

**REPORT OF THE DEFENSE SCIENCE BOARD
TASK FORCE**

**FOREIGN OWNERSHIP AND
CONTROL OF U.S. INDUSTRY**

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**DEFENSE SCIENCE BOARD
TASK FORCE ON FOREIGN OWNERSHIP
AND CONTROL OF U.S. INDUSTRY**

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This report was prepared under the overall guidance of the DSB Industrial Base Committee, chaired by Mr. Howard Samuel, President of the Industrial Union Department, AFL-CIO.

The Task Force on foreign Ownership and Control of U.S. industry was formed in mid-1989 (1) to analyze the consequences of foreign ownership and control of U.S. industry and (2) to recommend any changes in federal policy necessary to ensure access for the Defense Department to the technologies, components, and services essential for the national defense. (The original charter of the task force, which was appointed by the Under Secretary of Defense for Acquisition, appears in an appendix to this report.)

DoD is most concerned about proposals by foreign investors to buy defense-critical U.S. business assets. Although hostile takeovers, primarily by European firms, have occurred, the most difficult cases involve willing takeover targets. Such firms are usually being sold by their owners because of business difficulties, so simply denying the foreign buyers permission to purchase--the only current remedy--will not solve the underlying problems of the U.S. firm.

As a result of our review of available data and extensive discussions with analysts both inside and outside the government, the task force believes that the government should, after it makes appropriate investigations and before weak firms are put up for sale, actively intervene to help negotiate U.S. mergers, provide refinancing, or offer other support to assist the critical industry. If this intervention fails and cases involving critical assets are still brought before the Committee on Foreign Investment in the United States (CFIUS) for review, DoD should consider seeking formal guarantees of research and production activity in the United States by the potential investors. In cases in which foreign commercial technology essential to defense has a distinct lead over U.S. technology, DoD should actively seek foreign investors and encourage them to invest in manufacturing and research facilities in the United States.

A 1988 Defense Science Board (DSB) study on the defense industrial base¹ divided the issues associated with globalization and foreign direct investment into two categories: technologies in fielded systems (short-term effects) and forward-looking technologies (long-term effects). That report and a later report by the Defense Policy Advisory Committee on Trade found few short-term adverse effects from foreign ownership of U.S. industry.² But both reports were less sanguine in assessing foreign ownership over the longer term, especially when the issue was coupled with the increasing tendency of U.S. defense firms to obtain critical components from foreign sources.

Our task force focused on that longer-range dimension, seeking answers to the following questions:

- o What is the extent of foreign ownership and control of U.S. industry, particularly in defense-related technology, and what are the trends?
- o How do foreign ownership and control affect the development of the production and technology base required for national security?
- o What policy changes should DoD or the U.S. government overall consider to deal with foreign ownership and control as they affect national security interests?

Before we address these questions, however, it is important to note several overlapping background issues that point up the complexity of trying to assess foreign investment.

¹ Office of the Under Secretary of Defense for Acquisition, "Final Report of the DSB 1988 Summer Study on the Defense Industrial and Technology Base," December 1988, pp. 1-3. Another DSB task force currently has the task of identifying the technologies and industries essential for defense.

²"Foreign Ownership of Defense Related Industries", a paper prepared for DoD by the Defense Policy Advisory Committee on Trade, September 1988.

BACKGROUND ISSUES

Issue 1: Economic Considerations

Concerns about foreign ownership and control are part of a much larger set of questions about the health and competitiveness of the U.S. economy in general, an issue of great interest to DoD but outside its responsibility.

The persistent large U.S. trade deficit encourages foreign direct investment in two ways: (1) The deficit provides the investment capital to foreign firms which cannot be expected to invest it all in Treasury bills or real estate. (2) The deficit stimulates protectionist proposals in the United States. Foreign manufacturers cannot be faulted for investing in U.S. production facilities as a hedge against restrictions that would exclude them from the U.S. market.

A central problem often cited is the cost of capital but the Task Force felt it was really a case of priorities. U.S. investors have tended to underinvest in long-term, high value-added manufacturing technology in favor of leveraged buyouts. If this tendency could be modified, with more capital being invested in longer term oriented research and manufacturing technology, then there would be less pressure for start-up firms to seek foreign financial backing.³

Foreign firms have been providing needed investment capital in the form of direct investments. They earned some of this capital with a positive trade balance and like U.S. firms, seek to further penetrate markets here in the United States. The most important reason that U.S. multinational corporations, for example, cite to support overseas investment in manufacturing is to

³ "Japan's Capital Spending Spree," Fortune (April 9, 1990). This article cites a per capita investment ratio between Japan and the United States of 2 to 1. At the same time the value of mergers and acquisitions was 41.3 percent of all capital investment in the United States compared with 4 percent in Japan.

gain access to foreign markets.⁴

Questions about the health of the U.S. industrial base were being raised as long ago as 1980.⁵ Today, DoD is concerned about the rapid increase in foreign ownership and control of domestic technology and manufacturing assets because, in the long run, the United States might be losing its technological edge. But the question is, should the United States risk interfering with the free flow of investment to protect that leading edge in the interest of "national security"?

