors and employees), a situation that affects board conduct in ways that extant agency models do not predict.

Finally, agency theorists assert that although inside and outside owners of public firms may have differences that defy consensus, voting assures that the preferences of the risk-neutral majority will prevail. Of course, this assertion relies on the assumption that board members carry out their fiduciary responsibilities and that the independence of outsiders is not compromised by the influence of insiders. This is not always the case (e.g., Finkelstein & Hambrick, 1996). CEOs, by virtue of their professional and political ties as well as the authority of their office, can make both inside and (some) outside directors beholden to them (Kroll, Wright, & Theerathorn, 1993). Also, the boards of some firms, especially those with widely distributed ownership and without large-block owners, may appoint outsiders who are not vigilant in monitoring and/or fail to exercise their fiduciary authority over insiders (Walsh & Seward, 1990). Thus, entrenchment threatens the autonomy of such a board and undermines the effectiveness of its oversight.

Family firms are particularly vulnerable to voting imperfections and entrenchment. The CEO of a family firm generally wields power that is disproportionate to his or her share of ownership; this disproportionate power stems from familial sources (for instance, status as the head of the fam-

ily), hierarchical sources (such as status as the head of the firm), and (because the firm is privately held) freedom from the oversight and discipline provided by the market for corporate control and other sources of external governance. Not surprisingly, family-firm CEOs tend to be entrenched; their average tenure of 24 years (Beckhard & Dyer, 1983) is twice that observed in widely held firms (Hambrick & Fukutomi, 1991: 736). Further, family firms tend to have small boards of directors (there was an average of four members per board in the sample used in this study, whereas experts recommend seven or more), and they tend to appoint directors who are friends of the CEO and/or happen to have a fiduciary relationship with the firm (such as their attorneys and accountants), further compromising director autonomy and board vigilance (Ford, 1988; Gersick et al., 1997; Nash, 1988; Ward & Handy, 1988).

In sum, the combined influence of private ownership and family management results in a web of incentives that undermine a family firm's governance and raise the agency cost of fractional ownership. In the next section, we explain how ownership dispersion influences director conduct and family firms' use of debt.

THE EFFECTS OF OWNERSHIP DISPERSION AT FAMILY FIRMS

Whereas the boards of public firms consist of inside and outside directors, a family firm's board consists of a principal owner (who is usually, but not always, the founder and CEO) and minority shareholders (who tend to be members of the nuclear and/or extended family and are often, but not always, employed by the firm). Family-firm ownership tends to get dispersed in a somewhat episodic and "stepwise" fashion over a relatively long period of time, with shares usually passed from parent to child around the time of the principal owner's retirement and/or death.

While patterns of ownership dispersion vary, ranging from *primogeniture* (in which leadership and control of the voting stock passes to the first-born) to *coparcenary* (in which offspring receive relatively equal shares), the tendency in the United States is to grant the most shares to the chief executive, and more shares to offspring who are employed by the firm than to those who are not. (Testing for confirmation, we found the first tendency held true in all the cases in which we could identify the occupation of a firm's principal shareholder, and the second tendency held true for the preponderance of the 1,464 family firms represented in this sample.)

The ownership of a family firm generally passes through three broad stages of dispersion (Gersick et al., 1997): *controlling owner,* in which most shares are held by the founder, or in the case of later generations, by a single individual; the *sibling partnership,* in which relatively equal proportions of ownership are held by members of a single generation; and the *cousin consortium,* in which ownership is further fractionalized as it is passed on to include third and later generations. Although the conflicts that accompany each stage differ, the agency model that we describe below explains the conduct indigenous to each.

Controlling Owner

As we previously noted, in the principal-agent model, owners who manage a private (family or nonfamily) firm define its value in terms of their personal utility. Thus, they have powerful incentives to pursue options that they perceive as best and to bear the associated risks to the point where the marginal benefit received is offset by the threat the risks pose to their personal wealth (Jensen & Meckling, 1976). Proponents of behavioral agency theory (e.g., Wiseman & Gomez-Mejia, 1998) have refined that insight, arguing that the amount of risk that these owners are willing to bear is based, at least in part, on how they frame their expectations. For example, the owner-managers of private firms should have incentive to invest when they expect conditions in their firms' markets to grow, but not when they expect market growth to decline or slow. Lacking access to the equity markets, however, their ability to invest is limited by the availability of internally generated funds (Casson, 1991)—unless, of course they take on or increase debt. It follows that the owner-managers of private firms will be more willing to use debt, and more willing to bear the threat it poses to their individual wealth, during periods of high market growth than they will during periods of decline or low market growth.

We posit that parental altruism causes owners to pursue first-best actions when a private firm is family owned and is managed by a controlling owner.[1] Altruism is a trait that positively links the controlling owner's welfare, as head of the family, to that of other family members (Schulze et al., 2001).

Altruism thus compels the controlling owner to consider the needs of the firm and each family member when defining her or his first-best options (for instance, it may make the controlling owner more willing to pursue investments with longer-term payoffs). Over time, however, the economic incentive to do what maximizes personal utility can blur the controlling owner's perception of what is best for the firm or family; self-interest and the firm's and family's best interests may be viewed as one and the same in what we might call the "what's good for GM" phenomenon. For instance, age may cause the controlling owner to avoid investments that other family members favor because he or she views the investments as too risky or as personally threatening—in the case, perhaps, of their requiring the controlling owner to learn new skills. Conflicts of interest can therefore arise that give family members reason to question the extent to which they can rely on the controlling owner to make decisions that they deem as being in the family's best interests. The family members thus have incentives to monitor the controlling owner and incur other agency costs in an effort to assure that their best interests are being served.

Moreover, family members and controlling owners face different sets of incentives, and thus hold different views of what investments are best. For example, like their counterparts in public firms, family-member employees of family-owned and -managed firms bear only a fraction of the risk associated with an investment decision but, unlike their counterparts, are able to enjoy a disproportionate share of the benefits owing to their family status. They are also likely to feel entitled to these benefits since, as family members, they believe that they own de facto options in the firms, or a residual but legitimate claim on them in the form of an inheritance at a future date (Holtz-Eakin et al., 1993; Stark & Falk, 1998).

