INTERFIRM RELATIONSHIPS AND
THE ORGANIZATION OF A FIRM'S
FINANCIAL CAPITAL STRUCTURE:
THE CASE OF THE MIDDLE MARKET

Brian Uzzi and James J. Gillespie

ABSTRACT

We review the finance literature on the subject of the capital structure problem—how firms hierarchically stratify their dependence on different sources of financial capital—and describe how this problem involves consequential sociological issues relating to organizations, market stratification, and governance. Based on network theory and our original fieldwork in mid-market banking, we sketch arguments about how the organization's network of exchange relationships to outside suppliers of capital affects the firm's capital structure. We argue that the pecking order predicted by economic models—inside funds, family, bank debt, and investor debt—can change depending on the firm's network ties and that these ties also affect the dispersion of capital sources within tiers of the pecking order, an important question of stratification on which financial theory has been silent. We conclude with a discussion of the implications of our approach for the sociology of financial markets.
INTRODUCTION

A central concern in the financial theory of the firm is the capital structure problem. The capital structure problem refers to the way organizations hierarchically order their dependence on different sources of financial capital. Financial economists predict that firms follow a "pecking order" of capital, where internal funds, friends and family, banks, and equity markets make up the tiers of the pecking order from most to least preferred, where preferred sources should be used proportionately more than least preferred sources (Harris and Raviv 1991). Their explanation for this ordering keys on information asymmetries and agency costs for each capital source—the greater the information asymmetry or agency costs associated with a source of capital, the further down it is on the pecking order. For example, banks charge a premium for their capital because banks know less about the competence and intentions of the firm than the firm knows about itself. Equity funds come with even a higher premium than bank funds because equity markets know less than banks do about the firm and so forth.

Although not previously noted, the capital structure problem dovetails with important issues in the sociology of organizations and markets. First, a pecking order is a key component of stratification within organizations and markets. The hierarchical ordering of an organization's dependence on outside suppliers of capital reflects the firm's stratified ordering of its interfirm relationships. Similarly, outside suppliers of capital, such as banks, bondholders, and institutional investors, create an "order of control" over a firm's assets—stratifying the market in terms of what organizations have power over others. Second, the pecking order is an issue of corporate governance. If the pecking order reflects residual claimants' control over the organization's assets, then depending on how organizations order their outside suppliers and how separate outside suppliers of capital govern their interfirm ties, the firm is subject to different forms of governance (Scott 1995). Third, the closeness of interfirm relationships of capital supply speaks to issues of how networks of ties between organizations and their suppliers convey private information and how the structure of these networks influences market competition, prices, and power (Granovetter 1985; Knoke 1990; Knoke and Guiltarte 1994).

Empirical work in finance supports the broad outlines of the pecking order, although inconsistencies and questions remain. Barton and Gordon (1987, p. 67) concluded that despite empirical support "a significant gap exists in understanding the issue." In this paper, we address two gaps in the theory having relevance to questions in sociology and finance: what accounts for changes in the pecking order and what accounts for variance within the tiers of the order, the latter question being an issue financial theory is currently silent on. From the perspective of stratification and governance, what explains differences in the variance within tiers of a stratified system is as important as the order of the tiers (Blau 1977; Allison 1978).
Our approach builds on the ideas of embeddedness and social capital found in the literatures on interfirm relationships and financial markets (Granovetter 1985; Mintz and Schwartz 1985; Baker 1990; Coleman 1990; Mizuchi and Stearns 1994). These frameworks have shown that market behavior is tied to network relationships that influence the expectations and dependencies of firms and financial capital suppliers by channeling information, changing bargaining positions, and facilitating the creation of collaborative exchange norms. We argue that the nature of the relationship between the organization and its outside suppliers of capital, as well as the overall network of relationships possessed by an organization, is a determinant of the proportion of capital firms allocate to each tier of their pecking order. A strong relationship between the organization and an outside supplier of capital, for example, increases the probability of disproportionately borrowing from that source. This is because a strong relationship facilitates the flow of important information about the firm and the supplier and increases the motivation to work out problems as they arise. Across the tiers of the pecking order—internal funds, family/friends, banks, and equity markets—we see varying levels of embeddedness. First, an organization’s relationships with family and friends are richly embedded in personal relations, norms of cooperative behavior and trust, and a common web of relationships that reinforce fair play and information dissemination. This provides the lowest cost of capital and a capital structure that is more centered on borrowed capital from close lenders. Second, bank relationships have a lower level of embeddedness than family and friends but can develop high levels of embeddedness through exclusive exchanges and the identification of common ties to trusted third parties (Uzzi and Gillespie 1998). This provides an intermediate cost of capital. Finally, equity markets have the lowest level of embeddedness because ties between a firm and a creditor are indirect. Ties are institutionally embedded in intermediaries such as stock analysts, brokers, investment bankers, rating organizations, and certifying professionals, adding social distance between the lender (equity market participants) and the firms.