Although most analysts agree that investment, both U.S. and foreign, is beneficial for the United States industrial base, some question the current open-door policy. They point out that certain foreign investments, such as in semiconductor manufacturing equipment in the United States appear to have negative effects on the long-term health and competitiveness of U.S. industries which are critical to national security.

Issue 2: Defining National Security

Current policy allows blocking foreign investments that would harm national security. DoD acknowledges its central role in protecting national security but understandably has difficulty in evaluating effects of commercial activity on that charter. Purely commercial industries with products like toys and cosmetics can be ignored by DoD. Clearly, DoD should focus instead on "critical industries." This only slightly improves the problem. Defining critical industries, which ones, and to what subcomponent level, is an extremely complex issue, subject to detractors who then might accuse DoD of picking winners and losers.

Increasing use of high technology by commercial firms makes

⁴Center for National Policy "Survey of Attitudes among U.S. Manufacturers," (Washington D.C., 1987), p. 8.

⁵U.S. Congress, House Committee on Armed Services, Defense Industrial Base Panel, "The Ailing Industrial Base: Unready for Crisis," 96th Cong., 2d sess. (Washington, D.C.:U.S. Government Printing Office, 1980).

it very difficult to separate industries and technologies that are vital for defense systems from industries and technologies that are not. Many of the advanced technologies used in the development and production of defense capabilities have both defense and commercial applications. Such dual-use technologies, processes, and products include computer information processing systems; CAD-CAM systems and processes; multi-axis, high-precision machine tools; advanced composite materials; and microelectronic integrated circuits. Therefore, foreign control of U.S. high tech firms, whether or not they make defense products, must be carefully monitored.

Issue 3: Foreign Dependency

Dependency on foreign suppliers for technology and components essential to equipping our armed forces is an inseparable issue. Foreign ownership can help or hurt U.S. foreign dependency. In the short term, foreign investment in existing facilities helps DoD because the production asset stays in business here in the United States. Long term effects are more difficult to assess.

The increasing interdependence in the world economy makes complete self-sufficiency in advanced industrial sectors almost impossible and undesirable. It can be argued, in fact, that interlocked economies and defense procurements really help to stabilize world security. And most of our economic competitors are still dependent on the United States if not for components at least for complete weapons. While accepting that complete autonomy is impossible, foreign dependency still must be controlled by DoD to retain necessary freedom from foreign industrial constraints.

Commercial competition contributes to problems of foreign dependency. Even in peacetime, commercial motivations compel both U.S. and foreign firms to restrict access to their technology to maintain their competitive advantage. When foreign firms restrict access by competitor U.S. firms, the DoD's access also becomes limited. U.S. national security is negatively affected by foreign investment, the focus of this report, if access to technologies and

production capacities is reduced as a result of this commercial competition. Thus U.S. national security is closely linked to this economic competition.

Some policy analysts have suggested that an international agreement or protocol is needed to deal with problems of foreign investment and dependency. One approach is a reduction of barriers to foreign investment through the Uruguay Round of the GATT negotiations which the United States is now pursuing. Alternatively, the agreement could provide for advance notification and prohibition of retroactive decrees of the kind the United States tried to impose on its European allies regarding materials used for the Soviet gas pipeline.⁶ Although such agreements and protocols may sound appealing, their near-term utility for DoD is probably limited, so we have limited our recommendations to actions that are within the immediate purview of the U.S. government.

The main body of this report begins with a brief statement of the extent of foreign ownership of U.S. industry, followed by short analyses of the dual-use industrial base and an assessment of whether foreign ownership could threaten DoD's assured access to critical defense-related technologies and production processes. U.S. policy and laws governing foreign investment are then reviewed, and the workings of the Committee on Foreign Investment are examined. Following a review of other nations' foreign investment policies, the report concludes with a series of policy recommendations.

FOREIGN DIRECT INVESTMENT IN THE UNITED STATES

Over the past decade, foreign direct investment in the United States has increased rapidly, outpacing U.S. investment abroad.

⁶Theodore H. Moran, *The Globalization of America's Defense Industries* (Washington D.C. September 1989). Moran describes an international protocol that might provide a remedy for some national security concerns. In 1982 the United States attempted to withhold technology from its NATO allies in the Soviet gas pipeline incident, prohibiting both American subsidiaries and overseas licensees of American technology, even though on Allied soil, from carrying out preexisting contracts for sales to the USSR.

