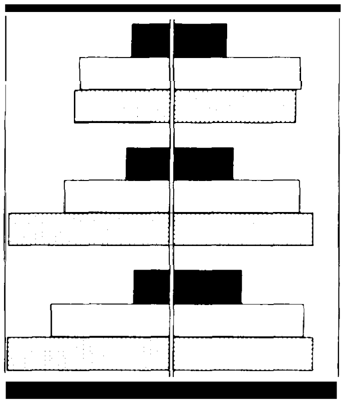
Part IV: Corporate Foundations of National Technology Systems

Despite the current blurring of national economic boundaries, the competitive strength of individual firms continues to be shaped by circumstances prevailing in their home countries. Those circumstances can provide firms with advantages, or they can create disadvantages. Perceptions of such advantages or disadvantages continue to influence the investment decisions of multinationals, especially regarding long-term investments in plant, equipment, research, and development—the wellsprings of future technological innovation.

Chapters 7 and 8 assess two principal asymmetries across national business environments, both of which are increasingly crucial to the investment patterns of American and foreign multinationals and hence to the health and relative position of the U.S. technology base.[1] Specifically, the chapters concentrate on key differences in internal corporate governance and in the corporate role of financial institutions across the Triad. The analysis focuses primarily on the United States, Japan, and Germany, due to the relative positions of these countries across a wide range of technologically intensive industries.[2] Moreover, the industrial structures of these three nations fundamentally influence evolving contemporary economic trends.



[1] On the concept Of "national asymmetries," see the first report of this assessment: 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), ch. 2.

[2] For a broad overview, see 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).

In practice, corporate governance patterns and financial systems are often linked. They are also connected to idiosyncratic national accounting standards, tax policies, bankruptcy rules, competition policies, and other factors that affect the environment within which corporate strategies are set. Bearing these other factors in mind, the main purpose of chapters 7 and 8 is to provide an orientation to important policy issues that arise from persistent national differences in the ways multinational firms govern themselves internally and in the enduring character of their involvement with financial institutions.

Although the chapters highlight the strengths and weaknesses of the traditional systems of corporate governance and long-term corporate finance in the United States, Germany, and Japan, they do not assert the superiority of any one system. During the late 1980s, it became quite common in policy circles to find fault with corporate America and its financial underpinnings. In the midst of severe recession in both Japan and Germany during the early 1990s, it was just as easy to spot the flaws in the respective approaches of those countries. Such debates will continue. Chapters 7 and 8, however, assess the impact of national differences that cannot be expected to disappear in the near term. Such differences are reflected in the technology bases of the three countries, and will likely contribute to increasing political tensions in an era of heightened competition among multinationals.

The analysis presented in chapters 7 and 8 relies in part on extensive OTA interviews with executives of multinational enterprises (MNEs) and banks in the United States, Europe, and Japan. Business executives as well as policymakers readily convey the importance of corporate governance and financial systems to the business activities of MNEs and consequently to the economic strategies of nations. However, the subjects of corporate governance and finance are less amenable to aggregate, quantitative analysis than are the other areas covered by this assessment. Compared to R&D and FDI, there is little quantitative data available on the effects of differences in either corporate governance patterns or financial market structures per se, and there are few comparative empirical analyses in the open literature. Accordingly, the analysis presented here is necessarily more descriptive and less data-intensive than that contained in Parts II and III of this report.

FINDINGS

1. Critically important distinctions persist in the ways corporations govern themselves and raise long-term capital across the United States, Germany, and Japan. Expectations concerning the ultimate convergence of these systems should be kept modest. National patterns are embedded in deep social and cultural traditions, and they can be reinforced more than eroded by turbulence in the global economy.
2. In particular, distinctive systems of institutional cross-shareholding and corporate banking should continue underpinning Japanese MNEs and a widening array of European MNEs. Arguably, those systems can, in certain circumstances, slow down processes of technological innovation. They can also, however, provide stable financial foundations that help facilitate the commercial adaptation, incremental improvement, and optimal diffusion of new technologies
3. For the foreseeable future, it is likely that differences in national systems of corporate governance and corporate financing will be the source of increasing friction in the complex economic relationships evolving among the United States and several of its major trading and investing partners.
4. The ability to raise capital on competitive terms and to deploy it effectively is crucial both to the long-term success of particular MNEs and to the development of critical technologies for individual countries. Global financial integration continues apace, however, especially with regard to short-term

capital.[3] In partial response, many MNEs are redeploying corporate assets to take advantage of new financial opportunities and to hedge against heightened financial uncertainties. But long-term investment patterns continue to differ significantly across countries and sectors.