This sense of entitlement has two important agency consequences. First, it can cause employed family members and their prospective heirs to become fiscally conservative, if not loss-averse, since added risk threatens the value of their anticipated inheritance. Put differently, an endowment effect (Wiseman & Gomez-Mejia, 1998) engenders loss aversion by altering their risk-return calculus. Second, when the sense of entitlement is coupled with high exit costs and the perception that the potential cost of exiting a firm exceeds the expected value of other opportunities, hopeful family heirs can become locked into a dependent relationship with the firm. This makes it possible for a state of "double moral hazard" (Gupta & Romano, 1998) or "owner opportunism" (Perrow, 1986) to develop in which

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[1] First-best actions maximize a principal's expected utility subject to the constraint that an agent receives his or her reservation utility (the utility the agent could receive by redeploying resources to their best alternative use).

the controlling owner has the power, and perhaps the incentive, to unilaterally change his or her estate plans, thereby placing family members' claims to the firm at risk.[2]

Although double moral hazard ordinarily gives agents incentives to invest resources in monitoring a principal's conduct, family members' ability to influence a controlling family owner is constrained by both their minority (or even nonshareholder) status and the added authority controlling owners have by virtue of being the heads of the family households and, in many cases, the founders of the firms. These constraints, combined with the risk that the controlling owner may undertake investments that other family members do not view as best, gives these family members incentive to prefer consumption to investment, and to do so (in the form of pecuniary and nonpecuniary benefits) at rates that are high relative to their ownership stakes. Consumption, of course, precludes alternative uses for the funds that are consumed.

The net result is a pattern of incentives that is the reverse of that theorized to exist at widely held public firms. Whereas fractional ownership at widely held public firms gives insiders incentives to free ride on the outside owners equity, we argue that it gives family insiders (family-member directors and employees) incentives to free ride on the controlling owner's equity. Controlling owners are likely to recognize that (some) family members are free riding on their (qua the family's) holdings. And, although altruism and the repercussions that disciplinary actions might have for family relations compels the controlling owners to accept this free riding, it also gives them incentive to be wary of the investment decisions that the family insiders might recommend.

Thus, although we anticipate that the controlling owners of family firms, and especially founders, will initially have strong incentive to use debt to fund investments that they think are the best, we argue in the next section that their ability (and willingness to do so) will decline as the percentage of ownership held by loss-averse, consumption-oriented family members increases.

Sibling Partnership

The agency dynamics during the sibling partnership stage become more problematic. As in the

controlling owner stage, the principal shareholder (that is, the largest shareholder) in a sibling partnership is likely to serve as the CEO, to control the largest single block of ownership, and, by virtue of his or her office, to continue to wield influence that is disproportionate to ownership share. And, like a founder, the principal shareholder can be expected to fulfill a quasi-family-leader role, using the firm's resources to promote family welfare and to favor the reinvestment of earnings over the consumption of those earnings via dividends and other payments (Gersick et al., 1997). Yet typically, the principal shareholder in a sibling partnership is neither the founder of the family firm nor the biological head of the family and, lacking that authority and influence over the siblings, is less able to obtain—whether by cooperation, co-option, or edict—the support of the other family directors for making investments and pursuing the opportunities that he or she believes to be the best options.

In addition, and in line with both the family business literature (Gersick et al., 1997) and economic theory about altruism, all sibling partners are also likely to be more concerned about their own welfare and that of their immediate families than they will be about each other's welfare. (According to this theory, a parent's concern for her or his children tends to be stronger than the children's concern for the parent [Stark & Falk, 1998], and altruistic ties among members of a nuclear family tend to be stronger than those among members of an extended family [Becker, 1981]). Thus, agency conditions in sibling partnerships resemble those in the controlling owner stage, with sibling partners having incentives to use a family-firm's resources to maximize their own utility; acting on these incentives can, again, engender double moral hazard problems and conflict between the sibling partners.

The risk of intrafamily conflict is further exacerbated as families age. Siblings who were once able to forge an effective partnership may find it torn apart as resource constraints force them to make hard decisions about dividend payout policy (to fund college tuitions, for instance) and/or the involvement of their adult children in the firm's operations. The risk of intrafirm conflict also rises if ownership is distributed somewhat equally among a principal shareholder and sibling partners. In this scenario, one loss-averse sibling can prevent others from putting a firm's resources to their desired (first-best) use. Consequently, we would expect sibling partners to have the incentive to engage in various political maneuvers, like vote swapping and "hostage taking," actions that might cause a series of compromises, ill-will, and second-best de-

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[2] Witness the now famous case of the former *Playboy* model, Anna Nicole Smith, who inherited $475 million (reduced on legal appeal to $88 million) after a brief marriage to a septuagenarian husband, much to his children's dismay (Miller, 1999).

cisions about growth, investments in new technology, and so on.

The result could be a state of paralysis in which no one sibling is willing to bear added risk or use debt to pursue opportunities that others believe are best. Thus, whereas the principal-agent model assumption is that increased ownership aligns the interests of rival parties, we posit that increased ownership dispersion among sibling partnerships will engender misalignment and loss aversion. Put differently, the increased concern for their own children, the added pressure from outside family directors (and in-laws) to sustain or enhance the rate of dividend payout, and the aging siblings' increasing reluctance to bear risk can cause a firm to reduce its use of debt, even when market conditions are perceived as favorable, and to get bogged down in the types of conflict that cause many family firms to flounder or fail (Levinson, 1971).

Cousin Consortium

Finally, we expect that the agency position of a principal and the minority owners will become more aligned in a family firm's cousin consortium stage. By the time the firm enters this stage, ownership has become more dispersed, or fractionalized, and it is less likely that a single individual owns a controlling or majority interest in the firm. This situation increases the degree of relative influence that each family director has on the future value of his or her claim on the firm, thereby mitigating the double moral hazard problem that characterized owner control and sibling partnership. Inside directors, it follows, should be less concerned with consumption and more concerned about the future value of their estates and how that value will be affected by any future dilution of ownership. The end result is an increase in the alignment of interest that exists among board members and, hence, reduced agency costs.