We also argue that social capital and “inseparability” play a role in how social structure influences the capital structure of the firm. Organizations may strategically build strong relationships to increase their social capital with a supplier or suppliers—reordering the tiers of the pecking order. This occurs because organizations may need to invest in relationships with certain providers to round out their portfolio of network relationships and to enrich their social capital across numerous capital suppliers (Baker 1990; Burt 1992). This strategic social capital perspective is tempered by our emphasis on inseparability. Inseparability refers to the way non-economic facets of exchanges between firms and outside suppliers exist independent of economic factors yet still affect the economics of the pecking order. Inseparability captures the idea that some network connections of the organization lie beyond its immediate control, limiting purposeful construction of networks rich in social capital.
It is important to note that the literature on the capital structure of the firm is vast (over 150 papers since 1980) and spans the fields of strategy, transaction costs economics, and finance (Barton and Gordon 1987; Williamson 1988; Harris and Raviv 1991). Consequently, it is overly ambitious to treat in one paper all the facets of the problem. Here, we focus on the capital structure problem for mid-market firms—firms that critically need financial capital to grow and develop but which have been relatively overlooked in strategy and finance literatures that focus primarily on large corporations (Mintz and Schwartz 1985; Petersen and Rajan 1993). Mid-market firms have sales between $10 and $500 million, make up over 45 percent of the GNP, and account for the largest portions of job growth and training in our economy (Granovetter 1984; Petersen and Rajan 1994). Because mid-market firms have relatively simple tax and ownership arrangements (usually personal), our scope also minimizes many of the ancillary tax, debt, bankruptcy, and ownership complexities that have hampered capital structure research (Harris and Raviv 1991). This scope also provides an opportunity to examine the embeddedness of lending, since relationships in the mid-market are more personal by nature and design than is the case among large firms (Petersen and Rajan 1994; Uzzi and Gillespie forthcoming).

The paper is organized as follows. First, we describe the nature of the capital structure puzzle and review the prevailing analytical approaches. Second, drawing on original fieldwork we have conducted on lending and capital structure practices in mid-market banking (Uzzi and Gillespie 1998), we discuss how the relations between borrowers and outside suppliers of capital are organized, highlighting the operation of embeddedness. Third, we outline the sociological pieces of the capital structure puzzle following from a network perspective and discuss the implications of our model for the sociology of financial markets.

PREVIOUS INTERPRETATIONS OF
THE CAPITAL STRUCTURE PROBLEM

Our sociological perspective on the capital structure puzzle is best understood by comparison to previous approaches in financial economics. The starting place for this comparison is the seminal article by Modigliani and Miller (1958), which broke ground by applying standard tools of economic analysis to study how firms choose their capital structures. Applying a static equilibrium model and assuming perfect markets, Modigliani and Miller showed firms could use debt or equity interchangeably without affecting the value of the firm, suggesting that capital structure decisions were determined by other factors. Subsequent analyses examined how factors such as debt, taxes, and dividends affect capital structure decisions (Modigliani and Miller 1961; Modigliani and Miller 1963; Miller 1977), yet even within economics, the Modigliani and Miller approach continued to be criticized for its simplifying assumptions. In the mid-1970s, Stiglitz (1974) and
Jensen and Meckling (1976) introduced agency considerations into the capital structure problem: managers were no longer assumed to have the same risk and incentive structures as external suppliers of capital. Later, Myers (1984) and Myers and Majluf (1984) added asymmetric information considerations: managers of the firm were assumed to have information that was different from the information possessed by outside suppliers of capital.

These changes in the framing of the capital structure puzzle around issues of information asymmetry and agency underlie the current approaches in finance. Asymmetric information problems arise because the owners and managers of the firm typically know more about the firm than do potential investors. This creates problems for standard market allocation mechanisms because buyers of capital (e.g., firms) and sellers of capital (e.g., financial institutions) assign different prices to the same projects (Myers 1984; Myers and Majluf 1984). Firms have an incentive to finance high net present value (NPV) projects using outside equity financing (because they keep all the residual profits) and low or potentially negative NPV projects using non-equity financing (because they share losses with debtholders). Understanding this incentive structure, the "market" discounts the price it is willing to pay for new equity and debt offerings, which in turn makes managers more reluctant to finance their "good" projects through equity or debt markets. This is called the "lemon problem" (Akerlof 1970). It cannot be solved through public communication because a firm with a good project might announce that it has a high NPV project, yet nothing stops a firm with a sub-par project from making an identical announcement. Alternatively, a firm could communicate very specific details about its project, but this information could be used by its competitors. Even if the firm does not have to safeguard proprietary information, educating potential investors takes time, energy, and money (Stiglitz and Weiss 1981).

