
MARK S. MIZRUCHI
Department of Sociology
University of Michigan
Ann Arbor, Michigan 48109-2590
(734) 764-7444

GERALD F. DAVIS
Michigan Business School
701 Tappan St.
Ann Arbor, Michigan 48109-1234
(734) 647-4737

May 2003


We thank Paul DiMaggio, Frank Dobbin, Gunter Dufey, and three anonymous reviewers for their helpful comments on an earlier draft of this paper. We also thank Donald Palmer for providing the director interlock data, the Undergraduate Research Opportunity Program at the University of Michigan for providing funds for the data collection, Princeton University for supporting the conference at which the paper was presented, and the Russell Sage Foundation for support in the final stages of writing and preparation.

ABSTRACT

Prior to 1960, only a handful of American commercial banks had any foreign operations. During the next 20 years, American banking became globalized; nearly every major bank established or expanded its overseas operations. In this paper, we argue that financial globalization is usefully examined as an organizational phenomenon, enacted by firms and their decision-makers, and thus susceptible to organizational analysis. Drawing on economic and sociological theory, we develop and test hypotheses to account for the establishment and expansion of foreign branches by a panel of the largest U.S. commercial banks during the 1970s and 1980s. Decisions to grow overseas operations were influenced by macro-economic conditions such as the cost of capital, stage of the business cycle, and Federal monetary policy, as well as by the banks’ positions in interfirm social networks. The overseas expansion of U.S. banking was largely complete by 1980, and since then commercial bank lending has declined substantially relative to foreign direct investment and cross-border portfolio flows. Once again, international banking is the domain of a small handful of U.S. banks. We conclude with a discussion of the decline of American commercial banking in the context of contemporary globalization.
The ongoing debates over globalization highlight the inextricable link between political economy, finance, and the management of corporations. From protests at the World Trade Organization meeting in Seattle to governmental interventions in cross-border hostile takeovers in Europe, politics and the governance and management of corporations are intertwined. At the center of this nexus are capital flows and how they are channeled. The 1990s witnessed an enormous expansion of financial flows around the globe, from trade in currencies to cross-border investments in domestic corporations. Enabled by information technology, upwards of $1.5 trillion flows across borders daily, far outstripping the nominal value of trade flows. The much-heralded triumph of markets is in many ways the triumph of financial markets as a means of allocating capital. The consequences for local economies can be substantial, from the management of the currency supply to traditional understandings of the purpose of the corporation.

In this paper, we seek to unpack a particular aspect of financial globalization—the expansion (and contraction) of American commercial banks through locating branches abroad. There are many ways for American businesses to operate outside U.S. borders, but bank branching is a particularly significant form of global expansion. First, banks are unlike other businesses in what they make and sell and in the breadth of consequences of their actions. In principle, banks can make capital from wealthy countries available for businesses in low-income countries with limited indigenous savings, thus jump-starting economic development (McMichael 1996). They can also serve as templates for the practices of well-regulated financial institutions, transferring economically useful know-how as well as capital (World Bank 1997). Second, branches represent a substantial commitment by the bank to the host nation. Where industrial companies might set up local subsidiaries that are separated from the parent company
by a legal firewall, branches do not have a separate legal personality nor their own assets and liabilities. Rather, the branch is legally part of its American parent, and its officers are officers of the parent bank (Robinson 1972).

Examining banks’ choices to go international also allows us to assess the fruitfulness of studying globalization at a disaggregated level. Cross-border financial flows implicate political choices as well as organizational decisions. American banks faced strict limits on the geography of branching and on the range of industries the banks could enter at home (Roe 1994), and regulations both constrained and enabled banks’ foreign operations. But banks did not respond to regulatory changes in identical ways: they varied enormously in where and to what extent they chose to open foreign branches. “The social-organizational approach depends upon political economy to explain the frameworks in which economic action proceeds, the rules and legal systems that constitute such objects as firms and markets, and the pressure to which the accumulation process subjects owners and managers. At the same time, political-economic analysis requires models of the forms of social organization that mediate the effects of macroscopic processes, and cause variation in their consequences at the level of industries and national economies” (Zukin and DiMaggio 1990, 3). In this paper, we focus on the latter process. We argue that globalization is usefully seen as an organizational phenomenon, enacted (or resisted) by organizations and their decision-makers. It is thus susceptible to organizational analysis.

By taking an organizational approach, our paper draws on two prominent perspectives within the new economic sociology: social network analysis and neo-institutional theory. We use network theory to argue that the banks’ positions within interfirm social structures influenced their decisions to open overseas branches. We use neo-institutional theory to argue that as the
process evolved, the opening of overseas branches came to be defined as an appropriate strategy within the community of large U.S. banks. We suggest that this new definition of expected behavior played a role in the diffusion of foreign branches, as bank officials observed their peers engaging in the practice and subsequently followed suit.

In focusing on the role of networks and socially accepted behaviors, we touch on themes raised by several of the other chapters in this volume. Schneper and Guillen, for example, show that the practice of hostile takeovers diffused from the United States to other countries after its inception in the 1970s, but that it became widespread only in nations in which the state had defined such practices as legitimate, through the institution of regulations that emphasized the rights of shareholders, as opposed to workers or the larger public. Bruegger and Knorr Cetina document the development of norms among international currency traders. They show that these norms developed in part as traders observed and mimicked the behavior of those they defined as peers. Haveman and Keister, in their study of California banks, find that banks performed best when they were able to distinguish themselves (in terms of the services they provided) from their direct competitors. This raises an issue that informs the larger study of which our paper is a part: To what extent does interfirm influence lead to firms directly mimicking their peers, versus trying to distinguish themselves from them? In this paper we focus on direct mimicry, in terms of banks following their peers into foreign branching. In subsequent work we plan to focus on banks’ specific locational decisions, in which we examine the extent to which banks open branches in countries distinct from those of their peers, as a means of identifying a unique niche.

Our paper is organized as follows. We first describe the theoretical background on banking and globalization, both at the macro level of Lenin and Braudel and at the micro level of social network analysis and neo-institutional theory. We then give a precis of the history of U.S.
banks abroad during the twentieth century, focusing in particular on the expansion period of the late 1960s and 1970s. We describe some of the policy changes that altered the context for global banking, as well as the “Third World debt crisis” that began in 1982 and radically altered the desirability of overseas expansion by banks. We analyze data on all foreign branch openings by the fifty largest U.S. commercial banks from roughly 1960 until 1999, linking the timing, intensity, and locational choices of the banks to their network ties to large U.S. corporations that were themselves globalizing. We find that the heyday of American bank globalization peaked in the late 1970s, and that—with a very small number of exceptions—US commercial banking has returned to being a resolutely domestic business, in sharp contrast to both investment banking and the broader sweep of American industry. The proportion of U.S. banks that did any commercial lending outside the U.S. is miniscule, and one bank—Citibank—holds over 40% of all corporate loans outside the country. We conclude with a discussion of the appropriate forms of analysis of financial globalization.

The place of banks in the project of globalization

The power and influence of “international bankers” has fascinated theorists from V.I. Lenin to Pat Robertson. In *Imperialism: The Highest Stage of Capitalism*, Lenin described the trajectory of *haute finance* within the major capitalist economies, in which banks became increasingly concentrated and ultimately formed a “bank trust” with significant power over the national economy. In the US, he argued, two banks (those of Rockefeller and Morgan) predominated (Lenin 1916, 40-41). Moreover, the business of banks under monopoly capitalism became increasingly international, and nations came to focus less on the export of goods than on the export of capital; thus did Britain transform from an industrial state to a “rentier state.” For Lenin, this system of capitalist imperialism was unsustainable—finance capitalism was
“moribund capitalism” bent on expansionist aggression (126). Polanyi (1944, 13-16) argued instead that representatives of *haute finance* were responsible for maintaining the peace, at least among the Great Powers, while Braudel (1984, 246) echoed Lenin’s assessment, finding that significant expansion of foreign lending is a “sign of autumn” for global hegemons.

In their ambitious effort to assess regularities in hegemonic transitions in the world system, Arrighi and Silver (1999) assert that the transitions from Dutch to British hegemony and the transition from British to American hegemony share underlying patterns that allow us to understand the (evidently forthcoming) end of American hegemony. Their conclusion is stark:

> The global financial expansion of the last 20 years or so is neither a new stage of world capitalism nor the harbinger of a ‘coming hegemony of global markets.’ Rather, it is the clearest sign that we are in the midst of a hegemonic crisis. As such, the expansion can be expected to be a temporary phenomenon that will end more or less catastrophically, depending on how the crisis is handled by the declining hegemon (Arrighi and Silver 1999, 259).

Financial expansion, by this account, increases the power of “finance capital” with respect to states, generates interstate competition, and brings about “massive, systemwide redistributions of income and wealth from all kinds of communities to the agencies that control mobile capital” (259). But what, exactly, are these “agencies that control mobile capital”?