In the cousin consortium stage of a family firm, ownership has likely passed to members of the extended family, the majority of whom are not employed by the firm. All things being the same, these outside family members are less "overinvested" in the firm and, so, they should have risk preferences that are more akin to those of institutional investors and others who invest in public firms. We therefore anticipate that cousin consortiums' managers are both more willing to use debt to pursue their objectives and, because of the dispersion of ownership, more able (and more likely) to bear that risk.

It remains true, however, that because these firms are private (there is no liquid market for their shares), outside family owners can benefit from growth in earnings (through the payout of dividends), but not from growth in valuation. Consequently, during this ownership stage, most outside family shareholders will continue to favor consumption, while insiders (whose combined equity holdings usually represent the majority) will continue to favor investment owing to their concern about the effect of further dilution on the value of their estates. Thus, the primary challenge facing the cousin consortium boards of family firms is to invest in growth while maintaining a dividend level that satisfies outside family owners (Gersick et al., 1997).

In summary, we anticipate that the dispersion of ownership that characterizes the cousin consortium stage engenders a coalition in which ownership brings the interests of the inside family directors into alignment. We do not expect that this alignment will be as stable as it is for widely held public firms, because ownership is not as dispersed and the problems of market liquidity and exit costs remain. Nevertheless, we posit that for family firms in the cousin consortium stage, the greater the ownership dispersion (and the smaller the average shareholding), the more likely their boards will be to favor growth and, in the absence of the ability to issue equity or cut dividends, the more likely they will be to risk the use of debt to fund growth.

Hypotheses

Taken together, our arguments support Morck and his coauthors' (1988) conjecture that dispersion of ownership has a significant influence on board conduct. By extending their arguments to the domain of private family-owned and -managed firms, we hypothesize that family boards will be more willing to use debt when ownership is either concentrated in the hands of a controlling owner or dispersed into the hands of many owners (as in a cousin consortium), and less willing to use debt when ownership is split into relatively equal proportions (as in a sibling partnership). Stated formally:

Hypothesis 1. The relationship between a family firm's use of debt and the dispersion of its ownership can be graphed as a U-shaped curve.

In line with behavioral agency theory, we anticipate that a board's willingness to use debt varies with growth conditions in a family firm's market. All else being the same, we predict that family firms will increase borrowing during periods of high growth and, because of their dependence on internal cash flows and limited access to external

capital markets, will reduce it during periods of low growth (Wright et al., 1996). Accordingly, we tested our hypotheses under conditions of both high and low market growth rates, positing that the relationships stated in Hypothesis 1 will be supported during periods of high growth, but not during periods of low growth.

> *Hypothesis 2. The relationship between a family firm's use of debt and the dispersion of its ownership is moderated by the growth rate of the firm's market.*

METHODS

Sample

Reliable information on family firms is extremely difficult to obtain (Wortman, 1994). Public information is unreliable because most family firms are privately held and have no legal obligation to disclose information. Government documents and Dunn and Bradstreet are also of little use because family-managed firms are not listed as a separate category of business organization. Finally, it is difficult for researchers to collect primary data or to target selected groups of family-managed firms for study because there is no reliable way to identify family firms a priori (Daily & Dollinger, 1993). Consequently, researchers are forced to rely on self-reported data, sample from a broad population, and identify family-managed firms ex post (Daily & Dollinger, 1992, 1993; Handler, 1989).

We field-tested our hypotheses using data from one of the largest and most comprehensive surveys ever conducted on family firms (Gersick et al., 1997), a 1995 survey of American family businesses that was designed and administered by the Arthur Andersen Center for Family Business. Since all of the firms in the sample were privately held, and the data were confidential and proprietary, we were unable to independently establish the data's reliability. Andersen's statisticians assured us, however, that they were reliable and representative of the population.

While the use of secondary data can limit generalizability, Ilgen (1986) and Sackett and Larsen (1990: 435) pointed out that representativeness is less of a concern when a sample typifies the relevant population and the research question concerns whether the hypothesized effects *can* occur, as opposed to concerning the frequency or strength of observed effects. The Arthur Andersen data are well suited to this task because the survey was designed to obtain "reliable benchmarks" about American family businesses (Arthur Andersen & Co., 1995: 3).

Before we mailed the survey to the chief executives of 37,304 privately held U.S. family businesses, we had the items in this survey reviewed by a focus group of family business owners and pilot-tested it on a hold-out sample. A single mailing yielded 3,860 responses within one month; this constitutes a response rate of 10.3 percent, which is comparable to "the 10–12 percent rate typical for studies which target executives in upper echelons" (Geletkanycz, 1997: 622; Hambrick, Geletkanycz, & Fredrickson, 1993; Koch & McGrath, 1996) or chief executives in small to midsized firms (MacDougall & Robinson, 1990).

Because of the a priori selection problems, Andersen survey respondents ranged from "mom and pop" proprietorships to large family-managed corporations. We therefore applied a number of ex post screening criteria to the data. First, we deleted 334 partnerships and proprietorships because different laws and tax policies influence their governance. Second, we dropped 1,650 cases because data about firm ownership and/or board composition were missing, and we dropped another 209 because some information about the other 13 variables included in the regression analyses was missing. (We tested and found no differences in the use of debt or in the mean values of our model's independent variables between cases that included data about ownership or board composition and those that did not.) Finally, by deleting 203 firms that had $5 million or less in sales, we excluded "lifestyle firms" (small firms that might be operated mainly for the purpose of "income substitution" [Allen & Panian, 1982]); firms whose use of debt might be biased by their receiving subsidies;[3] and others for which growth might not be a strategic objective (see, for example, Rubenson and Gupta [1996] and Carland, Hoy, Boulton, and Carland [1984], who also excluded these types of firms from samples, arguing that growth may not be among their strategic objectives). Larger firms are less likely to be operated in this manner since the demands of managing them mitigate a family's or a family CEO's primary motive for suppressing growth—to more easily maintain managerial and ownership control (Daily & Dollinger, 1992; Whisler, 1988). Thus, the final sample consisted of 1,464 firms. Our average firm had annual sales of $36 million, had 182 employees, and had been in business for 49 years.

