Corporate Finance and National Technology Systems

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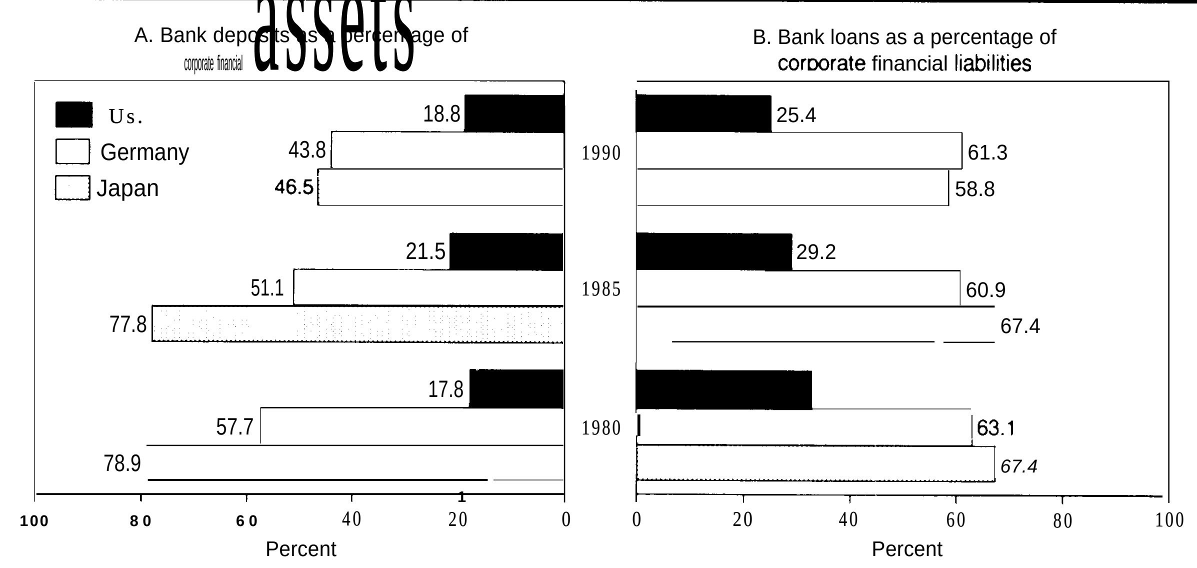
As the previous chapter noted, the corporate roles assigned to banks and other financial institutions constitute one of the starkest differences between American-style capitalism and other systems. Chapter 6 of the first report in this assessment provided an orientation to the changing international financial environment within which MNEs operate.[1] This chapter examines continuing differences among national financial structures and explores their impact on the investment strategies of MNEs and thereby on national technology bases. Once again, the focus is on the United States, Japan, and Germany, but not to draw lessons from one case for application to another. The point, rather, is that national differences are likely to persist and need to be taken into account by governments seeking stable expansion of international trade and investment across the Triad. Despite the fact that MNEs now have a wider array of financial options open to them, the nature of their respective strategies continues to be profoundly influenced by financial structures prevailing in their home countries.

In the United States, banks provide MNEs mainly with secondary financing, cash management, and other finance-related services. The trend has been for corporations to reduce their reliance on commercial bank financing, and to fund their long-term requirements from internal retained earnings or directly from bond and stock markets.

[1] U.S. Congress, Office of Technology Assessment, *Multinationals and the National Interest: Playing by Different* Rules, OTA-ITE-569 (Washington, DC: U.S. Government Printing Office, September 1993).

FIGURE 8-1: Indicators of the Relative Importance of Banks in the Financing of Corporations in the United States, Germany, and Japan



SOURCE: International Monetary Fund, *International Capital Markets Developments, Prospects, and Policy Issues* (Washington, DC International Monetary Fund, 1992), p 3

In Japan and Germany, conversely, banks have long played critical coordinating and steering roles in the ongoing process of national industrial and corporate development. Before the bubble burst in Japan, commentators frequently noted that the centrality of banks was breaking down and Japanese MNEs were becoming more independent. Today, the trend is not so clear. In Germany, on the other hand, banks have never ceased to play their central roles. Figure 8-1 illustrates these national differences.

Both OTA interviews and an expanding scholarly literature suggest that the roles assigned to banks, as well as the basic structure of national capital markets, affect the competitiveness of both MNEs and the technology bases of the countries in which they are based. Corporate performance in particular industrial sectors where the core technology is in a stable stage of development appears to be most affected by cross-national differences in financial structure. During the 1980s in the United States, for example, it was in such sectors that the most aggressive and destructive takeover struggles occurred.[2] Indeed, the experience of such excesses challenged the conventional American view that the structure and operation of its decentralized capital markets were optimal for building solid industries and for diffusing new technologies. This issue is developed further in this chapter after the U.S. system of corporate financing is compared with its analogs in Germany and Japan.

FINANCIAL MARKET STRUCTURE IN THE UNITED STATES

Financial markets in the United States are the world's largest and most dynamic—and most

[2] A. Chandler, "Competitive Performance of U.S. Industrial Enterprises: A Historical Perspective" in *Business History Review*, spring 1994 (forthcoming). Relevant comparative historical analysis is also included in J. Zysman, *Governments, Markets, and Growth: Financial Systems and the Politics of Industrial Change* (Ithaca, NY: Cornell University Press, 1983).

idiosyncratic. Both the timing and relative isolation of American industrialization created conditions that permitted a high degree of political intervention and experimentation. By the middle of the 20th century, the interplay of democratic politics and rapid industrial expansion created a complex and decentralized system of corporate financing. It also created the world's largest pool of venture capital. Not coincidentally, the United States became the world's leader in creating new technologies.

