

## FINANCIAL MARKETS, MONEY, AND BANKING

---

Lisa A. Keister

*Department of Sociology, Ohio State University, Columbus, Ohio 43210-1353;*

*e-mail: Keister.7@osu.edu*

**Key Words** banks, economic sociology, interlocking directorates, economic transition, inequality

■ **Abstract** The study of financial markets, money, and banking is largely considered the purview of economics. Yet sociologists have contributed greatly to understanding financial relations since the early history of the discipline. This review begins with an overview of classical sociological approaches to financial markets, money, and banking and then describes how research in these areas exploded in recent decades. I describe the current state of research on money, relations among firms and banks, and interlocking directorates. I consider the ways financial relations shape firm behaviors and processes, and I describe the growing body of work that treats financial markets as outcomes. I discuss research on the transformation of financial systems during transition from state socialism, and I conclude with a discussion of a growing literature that combines studies of financial markets and social stratification.

### INTRODUCTION

The study of financial markets, money, and banking has again begun to play a central role in sociological research. Simmel, Marx, and Weber all wrote important works on these subjects (Marx 1963, Simmel 1978, Weber 1927, 1978), but sociologists paid these topics little attention after Weber (Swedberg 1993). Between World War II and the late-1970s, only a handful of studies addressed issues related to finance (see, for example, Katona 1957, Lieberman 1961, Merrill & Clark 1934, Merrill & Palyi 1938, Parsons & Smelser 1956, Smelser 1959). Yet, Stinchcombe's *Economic Sociology* (1983), followed closely by Granovetter's (1985) work on embeddedness, began a revival of economic sociology as an important subfield. Since the early 1980s, the study of markets has become increasingly common in sociology, and the study of financial markets, in particular, has emerged as an enormously rich area of sociological research.

Research on financial markets and banking in sociology is diverse, but it is unified by the assumption that a financial market is a social system (Adler & Adler 1984, Baker et al. 1998, Mizruchi & Stearns 1994b). This research spans several major topical areas including studies of money, firms and relations among firms, markets as outcomes in their own right, economic development, transitions from state socialism, and social stratification. Underlying research in each of these areas,

however, is the notion that financial relations are social relations and that a financial market is a structure of ongoing and relatively stable exchange ties among buyers and sellers of financial resources.

In this chapter, I survey sociological research on financial markets, money, and banking. I begin with a brief overview of classical sociological approaches to these subjects, but I focus on modern treatments and more current research. Excellent reviews have already explored research on economic sociology in general (Baron & Hannan 1994, Carruthers & Babb 2000, Swedberg 1990, 1991, Zelizer 2001a), sociological approaches to markets (Lie 1997, Swedberg 1994), and sociological studies of money and financial markets in particular (Baker & Jimerson 1992, Mizruchi & Stearns 1994b, Zelizer 2001b). My objective is to focus more exclusively on the study of financial markets and banking than is possible in a general review of research in economic sociology and to update the focus of previous reviews of research on financial markets. Although I do draw on research from outside sociology, I make no effort to comprehensively represent research from other disciplines.

## CLASSIC APPROACHES TO MONEY AND BANKING

Early sociologists clearly recognized that money has social meaning, and several excellent reviews detail the nature of early thinking in this area (Giddens 1990, Mizruchi & Stearns 1994b, Zelizer 1992, 1994, 2001b). Money is a medium of exchange that has value because members of a society agree that it has value (Tobin 1992). Prior to the development of paper money, market exchange occurred through barter. Money simplified the complexities inherent in negotiating barter relationships and, once its value became accepted, increased efficiency by allowing producers to specialize. Precious metals and other substances that had both use value and exchange value first replaced barter, and eventually paper money became the standard means of commodity exchange. As Mizruchi & Stearns (1994b) point out, the development of modern nation states that were willing to back the value of money was critical to the development of paper money as it is known today. However, it was not until 1863 that the United States adopted a single, unified currency and currency continued to be backed by its value in gold until 1968 (Zelizer 1994).

Among the early sociologists, Simmel (1978) was perhaps most concerned with money itself, and his work influenced both Marx and Weber (Turner 1986). Central to Simmel's discussions of money is the idea that the historical development of money economies in place of systems of barter was part of the movement from *gemeinschaft* to *gesellschaft* (a community based on personal or on impersonal relationships, respectively) relations. Thus, Simmel viewed money as both a cause and a consequence of the prevalence of more impersonal relations. For Simmel, money corrupts and completely transforms social bonds into impersonal, instrumental relations. Marx shared Simmel's perception of money as impersonal, but he emphasized the role that money plays in creating and maintaining alienation. He argued that money is an impersonal method of exchange that has power because it

allows people to control things they otherwise would not control and to be things they otherwise would not be (1963). According to Marx, money will increasingly pervade social life (1964) and create alienated social exchange (1973).

The difference between the use value and exchange value of money was also central to Weber's thinking. Weber (1978) emphasized the consequences of money, including increased indirect exchange, hoarding, the concentration of power, and the growth of debt relations. His notion of money is largely consistent with the notion of money used in neoclassical economics, but he was more somber in his writing about money than most economists. Weber wrote, for instance, that "money is the most abstract and 'impersonal' element that exists in human life. The more the world of the modern capitalist economy follows its own immanent laws, the less accessible it is to any imaginable relationship with a religious ethic of brotherliness" (1971:331).

Early sociologists also addressed issues related to financial markets and the organizations that operate within these markets. In even the earliest writing on financial markets and banking, sociologists conceptualized the market as a system of ongoing social interactions and banks as key intermediaries in these interactions. Yet sociologists also emphasized that the financial market is a source of power and an arena in which corporate control is created and played out (Mizruchi & Stearns 1994b). As a result of rapid economic expansion in the late nineteenth and early twentieth centuries, private bankers routinely supplied capital to entrepreneurs, which established private lenders as both powerful and central to financial markets in the United States and Europe (Lamoreaux 1991, 1994, Smelser 1959). This pattern raised interest among researchers in the concentration of power associated with capital and led many to express concern about the control that access to capital garnered (Bell 1960, Hilferding 1981, Lenin 1975, Weber 1978).

A related body of literature was spawned by Berle & Means' now-classic work on the separation of ownership and control of corporations. Berle & Means (1968) argued that as corporations began to issue stock to raise capital, individuals owned smaller shares in companies. As a result, ownership of the corporation was increasingly separated from the daily control of the firm, which was passed to managers. A number of important critiques of this work as well as studies defending the Berle & Means thesis emerged (Burch 1972, Kotz 1978, Lerner 1970, Zeitlin & Ratcliff 1988). Critics charged that stock dispersal allowed banks to control corporations (Allen 1976), while studies such as Lerner's (1970) investigation of the largest U.S. companies showed that no single owner controlled more than 10% of a company's stock. The resulting literature fueled interest in corporate governance and the role of banks in the governance of firms (see below).

## MONEY

Sociological research following World War II paid almost no attention to money, financial markets, and banking. An important exception is Parson & Smelser's (1956) attempt in *Economy and Society* to define economic sociology as a subfield.

In this work, Parsons & Smelser viewed money as a mediator between production and exchange, but they also emphasized that money is a cultural object (pp. 106–7) with unique social functions (p. 71). Reminiscent of Weber's distinction between class and status was their point that money has both purchasing power and social meaning. They observed that historically the development of currency was necessarily associated with the erosion of self-sufficient forms of production and the advent of the division of labor. Extending these ideas beyond Weber and foreshadowing Zelizer's arguments that multiple monies are central to advanced capitalist economies, Parsons & Smelser also identified different types of money and defined these in relation to boundaries among various subsystems in the economy.

Indeed Zelizer's work on multiple monies and the social meaning of money has provided the basis for the bulk of recent microlevel research on money in sociology (Zelizer 1993, 1994, 1998). Zelizer's work is unique in its focus on the content of relations and the process by which people encounter and interact with economic processes (1979, 1987). She argues that money is neither culturally neutral nor socially anonymous. Rather, in advanced capitalist economies money has multiple meanings, depending on the nature of the social context in which it is used (1993:197). Zelizer (1994) explored the earmarking of money and the changing nature of money given its context, and she argued that the way money is used also contributes to its meaning. For instance, the recipient of a birthday check is not expected to buy groceries with it. Zelizer (forthcoming-a) ties her own work directly to Smelser's when she proposes an answer to one of Smelser's early questions: How do new forms of differentiation arise and how do they change? Attesting to the similarity of their work, Zelizer finds that the answer lies in the fact that culturally embedded people invent new commercial circuits that fit the needs of the context.