Still, total foreign direct investment in the United States remains relatively small. Foreigners control only 12 percent of manufacturing assets, the area of direct concern to DoD, but this figure understates the importance of that control because investments are concentrated in a few industries. What is more important, some of the acquisitions are of firms that have critical leading-edge technology. DoD is concerned about losing access in the long term to this and follow-on technology.

Foreign direct investment in recent years has been concentrated heavily in manufacturing, particularly dual-use, industries predominantly through acquisitions or the establishment of productive assets and real property (as opposed to the purchase of paper or "portfolio" assets). Between 1981 and 1986, the last year for which disaggregated investment data exist, the annual rate of foreign acquisitions of U.S. high-tech interests increased from 30 per year to more than 130 per year.⁷ Since 1986, Japanese firms alone have purchased all or significant portions of 94 American electronics companies. All told, foreign interests now control roughly half of the U.S. consumer electronics industry as well as nearly a third of the assets of the U.S. chemicals industry. If the estimates for 1990 auto imports by U.S. and foreign-owned multinationals are combined with the estimates for autos assembled or manufactured here by foreign transplants, the foreign-based and foreign-owned production in the U.S. accounts for approximately thirty-nine per cent of the cars sold in this country.⁸

Foreign offers for U.S. defense contractors and subcontractors are likely to increase. Reductions in U.S. military budgets and increasing worldwide competition in arms production are forcing a restructuring of the U.S. defense industry. (This restructuring is occurring not only in the United States but worldwide.) Many U.S. defense-industrial firms including primary and secondary

⁷Moran, The Globalization of America's Defense Industries, p. 40.

⁸Conversation with Peter Unterweger, United Auto Workers research department, April 25, 1990. This does not include Canadian imports or imported components used by the Big Three automakers in the United States.

defense contractors are now up for sale. Sales of defense firms will add to the pressure on government/DoD control mechanisms.

The Benefits of Foreign Investment

What should DoD consider as it evaluates the effect of foreign ownership on national security?

Most of the foreign investment in the United States has been economically and technologically beneficial for the U.S. industrial base. In addition to preserving and building production facilities, foreign investors have provided capital for critical research and development, brought in new technologies, and introduced important production and human resource techniques. The major form of foreign direct investment--acquisition of existing companies rather than construction of new ones--saves jobs and production capacities, which is why state and local governments work so hard to attract foreign investors.

Some less developed countries, unable to attract continued foreign direct investment because of debt and new production technologies which lessen the importance of cheap labor, would welcome a surge in foreign investment.⁹ Any policy recommendations concerning foreign involvement in the U.S. economy must consider the positive effects.

Many U.S. firms, faced with the choice of succumbing to foreign ownership or of going out of business altogether, solicit foreign capital. In 1989, Materials Research Corporation (MRC), a key manufacturer of semiconductor equipment (specifically, sputtering equipment and high-purity materials used for thin-film applications), faced capital difficulties and was unable to secure a domestic financier. Japan's Sony Corporation offered the funds that MRC needed to stay afloat. The loss of MRC would have meant the loss of an industrial base asset important in the production

⁹"International Direct Investment and the New Economic Environment" from the discussions at the Tokyo OECD Round Table, Paris 1989, p. 99.

of semiconductor chips. With MRC, the United States now has at least a domestic location and relatively assured access to 60 percent of the world's production capability for sputtering materials. If MRC had gone bankrupt, our assured access might have been reduced to roughly 2 percent.

A number of other U.S. dual-use firms have also been able to obtain affordable foreign financing for new projects. For example, in just the first months of 1990, five U.S. electronics firms announced major joint ventures with Japanese companies to produce semiconductors. In the latest such partnership, Texas Instruments will get the immediate benefit of Japan's Kobe Steel funding (for more than half of the project) to produce new logic semiconductors. Texas Instruments, in return, will teach Kobe how to manufacture semiconductors, and Kobe will get the bulk of the long-term profits from the venture. Similarly, the chief executive of California's Amdahl Corporation says his computer firm could not afford the designs for customized semiconductor housings if it were not for his joint venture with Fujitsu.

Foreign investment often brings with it plant expansion and new jobs. When Honda undertook a \$450 million expansion in 1987 at the Marysville, Ohio, engine production facility it had established several years earlier, it significantly raised its engine production capacity and added facilities to produce transmissions, suspension assemblies, and brakes in the United States.

By investing in existing U.S. firms and establishing U.S. affiliates, other foreign interests have brought with them technologies that have dramatically improved domestic manufacturing. In 1982, when the British electronics firm Plessey acquired Stromberg-Carlson, a small, faltering U.S. telecommunications equipment maker, Plessey brought in technological innovations that turned Stromberg-Carlson around. Today the firm claims a significant portion of the U.S. telecommunications switching equipment business.