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[3] For example, 95 percent of all loans guaranteed by the Small Business Administration go to firms with fewer than 50 employees (Small Business Administration, 2002), a statistic that characterizes the firms in this sample that had less than $5 million in annual sales.

Variables

Dependent variable. We used debt as the dependent variable. As we previously discussed, the ownership structure of privately owned firms, unlike that of their public counterparts, does not allow for unrestricted risk bearing via the issue of common stock. Capital investment is thus limited to that which can be supported by internally generated funds and the shareholders' willingness to bear the risk that debt poses to their individual wealth (Casson, 1999). Although private ownership thus engenders fiscal conservatism, all else being the same, we deduce from a behavioral agency view that directors are willing to incur debt to pursue the investments that they perceive to be the best ones, particularly when the directors expect their firm's market to grow.

Our variable measuring *debt* is a six-level indicator of a firm's debt-to-equity ratio; (from 1 to 6, codings were "no debt," "1–25%," "26–50%," "50–100%," "101–200%," and "over 200%"). The mean debt-to-equity ratio among our sample group of mature firms was 2.57, which interpolates to about 18 percent. The measure was self-reported and, as is the case with virtually all privately held firms, objective measures were not available. However, performance measures reported by executives have been shown to be reliable (Nayyar, 1992; Tan & Litschert, 1994), particularly when reported on anonymous surveys (Dillman, 1978; Nunnally, 1978). The impact of common method bias, which arises when a common method (such as a survey) is used to gather data about both independent and dependent variables, should also be less here than it might be for other types of studies because social desirability and other sources of bias are diminished when variables are demographic, descriptive, and/or nonaffective, as are most of our variables (Crampton & Wagner, 1994).

Covariates. We included nine covariates to reduce variance that would be extraneous to the research question or that might confound interpretation: *firm size, firm age, multiple family ownership, number of family employees, exports as a percentage of sales, information technology intensity, CEO tenure, average board tenure, board size, family ownership goal,* and *ownership held by the board.* Each covariate is described and its use is justified in the Appendix.

Independent variable. The mean percentage of shares controlled by the boards of the firms in our sample was 90 percent, and the largest shareholder controlled an average 52 percent of the votes (the largest shareholder was a sole owner in 18 percent of the cases). In contrast, the second through the

fifth largest shareholders on the family-firm boards controlled, on the average, 25, 8, 3, and 1 percent of the votes. Interestingly, the remaining members about whom we had information (that is, the sixth through the eighth largest shareholders) together controlled barely half of 1 percent of the votes. Moreover, extreme variance in the shares held by these board members was indicated by standard deviations that ranged to values up to ten times the size of the mean. This distribution is not a surprise, given that only 166 firms in the sample had six or more board members, and 107 had seven or more. Following Tabachnick and Fidell (1989), we therefore dropped these observations in our primary analyses of Hypotheses 1 and 2 and based our calculation of the independent variable, *balance of voting power,* on the total shares held by the five largest shareholders who served on a board. We also tested the sensitivity of our results by adding the shares held by the sixth largest shareholder, then the seventh, and then the eighth to the calculation and repeating our tests; results are reported below.

Balance of voting power was calculated as the sum of the squares of the minority board members' percentage share of votes divided by the square of the largest shareholder's percentage share of the votes. The sum of squares is used here like the Herfindal index, which economists use to describe the distribution of market share among industry participants: the sum of squares captures the effects of different distributions of ownership. Higher values are associated with increased power held by individual shareholders, and lower values, with a more equal, and/or more diffuse dispersion of power on a board.[4] The balance of voting power variable therefore captures the variance associated with changes in the dispersion of ownership that would not appear if the ratio were computed using a simple sum of each director's shareholdings. Values of 1:1 or less indicated the distribution of ownership favored the largest shareholder, and values higher than this indicated that the dispersion of ownership favored the minority shareholders. The dispersion of ownership favored the largest shareholder in 73 percent of our cases and favored minority shareholders in the remaining 27 percent of the cases.

Moderator. We used a dummy variable, *industry sales growth,* to test the proposition that investor expectations influence a family firm's use of debt.

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[4] For example, a change in minority ownership dispersion from 25:25 to 20:20:10 will cause the value of the numerator to fall from 1,250 to 900.

TABLE 1
Descriptive Statistics and Correlations[a]

	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Debt	2.56	1.45													
2. Firm size	37.44	121.71	.18												
3. Firm age	48.98	27.00	−.02	.10											
4. Multiple family ownership	0.91	0.29	.05	−.03	.01										
5. Number of family-member employees	3.43	2.03	.02	.09	.01	−.07									
6. Exports as a percentage of sales	1.51	0.82	.01	.07	.01	.00	−.03								
7. Information technology intensity	3.07	0.92	.08	.17	.06	.03	.00	.06							
8. Industry sales growth	0.52	0.50	.04	−.02	.08	−.01	.02	.24	−.02						
9. Ownership held by board	89.62	19.61	.01	−.15	−.16	.08	−.07	−.09	−.02	−.06					
10. CEO tenure	2.45	1.13	−.08	−.07	−.10	.02	.09	−.03	−.05	.00	.01				
11. Average board tenure	17.52	7.75	−.11	−.06	.13	−.03	.06	−.10	−.02	.00	.08	.13			
12. Board size	3.98	1.75	.04	.21	.22	−.05	.25	.08	.04	.08	−.23	−.04	−.20		
13. Family ownership goal	0.68	0.47	−.03	−.03	−.04	.07	−.04	−.05	.04	−.09	.12	.01	.03	−.09	
14. Balance of voting power	0.70	0.81	−.01	.02	.08	−.14	.27	−.03	.01	.02	.00	−.11	.06	.23	−.03

[a] $n = 1{,}464$. Correlations larger than .04 are significant at $p \leq .05$.

Since the industry categories identified in the Andersen survey do not correspond directly to SIC-based industry classifications, we coded industry sales growth 1 if the mean of the reported growth in sales for the industry category was greater than the median ratio for all industry categories, and we coded the variable 0 if mean growth was below the median. Although coarse-grained, this measure distinguishes industries that enjoyed high levels of sales growth during this period (for instance, manufacturing and telecommunications) from those that did not. Further, we were unable to employ financial statistics derived from SIC-based data for control purposes since such data include information from large, widely held businesses whose markets and capital structures differ markedly from those of family firms.