In the nineteenth century, the United States did have a system of corporate financing not unlike those existing in Germany and Japan. Banks could perform both commercial and investment banking functions. They were also allowed to hold equity positions in nonfinancial enterprises. In the wake of a series of financial scandals and crises culminating in the Great Depression, however, new rules were imposed at both federal and state levels of government. Various institutional interests gradually coalesced around those rules.

The first restrictions on the ability of commercial banks to own shares directly in industrial enterprises emerged between 1863 and 1892. Through the vehicle of investment banks, such activities persisted, however, until 1933 when the Glass-Steagall provisions of the Banking Act effectively banned linkages between commercial and investment banks. Bank holding companies came under similar constraints in 1956. In 1970, the so-called "Douglas" amendments to the Bank Holding Company Act ensured that, even indirectly, banks could not own more than 5 percent of the shares of nonbanking companies. They were also precluded from seeking to control such companies in other ways, for example, through cross-shareholding arrangements. Reinforcing such restrictions has been the evolution of bankruptcy law within the United States; creditors to a bankrupt firm can find their claims subordinated if the courts interpret them also to have a controlling equity stake.

The functional segmentation of the American banking industry and the restriction of bank-corporate alliances evolved along a parallel track to the geographic limitation on bank branching. An ambiguous division of regulatory responsibility for banking between federal and state authorities goes back to the nation's founding. Explicit limitations on interstate branching were codified in various state laws, the federal McFadden Act of 1927, the Banking Act of 1933, and the Bank Holding Company Act of 1956. With the emergence of regional banking pacts in recent years and various federal regulatory and legislative developments, rigid rules on branching gradually eroded. Their effect on money-center banks, however, would long be felt.[3] Somewhat more slowly, the functional segmentation of the industry also came under pressure.

The financial-industrial combinations that existed in the United States during the late 19th century, complete with interlocking boards and cross-shareholding, were effectively demolished by the 20th century. The institutional financial arrangements still characteristic of Japanese and German industry have long been considered anathema.[4] Despite prohibitions on formal linkages, however, "relationship banking" characterized American corporate finance at least until the

[3] A "regional banking pact" is an agreement among individual states, usually contiguous, that allows banks chartered by one another to expand across state lines. "Money-center banks" refer to the large commercial banks, usually federally chartered, based in New York, Chicago, Los Angeles, and other regional financial centers.

4 F R Edwards and R.A. Eisenbeis, "Financial institutions and Corporate Investment Horizons: An International perspective," background paper prepared for M. Porter et al., *Capital Choices,* A Report to the Council on the Competitiveness and co-sponsored by the Harvard Business School, June, 1992. As Edwards and Eisenbeis put it, "It was the legacy of the 1870-1911 period, however, that cemented concerns with the evils of "bigness. " The creation of a decentralized Federal Reserve System in 1913 was in deference to fears about the concentration of banking power. [n addition, the passage of the Bank Holding Company Act of 1956 was rooted in the failure of the Supreme Court to break up the Trans-America Corporation and prevent its attempt to monopolize banking in the western part of the country; and it was a fear of so-called "congeneric" or "near zaibatsu" banking companies that resulted in the restrictions contained in [the Douglas] amendments of 1970."

late 1970s. Practical business relationships between commercial and investment banks and their leading corporate clients were much looser than in Germany or Japan. In the United States, for example, it was much easier for a corporate client to switch lead banks. Nevertheless, most corporations relied on one main lender and one main underwriter. Especially during difficult periods, most corporations could count on their lead banks for patience, special loans, and other strategically useful services. In addition, as they expanded abroad, U.S.-based MNEs could often rely on the support of the international networks of their lead banks.

During the period after World War II, when many of America's top corporations were transforming themselves into MNEs, this form of relationship banking provided a stable financial base. Even this looser form of bank-corporate alliance, however, has been undermined in recent years. Successful corporations built up substantial retained earnings and came to rely less and less on banks for financing. This natural trend was reinforced by technological and regulatory developments, which led to the creation of an array of new debt instruments and new competitors for the banks. In addition, heightened price competition eroded bank profit margins on traditional forms of corporate financing. Over time, the banking industry lost a large portion of its aggregate U.S. market share to nonbank financial institutions, such as pension funds and mutual funds.[5]

The responses of banks to the heightened competition were skewed by the legal restrictions noted above. Within their confines, however, many banks sought new and often riskier clients to take the place of prime corporate borrowers. Many also expanded their overseas operations, as well as their trading and money market activities. Through such avenues, as well as through various regulatory loopholes, commercial banks began poaching the corporate clients of investment banks. Investment banks returned the favor.

All of this activity helped establish the financial conditions in the United States for the spectacular rash of corporate takeovers that occurred in the 1980s. Many formerly staid corporate banks, driven by fierce competitive pressures, even helped hostile buyers acquire their own clients. In so doing, some richly deserved the label "predator" that came to be associated with them in the popular media. By the beginning of the 1990s, few could doubt that the era of relationship banking in the United States was over.