Other foreign investments have substantially improved management techniques, including quality control and specific design and production skills. The world-class efficiency of Japan's Toyota Motor Corporation has been brought to Fremont, California, where a joint Toyota-General Motors assembly facility now uses a modified "just in time" inventory control system to produce in small lots and to reduce average setup time markedly. Moreover, the Fremont plant, which once suffered from low productivity and worker absenteeism, is now being revitalized by Toyota's "quality circles" and job-rotation methods.

Many other benefits could be cited but isolated examples are less important than general behavior. Whereas the majority of foreign investment is judged to be favorable, the task force looked for general patterns as well as specific cases of negative effects. Documenting these, we thought, would help DoD determine whether there are problems that should be rectified by a change in policy. In the next section we consider some underlying differences in behavior of foreign investors and U.S. multinationals that might affect the U.S. industrial base and thereby illustrate some disadvantages associated with foreign ownership of U.S. industry.

The Disadvantages of Foreign Ownership

Many defense and economic policy analysts maintain that the globalization of the world economy leaves little or no substantive difference between the behavior of foreign-owned multinational firms in the United States and that of U.S. multinationals. According to Robert Reich's review of multinational behavior in "Who Is Us?"¹⁰, a company that is headquartered, directed, and owned by U.S. nationals but undertakes most of its R&D, product design, and complex manufacturing offshore may be less "American" than a firm that is headquartered, directed, and owned by foreign

¹⁰ "Who Is Us?", Harvard Business Review (January-February 1990).

nationals but employs Americans for the most part and does most of its R&D and production in the United States. Our task force agreed on the importance of local manufacture and R&D to the definition of "American."

Some recent analyses of the aggregate behavior of foreign investors show that foreign-owned manufacturing firms can be distinguished as a category from U.S.-owned firms by certain characteristics that may, in fact, lead to a compromise of DoD's assured access. In high value-added manufacturing, the import-export behavior of foreign affiliates differs significantly from the behavior of U.S.-owned firms. Norman Glickman, in The New Competitors,¹¹ reports that U.S. affiliates of foreign manufacturers tend to import more components from their native countries. Other researchers concur. In comparing the behavior patterns of foreign-owned multinationals with those of U.S.-owned multinationals, these researchers say that foreign-owned manufacturers here import two-and-a-half times more than do U.S. multinational manufacturers.¹²

A sector analysis by the Department of Commerce points to a different type of import-export distinction for foreign-owned multinationals: whereas foreign affiliates in the nonconsumer electronics industry generally do not import more than their U.S.-owned counterparts, they do tend to export from the United States markedly less than American-owned firms do--roughly 10 percent of shipments for foreign-owned firms versus approximately 25 percent for U.S.-owned ones. According to their analysis, in 1986 foreign-owned manufacturers of electronic components in the United States

¹¹Norman J. Glickman and Douglas P. Woodward, The New Competitors (New York: Basic Books, Inc., 1989), p. 127.

¹²Edward M. Graham and Paul R. Krugman, Foreign Direct Investment in the United States (Washington, D.C.: Institute for International Economics 1989) p. 57. See also Congressional Research Service Report: James K. Jackson, "Foreign Direct Investment: Effects on the U.S. Trade Balance", (Washington, D.C., 1989).

were a major contributor (\$2 billion) to that sector's overall trade deficit.¹³

Bureau of Economic Analysis data indicate that \$92.7 billion of the \$127.2 billion U.S. merchandise trade deficit in 1986 can be attributed to the net import behavior of foreign affiliates, mostly Japanese. The bulk of this was wholesale trading--imports of automobiles and other Japanese goods--but \$8.2 billion was due to the import propensity of foreign-owned manufacturers located in the United States. Meanwhile, foreign affiliates of U.S. multinationals manufacturing overseas had a positive effect on the U.S. merchandise trade deficit; in 1986, U.S. companies with affiliates abroad showed a merchandise trade surplus with their foreign affiliates of \$10.8 billion.¹⁴

Foreign-owned affiliates in manufacturing also perform less research, when measured as a percentage of sales, than their U.S. counterparts. According to one study, the levels of R&D per American worker are roughly the same for foreign affiliates as they are for U.S. multinationals.¹⁵ But we believe this statistic can be interpreted as showing that the strong propensity of foreign affiliates to import components into the United States generally means that they have fewer U.S. workers for every dollar of sales and therefore a much lower propensity to do R&D here. In 1985, foreign affiliates owned 20 percent of the electronic industries assets but did only 8 percent of the sector's R&D.¹⁶

¹³"The Competitive Status of the U.S. Electronics Sector," Draft Report by the Department of Commerce to the House Appropriations Committee, U.S. House of Representatives, April 1990, p. 49.

¹⁴James K. Jackson, Congressional Research Service: "Japanese Investment in the U.S.," James K. Jackson (Washington D.C., January 1990).