In her recent work, Zelizer has begun to explore in greater depth the meaning of money in intimate relations. She explores the conditions under which people combine intimacy and monetary transactions and concludes that monetary transfers within intimate relations cannot be reduced to another form of market exchange, to the expression of cultural values, or to the product of coercion and power differentials (2000, forthcoming-b). Rather, she decides that people "pour unceasing effort into distinguishing qualitatively different social relationships—including their most intimate ties—from each other by means of well-marked symbols, rituals, and social practices" (2000). Consistent with her former research, Zelizer concludes that in intimate ties, forms of payment distinguish the nature and breadth of relations in which people are engaged.

The work that Carruthers and his co-authors have done on culture and money is similar to Zelizer's work in its microlevel orientation. Carruthers & Espeland (1991) address claims that double-entry bookkeeping increased rationality and furthered the development of capitalist modes of production. They argue that while this accounting method may have increased rationality, the rhetorical side of double entry is also important. In a piece that addresses the social meaning of money more directly, Carruthers & Babb (1996) argue that because people attribute value to a

medium whose physical traits are unrelated to its worth, money is most effective when it is taken for granted. Carruthers & Espeland (1998) are even more similar to Zelizer in their starting point when they argue that the meaning of money is defined by how it is used. Carruthers & Espeland move beyond Zelizer's work, however, to develop a set of systematic ideas for the study of money that incorporate both the origin and destination of the currency. Opportunities for extending and testing these ideas are abundant both historically and in modern conceptions and uses of money.

A related stream of literature with a more macrolevel orientation is Baker's work on the sources of money and its distribution across relations. Baker (1987) asks a question that recalls Zelizer & Carruthers' work on the meaning of money: What is money? But Baker's answer is structural rather than cultural. He emphasizes that a financial market is a social structure defined by interactions among the actors in the market, and he explores power differentials among nongovernmental financial institutions, financiers, and other financial organizations. Baker argues that more powerful actors will be more central, or closer to the core of the network, while less powerful actors will tend to be more peripheral. As a consequence, he proposes that the assets used by those in the core are closest to money. This proposal holds empirically in Baker's test, and these ideas have the potential to inform understanding of the meaning of money in other contexts as well. Baker himself has used a similar notion to understand the euro and the European cultural divide, and similar extensions in other contexts would contribute to a refined and more precise sociological understanding of money (2000).

## FIRMS, BANKS, AND INTERLOCKS

Interest in power and questions about corporate ownership and control have made the relationship between banks and firms one of the most active areas of sociological research related to financial markets. Earlier arguments that banks controlled corporations were questioned by scholars who observed the power managers appeared to have in directing daily operations (Mintz & Schwartz 1985). Mintz & Schwartz's model of financial hegemony, largely a response to these arguments, suggests that banks and other financial institutions have power because they shape the environment in which nonfinancial organizations function and because they reserve the right to intervene in corporate affairs even if they seldom do. Critics of this model have drawn on the widely accepted fact that firms have a "hierarchy of preferences" regarding borrowing and nearly universally prefer to use retained earnings before borrowing (Donaldson 1961, 1969, Myers 1984). This suggests that corporations are not forced to borrow from banks (Baran & Sweezy 1966); rather, they borrow to capitalize on interest rates, tax benefits, and other financial opportunities (Herman 1981, MacKie-Mason 1990, Modigliani & Miller 1963).

This controversy spawned a number of studies of the determinants of firm borrowing. Mizruchi & Stearns (1994a, 1993a,b) argued that firms will borrow when interest rates are low if borrowing is elective, but borrowing will be a function of the amount of cash the firm has available if borrowing is not discretionary.

Consistent with the latter, they have found that firms with high cash reserves borrow less than those with lower reserves at all interest rate levels. They find that firms borrow more when they have a representative of a financial institution on their board, suggesting that the firms' connections with banks are important. They also show that firms that share board members (particularly bank representatives) and other traits (such as CEOs with similar educational backgrounds) are likely to borrow similarly (1999). In a related study of firm capital structure, Baker (1990) demonstrated that the availability of external funds also shapes firm borrowing. He showed, for example, that firms use a number of investment banks to minimize dependence on a single source of funds. Yet as Mintz & Schwartz (1985) argued, it is difficult for corporations to remain independent of banks. Firms tend to rely on several financial institutions for financing, and because these banks typically interact with each other, firms cannot play them against each other.

While the related subject of interlocking directorates was studied from early in the twentieth century (Mizruchi & Stearns 1994b), research on overlapping board memberships did not expand rapidly until the 1970s. In the 1970s and 1980s, researchers showed that interlocks were pervasive and banks and other financial organizations were central to these interlocks (Allen 1978, Davis & Mizruchi 1999, Dooley 1969, Levine 1972, Mariolis 1975, Mintz & Schwartz 1981, Mizruchi 1982, Sonquist & Koenig 1975). An important controversy in this literature was, and still is, whether bank centrality in interlocks necessarily implies power. In the resource dependence view, banks have power because they control resources (Pfeffer 1987, Pfeffer & Salancik 1978). This perspective also anticipates that the firm will try to co-opt the source of the resources to reduce dependence, although this may actually reduce independence because the two organizations then share interests.

Recent evidence suggests that the centrality of banks in corporate interlocks declined precipitously between the early 1980s and the mid-1990s as large firms began to rely less on commercial banks for capital (Davis & Mizruchi 1999). Debate about the influence these ties have on firm outcomes is also the subject of continued debate. Some critics contend that interlocks are not influential because boards of directors actually do little (Galbraith 1967, Herman 1981, Mace 1971). Others point out that ties broken through death or retirement are seldom replaced or reconstituted, suggesting that the interlocked firms are not invested in the relation (Koenig et al. 1979, Ornstein 1980, Palmer 1983, Palmer et al. 1983). Still others have argued that what is more interesting than interlocks with banks is the process by which firms construct strategic choices. The focus should, therefore, be on what the firm does (Fligstein & Brantley 1992).

Acknowledging that firms began to rely less on commercial banks for capital in the 1980s and 1990s gave rise to research on the sources of firm finance. An extensive body of literature in economics documents changes in business finance over the life cycle of the firm (see Berger & Udell 1998 for a thorough overview). This research documents that firm size, age, and access to information shape the sources of firm finance. Very small firms rely on insider finance and angel finance (from high net worth individuals who provide direct funding to new businesses).

For medium-sized firms, venture capital (provided through more formal channels than angel finance) is more common, and larger firms with known track records rely on public equity. From the early stages of firm formation, trade credit and other forms of capital are also important. Berger & Udell (p. 623) illustrate the combinations of capital types that appear across the firm life cycle. Sociologists have begun to contribute in important ways to research on the acquisition of each of these forms of credit, demonstrating, for instance, that firms respond differently to uncertainty depending on its source (Podolny 2001), that firms vary in their experience of the liability of newness (Sacks 2002), and that there are important differences in the institutionalization of financing practices (Suchman 1995) in the venture capital industry. Sociologists have also made important contributions to understanding the acquisition of trade credit (Uzzi & Gillespie, forthcoming) and use of rotating credit associations (see Biggart 2001 for an excellent review).

## FINANCIAL RELATIONS AND FIRM OUTCOMES

While there are many unresolved debates in research on interlocking directorates, there is considerable evidence that interlocks, particularly those involving banks, shape a number of firm outcomes. Highly indebted firms or firms with declining profits appoint more bankers to their boards (Dooley 1969, Lang & Lockhart 1990, Mizruchi & Stearns 1988, Pfeffer 1972, Richardson 1987). Banks whose officers are central to social networks make broader investments than those whose officers are not as well connected (Ratcliff 1980). The type of financial institution on a firm's board affects the firm's capital structure (Stearns & Mizruchi 1993a,b). Firms that share a director make similar political contributions (Mizruchi 1992), and sharing a director increases the propensity that firms will adopt similar takeover strategies or engage in takeovers themselves (Davis 1992, Davis & Greve 1997, Haunschild 1994). Critics charge that it is difficult to decipher cause and effect in these relations. For example, greater debt may lead to more interlocking with banks wanting to track management behavior rather than the interlocks shaping the debt (Fligstein & Brantley 1992). However, recent studies have shown that some of the empirical controversy surrounding the effect of interlocks could be resolved if they are studied as spatial phenomena, distinguishing local from nonlocal (Kono et al. 1998), or in countries where interlocks are less likely to form because a firm is in financial decline (Keister 1998a, Meeusen & Cuyvers 1985).