Discussions of financial power in the global economy often obscure the identities of the relevant operators. Gowan (1999, 26), for instance, refers to “Wall Street” as synonymous with American private banking (including, for example, “the big, internationally-oriented U.S. money-centre banks”). But money center banks and other commercial banks in the U.S. have historically been quite idiosyncratic, both in their local orientation and in their constrained ability to serve corporate clients (they could make loans but not underwrite securities). Nationally chartered banks could not open foreign branches until 1913 (although state-chartered banks...
could), and banks were restricted to within-state domestic branching until quite recently. A strong current of populist mistrust toward concentrated economic power left the U.S. with a far more fragmented banking industry than any other industrialized nation (Roe 1994). As a result, with the exception of a handful of money center banks, large U.S. banks were relatively small by world standards and were overwhelmingly oriented toward local and regional businesses. This was reflected in their boards of directors, which were typically composed of prominent local businessmen (Mills 1956; Davis and Mizruchi 1999). “Wall Street” seems an inapt label for the geographically dispersed, highly localized business that was American commercial banking at mid-century. Yet by 1980 there were 150 American banks with foreign branches, spread across most of the globe. Virtually every major bank had branches in London and elsewhere. Something changed to draw Main Street to Bond Street.

We argue that a fruitful way to make sense of the contemporary process of financial globalization is to understand what large banks did when they expanded overseas, and why. To the extent that there are identifiable “agencies” controlling cross-national capital mobility, large commercial banks are among the most important. One indication of this is the composition of cross-border capital flows, particularly to low-income countries. Commercial bank lending was the overwhelming source of private capital flows to developing countries by the early 1980s (World Bank 1997, 14), and from 1970 to 1980, bank loans increased their share of Third World debt from 13 percent to 60 percent (McMichael 1996, 117). Banks during this period increasingly replaced states and multilateral aid agencies as sources of capital for both states and businesses in developing countries (see Manzocchi 1999 for a historical perspective). Thus, “by becoming truly international actors, banks have entered as full participants into the realm of foreign policy” (Cohen 1986, 56).
We seek to unpack the mechanisms by which domestic commercial banks came to be “truly international actors” during the 1960s and 1970s. Organizational decisions—the strategies followed by banks—are the micro components of financial globalization. The strategies followed by banks are in turn under the guidance of their top managers and boards of directors—typically local members of the corporate elite. Thus, we try to make sense of these decisions as a way to link the local economy to financial globalization (Sassen 1994).

**American commercial banks abroad**

By the standards that apply to a global power, American commercial banks in 1960 were remarkably provincial. Only eight U.S. banks had any overseas branches, and most of these branches were owned by one bank, First National City Bank (the predecessor to Citibank; see Brimmer 1973). The modest international presence of American banks at this time was comparable to the situation in 1920 and had changed relatively little since the period just after the Second World War. In contrast to Great Britain, whose banks were allowed substantial leeway in international operations for many decades, U.S. national banks were allowed to establish branches outside the U.S. only with the Federal Reserve Act of 1913 (Brimmer and Dahl 1975, 342-343). Moreover, the fact that only eight of the several thousand U.S. banks in 1960 had any foreign operations contrasts sharply with other industries in the US. In the mid-1960s, American manufacturers were well on their way to being multinational enterprises: IBM had operations in 81 nations, Singer was in 64, and Mobil, Exxon, and Texaco were each in dozens. Among the 389 large manufacturers that shared a director with a major bank in 1966, the median firm operated in three nations outside the US, and over 70 percent had at least some international operations (Directory of American Firms Operating in Foreign Countries 1966).
American banks could do business outside the U.S. in a number of forms. A U.S. bank could rely on a local bank in a foreign country to act as its agent, that is, as a correspondent bank. It could open a representative office that is able to handle the local affairs of the U.S. bank’s clients but cannot perform “banking” (taking deposits, making loans). It could take an equity stake in a local bank. It could acquire or establish a subsidiary in the local country—the pattern most frequently followed by industrial firms. Or it could open a branch, which is legally part of the parent bank and books its business on the parent’s balance sheet (see Robinson 1972 for a discussion of these alternatives). A branch is the most consequential local presence a bank can have in a local country, since it has essentially the same status as a domestic branch. That is, it can take deposits that may be used elsewhere in the bank, and it can make loans relying on the parent company’s capital. Both of these can provide a motive for overseas expansion by U.S. banks. A branch (in contrast to a subsidiary) could be used to gather Eurodollars (US currency held in banks outside the U.S., typically generated via foreign trade) to be recycled through lending to domestic businesses in the U.S. Branches could also make loans, either to American corporations doing business overseas, local businesses, or sovereign states.

Although few U.S. banks had international operations in 1960, during the subsequent twenty years the foreign assets of U.S. banks increased one hundredfold, and the number of banks operating branches outside the U.S. increased from eight to 150 (Hallow 1993). By this time, Citicorp operated branches in 93 countries, BankAmerica had branches in roughly 50 nations, and American banking was a truly global industry. National Bank of Detroit was in Germany, Japan, and London. Harris Bank of Chicago was in Brazil, France, Mexico, and Singapore. North Carolina National Bank was in Australia and the Cayman Islands. In short, during the 1960s and 1970s, banking began to catch up with the rest of American industry. But
why then, and not before? And what accounts for the wide variation in the patterns of expansion of U.S. banks?

In outline form, U.S. banks went international due to a combination of institutional and regulatory changes and because of the increasing internationalization of their domestic corporate customers. Perhaps the most significant regulatory change was the Voluntary Foreign Credit Restraint (VFCR) policy enacted by the Johnson Administration in early 1965. For several years the U.S. had run a substantial balance of payments deficit, exporting more capital than it earned. Johnson sought to remedy this by restricting the flow of foreign direct investment by US-based multinationals, and to limit foreign lending by commercial banks. VFCR guidelines, issued by the Federal Reserve Board in March 1965, sought to restrict the growth of foreign lending to five percent per year (Brimmer and Dahl 1975; Dombrowski 1996, 46). Crucially, foreign branches of U.S. banks were exempt from these restrictions. Thus, branches outside the U.S. served two essential functions: London branches (and later branches in the Bahamas and Cayman Islands) could gather deposits to be lent in the US, while other international branches could be used to make loans outside the purview of the VFCR. The VFCR “encouraged the establishment of an institutional structure abroad that would enable American banks to undertake a major and permanent commitment to overseas markets” (Hallow 1993, 84).

Once in place, the international branch network proved useful as a mechanism to recycle “petrodollars” generated as a result of the steep rise in oil prices following the 1973 energy crisis. As integral parts of the parent bank, foreign branches could in principle take in dollar-denominated deposits in Bahrain and lend them in Brazil (although other forms of intermediation were also possible). Bank lending came increasingly to replace official sources of development aid during the 1970s (Manzocchi 1999, 56), and the largest banks found foreign business to be
their primary source of profit growth. By 1976, 49 percent of the profits of the twelve major multinational banks came from international operations; for Chase Manhattan the figure was 78 percent (Hallow 1993, 95).

The two decades after 1980 saw, if not a complete reversal, then at least a substantial attenuation of the trend toward bank branch globalization. In December 1981 the Federal Reserve authorized the creation of International Banking Facilities, which were essentially “virtual branches” of U.S. banks able to book foreign deposits and loans as if they were transacted with an offshore branch. This allowed banks to participate in the Eurodollar market without having to establish “real” branches in London or shell branches in the Bahamas or Cayman Islands. Of more long-lasting significance was the Mexican debt crisis of 1982, which began when Mexico suspended its external debt service and nearly every debtor nation in Latin America and Africa ended up effectively in default. The consequences of this crisis are still widely felt in low-income countries in the form of IMF structural adjustment programs and other interventions, but the most immediate consequence for the banks was an immediate contraction in their overseas lending and a lingering malaise on their balance sheets. Figure 1 shows the cumulative number of nations in which the 50 largest U.S. banks operated, for each year between 1963 and 1998. As the graph indicates, the year 1978 was the high water mark for American banks’ international activities.