Capital suppliers will also be concerned that the firm will use the capital it acquires in an opportunistic manner. In particular, debtholders are concerned that the firm's managers will take on overly risky projects because they can pass on a disproportionately large portion of the downside costs of a failed investments to debtholders, whereas outside lenders only share equally in the upside benefits. To protect themselves from risky investments, debtholders often place their representatives on the firm's board or include contractual covenants restricting management behavior in numerous ways. Enforcing these restrictions, however, generates monitoring costs that are passed onto the firm and that constrain management's autonomy. Thus, like a backward induction problem, monitoring costs and the amount of asymmetric information between a firm and its lenders lessen as a firm moves up the pecking order from outside lenders to close lenders.

A related approach to the capital structure problem focuses on the transaction costs of different sources of capital (Williamson 1988). This approach shares more similarities than differences with financial approaches but couches the problem of information asymmetry in terms of asset-specificity. Like the transaction-cost economizing decision to buy (from the market) or make (using in-house
resources), firms favor the use of external financing when asset specificity is low and favor the use of internal financing (e.g., retained earnings) when asset specificity is high (Williamson 1988). This occurs for two reasons. First, the greater the asset specificity of the project, the greater the information asymmetry between the firm and outsiders. Second, high asset specificity implies that the firm's assets have limited redeployability. Thus, if the firm defaults on its obligations to external actors, debtholders will come into possession of assets with little marketability, raising the transaction costs of using external capital sources. Transaction cost theory argues that these costs are sufficiently great to motivate firms to arrange capital structures in a transaction-cost economizing way. In both the logic of financial theory and transaction costs theory, firms are predicted to order their rankings of capital in a way that minimizes their finance costs and the need to comply with external oversight.

**Pecking Order Model**

The pecking order model translates the underlying assumptions of financial and transaction cost theory into specific frameworks that attempt to explain how economic actors cope with the asymmetric information and principal-agent problems that plague the market allocation of financial capital. The pecking order model argues that firms have a hierarchical preference in types of financing (Myers 1984; Myers and Majluf 1984). Firms turn to sources lower in the hierarchy only after their preferred financing sources have been exhausted, exhibiting a preference for debt over equity and private sources over public sources. From most preferred to least preferred, the order typically is: internal financing (retained earnings), financial institution loans (private debt), capital contributions from close connections (private equity), bond issues (public debt), and stock issues (public equity). Within a category such as stock, the model posits that firms prefer issuing senior securities (e.g., convertible stock or preferred stock) over junior securities (e.g., common stock) because the latter are typically acquired by a broader base of the public.

This financial hierarchy purportedly helps firms manage information asymmetry and the principal-agent dilemma in the following way. Since no external actors are involved in using internal funds, agency and information problems are negligible. Private debt from banks is second on the hierarchy. Banks have expertise in gathering firm related information, designing debt contracts that limit opportunism, and in placing representatives on a firm's board of directors. Public equity is last because equity markets are least competent at assessing information about the firm or drawing up specific contracts and have no mechanism by which to place representatives on boards.

In an examination of financing patterns in Canada, France, Finland, Germany, Italy, Japan, the United Kingdom, and the United States, Mayer (1990) finds a common hierarchical preference for internal funds, first, and for bank finance, second, with external equity lagging behind. Other studies provide mixed support
Financial Structure

(Fazzari, Hubbard, and Petersen 1988; Baskin 1989; Pinegar and Wilbricht 1989; Claggett 1991; Jensen, Solberg, and Zorn 1992; Vogt 1994), yet few have examined why firms differ in their pecking orders or why the relative amount of debt in each tier tends to vary.

Recently these unanswered questions have led some economists to question the exclusive focus of these theories on the type of capital rather than the identity of the parties who supply the capital. MacKie-Mason (1990, p. 97), for example, concludes that “firms do care about who provides the funds, as distinct from the type of security.” Similarly, Hubbard (1990, p. 123) argues, “there is more to financing decisions than the choice of a debt-equity ratio. A crucial decision that firms face is the actual source of financing regardless of whether it is in the form of debt or equity.”