RESULTS

Table 1 reports descriptive statistics (unstandardized) and Pearson correlations, and Tables 2 and 3 report the results for all regression analyses. The change in explained variance *(F)* associated with the covariate set ranges from 3.52 ($p \leq .001$) to 7.17 ($p \leq .000$), and the *F*-statistic associated with the set of hypothesized variables, after hierarchically adjusting for covariates, ranges from 6.54 ($p \leq .01$) to 10.99 ($p \leq .000$).[5] Hypothesis 1 was tested in

both the full sample (Table 2) and in the two industry (high and low industry growth) subsamples (Table 3). We used only the full sample to test Hypothesis 2.

We used moderated hierarchical polynomial regression analysis to confirm that industry sales growth does, indeed, influence a family-owned and -managed firm's use of debt. In model 1 (Table 2), centered variables (and their product terms) were entered hierarchically for both the balance of voting power and its square, and then, in the next step, the products of the independent variable and its square with industry sales growth were entered. As one would expect if the hypothesized relationships were nonlinear and moderated, the product of balance of voting power and industry sales growth ($p \leq .009$) was negatively associated with the use of debt, while the product of balance of voting power squared with industry sales growth was positively associated with the use of debt ($p \leq .001$). The significance of the product terms indicates support for Hypothesis 2. In addition, and consistent with Hypothesis 1, the negative value of the first coefficient, combined with the positive sign of its square, suggests that the relationship is positively U-shaped over the relevant range.

We then tested the sensitivity of these results by using the three alternative calculations of balance of voting power previously mentioned to test Hy-

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[5] Overall, the regression models explain from 5 to 6 percent of the variance in our dependent variable. These small effect sizes are likely the result in part (1) of the high heterogeneity the sample contained by virtue of its very large and diverse representation of firms and industries and (2) of the categorical nature of the dependent

variable. Cohen and Cohen (1980) noted, however, that an advantage of large samples is that they give analysts the ability to detect small effects with a high degree of confidence. Kraemer and Thiemann (1987: 105) estimated that the reliability or power of a sample to detect observed effect sizes is .80.

TABLE 2
Results of Full-Sample Regression Analyses for Debt

Variables				
Covariates				
Firm size	0.17***	0.17***	0.17***	0.17***
Firm age	−0.03	−0.03	−0.03	−0.03
Multiple family ownership	0.06*	0.05*	0.05*	0.05*
Number of family-member employees	0.02	0.02	0.02	0.03
Exports as a percentage of sales	−0.02	−0.02	−0.02	−0.02
Information technology intensity	0.05*	0.05*	0.05*	0.05*
Ownership held by board	0.04	0.04	0.04	0.04
CEO tenure	−0.06*	−0.07*	−0.07*	−0.06*
Average board tenure	−0.09***	−0.09***	−0.09***	−0.09***
Board size	−0.01	−0.01	−0.01	−0.01
Family ownership goal	−0.03	−0.03	−0.03	−0.03
Industry sales growth	0.06*	0.06*	0.06*	−0.01
Predictors				
Balance of voting power		−0.04	−0.04	0.05
Balance of voting power squared		0.03	0.03	0.08
Interactions				
Balance of voting power × industry sales growth			−0.01	−0.14**
Balance of voting power squared × industry sales growth				0.02***
R^2	.05			
Adjusted R^2		.05	.05	.06
F	7.17***	6.23***	5.84***	6.19***
ΔF		0.36	0.10	10.99***
n	1,464	1,464	1,464	1,464

* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

potheses 1 and 2. All results (available on request) were correctly signed, and although their significance levels weakened incrementally as shareholders were added to the calculation, balance of voting power ($p \leq .08$)—but not its square—became marginally insignificant when calculated using information from all eight shareholders. Given the extreme variance associated with the addition of this information to the computation of the variable (previously discussed and reported), we concluded the results were not highly sensitive to its computation.

Results of the subgroup analysis (Table 3, models 2 and 3) lend further support to the hypotheses. The balance of voting power variable and its square are significant ($p \leq .03$ and $p \leq .01$, respectively) and correctly signed when industry sales growth is high, and are they insignificant when industry sales growth is low.

DISCUSSION AND CONCLUSION

Family firms constitute over 80 percent of all business organizations in the United States and are the dominant form of economic enterprise throughout the world (La Porta, Lopez-de-Silanes, &

Shleifer, 1999), yet over two-thirds of first-generation family firms do not survive to a second generation of family ownership (Gersick et al., 1997). Understanding how the agency positions of the controlling owner and the minority shareholders influence the conduct of family firms is a small step toward understanding why many fail. In this article, we drew from behavioral and economic theories to argue that the incentives facing the directors of privately held, family-managed firms are different from those facing the directors of widely held public firms. Whereas ownership is expected to align incentives in public firms, we found that *how* ownership is dispersed among the various family owners of a privately held firm affects such decisions as the use of debt. Our findings are therefore not only consistent with Morck and his colleagues' (1988) conjecture, but also suggest that the principal-agent model requires modification before being applied to family firms. Furthermore, our findings about the moderating influence of industry growth are also consistent with the views of behavioral agency theorists like Wiseman and Gomez-Mejia (1998), who pointed out that the amount of risk that

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TABLE 3
Results of Subsample Regression Analyses for Debt