FIGURE 1 ABOUT HERE

Commercial banks faced their own form of structural adjustment at home during the 1980s and 1990s, as market-based forms of funding increasingly took their core business of corporate lending. As Davis and Mizruchi (1999) document, large banks substantially retreated from domestic corporate lending during this time, turning increasingly to fee-based businesses
and other non-traditional activities. Some (notably J.P. Morgan and Bankers Trust) effectively abandoned commercial banking and morphed into investment banks. Those that maintained significant foreign lending were battered the hardest: Congressman John Dingell, Chair of the House Committee on Energy and Commerce, stated in 1991 that Citicorp (the most “international” of American banks) was “technically insolvent” and “struggling to survive.” Banks with the highest exposure to foreign loans were those with the most unfavorable stock market valuations. At the same time, the number of nations with stock exchanges doubled, and portfolio investment (primarily purchases of stocks and bonds by institutional investors) and foreign direct investment (investment by foreign businesses) increasingly replaced bank lending as the predominant forms of capital flows from wealthy nations to low-income nations (World Bank 1997; Weber and Davis 2002). Other new opportunities availed themselves to banks after 1989, as former Communist nations formed markets for U.S. banks. But the basic business model of commercial banks—taking in deposits and lending them out at higher rates of interest—had been largely superceded both at home and abroad, in wealthy nations and low-income countries. As Norwest CEO Dick Kovacevich put it, “The banking industry is dead, and we ought to just bury it.”

The net result of these trends is that U.S. banking has returned from a substantial international presence to an overwhelmingly domestic business, while at the same time “financial markets have been transformed…from relatively insulated and regulated national markets toward a more globally integrated market” (World Bank 1997, 14; Bruegger and Knorr Cetina, this volume). There were 129 U.S.-owned banks with 737 foreign branches in 1975. By 2001, only 30 of the over 2500 U.S.-owned bank holding companies operated any branches outside the U.S., while 38 had international banking facilities. Of the 824 foreign branches, over
half (413) were owned by Citibank, while the foreign presence of Chase Manhattan (successor to Manufacturers Hanover, Chemical Bank, J.P. Morgan, and the original Chase) and Bank of America (the successor to NationsBank and the original BankAmerica) were substantially attenuated compared to 1975. For American banks, international business lending is almost entirely the province of three organizations, and international business lending is a relatively modest part of global capital flows. Again, this contrasts sharply with the trends in other industries: for the median Fortune 500 manufacturer, the proportion of revenues accounted for by international business steadily increased from under 15 percent to about 25 percent between 1986 and 1999. It is possible that the “signs of autumn” for U.S. hegemony have actually heralded an Indian summer (Arrighi and Silver 1999).

**Why overseas expansion?**

In this paper, we limit our attention to the expansion phase of U.S. overseas banking, and leave a detailed account of its contraction to another paper. Sociologists and organizational theorists have done little theorizing on the reasons for overseas banking. Most writing on the topic has been done by economists, although sociologists of development have studied overseas economic expansion in general. In addition to the fact that the topic received little publicity until recently, one reason that sociologists have not addressed overseas banking may be that the reasons provided by economists have been plausible, straightforward, and largely intuitive—exactly the kind of explanations that sociologists would tend to find uninteresting and unworthy of study. Several accounts have been proposed (Baker and Bradford 1974; Darby 1986; Dombrowski 1996; Hallow 1993; Peter Merrill Associates 1981). Most of these involve either banks acting in reaction to U.S. government regulations that placed restrictions on the banks’ activities, incentives provided by foreign countries, or general attempts to increase profitability
by diversifying risk. Darby asserts, for example (1986, 405), that “[t]he onset of American banks’ foreign thrust can be attributed to avoidance of U.S. regulations.” He goes on to cite “deposit interest ceilings, reserve requirements, and various capital controls” (ibid). Baker and Bradford (1974, 3) note the persistent U.S. balance of payments deficit during the 1960s and the economic opportunities resulting from the emergence of the European Economic Community. Hallow notes the importance of regulations, such as the Interest Equalization Tax of 1963, which taxed foreign stocks and debt obligations of American firms and individuals (Americans circumvented this by depositing their earnings overseas, which increased the demand for American banking in these locales), and the Voluntary Foreign Credit Restraint (VFCR) program, described above, instituted on a voluntary basis in 1965 and made mandatory in 1970 (this program placed a limit on the amount that U.S. banks could lend overseas but exempted their overseas branches). These arguments are difficult to test empirically. For one thing, even when these authors specify the particular regulations they believe triggered overseas activity, it is difficult to predict when their effects will occur. Did the banks respond immediately, or within two, three, or four (or more) years? Second, even if these factors account for aggregate level increases in the number of U.S. banks operating abroad, they do not allow us to specify which particular banks opened overseas branches.

Another (related) argument suggested by Hallow (1993, 75) is that the imposition of tight monetary policy in the late-1960s, which restricted the amount of capital available to lend, led U.S. banks to rely increasingly on the Eurodollar market. In particular, Hallow notes, large U.S. banks circumvented the tight monetary policy by importing funds from their foreign branches. Although at first only the banks that already had overseas operations could take advantage of this, Hallow argues that once other banks recognized the advantages of foreign branches, they
rapidly established their own. If this is the case, then we should witness increases in foreign branching in response to tight monetary policy, although again, the precise timing of the effect is difficult to predict.

The argument that U.S. banks went overseas in response to declining profits at home also contains problems. Virtually any action that firms take can be assumed to be an attempt to improve profitability. Highly profitable banks might be just as likely as less profitable ones to adopt a new strategy, on the ground that it would lead to even higher profits. It may therefore be difficult to predict an association between profitability and entry into foreign activity. Still, the hypothesis that banks moved overseas to compensate for declining profit opportunities at home is testable. If the argument is tenable, we would expect overseas branching to increase in response to low profitability and to be especially likely to occur during contraction periods in the economy.

A fourth argument, suggested by both Baker and Bradford and Hallow, is both tenable and empirically testable, however. In this view, the proliferation of foreign banking was a response to the increased overseas activities of American banks’ primary customers, large nonfinancial corporations. Banks were seen as moving overseas to accommodate the overseas moves of their corporate customers. American banks were uniquely suited to do this, in this view, because they had already established informal operating procedures based on continued personal contacts and the trust they entailed. This ability to make use of personal contacts gave U.S. banks an advantage compared with banks in the host countries.

If this argument is correct, then banks that conducted business with corporations with high levels of overseas activity should be those most likely to open overseas branches. Systematic data on bank-customer relations in the 1960s are unavailable, so it is not possible to
directly test this argument. An indirect test is possible, however. One indicator of a link between nonfinancial corporations and banks is the extent to which the firms share directors, in particular whether officers of one of the firms are represented on the board of another. During the 1960s, leading commercial banks were filled with CEOs of major nonfinancial corporations. Mintz and Schwartz (1985) suggest that this was a means by which banks gleaned information about conditions in various industries. If this account is accurate, one consequence would be that banks with officers of firms with high foreign involvement would be more likely to become involved themselves.

This suggests an organization-level mechanism for financial globalization, particularly for banks outside the major money centers. As we have seen, manufacturers were internationally active well before most banks. And American banks have historically been locally oriented, by regulation and custom, with boards comprised of the notables of local industry. Thus, board of director ties are plausible sources of influence for the international locational decisions of commercial banks and a way to link global and local economic decisions. We might expect that as Emerson Electric, Monsanto, and Ralston Purina expanded operations overseas, First National Bank in St. Louis—whose board contained executives from each of these three local businesses—would follow suit, and St. Louis bankers might find themselves stationed at branches in Brazil, India, or Switzerland. Once in place, the branch network served as a circuit of capital as new contingencies arose, for example, following the oil crisis of 1973 (cf. Sassen 1994 on linking cities and globalization).

It is possible that banks’ decisions to move overseas were driven by other forces as well. Neo-institutional theorists have emphasized the socially constructed nature of much economic activity (Dobbin 1994; Fligstein 1990). Ideas about what constitute appropriate firm strategies
often take on an independent existence, becoming defined as “appropriate” forms of behavior even when evidence of their effectiveness is nonexistent or ambiguous. These ideas often diffuse through social networks among firms. In a study of the adoption of takeover defense plans known as poison pills, Davis (1991) found that in addition to direct ties to prior adopters, firms that were centrally located in the interlock network were more likely to adopt these plans. Studies by Galaskiewicz and Burt (1991) and Mizruchi (1992) showed that being centrally located led firms to engage in behaviors that were dominant within the network. One possible reason for these findings is that centrally located actors are in a position to dictate prescribed forms of behavior. As new developments occur, central actors may be the first to adopt, or if not the first, then those most likely to have their behavior mimicked. This means that other organizations that are close to the center have a greater opportunity to be exposed to these prescribed behaviors, a process akin to what Useem (1984) termed “business scan.”

The preceding suggests that being centrally located in interfirms may have an independent effect on adoption of a behavior that emanates from central organizations. Put another way, banks may learn where they should be doing business not so much from listening to their customers and advisors as from observing each other (see White 1981). During the 1960s the most central firms in the U.S. corporate network were the leading New York commercial banks, in particular the six major money market banks, all of which were among the early participants in overseas banking. Smith (1989) contends that Walter Wriston at Citibank almost single-handedly brought about the globalization of U.S. banking through his example of aggressive overseas expansion: “Few individuals have influenced a whole industry as much as Wriston in getting all the others to follow him…in trying to escape the fate of being permanently just another dull company from a highly regulated business” (35). Foreign banking, in other
words, was a behavior that was endorsed by centrally located organizations. We therefore hypothesize that the closer a bank was to the center of the corporate network (that is, the higher its centrality), the more likely it was to open an overseas branch.