Sociological and recent economic criticisms of the capital structure problem share similar concerns, albeit the absence of social structure in these models is more crucial to how sociologists view the problem of capital structure. We see two specific issues. First, present financial theory ignores the possibility that agency problems can be mitigated via certain social structural conditions. An embeddedness approach brings in questions of who transacts with whom, not just whether a transaction takes place or how large are transactions in the aggregate. Second, the realization that committed exchange partners can aid one another, even when their immediate self-interest is not maximized, leads to purposeful investment in collaborative ties with outside suppliers of capital. This conclusion suggests that rational actors who understand these processes will invest in relationships in order to gain the benefits of cooperation but also to enrich their social capital resources with lenders. In the next section, drawing on the economic sociology literature on interfirm networks and embeddedness, we develop arguments about how social structure plays a role in the capital structure puzzle.

THE CASE FOR AN EMBEDDEDNESS PERSPECTIVE

A sociological view of the capital structure begins by shifting the focus from the financing instruments to the actors, dyads, and networks involved. Instead of focusing primarily on what type of financing (e.g., equity, debt, or internal) the firm should seek, we focus on who is seeking the financing and from whom the financing is being sought. Firms use the quality of their relationships with outside lenders to mitigate agency and asymmetric information problems. A sociological view recognizes the a priori stratification of the lending market and that relationships vary between strata in distinctive ways.

In terms of financing sources and the nature of relationships in mid-market banking, it is useful to describe the sociology of banks and the role of relationship managers—the bank employees who meet and form relationships with corporate clients. Our research on mid-market banking shows that relationships between
banks and corporate borrowers tend to be personal and to have a consequential social component that highlights the weaknesses of current approaches (Uzzi and Gillespie forthcoming, 1998). A component of this research has concentrated on collecting original field and interview data on the banking industry and lending arrangements and practices. We focus on banks as outside lenders because banks are the primary source of outside funds for these firms. An important finding from this work has been a typological description of the banking industry's stratification and the roles and relationships of each stratum. We use these findings to describe how social relationships penetrate lending transactions and the manner in which variation in the embeddedness of relationships with outside lenders affects a firm's borrowing practices and capital structure.

Banking Market: Stratification, Players, and Relationships

Our field work has revealed that the prime source of external funds for mid-market firms is the banking market, which is stratified into three levels (New Corporate, Mid-market, and Entrepreneurial) and six main players (Bank's CEO, Relationship Managers, Firm's CEO, Firm's CFO, outside legal counsel, and outside accountants). Figure 1 illustrates these dimensions of the banking market and reveals the manner in which arm's-length banking ties of the kind that are presumed in the pecking order models are frequently supplanted by close personal ties between entrepreneurs and relationship managers.

The New Corporate Stratum

The new corporate stratum comprises about 50 percent of the bank market and includes the biggest banks and firms (sales greater than $500 million). The literature in finance and sociology has examined this segment almost exclusively (Mintz and Schwartz 1986; Stearns 1982; Petersen and Rajan 1993; 1994; Mizruchi and Stearns 1994). In this market, asymmetric information and agency problems are managed in three ways. First, firms have debt rated and certified financial statements that make their level of credit-carrying uncertainty low. Second, firms have sizable treasury departments, which identify financial borrowing opportunities and lower dependence on banks for financial advice. Third, large corporate borrowers have many alternative sources of capital besides banks. They use internal funds or go directly to capital markets such as LIBOR (London Interbank Offered Rate) where they can directly borrow capital at the same rate as banks. These characteristics lower the level of oversight that banks can impose on corporate borrowers, the latter being in a position to back out of a deal if they expect excessive bank oversight (Davis and Mizruchi 1998). Consequently, firms in this stratum typically buy capital only if the bank meets their terms, and they can avoid bank oversight by going directly to LIBOR or by bargaining hard for favorable terms.
Figure 1. Interfirm Relationships and Stratification in the Banking Market
The arm's-length nature of exchanges in this segment is reinforced in the relationships between the firm’s CFO and the bank's relationship manager (RM). We found that ties between relationship managers were not based on trust, high-levels of face-to-face interaction, or the sharing of private information about the firm, a result consistent with Mizruchi and Stearns' (1998) field study of Citibank’s new corporate banking relationships. Instead, the commodity-like nature of this market and the autonomy of firms bureaucratize lending ties in a "system of checks and balances." Loans are approved by the bank’s credit department, which "looks at the numbers only" and is purposefully kept at a distance from the borrower in order to maintain "objectivity." Moreover, when RMs become involved with a corporate borrower, their influence over the decision and ability to form close relationships is further diluted by a team structure (Ibarra and Andrews 1993), which organizes the ties between firms and relationship managers. For example, as shown in Figure 1, the lines and nodes extending from the CFO and the RM positions indicate that RMs' portfolios link to other corporate clients and that RMs work in project teams, which further reduces personal contact between RMs and specific CFOs.