Variable	Model 2: High Industry Growth			Model 3: Low Industry Growth		
Covariates						
Firm size	0.17***	0.17***	0.17***	0.17***	0.17***	0.17***
Firm age	−0.05	−0.05	−0.05	−0.01	−0.01	−0.01
Multiple family ownership	0.08*	0.08*	0.07*	0.04	0.03	0.04
Number of family-member employees	0.02	0.02	0.03	0.02	0.02	0.02
Exports as a percentage of sales	−0.03	−0.03	−0.03	−0.01	−0.01	−0.01
Information technology intensity	0.08*	0.08*	0.08*	0.02	0.02	0.02
Ownership held by board	0.02	0.02	0.02	0.06	0.06	0.06
CEO tenure	−0.06	−0.06	−0.06	−0.07	−0.07	−0.07
Average board tenure	−0.10**	−0.09**	−0.09**	−0.08*	−0.08*	−0.08*
Board size	−0.03	−0.03	−0.05	0.01	0.01	0.01
Family ownership goal	−0.05	−0.05	−0.05	0.01	−0.01	−0.01
Predictors						
Balance of voting power		−0.02	−0.12*		−0.01	0.03
Balance of voting power squared			0.13**			−0.05
R^2	.05			.04		
Adjusted R^2		.06	.06		.04	.04
F	4.48***	4.13***	4.31***	3.52***	3.26***	3.05***
ΔF		0.25	6.54**		0.77	0.35
n	764	764	764	700	700	700

* $p \leq .05$
** $p \leq .01$
*** $p \leq .001$

owners will bear is a function of how they frame their expectations in terms of opportunities.

Our story identifies two interesting de facto reversals of incentives, patterns that diverge from predictions based on the conventional agency model. First, we argue that, whereas "blockholding" in widely held public firms reduces the risk that insiders will free ride on outside owners' equity, controlling ownership in a family firm (the counterpart of blockholding in public firms) can give family-member firm employees and directors the incentive to free ride on the controlling owner's equity. Second, we argued that, whereas the outside shareholders in widely held public firms have the incentive to promote investment and growth-oriented risk taking, dispersion of ownership can give outside shareholders at private family firms the incentive to favor consumption. This story is also interesting from a theoretical perspective, since it identifies at least one population in which information about ownership dispersion, as well as ownership concentration, is needed to predict director (and board) conduct.

Results from our field study of 1,464 family firms support our hypotheses that their use of debt has a curvilinear (U-shaped) relationship to the dispersion of ownership among voting members of their boards of directors, particularly during periods of market expansion. The nonlinear relationship sug-

gests that family firms are most vulnerable to conflict, and least willing to bear added risk, when ownership is split in relatively equal proportions. Interestingly, the fact that this distribution appeared in only 22 percent of our sample firms suggests that most family firm owners may take such risk into consideration when making their estate plans. This speculation is consistent with the views of Gersick and his coauthors (1997), who noted that successful sibling partnerships are rare because they are so difficult to manage and recommended that founders and controlling owners settle their estates in a manner that prevents the development of sibling partnerships.

The purpose of our empirical tests, however, was to lend credibility to our theory, not to confirm its validity or determine the strengths of its effects. Indeed, we cannot claim that our tests were confirmatory since we used cross-sectional data and relied upon survey data gathered for other purposes. However, we think these tests lend credibility to our theory since the firms represented by the Andersen survey are typical of a population of firms that is rarely studied and whose data are difficult (and quite expensive) to obtain (Gersick et al., 1997: 25; Sackett & Larsen, 1990). The size of our sample also gave us sufficient power to detect small effects and yet conclude with a high degree of confidence that these results are not the product of

chance. Although some of the measures are coarser than we would have liked (for example, balance of voting power was computed from a simple sort of shareholdings by size, which captured only the average effects of ownership dispersion and its specific effects), that coarseness also lends a conservative bias to the analysis, since coarse measures deflate variance and the likelihood of obtaining significant results (Hunter & Schmidt, 1990). The fact that we obtained significant results, despite the type of measures used and the presence of nine control variables, suggests that these results are robust. Future research must, however, address these weaknesses through use of more appropriate survey research methodology and finer-grained measures.

The effect of ownership dispersion on goal alignment within family-firm boards is a complex issue, and this study investigates only one of its aspects. Future studies might examine the relationship between minority shareholder influence and the dispersion of ownership among minority members. We suspect that a relatively equal distribution of ownership among fewer minority owners promotes a more stable coalition that would be more able to influence firm conduct. Future studies might also examine whether the severity of the double moral hazard problem varies with ownership stage. We suspect that this problem is more likely to manifest itself under a controlling owner than under a sibling partnership. We also suspect that this problem may be more common when family firms are owned by more than one family than when different branches of the same family compete on the boards and for the firms' resources.

Future studies might examine whether our hypotheses apply without modification to family-controlled public firms. At what level of ownership and control might the controlling owners' concern for family welfare start to generate agency costs for outside shareholders? Are double agency problems, or the allegiance of a CEO to both stockholders and family, more problematic in public owner-controlled firms (like Microsoft), sibling partnerships (such as Wal-Mart), or cousin consortiums (like the Ford Motor Company)? And what is the effect of family ownership on the outside owners' agency costs? (The recent proxy fight at Hewlett-Packard over a proposed merger with Compaq Computer is one case germane to this question.)

These and other interesting questions that can enrich corporate governance theory remain. Our study represents an early attempt to pinpoint the dynamics of ownership and control in family firms. By showing that the dispersion of ownership influences family firms' use of debt, we provided a long overdue response to Morck and colleagues' (1988) call for research, while at the same time revealing information about an economically important population of firms that has been largely neglected by researchers.

REFERENCES

Alchian, A. A., & Woodward, S. 1988. The firm is dead: Long live the firm: A review of Oliver E. Williamson's *The economic institutions of capitalism. Journal of Economic Literature,* 26: 65–79.

Allen, M. P., & Panian, S. K. 1982. Power, performance, and succession in the large corporation. *Administrative Science Quarterly,* 27: 538–547.

Arthur Andersen & Co. 1995. *1995 American family business survey.* St. Charles, IL: Arthur Andersen Center for Family Business.

Becker, G. S. 1981. *A treatise on the family.* Cambridge, MA: Harvard University Press.

Beckhard, R., & Dyer, W. G., Jr. 1983. Managing continuity in the family owned business. *Organizational Dynamics,* 12 (1): 5–12.

Carland, J. W., Hoy, F., Boulton, W., & Carland, J. A. C. 1984. Differentiating entrepreneurs from small business owners: A conceptualization. *Academy of Management Review,* 9: 354–359.

Casson, M. 1999. The economics of the family firm. *Scandanavian Economic History Review,* 47(1): 10–23.