¹⁵Graham and Krugman, Foreign Direct Investment in the United States.

¹⁶"The Competitive Status of the U.S. Electronics Sector," tables 19 and 21.

Furthermore, although even these relatively low levels of R&D are welcome, the benefits of some of the R&D that foreign affiliates undertake here should not be overstated. For example, Japanese automobile makers in the United States spend only one-sixth the amount of money on R&D as a percentage of gross revenue that U.S. firms spend, and much of the Japanese makers' R&D money is spent on application marketing efforts (e.g., customizing autos for particular emissions standards) or on "listening post" work (gathering existing research data from open U.S. sources).

These generalizations may not apply to industries which, by their nature, must carry out research and production-intensive activity on-site. For instance, because it makes sense to ship crude oil to the local market and to refine the oil locally, Shell Oil refines in the United States the petroleum that Shell intends to sell in this country. Because Shell refines petroleum here, it invests heavily in American labor, plant expansion in the United States and related capital costs that will benefit this nation technologically and economically. Similarly, foreign chemical manufacturers with a large U.S. customer base produce their goods here. As a result, firms like Hoechst, Unilever, and Ciba-Geigy are also considered positive foreign investors. Pharmaceutical makers need to have research workers near the government licensing agencies such as the U.S. Food and Drug Administration. This phenomenon is not unique to foreign-owned multinationals; U.S. multinationals operating overseas demonstrate the same tendencies.

If the behavior of foreign firms in these categories is similar to that of U.S. firms--without preference for imported components--then other types of foreign owned, high value-added manufacturers, such as makers of electronics, machinery, and autos, must account for observed differences between United States and foreign-owned multinationals as a group.

An alternative theory--referred to as product cycle theory--holds that, over time, foreign investors gradually increase local

production and research and become more like domestic firms. Evidence to support this theory exists in the automobile industry where several Japanese transplants have increased use of locally produced components. Honda and others have begun assembly of engines and transmissions in the US and analysts predict that average U.S. manufacturing content¹⁷ for the transplants will increase to 50 percent in 1990. Some analysts contend that this trend has been accelerated by protectionist pressures.

An important consideration for DoD is whether, in the long term, a particular foreign investment will endanger national security by hurting the long-term economic competitiveness of a U.S. industry. Whereas the Sony buyout of MRC Corporation gave the New York-based MRC access to needed capital and kept the company located in the United States, control of the only major U.S. firm producing sputtering targets for semiconductor companies was transferred to the Japanese. Although domestic location is preferable to foreign location, there are potential national security problems in losing control of technology to economic competitors in essential industry sectors.

DoD is concerned about the loss of control of technology whether it is caused by U.S. industry contracting for offshore R&D and production or by foreign investments which might diminish domestic capability. The movement of component production offshore by U.S. owned firms, which is by no means restricted to industries that are commercially oriented, has weakened or reduced total defense-related technology and production assets in the United States. Some members of the task force believed that DoD should consider restrictions on U.S. buyers and owners of U.S.-located critical industries, but our charter limited this study to the foreign aspect.

¹⁷U.S. manufacturing content is a better measure than local content because it excludes nonmanufacturing elements like profit. Using this calculation, U.S. car makers would probably have only 85 percent U.S. manufacturing content rather than the 90 percent local content usually cited.

DoD's assured access has been threatened by foreign investment in a number of instances. Under the federal government's emergency powers authority (the Defense Production Act) DoD may requisition materiel or services from any domestically located establishment that may be needed in the event of a national crisis, so it is implicitly better for the federal government to depend on a foreign-owned source within the United States than on a foreign-owned source offshore.¹⁸ Therefore, DoD ought not to resist foreign investment in general, but rather ought to be more aware of potential problems with foreign ownership of U.S. high-tech companies and ask for assurances or guarantees from some potential foreign buyers as a prerequisite for approving the sale. Examples will help to illustrate this point, even though they occurred prior to Exxon Florio, because they demonstrate the need for government involvement beyond the current yes or no CFIUS response to foreign investment.

One such problem occurs when a foreign firm acquires a U.S. center specializing in military research which allows access to technology and commercial markets. For example, in 1987, International Telephone and Telegraph sold control of its telecommunications holdings here in the US and in Europe to Compagnie Generale d' Electricite (CGE), a firm controlled by the French government. CGE contributed significant telecommunications assets in Europe to the venture and gave a large amount of cash to ITT. ITT retained as part of the deal a minority 37 percent stake in the joint venture called Alcatel N.V. which is now the world's second largest manufacturer of telecommunications equipment. Alcatel then consolidated ITT telecommunications assets, closing down ITT's Advanced Technology Research Center in Connecticut and

¹⁸ From the national security standpoint, the best combination of the two determinants of control--ownership and location--seems to be U.S. owned and located, with location the overriding consideration. Title 1 of the Defense Production Act authorizes the President to order "acceptance and performance" of defense contracts. Firms located in the United States are subject to U.S. laws.

through reorganization, moving from Reston, Virginia approximately 50 digital switch engineering support personnel to France. The Valtec-ITT plant in West Boylston, Massachusetts was subsequently closed and its equipment transferred to the Celwave plant in Claremont, North Carolina. Restructuring was not limited to the U.S. Alcatel also closed a research center in the United Kingdom and moved the staff to Germany and France.