The same could not be said for other countries, however, as is suggested by the retreat of many U.S. banks from foreign markets in the early 1990s. Although markets like Germany's and Japan's were, in a legal and regulatory sense, more open than they had ever been, an increasing number of U.S. banks retreated or scaled back their direct foreign operations because they could not earn enough to justify their expenses. In the competition for high-profile corporate business, they often found themselves up against formidable indigenous banks. Not only could those banks match their pricing, but they also had long-standing linkages with the leading corporations in their markets, linkages often formalized through reciprocal shareholding. As a former senior Treasury official put it, such bonds no longer existed "in the commoditized U.S. market where price is virtually all that matters."[6]

The decline of banks as sources of long-run financial stability for American corporations has not been matched by the rise of other sorts of institutions that could play a role equivalent to that played by lead banks in Germany and Japan. American insurance companies are often pre-

[5] For data on the sectoral distribution of assets and liabilities overtime, see U.S. Board of Governors of the Federal Reserve System, *Flow of Funds Accounts, 1946-1993: Annual Total Flows and Year-end Assets and Liabilities* (Washington, DC: Federal Reserve System, 1994).

[6] M. Jacobs, *Short-Term America: The Causes and Cures of Our Business Myopia* (Boston, MA: Harvard Business School Press, 1991), p. 153. See also S. Strange, *Casino Capitalism* (Oxford, England: Basil Blackwell, 1986).

TABLE 8-1: Major Industrial Groups in Japan

Former Zaibatsu	New Bank-Centered	New Manufacturer-Centered
Mitsubishi	Dai Ichi Kangyo	Nippon Steel
Mitsui	Sanwa	Hitachi
Sumitomo	Tokai	Nissan
Fuyo	Industrial Bank of Japan	Toyota
		Matsushita
		Toshiba-IHI
		Tokyu
		Seibu

SOURCE Adapted from W.C. Kester, "Industrial Groups as Systems of Corporate Governance," Oxford Review of Eco*nomic Policy, 8(3) 29,* table 1, autumn 1992

vented by state laws from owning controlling shares of stock in corporations. Mutual funds are discouraged by federal regulations and by the national tax code from concentrating their assets in individual firms; portfolio diversification is central to the investment management business. Similarly, pension funds, now the largest owners of corporate stocks in America, are subject to formal fiduciary obligations that require them to shift out of investments if certain return on investment criteria are not met. Liability laws, governmental regulation, and the mandates given by most plan sponsors encourage portfolio diversification. For better or for worse—and after the 1980s many corporate managers considered it much better-most American MNEs must obtain long-term financing from decentralized capital markets.

If room still remains for debate on specific causal connections and the costs and benefits of reform, a growing number of analysts have noted a correlation between the current structure of U.S. financial markets, the short time horizons of American corporate managers, and specific problems in the national technology base. Those markets are good at harnessing risk capital for the initial development of new technologies. They are less good, however, at assisting in the diffusion of innovations throughout the national technology base and ensuring that the benefits of new innovations are commercialized and fully exploited within the national market. The situation is much different in Japan and Germany.

FINANCIAL MARKET STRUCTURE IN JAPAN

Japan developed its corporate financing system during the Meiji Restoration in the 19th century. Until World War II, its main-bank system looked like Germany 's. The principal corporate alliances, the zaibatsu, coalesced around several large banks. Although the zaibatsu were formally dissolved after World War II, the core role of the banks was retained in the keiretsu system of corporate alliances that emerged in the post war period. As new bank-centered keiretsu and so-called "production keiretsu" (centered around large manufacturing enterprises) evolved during the same period, networks of afflliated corporate contractors and subcontractors also tended to cluster their financial relationships around a few banks and trading companies (see table 8-1).[7]

The big change after World War II, however, was the imposition of a U.S.-style separation of financial functions on the market for corporate finance. In effect, the new Article 65 of Japan Securities and Exchange Law imposed a Glass-Steagall-type barrier between commercial bank-

[7] M. Gerlach, *A//lance Capitalism: The Social Organization of Japanese Business* (Berkeley, CA: University of California Press, 1992).

ing and investment banking. Following adoption of the law, the city banks were restricted mainly to short-term lending and deposit-taking functions. Long-term credit banks did what their name implies and funded themselves mainly through the issuance of bank debentures. Securities companies took on the functions of securities' underwriting and ancillary services. One difference between U.S. and Japanese practices, however, centered on the role of bank equity stakes in nonfinancial companies. Currently the ownership limit is 5 percent for both Japanese banks and U.S. bank holding companies. However, in the context of Japan's cross-shareholding system, a 5 percent share is sufficient to reinforce long-term business relationships, preclude hostile takeover bids, and legitimize direct intervention in the event of emergencies. By contrast, financial equity stakes held by U.S. bank holding companies are very restricted and prevent the banks from exerting influence over management.