We note that this stratum of the market conforms to the pecking order model of capital structure, at least in regard to variance between the tiers of the pecking order, because firms in the new corporate segment possess the capabilities needed to implement the sophisticated financial analyses implicit in the pecking order model. These firms have many financing options and the financial expertise required to make distinctions between these options. The self-sufficiency of large organizations in raising internal funds enables them to shop the market for the best deal. Finally, the nature of the bank-borrower relationship tends to be arm’s-length and bureaucratized within the hierarchy of the bank and the firm, further minimizing the role of personal relationships.

Mid-Market and Entry Level Strata

In the mid-market and entry level strata, the dynamics around asymmetric information and bank-borrower power is the reverse of the new corporate stratum. These borrowers are generally not debt rated or certified and the firm and the product may have little or no track record. These firms also have little financial expertise. Entrepreneurs typically know their product and customer well but lack financial competence. Consequently, they depend on banks for know-how concerning the costs and availability of capital. Banks are also the primary source of capital for small firms because they are too small to borrow elsewhere and rarely generate surplus internal capital (Petersen and Rajan 1993). This means that mid-market firms have few alternatives to banks for financial capital and most accept the bank’s oversight either in the form of representatives on the firm’s board or in terms of restrictive loan covenants. The lack of financial expertise put these
Financial Structure

firms in a position of knowing less about their market and financing alternatives than banks. Thus, these firms are in a position of low bargaining power.

Interestingly, banks also view the relationship as being high in information asymmetry. Because these firms lack certified financial statements and standardized reporting, banks know less about the true capacity of the firm to service debt than does the firm’s managers. For example, the common view held by bankers is that firms in these strata are high risk because they have no track record and lack the kind of third-party certification that reduces uncertainty. The following is a typical response that we heard from bankers:

The information is much less efficient in the entrepreneurial middle market. They’re less aware of financing alternatives, financing alternatives are less available to them because their information is not standardized, it’s not prepared in general for the SEC or for public consumption, it is prepared for the needs of the owner-operator first and foremost. So information is not efficient and with that comes the need for the financing source, the bank, to interpret, to take higher risk than there would be if information were very readily available. That’s not what happens in the Fortune 500 market. The capital structure, the pricing, everything is very efficient and that’s not the case with middle market.

Thus, in this level of the market, banks and corporate borrowers experience bilateral information asymmetry and agency problems. Firms lack expertise and non-bank sources of financing. They are not in a position to verify the credibility of a bank’s proposals or to bargain for less constrictive covenants. Conversely, banks must deal with firms that have no track record or verified standards of financial health.

Social Relationships with Outside Lenders and Capital Structure

A strict interpretation of the pecking order model suggests that the above conditions should encourage banks to charge a premium for capital and encourage firms to avoid banks whenever possible, relying instead on personal equity or capital from family and friends. In a study of small business financing, however, Petersen and Rajan (1993) found weak support for the pecking order model. They noted that relationships between banks and corporate borrowers can affect the price of loans and thus the pecking order. Consistent with Petersen and Rajan’s (1993) suppositions, our field research shows that in this segment of the market, embeddedness can change the dynamics of the capital structure puzzle. We found that embeddedness was greater in this segment of the market for two reasons. First, firms build embedded ties to overcome information problems and accumulate social capital that can then be used to access capital at prices that are more competitive than is possible in the absence of social relationships. Second, there is a high level of inseparability in the social and economic lives of the entrepreneurs who run these businesses, making it difficult to detach economic conditions from
social structure. These changes in the cost and access to outside capital change the parameters of pecking order stratification.

We begin with a discussion of social capital and then turn to inseparability. Our focus on social capital is consistent with the emerging view of social capital as a productive resource that is strategically managed by the firm (Coleman 1990; Bourdieu and Wacquant 1992; Burt 1992; Walker, Kogut, and Shan 1997). Our discussion of inseparability, however, sharpens our analysis of social capital in the mid-market banking context by showing how firms and outside suppliers are constrained by a web of relationships, some of which are beyond their strategic reach. Consequently, while social capital might imply that network relationships have economic value that can be managed, our embeddedness approach emphasizes how relationships have features that are separate from economic interests and expectations but that affect them in material ways.