Aside from the role that interlocking directorates may play, financial relations shape firm outcomes in other important ways. Several studies, for instance, have examined the effect of financial institutions on firm strategies and structures. Early research held that banks are deliberately confrontational with firms because the banks have an interest in controlling corporations, while the corporations seek to reduce dependence on banks (Mintz & Schwartz 1985, Mizruchi & Stearns 1994b). One potential by-product of this relationship is that while firms prefer to make decisions about allocating funds within the corporation, banks may attempt to determine which subsidiaries of a corporation receive credit. Some have argued

that banks might actually invite corporations to create conglomerates for a couple reasons (Kotz 1978). First, conglomerates may lessen competition in an industry and increase the borrower's profits, and second, the creation of the conglomerates can increase the value of the bank's stocks. Yet empirical evidence suggests that firms whose stocks are largely controlled by banks are actually less likely to adopt the multidivisional form than those controlled by managers (Palmer et al. 1987, 1993). Among late adopters, as well, management-controlled firms are more likely than bank-controlled firms to adopt the multidivisional form (Palmer et al. 1993).

Financial institutions also affect mergers and takeovers. While early studies found no effect of bank interlocks on ownership or merger activity in the 1970s (Fligstein & Brantley 1992), more recent research shows that the likelihood of acquisition is a function of the firm's dependence, the positions of its managers and directors in the ownership structure, and the overall structure of the business elite (Palmer et al. 1995). Perhaps most interesting, firms with bank interlocks are more likely to be taken over in a friendly, rather than predatory, way (Palmer et al. 1995). Critics argue that this work may show the importance of economic and resource dependence influences in mergers, but that the evidence does not demonstrate the importance of an interlocked elite (Fligstein 1995). In a similar debate, Fligstein & Markowitz (1993) found that firms with bank officers on their boards were more likely to be merger targets and that firms seek bank officers to fill board seats to encourage a sale of the firm when it is in financial trouble. Yet Davis & Stout (1992) found no relation between bank interlocks and the risk of takeover. Similarly, Davis et al. (1994) found that institutional ownership did not influence merger activity, but that it did reduce the rate of conglomerate acquisitions. Both data and timing issues explain these differences, reflecting changes in the role of banks and institutional investors over time (1994b).

A growing body of literature demonstrates the role of financial market networks in other firm behaviors. Uzzi & Gillespie (1999), for example, show that capital structure can change given a firm's network ties. They demonstrate that firms with both embedded and arm's length ties in their network of bank relations increase their likelihood of getting a loan, reduce the interest rates they pay, have less collateral taken, and pay larger spreads on their loans (Uzzi 1999, Uzzi & Lancaster 2001b). Firms with embedded ties to their bankers are also more likely to take profitable early-payment trade discounts and to avoid costly late-payment penalties (Uzzi & Gillespie, forthcoming).

## FINANCIAL MARKETS AS OUTCOMES

As Baker et al. (1998) observed, sociologists tend to assume that markets exist and seldom make the market itself the subject of inquiry. Barber (1977) called this the absolutization of the market. Sociologists study a number of phenomena that assume a financial market such as interfirm competition (Baum & Mezias 1992, Burt 1992, Carroll & Hannan 1989), firm births and deaths (Hannan & Freeman 1986, 1989), entrepreneurship (Aldrich 1999, Thornton 1999), and innovation



(Powell et al. 1996, Rogers 1995, van de Ven & Garud 1987). Sociologists have also contributed to understanding nonmarket ties, such as long-term interfirm alliances, or ties that develop and work because they supersede and thus avoid the market (Granovetter 1995, Gulati 1995b, Keister 2000a, Powell et al. 1996). White's (1981) theory of the market does treat the market as an outcome. In this theory, which distinguishes production from exchange markets, buyers in aggregate value their total array of purchases. The theory has not spawned as much research as it might have, but recently scholars have begun to explore White's ideas empirically (Larson 2001).

Another important exception is Baker et al.'s (1998) study of the continuity and dissolution of market relations. This study explicitly defines the market as an "in-tertemporal process of economic exchange between buyers and sellers" (p. 150) and proposes an explanation of the conditions under which interfirm rules of exchange are followed, not followed, transgressed, or transformed. The authors show that these outcomes are a function of power, competition, and institutional forces. While not explicitly a theory of financial markets, the value of this model to understanding the emergence and transformation of financial relations is great, and possibilities for extending the model to other organizations, contexts, and times are substantial.

A related, and growing, body of literature seeks to explain markets by identifying the determinants of interfirm relations, including financial relations. Experimental research shows that when uncertainty is high, partners in dyadic exchange relations continue to trade even when lower prices are available elsewhere (Kollock 1994, Lawler & Yoon 1993, 1996). Empirical research on firms also shows that when uncertainty is high, managers trade with those they dealt with successfully in the past to avoid malfeasance and opportunism (Hagen & Choe 1998, Powell 1990). They also target firms with whom their partners are connected because they can more easily ascertain information about the trustworthiness and reliability of these potential partners (Gulati 1995a, Rousseau et al. 1998, Sitkin et al. 1998). Once a set of relations has coalesced into a relatively stable network, the network serves as a source of information on the reliability, competencies, and needs of potential trade partners (Gulati 1995b, Gulati & Gargiulo 1999, Gulati & Zajac 2000, Keister 2001). There is also evidence that firms will pay a relatively significant cost to trade with a known partner when uncertainty is high (Keister 2001).

Similarly, bankers rely on colleagues with whom they are strongly tied for advice and support when uncertainty is high. Yet transactions in which bankers use relatively sparse approval networks are more successful than those involving dense approval networks. This creates an important paradox: the tendency to rely on those they trust creates conditions that render deals less successful than they might otherwise be (Mizruchi & Stearns 2001). Somewhat contrary to other research in this area, Baker & Faulkner (2001) explore the use of within-network exchange (using preexisting social ties with a sales representative as the basis of a financial exchange) and search embeddedness (using preexisting social ties with a prior investor). They find that only half of investors used prior social ties while the other half invested large sums of money with strangers without the advice of prior

investors. The surprising finding suggests that more research is needed to specify the conditions under which networks are used.

One approach that might hold some clues is qualitative research on financial market processes. Abolafia (1996) uses field research to examine how insiders negotiate a constant tension between short-term self-interest and long-term self-restraint in stock, bond, and futures markets. Smith (1981, 1999) uses similar methods to study the psychology of Wall Street insiders by classifying types of actors such as the efficient-markets believers and transformational-idea adherents. Similarly, Levin (2001) uses ethnographic data collected on the trading floor of a midwestern commodities exchange to investigate the salience of gender in the workplace. Each of these pieces offers insight that could enlighten future theory development about market processes and could guide additional empirical work on the origin and functioning of financial markets.

Another way in which financial markets become outcomes in sociological research is when researchers problematize changes in the market over time. The rise of the institutional investor has attracted attention in recent years (Mizruchi & Stearns 1994b:327–28). Between 1965 and 1990, the proportion of the average firm's equity that is controlled by institutional investors increased from 18% to 47% (Useem 1993). There is evidence that institutional investors force firms to adopt strategies that are more shareholder oriented (Davis et al. 1994, Useem 1993). Institutional investors reduce rates of conglomerate acquisition (Davis et al. 1994) and shape how top management manages (Useem & Gottlieb 1990).

An important outcome of financial relations is the setting of prices. Sociologists have been interested in market crises for some time (Abolafia & Kilduff 1988, Kindleberger 1978, Mizruchi & Stearns 1994b:329). More recently, issues related to price setting outside of market crisis have attracted more attention. Baker (1984a,b) found that patterns of relations among traders on the floor of a securities exchange affected both the direction and magnitude of price volatility. Baker & Iyer (1992) generalized these findings to develop a mathematical model of financial markets as networks. This stylized model explores the way that patterns of financial relations affect price volatility and trading volume. Using the model, Baker & Iyer demonstrate that importance of network structure in shaping market behavior even where investors are homogenous and the information flowing through the system is random and unbiased. As Baker and his co-author observe (1992:323), this model could be usefully extended in a number of ways theoretically, empirically, and using simulation models. Indeed, researchers have been extending these ideas—not always explicitly, but the underlying ideas are similar.