But the real concern for DoD was that a part of ITT's Electro-Optics Products Division in Roanoke, Va was not transferred to ITT Defense along with most of ITT's government and defense business. Instead, this division was split, with the night vision goggle business transferred but the fiber optic business going under Alcatel's control. The rationale was, according to ITT later, that the military fiber optics program was inseparable from the commercial fiber optics business which was in turn a major part of the telecommunications business. It was not practically possible to segregate. Army officials considered the impact of canceling the high-technology classified program with Alcatel and soliciting again for a new contract. AT&T also had bid on the ITT contract to develop the data link and could may have been awarded a new contract in the interest of protecting classified information. According to program management personnel, the French firm Alcatel brought no new technology to the program, rather that ITT clearly had the lead. In early 1987, Alcatel was given a clearance under the U.S.-French reciprocal information security agreement to allow Alcatel to continue work on the Army program. The potential delay of renegotiating with a new contractor was not considered warranted by the need to protect the technology in the FOG-M program at that time.

Using classified technology acquired from work on contracts assumed from ITT, Alcatel is now a subcontractor for Army's development of the Fiber Optic Guided Missile (FOG-M) program, supplying optic fiber and data links. Recently, Corning Glass was selected to be the supplier of optic fiber as the program moved into full-scale development but Alcatel will still supply both the

air and ground electronics units for transmitting data across fiber optic lines. In addition to a direct affect on DoD, this case has implications for U.S. commercial competitiveness because we allowed a foreign-owned competitor to purchase U.S. Government-financed fiber optic research. At the same time, the U.S. share of the world fiber optic market dropped from 54.2 percent in 1986 to about 40 percent in 1988-89 due to a lack of access to foreign markets.¹⁹

Again, this case illustrates the depth and subtlety of the issues needing constant policy reflection, yet which completely elude the current CFIUS investigations.

Assured access may also be compromised by foreign ownership that leads to or facilitates an erosion in the U.S. production base for key end-use industries. Some foreign interests that acquire U.S. facilities reduce U.S. firms' local production capacity or the local availability of certain products. A case in point is the purchase of New Hampshire Ball Bearings, Inc, (NHBB) by Minebea Company, Ltd., in 1985 which some government officials feared might hasten the decline of the U.S. ball-bearing industry. Despite informal reassurances from Minebea to the contrary, these officials feared that the firm would not invest adequately in the production of miniature ball bearings to ensure the competitive production of these military-critical parts in the United States. After a direct request to the President by the Japanese prime minister, the investment was allowed to proceed. The combined capacities of Minebea and NHBB made it the largest miniature and instrument bearings supplier in the world, claiming more than 80 percent of the world's small (9mm and under) bearings market.²⁰

Minebea did invest \$30 million in NHBB's Petersborough

¹⁹ U.S. International Trade Administration, International Competitiveness Study of the fiber Optics Industry (Washington, D.C.: September 1988, p. 25.

²⁰ Department of Justice antitrust concerns about the merger also were overruled during the CFIUS review process.

facility--but for production of larger bearings; Minebea now makes most of its miniature bearings in Thailand. The firm also stopped all production at NHBB's Jaffrey, New Hampshire, plant and moved it, according to Minebea, to Chatsworth, California. Minebea officials say the move was intended to "rationalize production." The evidence, however, suggests otherwise. Although Commerce Department and DoD officials have been told that the Chatsworth plant produces 600,000 bearing units per month, 1986-88 Customs affidavits indicate that production was well below half that amount. Furthermore, U.S. government personnel who have visited the Chatsworth plant report that low levels of apparent activity at the Chatsworth plant make it nearly impossible for the facility to produce the level of bearings that Minebea claims to be manufacturing in California.

Investigations by Customs and DoD have revealed that, rather than producing the bearings in Chatsworth, Minebea has been shipping at least some bearings from Thailand and Singapore to the Chatsworth facility. (In 1989, Minebea imported \$45 million worth of products from Singapore and Thailand.) Once at the Chatsworth facility, the bearings have been housed in "shields" manufactured at a second NHBB facility and stamped "U.S.A."