Banks played the key corporate financing role during Japan's rapid recovery and growth in the 1950s and 1960s. Contemporary Japanese MNEs benefited in the past from the banks' ability to harness and channel scarce national financial resources. Even into the 1970s, banks continued to provide Japanese corporate borrowers with over 60 percent of their external requirements. Securities markets, meanwhile, remained underdeveloped, providing only 7 percent of the country's financing in 1973, a number that would grow only marginally until the mid- 1980s.[8]

Japan's 13 city banks originally concentrated on their corporate lending role, but the market for retail deposits was decentralized. Government used the banking system, as well as an intricate set of public institutions engaged in deposit-taking and policy-based lending, to steer household savings to industry. Banking functions developed under the tight constraints of direct governmental regulation and indirect guidance.[9] In such a context, and given the absence or strict regulation of alternative funding mechanisms, the main-bank system proved critical to the success and rapid global expansion of Japanese MNEs.

The Japanese system provided the financial spark that, through those MNEs, energized the national technology base. As in the case of Germany, the banks played a variety of other roles, not least of which was the provision of fall-back resources. Indeed, it is still common for a corporation's lead bank to dispatch special teams to manage and restructure troubled firms.

In the late 1970s, aspects of the system began to change. The technological and market pressures that promoted a financial deregulatory agenda elsewhere were also at work in Japan. In addition, the leading Japanese MNEs had reached maturity. The corporate bond market began to expand as long-standing interest rate regulation and residual foreign exchange controls were relaxed. As Japanese MNEs built up their own internal reserves, corporate borrowing fell sharply. The banks, in turn, began diversifying their operations abroad. At the same time, banks and other Japanese financial institutions started a long and tendencious process of encroaching onto one another's traditional market segments.

Foreign political pressure reinforced a trend toward deregulation and liberalization. By the end of the 1980s, Japan's financial economy was booming and Japanese financial institutions dominated global markets. It was not uncommon to hear both market participants and observers speculate about the end of the main-bank system and Japan's inevitable convergence toward global norms.

[8] L. Pauly, *Opening Financial Markets: Banking Politics on the Pacific Rim* (Ithaca, NY: Cornell University Press, 1988), p. 13.

[9] See K. Kate), T. Shibata et al., *Policy-Based Finance: The Experience of Postwar Japan* (Tokyo, JA: The Japan Development Bank, January 1993); also see World Bank, *The East Asian Miracle: Economic Growth and Public Policy* (Washington, DC: World Bank, 1993); and R. Wade, *Governing the Marker* (Princeton, NJ: Princeton University Press, 1990).

A very different story was still unfolding when OTA interviews for this study took place in Japan late in 1993. The deregulation and financial euphoria that dramatically pushed up Japanese stock and real estate prices had long since passed. A deep recession followed a tight credit squeeze. Leading Japanese MNEs and their bankers suddenly found themselves overextended. The city banks, down to 11 from 13 after mergers in 1989 and 1990, now supplied a smaller percentage of the financing needs of large corporations; nevertheless, their role as lenders of last resort and work-out specialists was once again becoming apparent. It was an inauspicious time for a struggling corporation to be caught without a solid relationship to a main bank. Many corporate executives expect the current economic problems facing corporate Japan to be resolved in the traditional way, by concerted efforts within industrial groups to restructure themselves with the active assistance of their bank creditors. Indeed, some expressed relief that the wild ride of the 1980s was over.

In one respect, however, the deregulatory legacy of the past decade appeared likely to endure. By the early 1990s, Article 65 of Japan's Securities and Exchange Law was becoming moot. With the limited but growing role of the banks in underwriting corporate stocks and bonds, some aspects of German-style universal banking appeared to be coming quickly.

FINANCIAL MARKET STRUCTURE IN GERMANY

On December 17, 1993, the entire senior management of Metallgesellschaft, Germany's fourteenth largest industrial conglomerate, was abruptly dismissed by the firm's supervisory board. [10] The dismissal followed reports of massive trading losses in the firm New York office. The chairman of the supervisory board, a senior executive from Deutsche Bank, which along with Dresdner Bank was the company's leading lender and shareholder, publicly criticized the managers for inadequately supervising the New York operation. At the same time, he announced the appointment of a new senior management group charged with turning the company around. It later transpired that losses extended far beyond those of the New York office, and a massive global restructuring of the company ensued.

Reports in the financial press interpreted these events as indicative of the erosion of the traditional German system of corporate management, particularly the role of supervisory boards and banks as shareholders. It is more plausible, however, to reach the opposite conclusion. Crisis makes visible the fundamental principle of German corporate law: Ultimate authority over German corporations remains vested in supervisory boards. And at the core of the supervisory boards of most prominent German MNEs remain the banks.

Supervisory boards typically become more assertive and intrusive when troubles arise. At such times, banks play a crucial coordinating role: they are often lenders, partial owners, strategic advisers, and providers of emergency services, including debt work-outs and assistance in preventing hostile takeovers. Although the scale and timing of Metallgesellschaft's problems led to new scrutiny of the German system, that scrutiny looked unlikely to bring about its dismantling. If anything, the functions of the supervisory board will be underlined and board activism promoted. In this context, the role of banks maybe clarified and streamlined, but it will not likely be diminished. The Economics Minister of Germany implied as much when he publicly urged Metallgesellschaft's banks to assist the company to the extent necessary. German banks have done so in many other such cases before, and the result has been a significant bolstering of their various roles in the direction of corporate affairs.

10 "The Revolution at Metallgesellschaft," *The Economist* 329(7843):90, *Dec.* 25-Jan. 7, 1994; and "Smoking," *The Economist* 330(7844):66, Jan. 8-14, 1994.