Carruthers & Stinchcombe (1999) study the process by which heterogenous claims on income streams related to various assets become homogenous commodities understandable to buyers and sellers. The somewhat cognitive bent of their work is evident in their assertion that to understand this process, “one must account for what buyers, sellers, and market makers need to know about the homogeneity, in order to be willing to take the going price in an auction as all they can,

and all they need to, know about commodified claims on income streams” (p. 354). Uzzi & Lancaster (2001a) also observed that price formation can be understood as social, but their approach is more structural. They argue that the embeddedness of market transactions provides actors with information and informal governance benefits that shape prices by adding unique value to transactions. These studies both highlight the important information that sociological theory might add to understanding prices and price formation and suggest that further research on prices could be very fruitful.

## FINANCIAL MARKETS DURING ECONOMIC TRANSITION

The role that financial institutions play in economic development has attracted attention from economists and a handful of sociologists for decades (Cameron 1972, Cameron et al. 1967, Lamoreaux 1986, Levine 1997, Makler 2001). Sociologists have largely explored how social relations and long-term interfirm alliances allow firms to overcome market failure and to cope with poorly developed markets in these contexts. For example, an extensive literature on business groups has explored how nonmarket relations underlie many transactions, particularly financial transactions, in Asian and Latin American economies (Gerlach 1992, 1997, Granovetter 1995, Hamilton & Biggart 1988, Hamilton 1991, Keister 2000a, Lincoln et al. 1992). Social relations bind the firms in the groups (Granovetter 1995, Keister 1998c, 2001), and the groups, in turn, shape firm performance and other outcomes (Guillen 2000, Keister 1998c, forthcoming, Lincoln et al. 1996).

Recently, the development of financial markets in transition economies in Eastern Europe and China and of the East Asian financial crisis has raised interest to a new level among sociologists (Carruthers & Halliday forthcoming; Fox 1995; Keister 1998b, 2000a; Makler 2001). While this research explores a number of issues that are beyond the scope of this review, one area in which research is growing explores the development and transformation of financial arrangements. In both transition economies and economies that experienced a recent financial crisis, a central question is the degree to which firms rely on the state versus other sources for capital. In socialist economies, the state has monopolies in most industries, and firms interact with state officials by bargaining for resources. During transition, firms drastically reduce their reliance on state capital and begin borrowing from alternative external sources. This transformation of the state's relationship with firms is necessary to reduce state monopolies in most industries and to end the system of bargaining between the state and firms that can lead to soft budget constraints and undermine reform (Kornai 1986, Naughton 1992, Walder 1986). Restructuring the financial relationship between the state and firms also facilitates financial market development by increasing firm autonomy and creating incentives for firms to seek external funding (Walder 1995). In turn, a developed financial market encourages innovation and entrepreneurship (Dalzell 1987, Lamoreaux

**TABLE 1** The nature of firms in the survey**Firm characteristics (% of firms in the sample)**

<i>Ownership</i>		<i>Level of subordination</i>	
State-owned	54.13	Central ministry	6.25
Collective	29.00	Province	6.88
Stock	11.51	Municipality	49.75
Joint venture	2.63	County	7.38
Private	1.50	Other	29.75
Other	1.25		
<i>Firm location (province)</i>		<i>Firm age</i>	
Jiangsu	26.75	Less than 20 years	46.88
Sichuan	24.50	21–40 years	21.51
Jilin	25.38	Greater than 40 years	31.63
Shanxi	23.38		

*Source:* 2000–2001 survey of Chinese firms, funded by the National Science Foundation, National Bureau of Asian Research (NBR), and the Luce Foundation. Principal investigators include Mark Frazier, Lisa Keister, David Li, and Barry Naughton. The Chinese Academy of Social Sciences administered the survey to 800 companies, including 433 SOEs and 367 firms with other ownership structures (e.g., collectives, stock-owned, joint ventures, and privately owned companies).

1994), permits the efficient allocation of resources, facilitates privatization, and prevents capital flight (Demirgüç-Kunt & Levine 1996, Ratcliff 1980) (Table 1).

While firm borrowing from nonstate sources is critical to a large-scale economic transition, the degree to which this has actually occurred in the transition economies is uncertain because data are scarce. One exception is a recent study of firms in China. Table 1 presents basic characteristics of the firms included in the sample. Table 2 shows that Chinese firms have indeed begun to find other capital sources but that the financial transition has been slow and is far from complete. While markets were relatively local even a couple decades into China's reform, firms had definitely begun to acquire capital from a variety of sources. Because capital markets were slow to develop and because managers were relatively unfamiliar with market-based forms of acquiring capital (e.g., issuing public debt and trading on stock markets), the acquisition of capital from nonstate sources became common, but it did so slowly. Continued government regulation of some financial instruments and regional variations in opportunities to use certain instruments also shaped firm financial decisions. Reformers encouraged markets to form in certain regions before others, and special economic zones and special trade regions allowed markets for certain financial instruments to develop more quickly in some areas. As a result, some firms simply had access to capital markets earlier than others. Yet Table 2 shows that firms in this sample did begin to reduce their dependence on central government budget allocations and to acquire capital from other sources. Between 1994 and 1999, funds received from central and local governments declined considerably, while funds from other sources such as retained earnings grew rapidly. Debt issues, borrowing from other firms, investments

**TABLE 2** Percent of corporate funding from various sources

Source of capital	1994	1995	1996	1997	1998	1999
Central budget allocations	0.49	0.21	0.17	0.15	0.15	0.14
Local budget allocations	0.48	1.34	0.49	0.42	0.19	0.31
Bank loans	22.45	19.81	17.55	14.18	12.71	12.25
Public debt issues	0.25	0.03	0.07	0.01	0.01	0.00
Debt to other firms	1.15	0.27	0.28	0.48	0.40	0.58
Other firms' investment	0.63	1.02	0.91	0.83	0.67	0.67
Retained earnings	74.19	77.32	80.50	83.94	85.80	86.03
Other	0.36	0.00	0.03	0.07	0.07	0.02
Total	100	100	100	100	100	100

Source: 2000–2001 survey of Chinese firms (see Table 1 for details).

Note: Other sources include stocks and direct foreign investment or foreign bank loans.

received from other firms, and capital from other sources really have not become particularly significant sources of funding for this group of companies.

## FINANCIAL MARKETS AND INEQUALITY

The study of financial markets and the study of social stratification are typically considered separate subfields in sociology. Yet distributional outcomes of financial markets are at the heart of many studies of money and banking, and an important and growing body of literature directly studies these outcomes. Research on wealth necessarily explores the role of financial markets in creating and maintaining inequality. Because this literature has been reviewed elsewhere (Keister & Moller 2000, Spilerman 2000), I do not discuss it in detail. However, the particular role of financial markets in shaping wealth inequality is worth noting. Until the 1980s, Americans typically kept the majority of their wealth in housing and cash assets (Caskey & Peterson 1994, Keister 2000c). Tax incentives and the need for shelter encouraged families to first build home equity and use only excess savings to make other investments. As a result, only the wealthiest Americans owned stocks and other relatively risky financial assets. However, the increasing availability of mutual funds in the 1980s and 1990s made stock ownership much more common, and by the mid-1990s, stocks and other financial assets accounted for a much larger portion of Americans' portfolios, particularly if pensions invested in stocks are included (Keister 2000c).

During the 1980s and 1990s, the stock market boomed, and naturally, those who owned stocks experienced the benefits of this growth. Yet even though stock ownership has become more common, the ownership of financial assets is still much more concentrated than the ownership of other assets. As a result, only a small minority of the population actually enjoyed the economic growth of the

1990s. Racial differences in stock ownership, for instance, are pronounced (Conley 1999, Keister 2000b, Oliver & Shapiro 1995). While the average family kept 6.8% of their assets in stocks in the mid-1980s, white families (families with a white household head) kept 7.1% of their assets in stocks. In contrast, Hispanic families kept 2.2% of assets in stocks, and black families kept 0.9% in stocks. Thus, whites experienced the majority of the gains in the stock market boom (Keister 2000c).

Related to this is research that suggests that asset accumulation can help low-income families if they have access to the financial institutions and receive targeted financial education to promote saving (Beverly & Sherraden 1999, Keister 2000b). It is clear that minorities are less likely than whites to own a host of assets, are more likely to have debt, and are more likely to declare bankruptcy (Conley 1999, Keister 2000c, Keister & Moller 2000, Oliver & Shapiro 1995, Sullivan et al. 2000). There is some evidence that discrimination accounts for at least part of this difference. Conventional lenders neglect poor and minority communities, and these populations are served only by fringe institutions (Caskey 1994, Moulton 2000, 2001). There are also financial barriers to advancement that are evident in the difficulty minorities have becoming entrepreneurs because minorities are likely to receive lower capitalization (Bates 1997) and to face discrimination in bidding processes, lending, and supplier networks (Bostic & Lampani 1999, Feagin & Imani 1994, Uzzi 1991).