**Data and measures**

The banks in our data set were drawn from the Mathematical Analysis of Corporate Networks (MACNET) project at the State University of New York at Stony Brook under the direction of Michael Schwartz (see Mintz and Schwartz 1985, Appendix 1).1 This data set includes information on ties among the boards of directors of over 1000 large American corporations during 1962, 1964, and 1966, and includes 65 commercial banks that were ranked among the 50 largest by *Fortune* magazine at least once between 1962 and 1973. After eliminating subsidiaries we were left with a panel of 54 independent banks. We supplemented the director data with data drawn from various sources, primarily *Moody’s Financial Manual* (annually from 1962 through 1999) for financial data and information on foreign bank branches, *Who Owns What in World Banking* (various years), and the *Directory of American Firms Operating in Foreign Countries* (various years) for information on overseas activity among the nonfinancial corporations whose officers sat on the boards of the banks. The financial data for our analyses came from Standard and Poor’s COMPUSTAT files.

Our focus in the present paper is on the establishment and proliferation of overseas branches. We shall focus on the specific location of these branches in a subsequent paper. We examine two dependent variables in the analyses that follow: The time to a bank's establishment of its first overseas branch, and the number of new branches that the bank established in a given year. Our analysis is informed by two factors noted above. First, only nine U.S. banks had

---

1 We are grateful to Donald Palmer for providing these data.
foreign branches in 1962. Second, virtually all of the proliferation of overseas branching by U.S.
banks had ended by 1980. We therefore focus on the 45 banks in our data set that were at risk of
entering into foreign branching beginning in 1962. Missing data reduced our total number of
banks to 41, 33 of which were at risk of opening their first foreign branches. We followed these
33 banks from 1963 through 1981 (that is, just prior to the Mexican debt crisis and the enabling
of International Banking Facilities). The fact that we are omitting from our analysis the nine
major banks that were previously involved in overseas activity creates the potential for sample
selection bias. In an earlier analysis (Mizruchi and Davis 2000), we found, through an
examination of a sample selection model, that the omission of these nine banks had no effect on
the prediction of entry into foreign banking among the remaining 45 banks. We therefore focus
only on the latter here, although we do discuss the role of the original nine banks in our


collection.

Our dependent variables were drawn from data on the overseas branches of U.S. banks,
available in yearly editions of Moody’s and Who Owns What in World Banking. A team of six
research assistants coded, by year and location, all non-US branches of the 54 banks beginning in
1962 and ending in 1999. We can group our hypotheses into two broad categories, based on
those suggested by the economic literature and those consistent with organizational and
sociological arguments. The former include tests of the effects of regulation, profitability, and
macroeconomic conditions. The latter involve those based on the foreign activities of the banks’
interlock partners and the banks’ network centrality. The effect of the foreign activities of the
banks’ interlock partners actually follows from both the economic and organizational literature,
which suggest that the banks moved overseas to preserve their relations with their corporate customers.

One way to test the regulation arguments would be to examine a series of year dummy variables. There are two problems with this approach. First, as noted above, even though we can pinpoint our two key regulations in 1963 and 1965, it is difficult to predict the point at which their effects, if existent, were likely to emerge. Second, the use of year dummies makes it difficult to simultaneously examine the macroeconomic variables because they are year-specific. This means that it is necessary to examine the regulation hypotheses separately. Because the firm-level variables tend to be either highly stable over time (size and age, the latter of which varies consistently each year), measured at a single point in time (the director data), or uncorrelated with time, the most feasible way to test the regulation hypotheses is to examine a simple frequency count of the number of banks that opened their first foreign branch in each year.

To examine whether tight monetary policy led to an expansion of overseas banking, we examine two variables, the cost of AAA bonds and whether the Federal Reserve Bank was following a “tight” monetary policy. The effect of condition of the economy is a dummy variable, coded one for years in which the U.S. economy was in an expansion period and zero for years it was in a contraction period. Monetary policy is a dummy variable coded one when the Federal Reserve was following a “loose” policy and zero when it was following a tight policy. These data were derived from the National Bureau of Economic Research and the Federal Reserve Board Bulletins respectively. We used return on assets as our indicator of firm profitability. These data were derived from the COMPUSTAT files.
As we have already noted, we can test the hypothesis involving foreign activities of the banks’ customers only indirectly, by examining the foreign activities of their interlock partners. To address this, we coded a variable for the number of officers of companies conducting business overseas who sat on the board of the particular bank. We expect this variable to be positively associated with a bank’s decision to open overseas branches. To test the centrality hypothesis we examined the number of firms among non-bank members of the *Fortune* 800 (the sample of firms in the MACNET data set) with which the bank shared directors. Although this is not the only possible measure of centrality, it has been found to be highly correlated with the commonly-used eigenvector centrality measure developed by Bonacich (1987; see Mizruchi and Bunting 1981). Although our analyses stretch from 1963 through 1980, we currently have full director data for only 1962, 1964, and 1966, and we use the 1966 data in our analyses. This is not ideal but we believe that it is adequate for our purposes, for three reasons. First, Mariolis and Jones (1982) have shown that the interlock data from the MACNET data set tend to be highly stable over time. Our own analysis indicates that the data from 1962 and 1966 yield virtually identical results. Second, although beyond a ten-year period there is likely to be some instability in centrality, major U.S. commercial banks remained highly central in interlock networks into the early 1980s (see Figure 2). Their centrality declined markedly in later years (Davis and Mizruchi 1999), but those years are beyond the scope of the current analysis. Most importantly, the vast majority of the banks in our sample had opened foreign branches well before 1980—27 of the 33 by 1972 and 31 of the 33 by 1976. Despite these compensating factors, this measure is likely to yield a certain amount of error. Whatever error exists in our centrality measure is likely to render our results more conservative than they would be if we had interlock data for all of the
years. We are therefore confident that any interlock effects we observe are unlikely to be overestimated.

FIGURE 2 ABOUT HERE

In addition to our substantive predictors, we examined two control variables, size of the bank (in assets, which we examined both in its raw value and in logarithms), and age of the bank (in years). Because larger firms tend to be more heavily interlocked, it is possible that any observed effect of centrality could be a spurious consequence of size. The bank’s age could have either a positive or a negative effect on its decision to move overseas. On one hand, we would expect older banks to be more likely to have as customers the major firms with overseas operations. In that case, age would be positively associated with foreign branching. On the other hand, it is possible that younger banks would be more open to innovation, and thus more likely to engage in new activities. In this case, age would be negatively associated with foreign branching. We suspect that the latter is unlikely, since the nine banks that were operating outside the U.S. before 1960 were among the oldest, most well-established U.S. institutions. Regardless of which view is correct (or if either is correct), we include the bank’s age as a control.  

A reviewer suggested to us that the rate of inflation might have also played a role in banks’ decisions to open foreign branches, since high rates of inflation during the 1970s lowered real rates of return domestically. To examine this, we inserted a variable for the rate of inflation for each year in our data. The effect of this variable was significantly positive in two of the four equations involving opening of the first branch, but its inclusion had no effect on the strength of the remaining coefficients. The variable had no significant effect in any of the equations involving the number of foreign branches, although it was strongly negative (in the opposite from expected direction, which in a one-tailed test rendered the effect non-significant) in one equation. Because inflation was highly correlated with the three macro-economic variables—monetary policy, the cost of AAA bonds, and stage of the business cycle—this effect appears to have been due to multicollinearity: when we removed the macro-economic variables from the model, the effect of inflation on the formation of new branches became significantly positive. In none of the equations did inclusion of the inflation variable alter the substantive conclusions for the remaining variables in the model.  

---

3 A reviewer suggested to us that the rate of inflation might have also played a role in banks’ decisions to open foreign branches, since high rates of inflation during the 1970s lowered real rates of return domestically. To examine this, we inserted a variable for the rate of inflation for each year in our data. The effect of this variable was significantly positive in two of the four equations involving opening of the first branch, but its inclusion had no effect on the strength of the remaining coefficients. The variable had no significant effect in any of the equations involving the number of foreign branches, although it was strongly negative (in the opposite from expected direction, which in a one-tailed test rendered the effect non-significant) in one equation. Because inflation was highly correlated with the three macro-economic variables—monetary policy, the cost of AAA bonds, and stage of the business cycle—this effect appears to have been due to multicollinearity: when we removed the macro-economic variables from the model, the effect of inflation on the formation of new branches became significantly positive. In none of the equations did inclusion of the inflation variable alter the substantive conclusions for the remaining variables in the model.
**Estimation procedure**

Our dependent variables are the establishment of the bank's first overseas branch and the number of new branches the bank established in a given year. The first is binary; the second is a count. Because our data are temporal, we can treat the establishment of the first branch as an event and examine the process through the use of event-history analysis. At time zero, 1963, there were 33 banks in our data set “at risk” of establishing a foreign branch. Once the bank established the branch, we dropped it from the analysis. We used a discrete-time event-history model, in which our units of analysis were bank-years (Allison 1984). There were a total of 233 bank-years in the event-history models described below.