In view of the fact that 80 percent of America's ball bearings come from foreign sources and that NHBB may have been the largest U.S. producer of certain military ball bearings, Minebea's substitution of foreign imports for all or part of the production of military bearings at Chatsworth production seriously threatens the assured access of the U.S. military. Even before losing Minebea, DoD could not meet its estimated bearing surge requirements for a conventional war.

Just as foreign firms can (and do) withhold technology from their U.S. commercial competitors, foreign monopoly market power could, for political or strategic reasons, eventually cause other key technologies to be withheld. Therefore, DoD should be concerned about dependencies on upstream sectors in which monopolies or

oligopolies enable foreign governments or industrial cartels to dictate how firms operate and how certain technologies are used. Although there have been no specific instances of this type of behavior resulting from foreign investment in the U.S., the U.S. government has attempted to dictate to our allies as mentioned earlier. Current trends in the commercial arena should alert us to the potential for such situations to arise.

Evidence of the willingness on the part of U.S. allies to withhold technology from us is increasing, probably in direct relation to the extent of technology leadership. For example, Nikon makes its semiconductor "stepper" manufacturing equipment available in Japan up to 24 months before it will sell the devices to nondomestic firms. Although Nikon claims that this helps get the "bugs" out of the equipment before it is sold abroad, a number of U.S. semiconductor manufacturers complain that this practice allows manufacturers in Japan to remain ahead of U.S. competitors in the production of next-generation semiconductors. This practice is common to machine tools used in other industries such as automobile manufacturing, as well. In another, somewhat more disturbing instance for DoD, a Japanese firm is known to have withheld the sale of an advanced microelectronics package for supercomputers to a U.S. firm, because the sale would have stripped another Japanese computer producer of its competitive advantage.

The United States has laws to protect national security against the negative effects of foreign ownership but in general still maintains the most open investment environment. In the next section we discuss existing U.S. policy and laws and point out weaknesses that should be remedied.

U.S. POLICY AND LAWS REGARDING FOREIGN INVESTMENT AND NATIONAL SECURITY

Of all nations, the United States has the most open door policy toward foreign direct investment. Since World War II, the United States has had the world's largest economy and understandably has been the staunchest proponent of free trade. As the world's biggest foreign investor, the United States has had an interest in keeping its own doors open.

The Laws Before 1988

Although U.S. foreign investment laws date back to the early 1800s, the first law that provided national-security-related restrictions on foreign investment was the 1917 Trading with the Enemy Act, which empowered the President, in times of national emergency, to intervene in foreign purchases of U.S. assets or in the activity of foreign-owned entities in the United States. Nearly sixty years later, Congress passed the International Emergency Economic Powers Act, which prohibited the President from permanently nationalizing foreign assets seized in a national emergency.²¹

Over time, Congress has also enacted several measures that restrict foreign ownership in certain industries tied especially closely to national security. In the United States, foreigners may not invest in nuclear energy, control oil pipelines, own U.S.-flag vessels, purchase more than 25 percent of a U.S. airline, hold an undersea cable license, or hold a broadcasting license (although foreign ownership of cable broadcasting firms is becoming prevalent).

The most directly relevant prohibitions to foreign direct investment in the U.S. defense industry are the executive orders

²¹Graham and Krugman, Foreign Direct Investment in the United States.

that have established DoD's program on foreign investment, control, and influence (FOCI) over the past three decades. Through these executive orders, DoD's Defense Investigative Service can demand that foreign owners, in order to retain their ability to continue working on classified contracts, operate under U.S. management through nonvoting trusts or proxy arrangements. In essence, foreign investors are allowed to keep the profits but are excluded from strategic company decision making. Thus although foreign ownership is not legally blocked, the effects are controlled.

The FOCI program appears generally effective in protecting classified information, but even this long-standing program is under pressure to change. According to representatives of foreign multinationals, some acquisitions that allegedly would bring additional efficiencies are discouraged. DoD is aware of the trade-offs between information security and benefits of additional investment. In 1981, recognizing that some foreign owners might prefer to give up defense work rather than to operate through this arm's length arrangement, DoD developed an alternative provision for more management control by the foreign firm--called special security agreements--which exist as an exception to general policy. The trade-offs allowed by these agreements are the subject of ongoing debate.²²

Laws Governing the Security of Sensitive Technologies

In addition to these federal regulations to protect classified information, the United States has laws to keep sensitive technologies from falling into the hands of potential military adversaries.

DoD has reasonably effective policies to control the negative effects of foreign investment that involves the transfer of

²²U.S. General Accounting Office Statement for the Record before the House of Representatives Committee on Armed Services, "Defense Industrial Security," March 21, 1990.

classified or even sensitive information. The effectiveness of the law in application is more questionable with respect to long term assistance in securing access to advanced technologies.