The prominence of banks in the German system should not be misunderstood. In many ways, it represents the legacy of Germany's rapid but relatively late industrial development. In the absence of broad and deep capital markets, the banks performed a crucial function in organizing the financial resources required for that development. During the past two decades, the direct financing role of the largest corporate banks declined somewhat as corporations accumulated the internal reserves required to fund future investments. In cases where the ownership role of banks has increased in recent years, financial crisis has usually been the cause. Because it agreed to convert some of its prior loans to equity when Daimler-Benz was having difficulties, for example, Deutsche Bank wound up owning more of the firm than it probably wanted. For that reason alone, the bank had an incentive to become intimately involved in Daimler's efforts to diversify both its corporate assets and its shareholder base.

Among German MNEs, however, the continuing influence of the banks comes mainly from their universal character and from the nature of the proxy voting system. In a universal banking system, banks are empowered to lend funds directly to firms as well as to underwrite their stock and bond issues. In the German case, they can perform these functions for firms in which they themselves have an ownership interest. In addition, the German depository voting systems allows the banks to act as agents for individual shareholders. An individual, for example, usually signs over voting rights to a bank, which serves as custodian for the shares. When votes are to be taken, the bank now tells the shareholder how it intends to vote. Unless the shareholder specifically disagrees-a rarity—the bank controls those shares as well as any shares it holds in its own name. [11]

Germany had recovered successfully from the war by the 1960s and its corporations ostensibly began to reduce their direct reliance on banks. During the next two decades, it is estimated that the banks owned between 5 and 7.5 percent of corporate stock.[12] Under the proxy system, however, they controlled about 60 percent. But that interest was concentrated, and most of it reflected the position of the banks in the leading corporations of the country. The German Monopolies Commission reported in the late 1980s that in only three of the largest German companies did banks or insurance companies directly control a majority of voting shares. At the same time, the Big Three banks held significant minority interests in 13 of the largest 100 firms. The picture changes, however, if the proxy voting system is taken into account. A recent study estimates that through the proxy system banks controlled 34 of the largest German firms in 1975 and 39 in 1988.[13]

The German financial system comprises a large variety of banks and other credit institutions. Commercial banks, of which there are approximately 340, account for about one-quarter of total business financing activity. Of that amount, the Big Three--Deutsche, Dresdner, and Commerz—account for approximately one-third, and most of that activity is highly concentrated on German MNEs. In relative terms, those banks play a much more active role in the financial life of German corporations than do their counterparts in the United States. The German system was reshaped after World War II, and it continues to change. What has never taken root at the highest levels of German corporate finance, however, is a broad and deep de-concentration effort similar to that which decisively transformed the American system by the 1930s.

[11] See U. Schaede, "The Creation of a New System of Corporate Governance for the EC: An Integrative Model of the Anglo-American and Germanic Systems, ''Graduate School of International Relations and Pacific Studies, University of California, San Diego, June 1994, pp. 12-16.

[12] U.S. *Congress, General Accounting office, Competitiveness Issues: The Business Environment in the United States, Japan, and Germany,* GAO/GGD-93- 124 (Washington, DC: August 1993), p. 112.

[13] Ibid., p. 113.

German financial markets are more open to foreign participation now than they have ever been, although the role of foreign banks among German MNEs remains modest. Foreign banks have helped stimulate financial innovation, but the leading German banks have proved quite capable of keeping up with them. At the same time, through their active involvement in global capital markets, the biggest German banks also bring to their corporate clients full access to innovative financial techniques and new pools of capital.

During the 1980s and early 1990s, it began to look like this role might change as banks and corporations diversified their operations in the context of the evolution of a single European banking market.[14] Since the unification of Germany, however, the situation has become more complicated. German bankers believe that the substantial economic and political turbulence of the 1990s is reinforcing the links between leading MNEs and their main banks. The difficulties foreign banks have in building substantial corporate financing operations in Germany is symptomatic of the new reality. The market is now more open, but traditional bank-industry relationships are not under threat. No participants or observers told OTA that they expect this to change fundamentally even after the German economy fully recovers.

Neither the universal banking system nor the main-bank system is under imminent threat. The Metallgesellschaft case and others are certainly causing some public soul-searching, and anxiety concerning Germany technological future is frequently linked to the financial foundations and conservatism of German corporations. In light of Germany's industrial history as well as the constraints posed by circumstances now prevailing in European and world markets, however, it seems more than reasonable to expect those foundations to be reinforced even as they are incrementally adjusted. This will not preclude successful German MNEs from attempting to constrain the influence of their main banks during good times, for example, by building tactical relationships with other banks. But neither this nor the global strategies of the big German banks imply that the German system of corporate financing is moving toward the U.S. capital markets model.

CONCLUSIONS

The segmentation and decentralization of the American financial system, as well as the breakdown of relationship banking, can make life difficult for American industries in international competition. On the other hand, they force U.S. firms to be more agile, and they discourage reliance on potentially collusive strategies. Especially during the past few years, the American system inhibits investors inclined toward building large equity stakes. It also constrains institutional cross-shareholding. Competition between American MNEs and MNEs based in financial systems that do the opposite can therefore be skewed. Moreover, to the extent that unstable capital foundations discourage long-term corporate investment within the United States, the national technology base can be harmed.