The dependent variable in our second set of analyses, the number of new branches in a given year, is a count variable. This type of variable is most appropriately handled with a Poisson regression model. Poisson models require the assumption that the variance is smaller than the mean. When this is not the case, a situation referred to as “overdispersion,” then the negative binomial model is preferable. Because that was the case with our data, we estimated negative binomial models for the analyses involving the number of new branches in a given year. The standard negative binomial model includes a term, ln $\alpha$, that represents the level of overdispersion. This value is assumed to equal zero in a Poisson model. Because our data are longitudinal, we have reason to suspect that ln $\alpha$ may vary systematically over time. We therefore used a generalized negative binomial model, in which we estimate ln $\alpha$ as a function of time. Unlike the conventional negative binomial model, which estimates a single coefficient for ln $\alpha$, the generalized model that we estimate produces two ln $\alpha$ coefficients, a constant and one for the year effect.
As in the analysis of entry into foreign branching, our units of analysis for these models are also bank-years. Because all of the banks, including those that were involved in foreign banking prior to 1963, have the possibility of opening new branches in any given year, however, the observations remain present for all years in the sample. For these models there were 46 banks that were at risk of opening at least one branch in a given year. These analyses included 775 observations. Because the number of new branches that a bank opens may be affected by the number of branches the bank already has, we controlled for the existing number of branches. Given the pooled nature of our data- the fact that the same banks appear in multiple observations in both sets of analyses- it is necessary to control for the within-bank variation across these multiple observations. One possible way to do this through the use of firm-level dummy variables. An alternative approach is to adjust the standard errors using White's robust standard error transformation (Huber 1967; White 1978) combined with the algorithm for clustered observations developed by Rogers (1993; see the Appendix in Mizruchi and Stearns 2001 for a description of this model). We used robust standard errors with clustering in all of the models presented below.

**Results I: Entry into foreign markets**

Table 1 presents the means, standard deviations, and correlations among the variables. Table 2 presents a frequency distribution of the number of banks opening their first foreign branch for each year between 1963 and 1979 (at which point all 33 banks in our analysis had opened branches). Table 3 presents the results of a discrete-time event-history analysis of the banks’ opening of their first foreign offices. Because the data are pooled, the correlations in Table 1 have limited statistical meaning. They do provide some interesting summary information, however. Consistent with the regulation hypotheses, for example, banks tended to
open overseas branches when the Federal Reserve was engaging in a tight monetary policy (and the cost of capital was high). Concurrently, the banks tended to open overseas branches during contraction periods in the economy. The simple correlations for the interlock variable were also positive, as expected, although relatively small. And larger banks, as expected, were more likely than smaller banks to open foreign branches.

TABLE 1 ABOUT HERE

TABLE 2 ABOUT HERE

Table 2 indicates that banks’ entry into overseas banking occurred relatively constantly across time, with two exceptions, 1969 and 1970. Those two years saw 16 of the 33 banks in our analysis open their first overseas branches. It is difficult to know what this says about the regulation hypotheses. The two policies suggested in the literature to have significantly affected U.S. banks’ decisions to move overseas, the Interest Equalization Tax and the Voluntary Foreign Credit Restraint Program, were instituted in 1963 and 1965 respectively. Even if we assume a time lag, it is difficult to argue that it took six or seven years for the Interest Equalization Tax to trigger movement overseas. The effect of the Voluntary Foreign Credit Restraint Program is more complicated, because although the program was voluntary when it was instituted in 1965, it became mandatory in 1970. Anticipation of this change may have led to the extensive movement observed in 1969 and 1970. At the same time, the Federal Reserve Bank’s tight monetary policies and the concomitant high cost of capital described above may have been equally responsible. The real cost of AAA bonds was higher in 1970 and 1969 than in any other year in our time-series. The correlation between year dummy variables and the cost of AAA bonds was .52 for the 1970 dummy and .35 for the 1969 dummy. The Fed was also following a tight monetary policy in those two years, although the Fed also followed a tight monetary policy
in 1966 and only one bank opened its first foreign office that year. On the other hand, 1969 and 1970 represented the first time in our data set that the Fed followed a tight monetary policy for two consecutive years. The hypothesis for the effect of the Voluntary Foreign Credit Restraint program therefore receives some support from our data. The Interest Equalization Tax of 1963 appears to have had little if any effect.

TABLE 3 ABOUT HERE

Turning to the event-history models in Table 3, we have included tests of our hypotheses with various combinations of variables. As is evident from Table 1, the three macroeconomic variables (federal monetary policy, the cost of AAA bonds, and whether the economy was experiencing an expansion or contraction) and the two interlock variables (the number of companies with foreign operations represented on the bank's board and the bank's number of interlocks) were highly correlated, creating the possibility of multicollinearity. We therefore present equations with different combinations of these variables in order to more carefully identify their effects. Although both bank size and the number of interlocks were right-skewed, their correlations with each other and with the bank's opening of a foreign branch were very similar. We therefore present models based on the raw values of assets and interlocks. Equation 1 includes all of our predictors: the size, age, and profitability of the bank, the number of officers of companies doing business overseas represented on the bank's board, the bank's number of interlocks with other Fortune 800 firms, and the three macroeconomic indicators. Interestingly, the only substantive variable that significantly predicts the opening of the bank’s first foreign office is the cost of capital, which, as predicted, is positively associated. The controls for size and age of the bank are also significant positive predictors. Neither the other macroeconomic variables (stage of the business cycle and federal monetary policy) nor the two director variables (the number of firms with overseas operations represented on the bank’s board
and the bank’s centrality in the interlock network) were significantly associated with the bank’s opening of an overseas branch. This latter finding is interesting in light of an earlier analysis (Mizruchi and Davis 2000), in which we found that centrality in the interlock network predicted a bank’s likelihood of opening a London office between 1962 and 1970, even when we controlled for the bank’s size and profitability. The earlier analysis did not include the macroeconomic factors so it is possible that the inclusion of these effects is what caused the centrality effect to disappear. To examine this, we recomputed Equation 1 omitting these variables. The findings (not shown here but available on request) revealed no changes. The controls for size and age remained strongly positive and significant and the effect of profitability approached statistical significance (although in a positive direction, contrary to what the arguments above would suggest). The effects of the board of director variables remained non-significant, however. A further analysis examining the effects of the two board variables separately (the two have a correlation of .82) revealed no differences. Why the network centrality measure does not significantly predict entry into foreign banking can be seen when we remove size from the equation. As shown in Equation 2, removing the size variable causes the centrality effect to become significantly positive. Our analysis suggests, then, that there is a positive statistical association between network centrality and entry into foreign branching that disappears when we control for the size of the bank. Unlike our earlier analysis of the establishment of a London office, the effect of centrality is not independent of size.

To further examine the effects of the macroeconomic variables, we computed models in which we omitted one or more of the three variables. Equation 3 shows that when we remove the cost of AAA bonds, the effect of stage of the business cycle becomes significant in the predicted direction. Banks were more likely to open overseas operations during contraction
phases of the business cycle. The monetary policy variable remains not significant in this equation. When we remove both the cost of AAA bonds and stage of the business cycle from the model, however (Equation 4), monetary policy emerges as a significant predictor. Banks were more likely to open their first overseas branch during periods of tight federal monetary policy. The general effects of these three variables provide support for the hypothesis that U.S. banks moved overseas in response to restrictive federal monetary policies and recession stages of the business cycle.

Results II: Predicting the number of new nations entered

In addition to predicting the initial establishment of a foreign branch, we also used our variables to predict the number of new branches that a bank opened in a given year. Unlike the previous analysis, in which entry into foreign branching is an endpoint that removes the bank from the analysis, all banks remain at risk of opening new branches during every stage, regardless of whether they had previously opened one or more branches. The new branches variable thus includes the first branches that were the subject of the models in Table 3, but includes additional new branches as well. Because the number of new branches that a bank opens in a given year may be affected by the number it has already opened, we controlled for the number of existing branches that the bank had in the previous year. The number of observations in these analyses is 775, nearly four times as high as in the analysis of entry into foreign branching.

