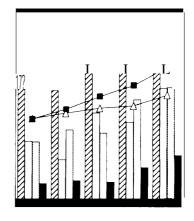
Part I: Summary, Findings, and Policy Options

EXECUTIVE SUMMARY

W ultinational enterprises (MNEs) are business organizations that underpin much of the U.S. economy and the international system of trade and investment. They are increasingly global in their origins, sourcing, communications, production, and outlook. The foreign affiliates of MNEs control a substantial portion of the world economy, perhaps as much as one-quarter of all economic activity in their host countries. Intrafirm trade (IFT) may account for as much as 40 percent of all U.S. merchandise trade. ¹

Even though MNEs exert an increasingly profound influence on technology development in the United States, the U.S. government currently does not have the institutions or the capability to monitor and analyze foreign direct investment (FDI) on a global basis, or to evaluate fully the investments by foreign-based companies in the United States. Clearly, a comprehensive understanding of the operations of MNEs is necessary to facilitate their benefits to the U.S. technology base, as well as to inform future U.S. economic policies, both foreign and domestic.

At the level of the firm, successful companies know that product design must follow consumer preference, and both vary from market to market around the world. These firms recognize that local markets require a local presence, which has led to wider distribution of the assets of many MNEs. But local presence, even manufacturing, does not often translate into local technology de-



¹I IT is defined as international trade among affiliated companies—that is, cross-border trade between firms within the same MNE group of companies. See glossary(appendix A) for terms and acronyms used in this report.

velopment, which has remained—with a few important exceptions—stubbornly resistant to the globalization phenomenon.

- Finding 1: Multinationals Develop Core Technology at Home
- Unlike other principal activities of MNEs, research and technology development tends to be concentrated in the country of national origin. U.S.-based MNEs, for example, conduct less than 13 percent of their manufacturing R&D abroad (see figure 1-1 in chapter 1). Although no comparable data exists for European and Japanese MNEs, the available evidence suggests that they conduct similar if not smaller percentages of their R&D overseas than do U.S. firms. R&D conducted by foreign affiliates continues to increase, especially in such sectors as chemicals, pharmaceuticals, and electronics; however, it tends to be focused on product design and customization.
- Foreign affiliates account for a small but rapidly rising share of all business R&D spending in the United States. That share increased from 9.4 percent (\$4.5 billion) in 1982 to 16.4 percent (\$10.7 billion) in 1992.² Much of this growth, however, resulted from unusually heavy foreign acquisitions of U.S. firms in the late 1980s. Among our major trading partners, Japanese affiliates in the United States exhibit by far the lowest level of R&D intensity, which is the ratio of R&D spending to sales (see figure 1-4).
- In sharp contrast to other advanced industrial nations, the United States typically exports five times more technology than it imports. Most of this trade is conducted within MNEs (see figures 1-2 and 1-3). Japanese firms, however, acquire considerably more

technology from unaffiliated U.S. firms than do their European counterparts. In 1992, for example, 43 percent of all U.S. technology sales to Japan were conducted between unaffiliated firms, compared to 11 percent for Europe.³

Japanese firms spend more on technology development as a percentage of GDP than do their U.S. or European counterparts. Between 1981 and 1993 industry-financed R&D expenditures in Japan grew at an average rate of 8.0 percent. The average growth rate for U.S. firms was 3.9 percent. That number for the United Kingdom, Germany, and France was 1.6, 3.9, and 4.6 percent respectively.

Finding 2: Trade Follows Investment in the 1990s

- Affiliates of foreign-based MNEs account for a substantial portion of U.S. merchandise trade and the greatest share of the U.S. merchandise trade deficit. In 1991, for example, the trade deficit of foreign affiliates in the United States was larger than the total U.S. trade deficit (see figure 1-5). Across the United States, Europe, and Japan, affiliates of foreign-based MNEs have a greater propensity to import than do domestic firms. In the absence of foreign affiliates, however, it is possible that the U.S. trade deficit would be even greater than it is.
- Over the past decade, the U.S.-European direct investment relationship has been relatively symmetrical in scale and composition. Japanese investment in the United States, however, exceeds U.S. investment in Japan by a factor of three to one (see figures 1-8 through 1 -11). Moreover, it is far more concentrated in wholesale operations (and less concentrated in manufacturing) than is European or American

² Unless otherwise specified, all figures in this report are expressed in 1987 constant dollars. For additional information on data used in this report, see appendix D.