Social Capital

Although rarely noted in current work by economists or sociologists, social capital is an obvious link between the capital structure of the firm and its relationships with outside suppliers of capital (Pennar 1997). Social capital refers to the resources that an individual accesses through known contacts. Social capital “accrue[s] to an individual or a group by virtue of possessing a durable network of more or less institutionalized relationships [that are] embedded in a stable system of contacts possessed by an individual” (Bourdieu and Wacquant 1992, p. 119).

It is our argument that the productive returns of social capital that are not easily attainable through other means, particularly market ties or organizational competencies, change the relationship between the firm and its outside suppliers of capital in two related ways. Firms will alter their level of borrowing depending on the degree to which the relationship is rich in social capital, and firms gain access to forms of productive capital besides financial capital when they maintain long-term and interdependent ties with their outside lenders.

Social capital has been tied to the structure of interpersonal and intercorporate networks and to effective interfirm transacting (Coleman 1990; Burt 1992; Portes and Sensenbrenner 1993; Uzzi 1997). Each of these relationships links a different aspect of social structure to the level of social capital possessed by individual members of the network as well as the network as a whole. Coleman (1988) identified the condition of closure. The concept of closure considers a network of ties among persons and firms where the individual units within the network can all be connected to one another—a fully closed network has no missing links between members of the network. Coleman found in his studies of two very diverse groups—merchants in New York’s diamond district and dropouts among tenth graders—that the level of information exchange, trust, and reciprocity was much higher in networks with high levels of closure. Closure promotes these outcomes because it enables effective norms of trust to arise, which in turn permit the
proliferation of obligations and expectations of fair play. Both of these outcomes help solve the conflicts of interest and information asymmetries inherent in the capital structure puzzle. In our banking study, we have seen these types of structures have productive effects on the cost and availability of capital. A number of bankers, for example, revealed that when the bank has a close and trusting tie to the firm’s CPA or outside counsel, it improves the perceived validity of shared information and promotes favorable interpretations of ambiguous behavior.

The structural hole approach to social capital (Burt 1992) focuses less on the collective social capital of a system and more on the social capital differences of individuals within systems. Its argues that an individual’s social capital is greatest when she is in a bridge position between two closed networks so that information and resources that need to flow from one network to the other must pass through the structural hole that separates them. Moreover, information that flows across a structural hole is likely to be unique and novel relative to information that circulates within networks because the former is not confined to the provincial views of densely knit networks. This suggests that capital suppliers and firms maintaining networks that are rich in structural holes gain privileged access to resources flowing across the structural hole. Burt (1992) showed that managers with many structural holes in their networks had higher rates of promotion and received higher bonuses than managers with few structural holes in their networks.

In the context of ties to outside capital suppliers, these arguments suggest that firms with ties to several capital suppliers of the same type (e.g., several banks) increase their ability to bargain for favorable terms by playing one supplier off against another and by strategically hoarding information. Baker (1990) presented evidence showing that firms that use several investment banks to float equity offerings garner more favorable terms. Uzzi and Gillespie (forthcoming), however, found that mid-market firms that have large networks of ties are able to access more capital, but gain no benefits in the rate charged for that capital. Similarly, Petersen and Rajan (1993) found that mid-market firms with large networks paid higher interest rates on their loans from both financial and nonfinancial (friends/family) suppliers of loans. These results suggest that networks rich in structural holes permit firms to access more capital but that the capital is not acquired at a competitive cost. While these results suggest that structural holes may indeterminately affect capital structuring, in part because the studies were not set up to examine the capital structure problem per se, they do suggest that the problem of information asymmetry and agency can be partly resolved through manipulating social structure. Thus, we expect that having more suppliers to choose from and negotiate with enables the firm to affect its access and cost of capital, and thus its capital structure, especially when the firm’s ties are spread over structural holes.

Another approach to networks and capital structure attempts to combine the insights from both the closure and weak ties approaches by specifying what kind of network structures gain the advantages of both types of ties while minimizing their disadvantages. In this view, a network is a “portfolio of social relationships”
such that optimally structured networks obtain a balance of the different types of ties. This balanced mix draws out the mutually reinforcing properties of different ties, thereby making the contingent value of each type of tie highest to the network as a whole. On the one hand, organizations with networks of weak ties may find that they can effectively “shop” the market for financing opportunities but are comparatively ineffectual at gaining price concessions because their exchange partners will not accept the risk of collaboration without costly assurances. The absence of strong ties and closure in their networks decreases the chances that shared and enforceable norms will develop. On the other hand, networks of strong ties have high levels of trust and information exchange but are confined to provincial pools of knowledge of their enclosed network—limiting the organization’s access to new information about alternative financial structures. This suggests that firms maintaining a mix of weak and strong ties are best able to gain information exchange and bargaining benefits.