As noted above, our dependent variable here is a count variable. Because the variance of this variable exceeds its mean and because it is possible that this overdispersion was not constant over time, we computed generalized negative binomial regression models. They are presented in Table 4. Equation 1 presents the full model, with all of the predictors and controls. The findings
contain both similarities and differences with those in Equation 1 of Table 3. As in the earlier
analysis, the cost of AAA bonds is positively associated with foreign branching. The other
variables that were non-significant in Table 3 are non-significant here as well, although the effect
of stage of the business cycle has a probability level of below .10 (.065). The most striking
difference in this model is that the effect of network centrality is significantly positive, while that
of size is not. Further examination (not shown here) indicates that the effect of size is
significantly positive when we remove the control for the prior number of branches. Once we
control for this variable, then, size does not significantly increase the model's explanatory power.

TABLE 4 ABOUT HERE

Examination of the correlations, especially considering the presence of the cumulative
number of branches that the bank had established, indicates the potential for serious
multicollinearity. This is especially the case with the role of bank size. We saw earlier that size,
measured as the bank's assets, was highly skewed. The simple correlation between size and
establishment of the bank’s first foreign branch was virtually identical regardless of whether we
used the log of size, and the correlations of both raw and logged size with the other exogenous
variables were generally similar, although they tended to be larger when size was logged. The
simple correlation between size and the number of new branches was considerably stronger
when we logged size than when we did not, however. The log of size was also correlated .65
with centrality, compared to only .50 between raw size and centrality. As Equation 2 of Table 4
illustrates, taking the log of size significantly affects our findings. The effect of log of size is
strongly positive, and inclusion of this variable nullifies the effect of centrality, regardless of
whether we take the log of interlocks or the raw number (the equation with the log of interlocks
is available on request). The effects of age and the cost of AAA bonds also increase when we
take the log of size, although the effect of stage of the business cycle appears to decline. Before
we conclude that the control for size has nullified an otherwise positive effect of centrality, however, we need to consider an important aspect of our measurement. We were able to measure bank size, in terms of assets, on a yearly basis for each bank. The asset values are also unadjusted for inflation, so that they tend to increase, sometimes sharply, with time. Our centrality measure, on the other hand, is based on the bank’s number of interlocks in a single year, in this case 1966. This value remains constant throughout the period of the study, which continues through 1980. Our measure of network centrality is therefore significantly less valid than our measure of size. Its lack of variation, and (despite the stability of interlocks that we described above) its possibly decreasing connection with our endogenous variables over time, suggest that our observed effects of centrality may be underestimated. For this reason, we believe that the results in Equation 1 may be no less valid than those in Equation 2.

Whether we use raw size or its log affects the strength of some of the other coefficients as well. Equation 3 of Table 4 shows, similar to Equation 3 of Table 3, that when we remove the cost of AAA bonds, the effect of stage of the business cycle becomes strongly significant; banks are likely to open more branches during contraction periods than during economic expansions. This effect holds, and the Z-statistic actually becomes stronger (increasing in strength from -3.169 to -4.155) when we include the log of size in the equation (not shown here). When we include the log of size, the effect of federal monetary policy, which is virtually zero in Equation 3, has a positive Z-statistic (1.609) that, were we not using a one-tailed test with a negative alternative hypothesis, would be nearly significant in the opposite from predicted direction. The effect of federal monetary policy is significantly negative, as predicted, in Equation 4, when we use the raw number of assets as our indicator of size. When we use the log of size, however (not
shown here), the effect of monetary policy remains negative, but it is no longer close to statistically significant (Z=-0.790).

Our analysis of the number of foreign branches opened thus yields findings similar to those of the analysis of opening of the first foreign branch, with the exception of the relation between size and network centrality. In the former analysis, size had a strong effect, and centrality had no significance when size was controlled. In the latter analysis, however, centrality did have a significant positive effect on the number of new foreign branches when we controlled for the bank's raw volume of assets. The effect of centrality disappeared when we controlled for the log of assets, but as we noted, our measure of bank size is accurate to the year, while our measure of interlocking is based on a single year (1966) that may have limited relevance to the later years of our data. Multicollinearity among the exogenous variables and controls may also have contributed to the non-significant effects when we used the log of size.

Discussion

Our results indicate that American banks expanded outside the U.S. for a combination of macroeconomic, public policy, and organizational reasons. Tight money at home and a policy to limit lending directly from domestic offices provided the initial impetus for banks to open foreign branches. London branches provided access to Eurodollars to be lent via American branches; by 1970 22 of our 33 previously domestic banks had opened their first foreign office. We find only some suggestive evidence for any network effects here. In contrast, opening other branches did reflect social influences. We considered two possibilities. Banks might follow their customers, opening branches close to the operations of their major customers (as proxied by the locational choices of their board members’ companies). Or banks might look to each other for guidance on appropriate actions for a multinational bank. Our results are most consistent
with the second possibility. (In subsequent work we will examine in greater detail the linkages among the locational choices of banks and the industrial firms they are tied to over time.)

Even as foreign activity proliferated among U.S. banks, the bulk of the activity remained concentrated in a small number of institutions, and these were the same institutions that had been involved in foreign banking prior to the 1960s. These consisted primarily of the six major New York money market banks plus a few leading banks in Boston, Chicago and California. By the late 1990s, only five banks remained that had 25 percent or more of their revenues from overseas activities: Bank of Boston, Bankers Trust, Chase-Chemical, Citicorp (now Citigroup), and J.P. Morgan.  

In a recent paper (Davis and Mizruchi 1999), we found that the role of large commercial banks in the U.S. economy declined between the early 1980s and mid-1990s. The proliferation of alternative sources of financing reduced major U.S. firms’ dependence on commercial banks. Corresponding to this, the presence of commercial banks in the center of the interlock network, a phenomenon that had held steady since the turn of the twentieth century, declined as well. We suggested that one possible reason for this decline was the banks’ increasing attention to overseas activity. As the profitability of domestic lending declined, the banks were presumed to be searching elsewhere for profitable activities - service related functions with U.S. firms, and increased lending overseas. Our findings from this paper show that the foreign banking portion of this account was at best overstated. The major U.S. banks had gone multinational long before the 1980s. If anything, in the 1980s and 1990s they became less focused on foreign activity.

Still, there was variation in the original entry into foreign banking and there remains considerable variation in the amount of it to the present. Which banks were most likely to enter
foreign banking in the 1960s, and which ones are most heavily involved at present? Clearly size is a primary factor. The largest banks were more likely to be early entrants and are more likely to have significant foreign operations. But size alone does not explain these behaviors. Even when we control for size, banks' ties to other members of the corporate network play a significant role in predicting overseas activity. Banks that were integrated into the larger corporate network, where general ideas about prescribed strategies are likely to prevail, were more likely to join the growing trend toward internationalization.

How did these effects operate? If we consider a social network as an arena in which ideas are generated and disseminated, then whichever ideas and behaviors that prevail are likely, if not initially then eventually, to be adopted by actors most integrated into the network. This means that the closer an actor is to the center, the greater the probability that it has been exposed to the prevailing ideas and behaviors. To the extent that the internationalization of banking in the 1960s was a prevalent trend, we would expect that banks that were central in the network would be most likely to adopt this behavior. This is precisely what we find. The socially central banks also tend to be the largest, and, depending on the measure we use, consideration of the bank’s size may dampen the effect of centrality. Given the high correlation between centrality and size and the imperfections in measuring the former (discussed above), size may also be a proxy for status within the banking community. Even taking into account the limited network data in our current analysis, centrality appears to be a significant positive predictor of a bank’s involvement in overseas activity.

4 Chase and Morgan subsequently merged.
**Coda: What happened next**

We cannot comment at length on the subsequent two decades, but we can give a brief outline. In addition to the branch data described in previous sections, we have assembled data on board ties among the several hundred largest U.S. corporations from 1982 through 1999 (which includes a panel of the largest banks) as well as annual data on the foreign operations of the major corporations tied to banks through shared directors (reported on annual 10K reports). We have also put together annual data on the volume of domestic and foreign corporate lending by every commercial bank holding company in the U.S. from 1986 through 1999 (from quarterly Federal Reserve call reports). Descriptively, the data point to four trends: (1) manufacturers gained an increasing proportion of their revenues from overseas, with the average firm’s foreign sales increasing from under 15 percent to 25 percent of its total (see Figure 3); (2) the number of banks doing business with foreign customers dropped by one-third, in part due to a consolidation in the banking industry; (3) the volume of loans to non-US businesses held by U.S. banks declined steadily from 1986 to 1992 but recovered by 1997 and remained at roughly the same level through the rest of the decade; and (4) foreign loans were increasingly held by a very small number of banks. Citibank’s share of foreign corporate loans increased from 22 percent to 42 percent of the total held by U.S. banks between 1986 and 1999, and the four largest lenders collectively held roughly 78 percent of all commercial and industrial loans to addresses outside the US. In short, while the average American manufacturer grew increasingly multinational, bank holding companies split into two camps: a tiny handful of large multinationals, dominated by Citibank (now Citigroup), and roughly 2500 domestically-oriented banks (see Figure 4).