The traditional American distrust of financial concentration, combined with the dynamic effects of various regulatory and technological changes, created an environment conducive to the hyperactive market for corporate takeovers in the 1980s. Although some firms undoubtedly needed the shake-up and rationalization that ensued, others were severely damaged. In addition, there would appear to be few benefits for the American economy as a whole from the excessive managerial autonomy that sometimes followed as various states competed to provide corporations with new forms

14 The strategies of the big German banks were in fact recast more broadly. In the context of the effort to create a single European banking market, for example, the banks have been active proponents of the development of Finanzplatz Deutschland as a potential rival to capital market centers in London and elsewhere. Cross-border alliances have also begun, the most prominent including Dresdner Bank's purchase of a minority stake in Banque Nationale de Paris, and Credit Lyonnais" purchase of Bank fur Gemeinwirtschaft.

TABLE 8-2: Technological Complexity, Merger and Acquisition Activity, and International Competitiveness During the 1980s

	Merger and Acquisition Activity	International Competitive Capability
High technology		
Chemicals	Medium	High
Pharmaceuticals	Low/medium	High
Computers	Low	High
Electronics	Low	Mixed
Aerospace	Low	High
Stable Technology		
Oil	Medium	High
Rubber	High	Low
Machinery	High	Low
Motor vehicles	Medium	Low
Metals	High	Low
Low Technology		
Food, drink, tobacco	High	Little foreign challenge
Textiles	High	Low
Paper	Medium	Little foreign challenge

NOTE: OTA obtained this chart from Alfred Chandler, who developed it in preparation for his forthcoming article "Competitiveness of U.S. Industrial Enterprises: A Historical Perspective," Business History *Review,* Spring 1994 (forthcoming)

of protection from future takeovers. In one of the most egregious and well-known cases, for example, the State of Pennsylvania passed a law in 1990 that absolved the directors of firms incorporated in that state from their primary fiduciary obligation to shareholders and in several other respects made takeovers much more difficult and costly.[5]

Unstable corporate financial foundations exposed many American businesses in the 1980s to unwanted and frequently damaging takeovers. Merger and acquisition activity was highest in sectors where core technologies were in relatively stable stages of development (see table 8-2); many firms in these sectors were substantially weakened or dissolved in the wake of these takeovers.[16] Takeovers also appear to have hurt some sectors where process technologies were rapidly changing. For instance, severe damage occurred among financially weak producers of rubber products, nonelectrical machinery and machine tools, metals, and transportation equipment. In addition, a dearth of patient capital was clearly associated with instability in significant parts of the U.S. electronics sector. In one other high-technology sector, inorganic chemicals, the high level of merger and acquisition activity of the 1980s—much of it initiated by foreign MNEs—appears to correspond to differences in underlying financial structures, especially between German and American firms.

OTA interviews in Europe and Japan underscored the importance of reliable corporate financiers to the strategic planning process of a wide range of MNEs. This is one reason behind the current spread of the universal banking model within the European Community. Certainly the future of that model is not compromised by the steady growth of stock and bond markets in Europe. In fact, the two trends—the spread of universal banking and the growth of nonbank capital markets—seem to go together.[18] The large corporate banks of Germany, for example, may be expected to dominate Finanzplatz Deutschland. A similar process is under way in Japan, although a deep conflict of institutional interests between the city

[15] Jacobs, op. cit., footnote 5, p. 103.

[16] A Chandler op. cit., footnote 2; also see U.S. Department of Commerce, *Foreign Direct Investment in the United States: An Update* (Washington DC: U.S. Government Printing Office, June 1993), ch. 6.

[17] A. Chandler, op. cit., footnote 2.

[18] See J B. Goodman and L.W. Pauly, "The obsolescence of Capital Controls? Economic Management in an Age of Global Markets," *World Politics 46(1)*:50-82, October 1993.

banks, long-term credit banks, and securities companies complicates the move to universal banking. In fact, a look at Japan, Germany, Canada, the United Kingdom, France, and other leading industrial economies, shows a clear move toward universal-type banking structures. Only in the United States is the trajectory unclear.

Corporate networks that center themselves on concentrated banks are provided with financial stability. This does facilitate long-term investment decisionmaking. There is little evidence that such financial structures are being held responsible for the severe financial pressures that have arisen for German and Japanese MNEs during the past few years. Indeed, OTA analysis suggests the opposite. In the face of deep domestic and regional recessions, negative developments in exchange rates, and problems in key export markets, many German and Japanese MNEs have recently been reminded of the wisdom of having long ago purchased the insurance policy of stable banking relationships.

To be sure, the U.S. financial system has its own strengths. From a purely economic point of view, these include its capacity to let the pendulum of market change swing rapidly. Periodic bouts of excessive risk-taking are followed almost predictably by excessive caution, but the system usually adjusts. The wild takeovers of the 1980s, for example, led to credit losses—and legal liabilities—for some financial institutions, and a retreat from excessive lending for leveraged buyouts subsequently occurred. But this sort of normal turbulence is no longer occurring in a system that is isolated. The swinging pendulum can compound long-term adjustment costs for American MNEs when foreign rivals are playing by different rules. In the face of such costs, American MNEs search for ways to shield themselves and stabilize their financial foundations.