Consistent with this argument, Baker (1990) found that corporations that strategically adjusted their mix of transactional and relational ties with investment banks maximized their market power and efficiency. Similar patterns have been reported in industries as diverse as apparel and biotechnology and at the intersectoral level (Uzzi 1996; Talmud and Mesch 1997). Uzzi and Gillespie (forthcoming) found that firms consolidating some of their banking transactions but also maintaining weak ties to a few banks were least likely to be credit rationed and received the best rates on their loans. Firms with network ties to banks that were composed entirely of either weak ties or strong ties were most likely to be credit rationed and had high rates of interest on their loans. In the context of the capital structure puzzle, we expect mixed ego-network coupling to have a similarly beneficial effect on the cost of capital. The common recognition then across all these findings is that network-portfolios with a mix of strong and weak ties with outside capital suppliers generate greater potential for social capital than do networks with either a weak tie or strong tie structure. We expect that organizations with different mixes of network ties are likely to have significantly different orderings of capital structure.

Inseparability

A distinctive feature of the mid-market strata is the inseparability of the social and economic lives of the leaders of these organizations. RMs remarked frequently about the indistinguishable nature of the entrepreneur’s identity and the company’s identity. The source of this indistinguishability was due to the porosity of both the financial and social boundaries of these organizations and the lives of their managers/owners. RMs noted that differences in the company’s finances and the entrepreneur’s personal finances were in name only. A typical analogy used by RMs at several banks was that the “company’s money is in the right pocket and the entrepreneur’s money is in the left pocket, but the
pockets are in the same pair pants." Other RMs said, "It's like the amplification is turned up in entrepreneurial businesses, it's you and it's your business and they're one and the same."

Family ties were a key source of this porosity. Most businesses in this market are family owned, and we discovered a propensity for both the positive and negative relations in the family to get reproduced in the firm and for the business to be used to shape family dynamics. From the bank's perspective, the important issue is that the economics of the firm becomes embedded in social collaborations and conflicts that affect organizational performance in ways independent of the marketplace's competitive environment. Consequently, bankers become involved in extended family relations in the same way they become involved in the firm's financial health because these social factors affect expectations about economic transactions, even if separate from the economic sphere. One RM noted the following:

There's a whole host of dynamics that enter into decision making. It's something you wouldn't think... has to do with major business but... every combination of social issue is played out in economic form. They have children of unequal talents and the CEO of the company may be less talented than his children. Somebody doesn't want to give up stock and somebody does. Many entrepreneurs come to a point when they make a basic decision they're gonna run the company in the best interest of the family or the business.... Can't see that on a balance sheet or P&L. The marketplace hasn't changed. The competitive environment hasn't changed. That is the dynamic.

The propensity to introduce social relationships into bank-borrower transactions is facilitated in the mid-market by the high level of personal contact between the firm's CEO and an RM. In contrast to the new corporate level, ties between RMs and CEOs tend to be direct rather than spread across RM project teams within the bank's bureaucratic hierarchy (Figure 1). Moreover, RMs make both the assessment of creditworthiness decision and the lending decision.

Inseparability has two consequences for pecking orders. First, models of capital structure that aim to maximize the wealth of the corporation's owners can improve their specification by appreciating how information is embedded in social structure, particularly in the case of mid-market firms where the ownership of the corporation is less ambiguous than in large commercial enterprises. In this regard, social factors such as the power dynamics within the family or sibling rivalry or loyalty or commitment can be used as resources to manage information asymmetries. Consistent with this assumption, we found that a common practice used by RMs to reduce agency and information asymmetry problems was to build a close relationship with the spouse of the entrepreneur through entertaining and socializing. RMs often included their children if the entrepreneur and his or her spouse had children in order to expand the points of contact. RMs noted that these types of relationships help develop trust between RMs and entrepreneurs because the spouse is a source of information on the business and has decision-making
influence over the entrepreneur, given that the entrepreneur’s business actions affect their social life. Many bankers for example mentioned the importance of “pillow talk” between entrepreneurs and their spouses. From the banker’s perspective, if the spouse’s view is positive it can mean the difference in making a financing deal or not. Second, inseparability accentuates the dual nature of embeddedness. On the one hand, social relations can be used to facilitate exchanges by minimizing information asymmetries and agency problems. On the other hand, it can create new complexities because organizational events such as CEO succession, third party gossip, and family stability amplify both positive and negative consequences.