Cohen, J., & Cohen, P. 1983. *Applied multiple regression/correlation analysis for the behavioral sciences.* Hillsdale, NJ: Erlbaum.

Crampton, S. M., & Wagner, J. A. 1994. Percept-percept inflation in microorganizational research: An investigation of prevalence and effect. *Journal of Applied Psychology,* 79: 67–76.

Daily, C. M., & Dollinger, M. J. 1992. An empirical examination of ownership structure in family and professionally-managed firms. *Family Business Review,* 5(2): 117–136.

Daily, C. M., & Dollinger, M. J. 1993. Alternative methods for identifying family vs. nonfamily managed small businesses. *Journal of Small Business Management,* 31(2): 79–90.

Demsetz, H. 1973. Industry structure, market rivalry, and public policy. *Journal of Law and Economics,* 16: 1–10.

Dillman, D. A. 1978. *Mail and telephone surveys: The total design method.* New York: Wiley.

Fama, E., & Jensen, M. C. 1983a. Agency problems and residual claims. *Journal of Law and Economics,* 26: 325–344.

Fama, E., & Jensen, M. C. 1983b. Separation of ownership

and control. *Journal of Law and Economics,* 26: 301–325.

Fama, E., & Jensen, M. C. 1985. Organizational forms and investment decisions. *Journal of Financial Economics,* 14: 101–119.

Finkelstein, S., & Hambrick, D. C. 1990. Top management team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly,* 35: 484–503.

Finkelstein, S., & Hambrick, D. C. 1996. *Strategic leadership: Top executives and their effects on organizations.* St Paul: West.

Ford, R. H. 1988. Outside directors and privately-held firms: Are they necessary? *Entrepreneurship Theory and Practice,* 13(1): 49–57.

Geeraerts, G. 1984. The effect of ownership on the organization structure in small firms. *Administrative Science Quarterly,* 29: 232–237.

Geletkanycz, M. A. 1997. The salience of "culture's consequences": The effect of cultural values on top executive commitment to the status quo. *Strategic Management Journal,* 18: 615–634.

Gersick, K. E., Davis, J. A., Hampton, M. M., & Lansberg, I. 1997. *Generation to generation: Life cycles of the family business.* Boston: Harvard Business School Press.

Gomez-Mejia, L., Nuñez-Nickel, M., & Gutierrez, I. 2001. The role of family ties in agency contracts. *Academy of Management Journal,* 44: 81–95.

Gupta, S., & Romano, R. E. 1998. Monitoring the principal with multiple agents. *Rand Journal of Economics,* 29: 427–442.

Hambrick, D. C., & Fukutomi, G. D. S. 1991. The seasons of a CEO's tenure. *Academy of Management Review,* 16: 719–742.

Hambrick, D. C., Geletkanycz, M. A., & Fredrickson, J. A. 1993. Top executive commitment to the status quo: Some tests of its determinants. *Strategic Management Journal,* 14: 401–418.

Handler, W. C. 1989. Methodological issues and considerations in studying family business. *Family Business Review,* 1(4): 257–276.

Holtz-Eakin, D., Joulfian, D., & Rosen, H. S. 1993. The Carnegie conjecture: Some empirical evidence. *Quarterly Journal of Economics,* 108: 413–435.

Hunter, J. E., & Schmidt, F. L. 1990. *Methods of meta-analysis: Connecting error and bias in research findings.* Newbury Park, CA: Sage.

Ilgen, D. R. 1986. Laboratory research: A question of when, not if. In E. A. Locke (Ed.), *Generalizing from laboratory to field settings:* 257–267. Lexington, MA: Heath.

Jensen, M. C. 1998. Self-interest, altruism, incentives, and agency. In M. C. Jensen (Ed.), *Foundations of organizational strategy:* 39–50. Cambridge, MA: Harvard University Press.

Jensen, M. C., & Meckling, W. H. 1976. Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics,* 3: 305–360.

Jensen, M. C., & Smith, C. L. 1985. Stockholder, manager and creditor interests: Applications of agency theory. In E. I. Altman & M. G. Subrahmanyam (Eds.), *Recent advances in corporate finance:* 95–131. Homewood, IL: Irwin.

Kang, D. 1999. *Ownership structure and corporate dividend policy: How large block family owners increase dividend payout and achieve superior firm performance.* Harvard Business School working paper number 99-032, Boston.

Koch, M. J., & McGrath, R. G. 1996. Improving labor productivity: Human resource management policies do matter. *Strategic Management Journal,* 17: 335–354.

Kraemer, H. C., & Theimann, S. 1987. *How many subjects: Statistical power analysis in research.* Newbury Park, CA: Sage.

Kroll, M., Wright, P., & Theerathorn, P. 1993. Whose interests do top managers pursue? An examination of acquisition performance and CEO rewards. *Journal of Business Research,* 26: 133–148.

La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. 1999. Corporate ownership around the world. *Journal of Finance,* 54: 471–517.

Levinson, H. 1971. Conflicts that plague family business. *Harvard Business Review,* 49(2): 90–98.

Lunati, M. T. 1997. *Ethical issues in economics: From altruism to cooperation to equity.* London: Macmillan.

MacDougall, P., & Robinson, R. B. 1990. New venture strategies: An empirical identification of eight "archetypes" of competitive strategies for entry. *Strategic Management Journal,* 11: 447–468.

Meyer, M., & Zucker, L. G. 1989. *Permanently failing organizations.* Newbury Park, CA: Sage.

Morck, R., Shleifer, A., & Vishny, R. W. 1988. Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics,* 20: 293–315.

Nash, J. M. 1988. Boards of privately-held companies: Their responsibility and structure. *Family Business Review,* 1(3): 263–369.

Nayyar, P. R. 1992. On the measurement of service diversification strategy: Evidence from large U.S. service firms. *Strategic Management Journal,* 13: 219–235.

Nunnally, J. C. 1978. *Psychometric theory.* New York: McGraw-Hill.

O'Donoghue, T., & Rabin, M. 2000. The economics of

immediate gratification. *Journal of Behavioral Decision Making,* 13: 233–250.