Despite the difficulties confronting their Japanese and German competitors, American MNEs have reason to remain concerned. The planning myopia that plagued them during the booming 1980s might be masked in the 1990s by a normal upturn in the business cycle. Many of the corporations that realize this are now on a strategic track conventionally labeled "globalization." As discussed in the first report of this assessment, they seem to be driven in part by a desire to hedge their financial bets. Their treasurers are busy diversifying their capital foundations in a movement that runs in tandem with the geographic spreading of production facilities. In many of the leading American MNEs, this appears to be part of a fundamental corporate strategy. The crafting of new international alliances may be seen in the same light (see box 8-1).

Similar trends are, of course, noticeable in Japan and Germany. In the case of leading Japanese and German MNEs, however, the movement appears much more tactical. With respect to the fundamental financial foundations of such MNEs, an observer would be hard-pressed to find evidence of strategies truly aiming at deconcentration or decarte libation. The large Japanese keiretsu are certainly not coming apart. Similarly, hints of capital diversification in *Germany* need to be interpreted cautiously. The recent foray of Daimler-Benz into American equity markets, for example, does not appear to signal a new willingness on the part of German industry to move away from traditional financial and strategic relationships.

The dynamic nature of today's multinational corporate competition does, however, portend a heightened competition between national financial systems. In such a world, despite recent good news about the performance of many American corporations, it is by no means certain that the American system has proven its superiority. The system has created the world's deepest pool of venture capital, but that pool is increasingly open to non-U.S.-based MNEs. This is potentially very positive not only for Americans but for the rest of the world. Serious questions remain, however, as to whether American firms enjoy reciprocal access to the functional equivalents that have been developed abroad. Surely Japan's equivalent, the spinning off of new operations by established firms once they have reached competitive maturity, is not open; nor have acquisitions become easier to undertake in either Japan or Germany. It is also not clear that American venture capital can be easily attracted to support the development of

BOX 8-1: National Financial Structures and International Strategic Alliances

As discussed in chapter 5 of the first report in this assessment, financial considerations often provide a powerful motivation for the crafting of strategic alliances between otherwise competing MNEs. The vast expense and short technology development cycles experienced in such sectors as telecommunications and computing are often cited by corporate officials as central reasons for entering into such alliances.

Research on the causes of corporate alliances, and on their consequences for public policy, is still at an early stage.[1] OTA interviews, however, indicate the need to begin asking whether differences in underlying financial structures and related forms of corporate governance exert powerful and differential influences on the ways in which MNEs conceive of their participation in such alliances.

American MNEs involved in new alliances, for example, often view corporate alliances as intrinsically strategic. By providing a solution to otherwise binding financial constraints, new alliances are seen as sowing the seeds for future joint ventures, licensing agreements, and various forms of market sharing. In a sense, they are depicted as substitutes for the kinds of long-standing networking arrangements that typify the Japanese and German domestic markets, especially in high-technology sectors.

German and especially Japanese MNEs, conversely, seem to approach the calculation of interests differently. Embedded in the kinds of more stable financial structures discussed above, they tend to view alliances with unrelated MNEs in a more tactical light. Such a view was supported by a number of German and Japanese corporate officials in OTA interviews. Those officials suggested that in many of the alliances that developed in the 1980s, the American firm brought the technology, while partners contributed cash or access to their domestic markets. Indeed, deals that trade technology for market access lie at the heart of many alliances, especially those formalized as joint ventures. One recent study noted, for example, that such vehicles have been particularly popular in the electronics sector in Europe. In such cases, "joint ventures may represent not just a better option in entering a particular market: they may represent the only option."[2] In Japan, and sometimes in Germany, traditional structures of corporate governance and corporate financing clearly contribute to market access problems. They also help make plausible the view that Japanese and German MNEs think about alliances in a more tactical fashion than do their counterparts in the United States.

[1] See P.F. Cowhey and J.D. Aronson, *Managing the World Economy: The Consequences of Corporate Alliances* (New York: Council on Foreign Relations Press, 1993); B.M. Gilroy, *Networking in Multinational Enterprises: The Importance of Strategic Alliances* (Columbia, SC: University of South Carolina Press, 1993); L.K. Mytelka (ed.) *Strategic Partnerships: States Firms and International Competition* (London, UK: Pinter, 1991); and D.C. Mowery (ed.) *International Collaborative Ventures in U.S. Manufacturing* (Cambridge, MA: Ballinger, 1988).

[2] Commission of the European Communities, *Panorama of EC Industry* ECSC-EEC-EAEC (Brussels, Luxembourg: Office for Official Publications of the European Communities, 1993), p. 51.

"boring" improvements in basic and process technologies, both of which will figure heavily in future global competition across a range of manufacturing industries. Indeed, in a number of sectors in the United States, there remains a serious funding gap between the time when initial venture capital for product development runs out and the time when product commercialization attracts routine financing.