CONCLUSION

In this paper we reviewed the finance literature on the capital structure problem—how firms stratify their different sources of financial capital—and described how this problem involves consequential sociological questions about governance, organizations, and market stratification. As a first attempt to examine this problem, we sketched several arguments about how the organization’s network of exchange relationships to outside suppliers of capital affects the capital structure of the firm based on the embeddedness approach and our original fieldwork in mid-market banking. Our basic premise was that the configuration of network ties between an organization and its lenders, as well as the quality of the relationship between an organization and its lender, affect the observed pecking order in two ways. First, the typical pecking order predicted by economic models—family and friends, retained earnings, private or bank debt, and public or market debt—can be ordered depending on the firm’s embeddedness in the financial market. Thus, in contrast to financial theory, we do not argue that firms follow a preset hierarchy, always preferring source A to B and B to C. Instead, a firm’s ordering depends on the nature of the network of relationships to outside suppliers. Second, the embeddedness of the firm in financial relationships can affect the dispersion of capital sources within the tiers of the pecking order, an important question of stratification on which financial theory has been silent. Taken together, these approaches to the capital structure problem open to empirical and theoretical research the question of who transacts with whom, not just whether transactions get made.

We believe several propositions about the capital structure problem follow from our analysis and furnish a basis for future research. Several propositions relate to the structure of the firm’s network and follow from our discussion of social capital. We would expect the order of capital sources as well as the size of tiers to vary with the organization’s network of relationships. In markets where there are few institutional standards of financial reporting and credit verification, we expect interfirm networks to be most consequential in shaping the stability, sequence and size of a pecking order’s tiers. A number of propositions
that follow from our discussion of inseparability relate to how third parties and non-economic factors affect the capital structure. We expect the hierarchy of an organization’s pecking order to be more stable over time when the suppliers of capital to the organization and the organization share a relationship with a third party than when they do not share third party ties. We expect the stability, sequence, and size of an organization’s pecking ordering to change when there is a succession of leadership at the organization.

A number of questions remain to be answered. As we noted, the capital structure problem has several strands, each with a long history in finance. We tapered our analysis to mid-market banking because it is an important segment of capital markets that is under-researched and enables us to offer a framework of the middle range. While we approached the problem from the perspective of structural embeddedness, other sociological traditions could be usefully integrated with our own to further expand our understanding of the social dimensions of the capital structure problem. It would appear that economic necessity and the need to signal legitimacy could also play a role. Research on status in markets suggests that firms differentially adjust their level of borrowing and dependence on outside sources of capital depending on the status of the outside supplier of capital (Podolny 1993). Consequently, we might expect that the ordering of sources of capital might include more capital from well-known banks or equity holders than from retained earnings or family funds when the firm is trying to gain legitimacy outside its initial market—reversing the sequence of the pecking order. A next step would be to begin to integrate network methods with status arguments (Podolny 1993) and to look for conditions under which organizations are sensitive to status issues or to see how shifts in status influence the stability of ties. It would also be an addition to our preliminary framework, as well as to the finance literature, to analyze how institutions such as the Small Business Association and the Federal Reserve, which underwrite loans, influence pecking orders among firms with different ethnic, gender, and technical backgrounds. In this regard, future research should continue to apply the tools of structural sociology to problems that crosscut issues of stratification and power within financial markets.

ACKNOWLEDGMENTS

We thank Marc Ventresca, Steven Andrews, and David Knoke for their helpful comments on this chapter.

NOTES

1. A related model, the static tradeoff model, simplifies the ordering to two tiers, debt and equity, and argues that firms calculate a long-term target that optimizes their level of debt and equity financing (Modigliani and Miller 1958). Firms seek to move towards their target debt-to-value ratio, substituting debt for equity, or equity for debt, until the target is reached and value is maximized. According to the
static tradeoff model, firms are indifferent to the type of financing (e.g., loan, preferred stock, or commercial paper) and the entity that supplies the financing (e.g., bank, stock exchange, or close relative). Studies have found, however, that firms that are similar on the dimensions considered most central to setting the target ratio display different capital structures (Myers 1984) and adjust to target ratios at surprisingly slow speed (Whited 1992). Also, the static tradeoff model does not predict that firms prefer debt to equity, yet target ratios suggest that firms do—an observation more consistent with the standard pecking order model.

2. We note that there are several forms of inseparability besides family such as entrepreneurial ego, cultural scripts around gender and race, third party links, and so on (see Uzzi and Gillespie 1998). We focus on one form of inseparability here to illustrate the construct’s property in the banking market.

REFERENCES


Financial Structure