However, the degree to which discrimination accounts for racial differences in well-being is still the subject of heated debate, and discrimination in real estate lending has perhaps received the most attention (Turner & Skidmore 1999). Turner & Skidmore's collection of essays is an extremely thorough assessment of the evidence. The volume documents that discrimination in home mortgage lending takes two forms, differential treatment and disparate impact. It also demonstrates that in many cases it is difficult, if not impossible, to disentangle the two. The studies provide evidence that loan officers give minorities less information about loan products, spend less time with them, quote them higher interest rates, and deny them loans more often than whites. Some of these differences may be attributable to legitimate underwriting standards, and the authors acknowledge that it is difficult to demonstrate with certainty that discrimination is the cause. Yet the volume also demonstrates that there is considerable room for additional research into these important questions. In particular, additional evidence exploring the role of advertising, outreach, referrals, and loan administration would perhaps improve understanding of the causes of differences in lending.

## ASSOCIATIONS AND OVERLAPS: CONNECTIONS AMONG THESE LITERATURES

As this review demonstrates, research on financial markets and banking in sociology is diverse, but the streams of literature that comprise this subfield are inter-related in important ways. Perhaps the most important association among these literatures is the common assumption that systems of financial relations are social

structures. That is, nearly all sociological research on money, financial markets, and banking at least implicitly assumes that financial relations are social relations. This does not imply that there are no boundaries around the subject. Rather it suggests that sociologists can (and do) usefully inform studies of a subject most often associated with another discipline. Because of the unifying assumption underlying research in this area, sociologists in the major topical areas discussed above usefully extend knowledge about social interaction developed in other subfields of the discipline to improve understanding of banking and finance. Likewise, findings from the study of financial markets are now being extended in useful ways to other domains within sociology.

In addition to drawing on a common set of assumptions, the broad subfields within the study of money, financial markets, and banking inform each other in important ways. Those who conceive of money, for example, in terms of social relations (Baker 1987) also explore the network characteristics of financial markets (Baker 1990, Mizruchi 1992). Sociological definitions of money, which usually include some notion that money is neither culturally neutral or socially anonymous (Zelizer 1993, 1994), also influence to a large degree the types of questions sociologists chose to address within the study of financial markets and banking. Sociologists are more inclined, for example, to study issues of power and influence, interfirm relations, and the importance of uncertainty given their shared notion of money as social. Of course, as the range of topical areas included here suggests, there is room for integrating these disparate issues even further. Exploring the effect that different conceptions of money have on studies of financial markets would be an interesting first step. Similarly, research on the intersection of corporate power and the financial aspects of stratification would be informative.

## CONCLUSIONS

While banking and financial markets are still largely considered in the domain of economics, perhaps this review illustrates that sociologists are indeed contributing in very significant ways to understanding the nature of financial relations and related institutions. From classical writings about the nature of money and financial institutions to current research spanning the spectrum from firm-bank relations to banks in transition economies to the financial origins of inequality, it is clear that sociologists are contributing to understanding money, banking, and finance. This review opened with a discussion of classical works on these subjects. It then surveyed more current research on relations among firms and banks, interlocking directorates, and the effect of financial relations on firm outcomes. I then described two exciting and growing bodies of literature, one that treats financial markets as outcomes and another that extends many of these same ideas to understand the role that finance plays in economic transition. I concluded with a brief description of research that explores the distributional impact of financial markets. Given the large number of areas in which further research could be fruitful, it is clear that previous research on money, banking, and financial markets in sociology is foundational.

Building on this foundation will both challenge and advance sociology and simultaneously expand understanding of a set of institutions that is among the most critical components of all societies.

## ACKNOWLEDGMENTS

Research for this paper was supported by a National Science Foundation Faculty Early Career Development award. I am grateful to Wayne Baker, Nicole Biggart, Bruce Carruthers, Josh Dubrow, Michael Loundsbury, Jin Lu, Mark Mizruchi, Michael Sacks, Brian Uzzi, Marc Ventresca, Viviana Zelizer, and an anonymous reviewer for comments and assistance gathering papers and other materials for this chapter.

The *Annual Review of Sociology* is online at <http://soc.annualreviews.org>

## LITERATURE CITED

- Abolafia, MY. 1996. *Making Markets: Opportunism and Restraint on Wall Street*. Cambridge, MA: Harvard Univ. Press
- Abolafia MY, Kilduff M. 1988. Enacting market crisis: the social construction of a speculative bubble. *Admin. Sci. Q.* 33:177-193
- Adler P, Adler P. 1984. *Social Dynamics of Financial Markets*. Greenwich, CT: JAI
- Aldrich HE. 1999. *Organizations Evolving*. Thousand Oaks, CA: Sage
- Allen MP. 1976. Management control in the large corporation: comment on Zeitlin. *Am. Sociol. Rev.* 81:885-94
- Allen MP. 1978. Economic interest groups and the corporate elite structure. *Soc. Sci. Q.* 58: 597-615
- Baker WE. 1984a. Floor trading and crowd dynamics. In *The Social Dynamics of Financial Markets*, ed. P. Adler, P. Adler. Greenwich, CT: JAI
- Baker WE. 1984b. The social structure of a national securities market. *Am. J. Sociol.* 89:775-811
- Baker WE. 1987. What is money?: a social structural interpretation. In *Intercorporate Relations: The Structural Analysis of Business*, ed. M.S. Mizruchi, M. Schwartz, pp. 109-44. New York: Cambridge Univ. Press
- Baker WE. 1990. Market networks and corporate behavior. *Am. J. Sociol.* 96:589-625
- Baker WE. 2000. The widening cultural divide. *Univ. Mich. Ctr. for Soc. Econ. Policy Newslett.* <http://www.bus.umich.edu/cse/pdf/baker.pdf>
- Baker WE, Faulkner RR. 2001. Markets without networks. Work. pap. Univ. Mich. Bus. Sch.
- Baker WE, Faulkner RR, Fisher GA. 1998. Hazards of the market: the continuity and dissolution of interorganizational market relationships. *Am. Sociol. Rev.* 63:147-77
- Baker WE, Iyer AV. 1992. Information networks and market behavior. *J. Math. Sociol.* 15:305-32
- Baker WE, Jimerson JB. 1992. The sociology of money. *Am. Behav. Sci.* 35:678-93
- Baran PA, Sweezy PM. 1966. *Monopoly Capital*. New York: Monthly Rev.
- Barber, B. 1977. Absolutization of the market. In *Markets and Morals*, ed. G. Dworkin, G. Bermant, P. Brown. Washington, DC: Hemisphere
- Baron JN, Hannan MT. 1994. The impact of economics on contemporary sociology. *J. Econ. Lit.* XXXII:1111-46
- Bates T. 1997. Unequal access: financial institution lending to black- and white-owned small business start-ups. *J. Urban Affairs* 19:487-95
- Baum JAC, Mezas SJ. 1992. Localized