**FIGURE 3 ABOUT HERE**

**FIGURE 4 ABOUT HERE**
Our initial analytical results indicate that the processes of globalization and “de-globalization” were not symmetric. Banks did not pull out of foreign operations at the speed with which they entered. Instead, the decline in overseas activity was more gradual and operated partly through attrition, as a number of leading banks were absorbed by other banks, including non-US ones. The processes that accounted for overseas banking activity were, if anything, even more prominent in recent years, however. In an analysis of banks’ proportion of commercial and industrial lending that took place outside the U.S. (Mizruchi and Davis 2000), we found that network centrality and interlocks with U.S. nonfinancial corporations that did business overseas were consistently strong predictors of involvement in foreign lending, with effects considerably stronger than those we observed in the 1963-1980 period. The factors that we predicted would influence involvement in foreign banking appear to have solidified in recent years, as numerous banks reduced their overseas activities. For the few U.S. banks that remain as global institutions, proximity to the center of the corporate network is a primary predictor of the level of foreign activity. This suggests a puzzle: if centrality is associated with adopting “normatively appropriate” practices, why then are only the most central firms heavily involved in international banking?

**Conclusion**

We have tried to unpack the mechanisms behind the international expansion phase of American commercial banks during the 1960s and 1970s. Over the course of a few years, large banks went from overwhelmingly domestic institutions to major players in the international economy, and the industry’s foreign assets increased one hundred times. Nearly every major bank that did not already have branches abroad opened them, and the largest banks greatly expanded their foreign operations, to the point that half the profits of the dozen largest
multinational banks came from outside the US. We find that this came about through a combination of opportunities and constraints at the level of political economy and network processes at the organizational level. Once a branch network was in place, new opportunities became available: new sources of deposits in oil exporting nations and new outlets for lending in low-income countries.

The punctuation point of this process was the Third World debt crisis of 1982, and in the subsequent years U.S. banking as an industry substantially retrenched. By 2001, through a combination of mergers and exits, the number of US-owned banks operating foreign branches dropped from 150 to 30. Branches on-site are not the only way to do foreign business, of course, but the number of bank holding companies booking any corporate loans to businesses outside the U.S. dropped by about one-third from 1986 to 1999, and only 38 banks maintained International Banking Facilities. One bank in particular, the former Citibank, now Citigroup, dominates U.S. overseas banking. As noted above, between 1986 and 1999, Citigroup’s share of foreign corporate loans among U.S. banks increased from 22 percent of all foreign loans to 42 percent. Of the 824 foreign branches of US-owned banks in March 2001, Citigroup operated 413 of them, and the three largest parents (now Citigroup, Fleetboston, and J.P. Morgan Chase) owned 87 percent of the total. International banking, at least for U.S. commercial banks, is in effect synonymous with these three organizations.

International financial expansions are taken by some as signs of impending “hegemonic crises” in global capitalism (see, for example, Arrighi and Silver 1999), and international banks have at various times played a critical part in this process. We have argued that the activities of banks are susceptible to organizational analysis, and we have traced the history of American banks abroad by linking their strategies to developments at the level of political economy and
organizational networks. In particular, we find evidence that in addition to economic and regulatory forces, the proliferation of foreign branching by U.S. banks was driven by a process of social definition, as banks that were centrally located in interfirm social networks were those most likely to open overseas branches. This suggests, consistent with both social network and neo-institutional theory, that this particular business strategy may have diffused in part because it was defined by leading actors in the banking community as a socially appropriate activity. Our findings indicate a great U-turn, however, with American banks going from an overwhelmingly domestic business to a substantially international one—and back again. This finding of contraction clearly calls for further study. As Schneper and Guillen (this volume) show, innovations do not always diffuse in a linear manner. They may catch on under some conditions but fail to under others. Although all of our banks eventually opened foreign branches, most reduced their operations over time. To what extent was this related to the lack of a fit between the banks’ missions and their actions? To what extent was the contraction based on location decisions that prevented the banks from occupying a unique niche in the international distribution of U.S. banking, as Haveman and Keister’s findings (this volume) might suggest?\(^5\)

At the same time, we should not lose sight of what is perhaps our most notable finding: the remarkable stability of the dominant foreign oriented U.S. banks. The five U.S. banks with the greatest international business in 1960, accounting for almost all activities by the industry, were Citibank, Chase Manhattan, Bank of America, Bank of Boston, and JP Morgan. These were exactly the same banks—in the same rank order—that dominated foreign corporate lending in 1999. The average American bank is far less international than the average American bank.

\(^5\) A third possible explanation for the banks’ reduction in foreign branching has been suggested to us by Gunter Dufey, a professor at the University of Michigan Business School and a former banker. Dufey notes that when they opened their foreign branches, U.S. banks made special efforts to train personnel from the host country. This
manufacturer; with the exception of a half-dozen firms, American banking is almost exclusively domestic. The relevant tools for studying American international banking are perhaps those of the biographer rather than the demographer.

In arguing against the notion that the current phase of globalization is simply a replay of prior historical occurrences, or that nothing much has changed at base in the world economy, Giddens (2000, 27) points to financial globalization as perhaps the central distinguishing feature. “Geared as it is to electronic money—money that exists only as digits in computers—the current world economy has no parallels in earlier times.” One way in which the current era is distinctive is that identifiable actors, such as banks, are far less important to global financial flows than they were as recently as 1980. Since then, market-based flows have emerged as far more central (World Bank 1997). In that sense, the current era of financial globalization looks very much like the “coming hegemony of global markets” (Arrighi and Silver 1999, 259), which is itself a distinctively American form.

training was so successful, he argues, that many of the indigenous bankers left the U.S. banks and went to work for local institutions, taking their American customers with them. We thank Professor Dufey for this point.
References


York: Routledge.


Table 1
Means, Standard Deviations, and Correlations Among Variables
(pairwise; N=281 for variable 1, 898-923 for variables 2-12)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Open First Branch (1=yes)</td>
<td>.117</td>
<td>.322</td>
<td>949</td>
<td>225</td>
<td>231</td>
<td>063</td>
<td>096</td>
<td>-186</td>
<td>286</td>
<td>-289</td>
<td>033</td>
<td>071</td>
<td>na</td>
</tr>
<tr>
<td>2. New Branches Opened</td>
<td>.473</td>
<td>1.653</td>
<td></td>
<td>120</td>
<td>232</td>
<td>-035</td>
<td>118</td>
<td>001</td>
<td>036</td>
<td>-033</td>
<td>184</td>
<td>217</td>
<td>248</td>
</tr>
<tr>
<td>3. Size (in assets)</td>
<td>9136.27</td>
<td>14717.2</td>
<td>790</td>
<td>-226</td>
<td>150</td>
<td>-170</td>
<td>-151</td>
<td>-038</td>
<td>434</td>
<td>504</td>
<td>840</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Profitability (ROA)</td>
<td>.643</td>
<td>.246</td>
<td></td>
<td></td>
<td></td>
<td>-097</td>
<td>058</td>
<td>098</td>
<td>067</td>
<td>-077</td>
<td>-120</td>
<td>-206</td>
<td></td>
</tr>
<tr>
<td>6. Age of Bank</td>
<td>93.836</td>
<td>43.032</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-061</td>
<td>-027</td>
<td>-030</td>
<td>267</td>
<td>341</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>8. Cost AAA Bonds</td>
<td>5.308</td>
<td>.706</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-499</td>
</tr>
<tr>
<td>9. Business Cycle (1=expansion)</td>
<td>.680</td>
<td>.467</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>001</td>
</tr>
<tr>
<td>10. Officers of Multinationals</td>
<td>4.430</td>
<td>3.481</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Centrality (interlocks)</td>
<td>22.520</td>
<td>14.572</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Branches Established</td>
<td>5.304</td>
<td>10.806</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Decimal points are omitted from the correlation coefficients to conserve space.
Table 2

Number of Banks Opening First Foreign Branch, 1963-1979

<table>
<thead>
<tr>
<th>Year</th>
<th>At Risk</th>
<th>Entering</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>33</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1964</td>
<td>33</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1965</td>
<td>32</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1966</td>
<td>30</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>1967</td>
<td>29</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>1968</td>
<td>29</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>1969</td>
<td>27</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>1970</td>
<td>22</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>1971</td>
<td>11</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>1972</td>
<td>9</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>1973</td>
<td>6</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>1974</td>
<td>6</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>1975</td>
<td>6</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>1976</td>
<td>3</td>
<td>1</td>
<td>31</td>
</tr>
<tr>
<td>1977</td>
<td>2</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>1978</td>
<td>2</td>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td>1979</td>
<td>1</td>
<td>1</td>
<td>33</td>
</tr>
</tbody>
</table>
## Table 3