Ouchi, W. G. 1980. Markets, bureaucracies, and clans. *Administrative Science Quarterly,* 25: 129–141.

Perrow, C. 1986. *Complex organizations.* New York: Random House.

Rubenson, G. C., & Gupta, A. K. 1996. The initial succession: A contingency model of founder tenure. *Entrepreneurship Theory and Practice,* 21(2): 21–35.

Sackett, P. R., Larsen, J. R., Jr. 1990. Research strategies and tactics in industrial organization psychology. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organization psychology:* 419–490. Palo Alto, CA: Consulting Psychologists Press.

Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. 2001. Agency relationships in family firms: Theory and evidence. *Organization Science,* 12: 99–116.

Small Business Administration. 2002. *SBA loan programs.* Document number 507. *http://asbdc.ualr. edu/fod/fo7.htm.*

Stark, O., & Falk, I. 1998. Transfers, empathy formation, and reverse transfers. *American Economic Review,* 88: 271–276.

Tabachnick, B. G., & Fidell, L. S. 1989. *Using multivariate statistics.* Cambridge, MA: Harper & Row.

Tan, J. J., & Litschert, R. J. 1994. Environment-strategy relationship and its performance implications: An empirical study of the Chinese electronics industry. *Strategic Management Journal,* 15: 1–20.

Thaler, R. H., & Shefrin, H. M. 1981. An economic theory of self-control. *Journal of Political Economy,* 89: 392–406.

Walsh, J. P., & Seward, J. K. 1990. On the efficiency of internal and external control mechanisms. *Academy of Management Review,* 15: 421–458.

Ward, J. L. 1987. *Keeping the family business healthy: How to plan for continuous growth, profitability, and family leadership.* San Francisco: Jossey-Bass.

Ward, J. L., & Handy, J. L. 1988. A survey of board practices. *Family Business Review,* 1(3): 298–308.

Whisler, T. L. 1988. The role of the board in threshold firms. *Family Business Review,* 1(3): 309–321.

Wiseman, R. M., & Gomez-Mejia, L. R. 1998. A behavioral agency model of managerial risk taking. *Academy of Management Review,* 23: 133–153.

Wortman, M. S., Jr. 1994. Theoretical foundations for family-owned business: A conceptual and research-based paradigm. *Family Business Review,* 7(1): 3–27.

Wright, P., Ferris, S. P., Sarin, A., & Awasthi, V. 1996. Impact of corporate insider, blockholder, and institutional equity ownership on firm risk taking. *Academy of Management Journal,* 39: 441–465.

APPENDIX

Nine covariates were included to reduce extraneous or confounding variance. *Firm size* was total firm sales logarithmically transformed to correct for its skewed distribution. *Firm age* was calibrated in years. Age may be linked to performance via a self-selection bias; older firms existed in this sample simply because they were successful. *Multiple family ownership* was a dummy variable (0/1) that adjusted for the influence of multiple families owning at least 15 percent of a firm's stock. We also controlled for the *number of family-member employees* since employment risk rises as families become dependent on a firm for their livelihood. The mean number of family employees for our sample was 3.51; the range was 1–24. *Exports as a percentage of sales* was a five-level indicator ranging from "zero" through "over 50 percent." In general, firms with export sales report a higher level of indebtedness because they use bank letters of credit and other types of debt instruments to facilitate payment from international customers. Variance in performance and agency conditions linked to *information technology intensity* was controlled by using this item: "How important are investments in information technology for the accomplishment of your future goals?" (1 = "not important," 4 = "very important").

We also controlled for CEO tenure, average board tenure, and board size. A large body of managerial research indicates that long CEO tenure is generally detrimental to firm performance (Finkelstein & Hambrick, 1990). Individual risk tolerance falls with age, and cognitive processes rigidify. For example, Hambrick and Fukutomi (1991) observed that as managers age, they tend to receive narrower and more filtered information, acquire task knowledge more slowly, lose interest in routine tasks as repetition leads to tedium, and increase their commitment to the status quo (Hambrick et al., 1993). The negative effects of age and tenure on both cognitive diversity and risk tolerance are exacerbated by group processes (Finkelstein & Hambrick, 1996: 124–130). The Andersen survey from which we drew data measured *CEO tenure* with a five-level variable with responses ranging from "11 or more years until retirement" to "semiretired." We found that this indirect measure of tenure correlated with other indirect measures of tenure available from the survey. For example, the bivariate correlation between CEO tenure and CEO age was high ($r = .62, p \leq .001$), particularly given that scaling differences naturally deflated the correlation between the two variables. Also, the mean age of the CEOs (54 years) and the mean age of the heirs-apparent at the time of this designation (38 years) differed, as we expected, by about one generation. Like Finkelstein and Hambrick (1990), we measured *average board tenure* as the average of the years members had served and controlled for variance in the number of board members across firms with a count indicating *board size.* The mean board size in this sample was 3.98, and the standard deviation was 1.74. An item that asked the respondents to rate the likelihood that

their families would retain control of the sampled firms in the foreseeable future, *family ownership goal,* controlled for variance in the strategic directions of these family firms. Lastly, we measured *ownership held by board* as the percentage of a firm's shares held by members of its board of directors.

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William S. Schulze *(Schulze@po.cwru.edu)* is an assistant professor of entrepreneurship and the H. R. Horvitz Professor in Family Business at the Weatherhead School of Management, Case Western Reserve University. He earned his Ph.D. in strategic management from the University of Colorado at Boulder. His research focuses on entrepreneurship, firm governance, risk, and managerial applications of economic theory.

Michael Lubatkin is the John and Bette Wolff Family Professor of Strategic Entrepreneurship at the University of Connecticut and a professor at the Ecole de Management de Lyon. He earned his Ph.D. in business administration from the University of Tennessee. His research focuses on firm governance, mergers and acquisitions, corporate diversification, international management, and managerial applications of economic theory.

Richard N. Dino is an associate professor of management, an associate dean of the School of Business, and the chair of the Family Business Program at the University of Connecticut. He earned his Ph.D. in economics from the State University of New York at Buffalo. His teaching and research focus on the management and performance of small to medium-sized, closely held businesses.

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