- competition and organizational failure. *Admin. Sci. Q.* 37:580-604
- Bell D. 1960. *The End of Ideology*. New York: Collier
- Berger AN, Udell G. 1998. The economics of small business finance: the roles of private equity and debt markets in the financial growth cycle. *J. Banking Finance* 22:613-73
- Berle AA, Means GC. 1968. *The Modern Corporation and Private Property*. [originally published in 1932]. New York: Harcourt, Brace & World
- Beverly SG, Sherraden M. 1999. Institutional determinants of saving: implications for low-income households and public policy. *J. Socio-Econ.* 28:457-73
- Biggart NW. 2001. Banking on each other: the situational logic of rotating savings and credit associations. *Adv. Qualit. Org. Res.* 3:129-52
- Bostic RW, Lampani KP. 1999. Racial differences in patterns of small business finance: the importance of local geography. In *Business Access to Capital and Credit*, ed. J.L. Blanton, A. Williams, S.L.W. Rhine, pp. 97-118. Washington, DC: Fed. Reserve Board of Governors
- Burch PH Jr. 1972. *The Managerial Revolution Reassessed*. Lexington, MA: D.C. Heath
- Burt RS. 1992. *Structural Holes: The Social Structure of Competition*. Cambridge, MA: Harvard Univ. Press
- Cameron R, ed. 1972. *Banking and Development: Some Lessons of History*. Washington, DC: World Bank
- Cameron R, Crisp O, Patrick HT, Tilly R. 1967. *Banking in the Early Stages of Industrialization: A Study in Comparative Economic History*. New York: Oxford Univ. Press
- Carroll GR, Hannan MT. 1989. Density dependence in the evolution of populations of newspaper organizations. *Am. Sociol. Rev.* 52:524-41
- Carruthers BG, Babb S. 1996. The color of money and the nature of value: greenbacks and gold in postbellum America. *Am. J. Sociol.* 101:1556-91
- Carruthers BG, Babb SL. 2000. *Economy/Society: Markets, Meanings, and Social Structure*. Thousand Oaks, CA: Pine Forge
- Carruthers BG, Espeland WN. 1991. Accounting for rationality: double-entry bookkeeping and the rhetoric of economic rationality. *Am. J. Sociol.* 97:31-69
- Carruthers BG, Espeland WN. 1998. Money, meaning, and morality. *Am. Behav. Sci.* 41:1384-88
- Carruthers BG, Halliday TC. Forthcoming. Institutionalizing creative destruction: predicable and transparent bankruptcy law in the wake of the East Asian financial crisis. In *Neoliberalism and Institutional Reform in East Asia*, ed. M. Woo-Cumings. Ithaca, NY: Cornell Univ. Press. Forthcoming
- Carruthers BG, Stinchcombe AL. 1999. The social structure of liquidity: flexibility, markets, and states. *Theory Soc.* 28:253-382
- Caskey JP, Peterson A. 1994. Who has a bank account and who doesn't: 1977 and 1989. *East. Econ. J.* 20:61-73
- Caskey R. 1994. *Fringe Banking: Check-cashing Outlets, Pawnshops, and the Poor*. New York: Sage Found.
- Conley D. 1999. *Being Black, Living in the Red: Race, Wealth and Social Policy in America*. Berkeley, CA: Univ. Calif. Press
- Dalzell RF. 1987. *Enterprising Elite: The Boston Associates and the World They Made*. New York: Norton
- Davis GF. 1992. Agents without principles? The spread of the poison pill through the intercorporate network. *Admin. Sci. Q.* 36:583-613
- Davis GF, Diekmann KA, Tinsley CH. 1994. The decline and fall of the conglomerate firm in the 1980s: the deinstitutionalization of an organizational form. *Am. Sociol. Rev.* 59:547-70
- Davis GF, Greve HR. 1997. Corporate elite networks and governance changes in the 1980s. *Am. J. Sociol.* 103:1-37
- Davis GF, Mizruchi MS. 1999. The money center cannot hold: commercial banks in the U.S. system of corporate governance. *Admin. Sci. Q.* 44:215-39

- Davis GF, Stout SK. 1992. Organization theory and the market for corporate control: a dynamic analysis of the characteristics of large takeover targets: 1980–1990. *Admin. Sci. Q.* 37:605–33
- Demirgüçs-Kunt A, Levine R. 1996. Stock market development and financial intermediaries: stylized facts. *World Bank Econ. Rev.* 10:291–322
- Donaldson G. 1961. *Corporate Debt Capacity*. Boston: Grad. Sch. Bus., Div. Res., Harvard Univ.
- Donaldson G. 1969. *Strategy for Financial Mobility*. Boston: Grad. Sch. Bus., Div. Res., Harvard Univ.
- Dooley PC. 1969. The interlocking directorate. *Am. Econ. Rev.* 59:314–23
- Feagin JR, Imani N. 1994. Racial barriers to African American entrepreneurship: an exploratory study. *Soc. Prob.* 41:562–84
- Fligstein N. 1995. Comment: power networks or finance conception control? *Am. Sociol. Rev.* 60:500–3
- Fligstein N, Brantley P. 1992. Bank control, owner control, or organizational dynamics: Who controls the large modern corporation? *Am. J. Sociol.* 98:280–307
- Fligstein N, Markowitz L. 1993. The finance conception of the corporation and the causes of the financial reorganization of large American corporations, 1979–1988. In *Sociology and Social Policy*, ed. W.J. Wilson. Beverly Hills, CA: Sage
- Fox JD. 1995. Finance capital and the state: an analysis of ownership and control of large corporations in an East Asian newly industrializing country. *Sociol. Inquiry* 65:339–64
- Galbraith JK. 1967. *The New Industrial State*. New York: New Am. Library
- Gerlach ML. 1992. *Alliance Capitalism: The Social Organization of Japanese Business*. Berkeley, CA: Univ. Calif. Press
- Gerlach ML. 1997. The organizational logic of business groups: evidence from the Zaibatsu. In *Beyond the Firm: Business Groups in International and Historical Perspective*, ed. T. Shiba, M. Shimotani, pp. 245–73. New York: Oxford Univ. Press
- Giddens A. 1990. *The Consequences of Modernity*. Stanford, CA: Stanford Univ. Press
- Granovetter M. 1985. Economic action and social structure: the problem of embeddedness. *Am. J. Sociol.* 91:481–510
- Granovetter M. 1995. Coase revisited: business groups in the modern economy. *Indust. Cor. Change* 4:93–130
- Guillen MF. 2000. Business groups in emerging economies: a resource-based view. *Acad. Mgmt. J.* 43:362–80
- Gulati R. 1995a. Familiarity breeds trust? The implications of repeated ties for contractual choice in alliances. *Acad. Mgmt. J.* 38:85–112
- Gulati R. 1995b. Social structure and alliance formation patterns: a longitudinal analysis. *Admin. Sci. Q.* 40:619–52
- Gulati R, Gargiulo M. 1999. Where do interorganizational networks come from? *Am. J. Sociol.* 104:1439–93
- Gulati R, Zajac EJ. 2000. Reflections on the study of strategic alliances. In *Cooperative Strategy: Economic, Business and Organizational Issues*, ed. D.O. Faulkner, M.d. Rond, pp. 365–74. New York: Oxford Univ. Press
- Hagen JM, Choe S. 1998. Trust in Japanese interfirm relations: institutional sanctions matter. *Acad. Mgmt. Rev.* 23:589–600
- Hamilton G, Biggart NW. 1988. Market, culture, and authority: a comparative analysis of management and organization in the Far East. *Am. J. Sociol.* 94 (Suppl.):S52–S94
- Hamilton GG. 1991. *Business Networks and Economic Development in East and Southeast Asia*. Hong Kong: Ctr. Asian Stud., Univ. Hong Kong
- Hannan, MT, Freeman, J. 1986. The ecology of organizational founding: American labor unions 1836–1985. *Am. J. Sociol.* 92:910–43
- Hannan MT, Freeman J. 1989. *Organizational Ecology*. New York: Oxford Univ. Press
- Haunschild PR. 1994. Interorganizational imitation: the impact of interlocks on corporate acquisition activity. *Admin. Sci. Q.* 38:564–92