³ This report uses *'Europe" to refer to the European Union, its associate members, and the European Free Trade Association. Consistent with most international trade and investment data, the term does not include the countries of Eastern Europe. The report uses "European Union" or "EU" when the data or analysis pertains only to the countries of the European Union.

FDI. As global FDI expanded dramatically in the 1980s and 1990s, U.S. direct investment in Japan failed to keep pace with the overall trend (see figure 1 -6).

- International trade among affiliated firms tends to reflect the balance of investment between the United States and its respective trading partners. Between 1983 and 1992, intrafirm trade (IFT) between the United States and Europe was roughly equivalent, accounting for 43 percent of all U.S.-European merchandise trade. Of that IFT, 43 percent was conducted by U.S.-based MNEs and 57 percent by European-based MNEs (see figure 1-7).
- Intrafirm trade between the United States and Japan is far less balanced than U.S.-European IFT. Over the past decade, IFT accounted for 71 percent of all U.S.-Japan merchandise trade. Of that, fully 92 percent was conducted by Japanese MNEs and only 8 percent by U.S.-based MNEs (see figure 1-1 2). These figures indicate that the majority of U.S. trade with Japan takes place within and is dominated by affiliated networks of Japanese firms.

I Finding 3: Corporate Governance and Finance Diverge Across the Triad

- Despite the current blurring of national economic boundaries, the competitive strength of individual MNEs continues to be shaped by circumstances prevailing in their home countries. Critically important distinctions persist in the ways corporations govern themselves and raise long-term capital across the United States, Germany, and Japan.
- •American capital markets are the largest, most decentralized, open, and transparent in the world. Japanese and German capital markets are changing somewhat, but they are likely to remain relatively concentrated and opaque.
- The ability to raise capital at competitive terms and to deploy it effectively is crucial to both the long-term success of particular MNEs and to the development of critical technologies for in-

dividual nations. Long-term capital remains more patient in Germany and Japan than in the United States. Foreign firms enjoy full access to U.S. capital markets; however, firms based outside Japan and Germany are less able to benefit from the strengths inherent in those capital markets.

- Distinctive cross-shareholding and corporate banking relationships shape the business strategies and development trajectories of Japanese and many European MNEs. These institutional arrangements can provide stable foundations for the commercial adaptation, incremental improvement, and optimal diffusion of new technologies.
- For the foreseeable future, it is likely that **differences in national systems of corporate governance and corporate financing will be a source of increasing friction** in the complex economic relationships evolving among the United States and several of its major trading and investing partners.

Policy Issues

Taken together, the findings presented above suggest that the United States has a clear interest in the success of U.S.-based firms, both at home and abroad, in proportion to the commitment that such firms make to the U.S. technology base. To the extent that foreign-based companies also contribute to U.S. technology development, the United States has a direct interest in their success as well. More technology innovation and development in the United States can lead to more jobs for Americans. Furthermore, the higher-skill, higher-wage jobs of the future are likely to reside in technology-intensive industries.

U.S. policy might pursue three basic strategic responses to the international asymmetries in global trade, investment, and finance identified by this assessment. It could:

1. Seek to expand existing multilateral trade agreements to encompass obstacles to foreign direct investment, restrictive business practices, and other barriers to comparable market access.

4 I Multinationals and the U.S. Technology Base

- 2. Create a two-tiered policy regime, one that grants national treatment when comparable market access exists, and another that places conditions on national treatment in response to enduring formal or informal market barriers.
- 3. Augment a broad multilateral strategy with domestic measures designed to (a) improve U.S. technological capabilities and (b) reform U.S. trade and investment policies to meet the demands of increasingly global commerce.

The specific policy options identified by this assessment are divided into three broad areas: technology development, foreign direct investment, and the ways in which MNEs govern and finance their operations. They range, for example, from creating a uniform national benefits test for participation in U.S. technology programs to harmonizing diverse national financial regimes. Policy issues and options are discussed in detail in chapter 2 of this report.