German and Japanese MNEs have been able to take a longer-term view of their investment and strategic decisions. Contributing significantly to their abilities in this regard have been the main-bank system, universal banking (in Germany),

BOX 8-1 continued: National Financial Structures and International Strategic Alliances

Mergers and takeovers are the ultimate forms of corporate alliance. The structure and openness of American capital markets undoubtedly contribute to the fact that alliances culminating in mergers have been more common in the United States than in Europe (see table 8-1-1)

TABLE 8-1-1: Value of Completed International Mergers and Corporate Transactions (billions of dollars)

	Domestic		Cross-border			
			U.S.		Europe/non-Europe	
Year	**U.S.**	**Intra-Europe**	**Buyer from U.S.**	**Seller from U.S.**	**Buyer from Europe**	**Seller from Europe**
1985	181.5	8.3	4.8	9.7	6.1	2.4
1986	201.7	11.9	2.9	27.3	17.8	3.5
1987	199.9	38.3	7.7	35.3	27.8	8.3
1988	286.9	63.4	5.9	60.9	36.0	8.4
1989	200.3	74.4	17.5	44.6	33.4	12.7

SOURCE: A.E. Safarian, "Have Transnational Mergers or Joint Ventures Increased?" *Competition Policy in an Interdependent World*, E. Kantzenbach, et al. (eds.) (Baden-Baden, FRG: Nomos, 1993), p. 16.

Many observers, however, have noted structural barriers to takeovers (especially contested takeovers) outside the United States and Great Britain, both of which share certain similarities in the character of their financial markets. In Europe, the importance of such barriers became obvious in 1991 when Pirelli, Italy's leading tire company, made a hostile bid for Continental AG of Germany and was decisively rebuffed. As a survey published by the European Union put the matter, "[This] confirmed the view that German companies are impregnable as long as they have the support of big German banks."[3] A study by Coopers & Lybrand on the subject of corporate takeovers in Europe concluded more generally: "We found that only in the U.K. is the concept of 'hostile takeover' perceived to be an integral part of the financial market."[4]

[3] Ibid

[4] Ibid

and intricate corporate alliance structures (in both Germany and Japan). When such structures merely shield shoddy or overly conservative management practices, they have costly effects. But when they serve to keep corporate managers accountable to the full range of stakeholder interests, and when they provide emergency support during downturns in economic cycles, they can help build strong international competitors. Those same factors are now assisting leading German ant Japanese MNEs as they seek to adjust to radically altered domestic and international business environments.[19]

Business analysts frequently assume that competition between national systems of corporate financing will lead to the abandonment or continuing erosion of the American system. Two respected observers put the matter starkly:

> We are beginning an era of international competition between the entire financial and industrial structures of countries. The efficient ones will be those that survive this Darwinian competitive struggle. Legal and institutional impediments that fail this test will cease to exist. Our belief, or perhaps our prejudice, is that many of the present constraints on U.S. financial institutions will not survive.[20]

Universal banking and "corporate networking" are often portrayed as better adapted to the competitive world of the future, where massive investments in new technology will have to be undertaken and "stable" financial foundations—as well as "orderly" markets—will be needed to make those investments feasible. All of this may be true, but there are at least two basic impediments to the evolution of that future. The first is readily apparent in corporate America itself. Especially after the experience of the 1980s, when a number of firms watched their trusted bankers help raiders take them over, few corporate managers can be expected to be enthusiastic about the recreation of universal banking in the United States. The managerial flexibility provided to those corporate leaders by decentralized capital markets, even though it may force them to focus excessively on the short-term, is now highly valued. The more important impediment is rooted more deeply in the traditional American political reaction to financial concentration.[21]

19 Note Kester's hypothesis (W.C. Kester, "Governance, Contracting, and Investment Time Horizons," working paper 92-003, Harvard Business School, Division of Research, 1991) that, although the German and Japanese systems may not be ideal, "they maybe more efficient than the Anglo-American system in coping with hazards posed by risky investment in new environments."

20 Edwards and Eisenbeis, op. cit., footnote 9.

21 The differences between the American reaction to financial concentration and those of other countries also come out in the field of antitrust policy and its analogs. This is another area that will likely increase in importance as new multilateral roles for trade and investment are sought. See appendix C. See also U.S. Congress, Office of Technology Assessment, *Competing Economies: America, Europe and the Pacific Rim* OTA-ITE-498 (Washington, DC: U.S. Government Printing Office, October 1991); U.S. Congress, General Accounting Office, *Competitiveness Issues: The Business Environment in the United Stares, Japan, and Germany* GAO/GGD-93-124, (Washington, DC: U.S. Government Printing Office, August 1993); J.F. Rill, "Competition Policy: A Force For Open Markets,'' *Antitrust Law Journal* 61:637-650, winter 1993; F.H. Easterbrook, "Monopolization: Past, Present, Future," *Antitrust Law Journal 61*:99-118, summer 1992; L.D. Tyson, *Who's Bashing Whom: Trade Conflict in High Technology Industries* (Washington, DC: Institute for International Economics, 1992); C.F. Bergsten and M. Noland, *Reconcilable Differences: United States-Japan Economic Conflict* (Washington, DC: Institute for International Economics, 1993); J.P. Trachtman, "International Regulatory Competition, Externalization, and Jurisdiction," *Harvard international Law* Journal, 34(1):47-104, winter 1993; J.P. Griffin, "United States Antitrust Laws and Translational Business Transactions: An Introduction," *The International Lawyer21* (2) spring 1987; R.P. Alford, "The Extraterritorial Application of Antitrust Laws: The United States and European Community Approaches," *Virginia Journal of International Law 33:1* -50, fall 1992; P.D. Sutherland, "The Competition Policy of the European Community," *St. Louis University Law Journal 30: 149-170, 1992.*