- Herman ES. 1981. *Corporate Control, Corporate Power*. New York: Cambridge Univ. Press
- Hilferding R. 1981 [1910]. *Finance Capital*. Trans. M Watnick, S Gordon. London: Routledge
- Katona G. 1957. *Business Looks at Banks*. Ann Arbor: Univ. Mich. Press
- Keister LA. 1998a. Engineering growth: business group structure and firm performance in China's transition economy. *Am. J. Sociol.* 104:404–40
- Keister LA. 1998b. Insider lending and economic transition: the structure, function, and performance impact of finance companies in Chinese business groups. In *Managing Organizational Change in Transition Economies*, ed. D. Dennison, pp. 13–36. Ann Arbor, MI: Lawrence Erlbaum
- Keister LA. 1998c. Social ties and the formation of Chinese business groups. *Sociol. Anal.* 2:99–118
- Keister LA. 2000a. *Chinese Business Groups: The Structure and Impact of Interfirm Relations During Economic Development*. New York: Oxford Univ. Press
- Keister LA. 2000b. Race and wealth inequality: the impact of racial differences in asset ownership on the distribution of household wealth. *Soc. Sci. Res.* 29:477–502
- Keister LA. 2000c. *Wealth in America*. New York: Cambridge Univ. Press
- Keister LA. 2001. Exchange structures in transition: a longitudinal study of lending and trade relations in Chinese business groups. *Am. Sociol. Rev.* 66:336–60
- Keister LA. Forthcoming. *Guanxi* in business groups: social ties and the formation of economic relations. In *Social Connections in China: Institutions, Culture, and the Changing Nature of Guanxi*, ed. T.B. Gold, D. Guthrie, D. Wank. New York: Cambridge Univ. Press. Forthcoming
- Keister LA, Moller S. 2000. Wealth inequality in the United States. *Annu. Rev. Sociol.* 26: 63–81
- Kindleberger CP. 1978. *Manias, Panics, and Crashes: A History of Financial Crises*. New York: Basic Books
- Koenig T, Gogel R, Sonquist J. 1979. Models of the significance of interlocking corporate directorates. *Am. J. Econ. Sociol.* 38:173–86
- Kollock P. 1994. The emergence of exchange structures: an experimental study of uncertainty, commitment, and trust. *Am. J. Sociol.* 100:313–45
- Kono C, Palmer D, Friedland R, Zafonte M. 1998. Lost in space: the geography of corporate interlocking directorates. *Am. Sociol. Rev.* 103:863–911
- Kornai J. 1986. The soft budget constraint. *Kyklos* 39:3–30
- Kotz DM. 1978. *Bank Control of Large Corporations in the United States*. Berkeley: Univ. Calif. Press
- Lamoreaux N. 1986. Banks, kinship, and economic development: the New England case. *J. Econ. Hist.* 46:647–67
- Lamoreaux N. 1991. Bank mergers in late nineteenth-century New England: the contingent nature of structural change. *J. Econ. Hist.* 3:537–57
- Lamoreaux N. 1994. *Insider Lending: Banks, Personal Connections, and Economic Development in Industrial New England*. New York: Cambridge Univ. Press
- Lang JR, Lockhart DE. 1990. Increased environmental uncertainty and changes in board linkage patterns. *Acad. Mgmt. J.* 33:106–28
- Larner RJ. 1970. *Management Control and the Large Corporation*. New York: Dunellen
- Larson E. 2001. Embedding brokers: an examination of market processes on the Suva stock exchange in relation to network—structural and social constructionist theories of markets. Work. pap. Univ. Minn.
- Lawler EJ, Yoon J. 1993. Power and the emergence of commitment behavior in negotiated exchange. *Am. Sociol. Rev.* 58:465–81
- Lawler EJ, Yoon J. 1996. Commitment in exchange relations: test of a theory of relational cohesion. *Am. Sociol. Rev.* 61:89–108
- Lenin VI. 1975 [1917]. *Imperialism: The*

- Highest Stage of Capitalism*. Peking: Foreign Lang. Press
- Levin P. 2001. Gendering the market: temporality, work, and gender on a national futures exchange. *Work Occup.* 28:112-30
- Levine JH. 1972. The sphere of influence. *Am. Sociol. Rev.* 37:14-27
- Levine R. 1997. Financial development and economic growth: views and agenda. *J. Econ. Lit.* 35:688-726
- Lie J. 1997. Sociology of markets. *Annu. Rev. Sociol.* 23:341-60
- Lieberson S. 1961. The division of labor in banking. *Am. J. Sociol.* 66:491-96
- Lincoln JR, Gerlach ML, Ahmadjian CA. 1996. *Keiretsu* networks and corporate performance in Japan. *Am. Sociol. Rev.* 61:67-88
- Lincoln JR, Gerlach ML, Takahashi P. 1992. *Keiretsu* networks in the Japanese economy: a dyad analysis of intercorporate ties. *Am. Sociol. Rev.* 57:561-85
- Mace M. 1971. *Directors: Myth and Reality*. Boston: Harvard Univ. Grad. Sch. Bus. Admin.
- MacKie-Mason JK. 1990. Do taxes affect corporate financing decisions? *J. Finance* 45: 1471-93
- Makler HM. 2001. Financial institutions in economic development. In *International Encyclopedia of the Social and Behavioral Sciences*, ed. N.J. Smelser, P.B. Baltes. Oxford: Elsevier
- Mariolis P. 1975. Interlocking directorates and control of corporations. *Soc. Sci. Q.* 56:425-39
- Marx K. 1963 [1844]. *Early Writings*, ed. T.B. Bottomore. New York: McGraw-Hill
- Marx K. 1964 [1844]. The power of money in bourgeois society. In *The Economic and Philosophic Manuscripts of 1844*. New York: Int. Publ.
- Marx K. 1973 [1858-1859]. *Grundrisse*. New York: Vintage
- Meeusen W, Cuyvers L. 1985. The interaction between interlocking directorships and the economic behavior of companies. In *Networks of Corporate Power*, ed. F.N. Stokman, R. Ziegler, J. Scott, pp. 137-56. Cambridge, England: Polity
- Merrill FE, Clark CD. 1934. The money market as a special Public. *Am. J. Sociol.* 39:626-36
- Merrill FE, Palyi M. 1938. The stock exchange and social control. *Am. J. Sociol.* 43:560-77
- Mintz B, Schwartz M. 1981. Interlocking directorates and interest formation. *Am. Sociol. Rev.* 46:851-69
- Mintz B, Schwartz M. 1985. *The Power Structure of American Business*. Chicago: Univ. Chicago Press
- Mizruchi MS. 1982. *The American Corporate Network, 1904-1974*. Beverly Hills, CA: Sage
- Mizruchi MS. 1992. *The Structure of Corporate Political Action: Interfirm Relations and their Consequences*. Cambridge: Harvard Univ. Press
- Mizruchi MS, Stearns LB. 1988. A longitudinal study of the formation of interlocking directorates. *Admin. Sci. Q.* 33:194-210
- Mizruchi MS, Stearns LB. 1994a. A longitudinal study of borrowing by large American corporations. *Admin. Sci. Q.* 39:118-40
- Mizruchi MS, Stearns LB. 1994b. Money, banking, and financial markets. In *The Handbook of Economic Sociology*, ed. N.J. Smelser, R. Swedberg, pp. 331-41. Princeton, NJ: Princeton Univ. Press
- Mizruchi MS, Stearns LB. 1999. Social networks, CEO background, and corporate financing: a dyadic analysis of similarity of borrowing by large U.S. firms, 1973-1993. Work. pap. Univ. Mich. Bus. Sch.
- Mizruchi MS, Stearns LB. 2001. Getting deals done: the use of social networks in bank decision making. Work. pap. Univ. Mich. Bus. Sch.
- Modigliani F, Miller MH. 1963. Taxes and the cost of capital: a correction. *Am. Econ. Rev.* 53:433-43
- Moulton L. 2000. Organizational links in the U.S. credit industry: how legal and technological changes affect market segmentation. Work. pap. Rutgers Univ.
- Moulton L. 2001. What is a good borrower?

- Human development with a business model in the U.S. credit industry. Work. pap. Rutgers Univ.
- Myers SC. 1984. The capital structure puzzle. *J. Finance* 39:575-91
- Naughton B. 1992. Hierarchy and the bargaining economy: government and enterprise in the reform process. In *Bureaucracy, Politics, and Decision Making in Post-Mao China*, ed. K.G. Lieberthal, D.M. Lampton, pp. 245-79. Berkeley: Univ. Calif. Press
- Oliver MO, Shapiro TM. 1995. *Black Wealth/White Wealth*. New York: Routledge
- Ornstein MD. 1980. Assessing the meaning of corporate interlocks: Canadian evidence. *Soc. Sci. Res.* 9:287-306
- Palmer D. 1983. Broken ties: interlocking directorates, and intercorporate coordination. *Admin. Sci. Q.* 28:40-55
- Palmer D, Friedland R, Jennings PD, Powers ME. 1987. The economics and politics of structure: the multidivisional form and the large U.S. corporation. *Admin. Sci. Q.* 32:25-48
- Palmer D, Friedland R, Singh JV. 1983. The ties that bind: organizational and class bases of stability in a corporate interlock network. *Am. Sociol. Rev.* 51:781-96
- Palmer D, Jennings PD, Zhou X. 1993. Late adoption of the multidivisional form by large U.S. corporations: institutional, political, and economic accounts. *Admin. Sci. Q.* 38:100-31
- Palmer D, Zhou X, Barber BM, Soysal Y. 1995. The friendly and predatory acquisition of large U.S. corporations in the 1960s: the other contested terrain. *Am. Sociol. Rev.* 60:469-99
- Parsons T, Smelser N. 1956. *Economy and Society*. New York: Free Press
- Pfeffer J. 1972. Size and composition of corporate boards of directors. *Admin. Sci. Q.* 17:218-28
- Pfeffer J. 1987. A resource dependence perspective on intercorporate relations. In *The Structural Analysis of Business*, ed. M.S. Mizruchi, M. Schwartz, pp. 25-55. New York: Cambridge Univ. Press
- Pfeffer J, Salancik GR. 1978. *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper & Row
- Podolny JM. 2001. Networks as the pipes and prisms of the market. *Am. J. Sociol.* 107:33-60
- Powell WW. 1990. Neither market nor hierarchy: network forms of organization. *Res. Org. Behav.* 12:295-336
- Powell WW, Koput K, Smith-Doerr L. 1996. Inter-organizational collaboration and the locus of innovation: networks of learning in biotechnology. *Admin. Sci. Q.* 41:116-45
- Ratcliff RE. 1980. Banks and corporate lending: an analysis of the impact of the internal structure of the capitalist class on the lending behavior of banks. *Am. Sociol. Rev.* 45:553-70
- Richardson RJ. 1987. Directorship interlocks and corporate profitability. *Admin. Sci. Q.* 32:367-86
- Rogers EM. 1995. *Diffusion of Innovations*. New York: Free Press. 4th ed.
- Rousseau DM, Sitkin SB, Camerer C. 1998. Not so different after all: a cross-discipline view of trust. *Acad. Mgmt. Rev.* 23:393-404
- Sacks MA. 2002. The social structure of new venture funding: stratification and the differential liability of newness. In *Research in the Sociology of Organizations*, ed. M. Lounsbury, M.J. Ventresca, London: JAI/Elsevier
- Simmel G. 1978 [1907]. *The Philosophy of Money*. Trans., ed. T. Bottomore Boston: Routledge & Kegan Paul. 2nd ed.
- Sitkin SB, Rousseau DM, Burt RS, Camerer C. 1998. Special topic forum on trust in and between organizations. *Acad. Mgmt. Rev.* 23:387-92
- Smelser N. 1959. *Social Change in the Industrial Revolution*. Chicago: Univ. Chicago Press
- Smith CW. 1981. *The Mind of the Market: A Study of Stock Market Philosophies, Their Uses, and Their Implications*. New York: Rowman & Littlefield
- Smith CW. 1999. *Success and Survival on Wall*