Determinants of Establishment of First Foreign Branch  
(Discrete-Time Event History Models With Clustering)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-10.800***</td>
<td>-7.251**</td>
<td>-4.401***</td>
<td>-4.906***</td>
</tr>
<tr>
<td></td>
<td>(-4.243)</td>
<td>(-2.690)</td>
<td>(-4.459)</td>
<td>(-4.841)</td>
</tr>
<tr>
<td>Size</td>
<td>.0005***</td>
<td>.0004***</td>
<td>.0005***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4.570)</td>
<td>(3.998)</td>
<td>(6.473)</td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td>0.303</td>
<td>-0.251</td>
<td>0.714</td>
<td>1.243</td>
</tr>
<tr>
<td></td>
<td>(0.301)</td>
<td>(-0.292)</td>
<td>(0.696)</td>
<td>(1.016)</td>
</tr>
<tr>
<td>Age</td>
<td>0.023***</td>
<td>0.014**</td>
<td>0.021***</td>
<td>0.019***</td>
</tr>
<tr>
<td></td>
<td>(3.213)</td>
<td>(2.984)</td>
<td>(3.280)</td>
<td>(3.299)</td>
</tr>
<tr>
<td>Monetary Policy (1=loose)</td>
<td>0.207</td>
<td>0.616</td>
<td>0.051</td>
<td>-0.929*</td>
</tr>
<tr>
<td></td>
<td>(0.210)</td>
<td>(0.560)</td>
<td>(0.071)</td>
<td>(-2.212)</td>
</tr>
<tr>
<td>Cost AAA Bonds</td>
<td>0.996**</td>
<td>0.732</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.386)</td>
<td>(1.625)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Cycle (1=expansion)</td>
<td>-0.757</td>
<td>-1.410</td>
<td>-1.515*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-0.810)</td>
<td>(-1.388)</td>
<td>(-1.939)</td>
<td></td>
</tr>
<tr>
<td>Officers of Multinationals</td>
<td>-0.106</td>
<td>-0.081</td>
<td>-0.067</td>
<td>-0.039</td>
</tr>
<tr>
<td></td>
<td>(-1.036)</td>
<td>(-0.827)</td>
<td>(-0.647)</td>
<td>(-0.384)</td>
</tr>
<tr>
<td>Centrality (interlocks)</td>
<td>0.027</td>
<td>0.060*</td>
<td>0.017</td>
<td>-0.005</td>
</tr>
<tr>
<td></td>
<td>(0.734)</td>
<td>(1.971)</td>
<td>(0.498)</td>
<td>(-0.144)</td>
</tr>
<tr>
<td>$\chi^2$</td>
<td>75.39***</td>
<td>31.84***</td>
<td>56.44***</td>
<td>57.25***</td>
</tr>
<tr>
<td>df</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-77.423</td>
<td>-82.646</td>
<td>-80.095</td>
<td>-83.336</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; ***p < .001; probabilities for substantive variables are one-tailed; those for control variables are two-tailed. N=233 in all models. Logit coefficients are presented, with Z-statistics, based on robust variance estimates with clustering, in parentheses.
### Table 4
Determinants of New Foreign Branches
(Generalized Negative Binomial Models With Clustering)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-3.361***</td>
<td>-15.000***</td>
<td>-1.424**</td>
<td>-1.530*</td>
</tr>
<tr>
<td></td>
<td>(-3.415)</td>
<td>(-7.053)</td>
<td>(-2.417)</td>
<td>(-2.528)</td>
</tr>
<tr>
<td>Size (ln size in Eqn 2)</td>
<td>.0000</td>
<td>1.110***</td>
<td>.0000</td>
<td>-.0000</td>
</tr>
<tr>
<td></td>
<td>(0.309)</td>
<td>(6.160)</td>
<td>(0.011)</td>
<td>(-0.304)</td>
</tr>
<tr>
<td>Profitability</td>
<td>-0.507</td>
<td>0.599</td>
<td>-0.387</td>
<td>-0.446</td>
</tr>
<tr>
<td></td>
<td>(-0.937)</td>
<td>(1.554)</td>
<td>(-0.689)</td>
<td>(-0.790)</td>
</tr>
<tr>
<td>Age</td>
<td>0.003</td>
<td>0.007**</td>
<td>0.003</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>(0.906)</td>
<td>(3.035)</td>
<td>(0.776)</td>
<td>(0.699)</td>
</tr>
<tr>
<td>Monetary Policy (1=loose)</td>
<td>-0.037</td>
<td>0.196</td>
<td>0.020</td>
<td>-0.354*</td>
</tr>
<tr>
<td></td>
<td>(-0.172)</td>
<td>(1.014)</td>
<td>(0.093)</td>
<td>(-2.160)</td>
</tr>
<tr>
<td>Cost AAA Bonds</td>
<td>0.334**</td>
<td>0.064***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2.491)</td>
<td>(4.586)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Cycle (1=expansion)</td>
<td>-0.366</td>
<td>-0.174</td>
<td>-0.662**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-1.515)</td>
<td>(-0.750)</td>
<td>(-3.169)</td>
<td></td>
</tr>
<tr>
<td>Officers of Multinationals</td>
<td>-0.047</td>
<td>-0.030</td>
<td>-0.050</td>
<td>-0.048</td>
</tr>
<tr>
<td></td>
<td>(-1.181)</td>
<td>(-0.996)</td>
<td>(-1.143)</td>
<td>(-1.041)</td>
</tr>
<tr>
<td>Centrality (interlocks)</td>
<td>0.287*</td>
<td>-0.005</td>
<td>0.031**</td>
<td>0.031**</td>
</tr>
<tr>
<td></td>
<td>(2.215)</td>
<td>(-0.492)</td>
<td>(2.427)</td>
<td>(2.472)</td>
</tr>
<tr>
<td>Cumulative Total Branches</td>
<td>0.043**</td>
<td>-0.002</td>
<td>0.047**</td>
<td>0.047**</td>
</tr>
<tr>
<td></td>
<td>(2.911)</td>
<td>(-0.223)</td>
<td>(2.912)</td>
<td>(2.790)</td>
</tr>
<tr>
<td>Ln alpha (year)</td>
<td>0.080*</td>
<td>0.062</td>
<td>0.076*</td>
<td>0.064</td>
</tr>
<tr>
<td></td>
<td>(2.424)</td>
<td>(1.386)</td>
<td>(2.109)</td>
<td>(1.574)</td>
</tr>
<tr>
<td>Ln alpha (constant)</td>
<td>-156.737*</td>
<td>-122.550</td>
<td>-148.136*</td>
<td>-125.241</td>
</tr>
<tr>
<td></td>
<td>(-2.409)</td>
<td>(-1.379)</td>
<td>(-2.095)</td>
<td>(-1.561)</td>
</tr>
</tbody>
</table>

\[ \chi^2 \]

<table>
<thead>
<tr>
<th>df</th>
<th>9</th>
<th>9</th>
<th>8</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log likelihood</td>
<td>-608.589</td>
<td>-585.042</td>
<td>-611.249</td>
<td>-615.966</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01; ***p < .001; probabilities for substantive variables are one-tailed; those for control variables are two-tailed. N=775 in all models. Poisson coefficients are presented, with Z-statistics, based on robust variance estimates with clustering, in parentheses.
Figure 1: Foreign branches of the largest 50 U.S. banks
Figure 2: Ten most central firms in the interlock network, 1962-1999*

<table>
<thead>
<tr>
<th>1962</th>
<th>1982</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>JP Morgan [56]</td>
<td>AT&amp;T [43]</td>
<td>Chase Manhattan [34]</td>
</tr>
<tr>
<td>Chemical Bank [51]</td>
<td>JP Morgan [48]</td>
<td>Sara Lee [34]</td>
</tr>
<tr>
<td>First National City Bank [47]</td>
<td>Citicorp [43]</td>
<td>Bell Atlantic [34]</td>
</tr>
<tr>
<td>Manufacturers Hanover [43]</td>
<td>IBM [38]</td>
<td>Ameritech [26]</td>
</tr>
<tr>
<td>Southern Pacific RR [38]</td>
<td>General Foods [31]</td>
<td>Xerox [29]</td>
</tr>
<tr>
<td>Ford Motor Co [34]</td>
<td>Chemical NY [38]</td>
<td>Lucent Techs [22]</td>
</tr>
<tr>
<td>Bankers Trust [41]</td>
<td>Mobil [28]</td>
<td>Procter &amp; Gamble [26]</td>
</tr>
</tbody>
</table>

*Rankings are based on Bonacich’s (1972) eigenvector measure of point centrality, in which a node is more central if the nodes it is connected to are also central. Numbers in parentheses are counts of interlock ties.
Figure 3: Growing international presence of U.S. manufacturers

Figure 4: Growing concentration of foreign corporate lending

Concentration of commercial and industrial loans made outside the US by US banks

Percent


Top 4 US banks
Citicorp