5. American capital markets are the largest, most decentralized, open, and transparent in the world. Japanese and German capital markets are changing, but they remain relatively concentrated and opaque. The providers of long-term capital, in particular, remain more patient in Germany and Japan than in the United States. Firms based outside the United States are able to enjoy full access to U.S. capital markets. Firms based outside Japan and Germany, on the other hand, are less able to benefit from the strengths inherent in those capital markets.
6. National asymmetries in corporate governance and corporate financing have important consequences for industry. Many other factors, of course, contribute to industrial success or failure. But solid financial foundations are critical. The fact that a number of premier American firms exited from the important and rapidly growing consumer electronics sector during the 1980s, for example, has been ascribed to myriad factors. But it is no coincidence that the Japanese and European MNEs that took their places were able to rely on more stable governance and financing structures.
7. Compared with Germany and Japan, the financial markets of the United States are more supportive of novel technological development. They therefore remain a source of considerable national strength. In the recent past, however, they have been less supportive of the kinds of medium- and long-term investment required to commercialize new products, such as building advanced manufacturing facilities that anticipate demand. Since the development of next-generation technologies often is associated with such facilities, this kind of short-term focus, even if a cyclical phenomenon, can have negative consequences for the national technology base.
8. Japanese and German patterns of corporate governance and corporate financing are often depicted as comparatively rigid and ill--adapted to the initial development of novel technologies. They can, however, be quite effective at marshaling the long-term financial resources needed to build advanced manufacturing facilities. Historically, they have encouraged the relative concentration of such facilities within national markets.
9. National financial asymmetries can skew competition among MNEs, especially if outright corporate failure is precluded or discouraged in some countries. Waiting for structural convergence provides an excuse to avoid reflecting on problems in the U.S. technology base. To be sure, in the mid-1990s that base looks relatively stronger in a number of sectors than it did a decade earlier. Moreover, many vulnerabilities, which came to the fore in the 1980s, reflect internal factors that have little to do with MNEs. Low national savings rates and problems in the U.S. educational system, for example, are frequently cited. The strategic investment behavior of MNEs, however, deserves to be assessed in this connection. MNEs make many of the long-term investment decisions that create new technologies, and they can determine where full development takes place. In this respect, however, all MNEs do not act alike.
10. Japanese and German systems of corporate governance and long-term corporate financing are adjusting somewhat as national and global market conditions change. Pessimistic forecasts concerning the technological futures of these systems are overdrawn. Each system remains quite capable of once again effectively raising considerable financial and

[3] OTA, *Multinationals and the National Interest*, op. cit., footnote 1, ch. 6.

managerial resources and focusing them on the development and commercialization of leading-edge technologies. The American counterparts to those structures, to be sure, have their strengths. But it is premature to conclude they have proven their superiority, especially when it comes to providing solid financial and social foundations for future technological development within the United States.

11. Japanese and German corporate governance and financing structures promote the creation of organized corporate networks. Such alliances, often centered on banks, provide financial stability and facilitate long-term planning. Although economic turbulence in the Japanese and German economies has reduced the level of intercorporate alliance activity, OTA interviews indicate that the core alliance structures of major MNEs are not breaking down. In the face of deep domestic and regional recessions, the value of these alliances to many Japanese and German MNEs has been reinforced. Without them, retooling and continuing investment in new technologies would pose greater challenges. The process of adjusting to a new competitive environment might also be more rapid and violent. In the view of a number of senior executives of Japanese and German MNEs, such a course would risk severe instability in the social bases within which their firms are and will remain embedded.