- Street: Understanding the Mind of the Market*. New York: Rowman & Littlefield
- Sonquist J, Koenig T. 1975. Interlocking directorates in the top U.S. corporations: a graph theory approach. *Insurgent Sociologist* 5:196–230
- Spilerman S. 2000. Wealth and stratification processes. *Annu. Rev. Sociol.* 26:497–524
- Stearns LB, Mizruchi M. 1993a. Corporate financing: social and economic determinants. In *Explorations in Economic Sociology*, ed. R. Swedberg, pp. 279–307. New York: Sage Found.
- Stearns LB, Mizruchi MS. 1993b. Board composition and corporate financing: the impact of financial institution representation on borrowing. *Acad. Mgmt. J.* 36:603–18
- Stinchcombe AL. 1983. *Economic Sociology*. New York: Academic Press
- Suchman MC. 1995. Localism and globalism in institutional analysis: the emergence of contractual norms in venture finance. In *The Institutional Construction of Organizations: International and Longitudinal Studies*, ed. WR Scott, C. Soren, pp. 39–63. Thousand Oaks, CA: Sage
- Sullivan TA, Warren E, Westbrook JL. 2000. *The Fragile Middle Class: Americans in Debt*. New Haven: Yale Univ. Press
- Swedberg R. 1990. *Economics and Sociology, Redefining their Boundaries: Conversations with Economists and Sociologists*. Princeton, NJ: Princeton Univ. Press
- Swedberg R. 1991. Major traditions of economic sociology. *Annu. Rev. Sociol.* 17:251–76
- Swedberg R. 1993. *Explorations in Economic Sociology*. New York: Sage Found.
- Swedberg R. 1994. Markets as social structures. In *The Handbook of Economic Sociology*, ed. N.J. Smelser, R. Swedberg, pp. 255–282. Princeton, NJ: Princeton Univ. Press
- Thornton PH. 1999. The sociology of entrepreneurship. *Annu. Rev. Sociol.* 25:19–46
- Tobin J. 1992. Money. In *The New Palgrave Dictionary of Money and Finance*, ed. P. Newman, M. Milgate, J. Eatwell, 2:770–78. London: Macmillan
- Turner BS. 1986. Simmel, rationalisation and the sociology of money. *Sociol. Rev.* 34:93–114
- Turner MA, Skidmore F, eds. 1999. *Mortgage Lending Discrimination: A Review of Existing Evidence*. Washington, DC: Urban Inst.
- Useem M. 1993. *Executive Defense: Shareholder Power and Corporate Reorganization*. Cambridge, MA: Harvard Univ. Press
- Useem M, Gottlieb MM. 1990. Corporate restructuring, ownership-disciplined alignment, and the reorganization of management. *Hum. Resource Mgmt.* 29:285–306
- Uzzi B. 1996. The sources and consequences of embeddedness for the economic performance of organizationals. *Am. Sociol. Rev.* 61:674–98
- Uzzi B. 1999. Embeddedness in the making of financial capital: how social relations and networks benefit firms seeking financing. *Am. Sociol. Rev.* 64:481–505
- Uzzi B, Gillespie JJ. 1999. Interfirm relationships and the firm's financial capital structure: the case of the middle market. *Res. Sociol. Org.* 16:107–126
- Uzzi B, Gillespie JJ. 2002. Knowledge spillover in corporate financing networks: embeddedness, network transitivity, and trade credit performance. *Strat. Mgmt. J.* Forthcoming
- Uzzi B, Lancaster R. 2001a. Legal changes: embeddedness and price formation in corporate law markets. Work. pap. Kellogg Sch. Manage., Northwestern Univ.
- Uzzi B, Lancaster R. 2001b. Social networks and knowledge transfer in debt markets: an embeddedness approach. *Work. pap.*
- van de Ven AH, Garud R. 1987. A framework for understanding the emergence of new industries. *Res. Technol. Innovation, Mgmt., Policy* 4:195–225
- Walder AG. 1986. *Communist Neo-Traditionalism: Work and Authority in Chinese Industry*. Berkeley: Univ. Calif.
- Walder AG. 1995. Local governments as industrial firms: an organizational analysis of China's transitional economy. *Am. J. Sociol.* 101:263–301
- Weber M. 1927 [1923]. *General Economic*

- History*. Trans. F.H. Knight. New York: Greenberg
- Weber M. 1971 [1946]. *The economic sphere*. In *From Max Weber: Essays in Sociology*, ed. H.H. Gerth, C.W. Mills. New York: Oxford Univ. Press
- Weber M. 1978 [1922]. *Economy and Society: An Outline of Interpretive Sociology*. Trans. E. Fischoff, et al., eds. G. Roth, C. Wittich. Berkeley: Univ. Calif. Press
- White HC. 1981. Where do markets come from? *Am. J. Sociol.* 87:517-47
- Zeitlin M, Ratcliff RE. 1988. *Landlords and Capitalists: The Dominant Class of Chile*. Princeton, NJ: Princeton Univ. Press
- Zelizer VA. 1979. *Morals and Markets: The Development of Life Insurance in the United States*. New York: Columbia Univ. Press
- Zelizer VA. 1987. *Pricing the Priceless Child: The Changing Social Value of Children*. New York: Basic
- Zelizer VA. 1992. Money. In *Encyclopedia of Sociology*, ed. E.F. Borgatta, M.L. Borgatta, pp. 1304-10. New York: Macmillan
- Zelizer VA. 1993. Making multiple monies. In *Explorations in Economic Sociology*, ed. R. Swedberg, pp. 193-212. New York: Sage Found.
- Zelizer VA. 1994. *The Social Meaning of Money*. New York: Basic
- Zelizer VA. 1998. The proliferation of social currencies. In *The Law of Markets*, ed. M. Callon, pp. 110-29. Oxford: Blackwell
- Zelizer VA. 2000. The purchase of intimacy. *Law Soc. Inquiry* 25:817-48
- Zelizer VA. 2001a. Economic sociology. In *International Encyclopedia of the Social and Behavioral Sciences*, ed. N.J. Smelser, P.B. Baltes. Oxford: Elsevier
- Zelizer VA. 2001b. Sociology of money. In *International Encyclopedia of the Social and Behavioral Sciences*, ed. N.J. Smelser, P.B. Baltes. Oxford: Elsevier
- Zelizer VA. Forthcoming-a. Circuits of Commerce. In *Self, Social Structure, and Beliefs: Explorations in the Sociological Thought of Neil Smelser*, ed. J. Alexander, G.T. Marx, C. Williams. Berkeley: Univ. Calif. Press
- Zelizer VA. Forthcoming-b. Intimate transactions. In *Economic Sociology for the Next Millennium*, ed. R. Collins, M. Guillen, P. England, M. Meyer. New York: Sage Found.