The 1988 Omnibus Trade and Competitiveness Act and the Committee on Foreign Investment in the United States

In 1988, the Congress enacted the Omnibus Trade and Competitiveness Act, which, in addition to establishing new rules to prevent circumvention of unfair trade restrictions with "greenfield" foreign investments²³, included the Exon-Florio Amendment. This amendment explicitly authorizes the executive branch to intervene in foreign acquisitions that may adversely affect "national security." The law does not explicitly define this term or give examples of adverse effects.

The U.S. government body responsible for administering the Exon-Florio Amendment is the Committee on Foreign Investment in the United States (CFIUS). Originally established in 1975, CFIUS is an interagency committee chaired by the Assistant Secretary of the Treasury for International Affairs. It includes representatives from the Departments of Defense, Commerce, Justice, and State; the Council of Economic Advisers; and the Offices of the U.S. Trade Representative and Management and Budget.

CFIUS is responsible for analyzing proposed acquisitions that may endanger "national security" and for making a recommendation

²³The "greenfield" laws in Section 781 of the Omnibus Trade and Competitiveness Act prohibit foreigners from establishing "screwdriver" operations in the United States solely for the purpose of bypassing American antidumping restrictions: appropriate duties are applied to the components imported for assembly unless an adequate percentage of value is added in the United States. But serious loopholes still exist in this law: Congress never specified what percentage of a plant is permitted to be a "screwdriver" operation in such instances. Moreover, if there is no trade dispute under way or on record, these laws do not apply.

to the President on whether the investment should be blocked or allowed to proceed. Judging simply by the number of cases reviewed, CFIUS is not blocking very much. As of the end of February 1990, 270 cases had come before CFIUS. Seven of these cases were investigated; four recommendations were referred to the President; and one foreign investor, a Chinese national firm, was ordered to divest its share in a U.S. aerospace firm. This accounting understates CFIUS effectiveness, however, because some cases are withdrawn or resolved before CFIUS makes a recommendation to the President. Although no one can accurately estimate the number of takeovers that are not even attempted because of the Exon-Florio Amendment, in at least one case a firm has voluntarily added reassurances that critical R&D or production would remain in the United States (Monsanto). In other cases, such as Perkin Elmer, the offer to purchase has simply been withdrawn.

Cases come before CFIUS by way of parties involved in a proposed acquisition: Firms that would be directly affected by the foreign takeover or government members of CFIUS may voluntarily raise the issue of the takeover's effects on national security. Some critics contend that this voluntary notification leaves a potential gap in the oversight but the task force believes that a mandatory notification requirement could result in a great increase in filings with a decrease in analysis of essential cases.

CFIUS has thirty days after such a petition is presented to complete an initial assessment to determine whether to begin a 45-day in depth review.

During the initial review and any follow-on investigation, the national security review process moves as follows: The case is referred to all CFIUS participants, including DoD. Within DoD the case is sent to the Defense Technology Security Agency (DTSA), which reviews it for issues related to technology transfer and to DoD's needs for certain dual-use technologies. DTSA sends it to the Defense Investigative Service, to other DoD staff organizations, and to each of the military services. As mentioned,

the Defense Investigative Service reviews the case to ensure that the proposed acquisition will not compromise classified information. The Under Secretary of Defense for Acquisition reviews the potential impact of the case on the industrial base via the Office of Industrial Base Assessment, which uses the Defense Industrial Network (DINET) to seek information on the firms involved in the case.

The DoD analysts who review CFIUS cases have roughly two weeks to complete their initial assessments on whether a full investigation is required. Within forty-five days of the initiation of such a full review, CFIUS must make a final recommendation to the President. Under authority of the Exon-Florio Amendment, the President may choose to block the acquisition or let it proceed.

One problem with CFIUS is that the chairman, a Treasury Department official, has a primary goal of alleviating the overall budget and foreign trade deficits. Foreign investment is not only unavoidable but positively desirable as a means of repatriating U.S. consumer dollars that cause imports to exceed exports. Obviously, the Treasury Department does not want to frustrate the desire of foreign firms to invest capital in the United States. Many members of the task force believe that the appointment of a co-chairman from an agency without this bias would bring more balance, but the group was unable to reach consensus on this issue. A practical concern is that a committee co-chairmanship would dilute the clear line of responsibility.

The main failing of CFIUS, though, is that it does not take a long-term perspective in dealing with foreign ownership and control. Its charter does not appear to preclude it from considering these critical broader issues, but the current focus of the CFIUS review is usually limited to whether the firm being acquired has defense contracts or subcontracts. Even if the firm is a direct supplier to DoD, it is hard to prove that DoD's assured access is threatened. Does it matter in the long run that a

company is owned by an economic competitor? Will it bring advanced technology to the United States? It is difficult to answer these questions without a crystal ball, although there is reason, as pointed out previously, for DoD to be critical of foreign ownership. Some DoD officials believe that even to request the in-depth 45-day investigation sends the wrong signal to foreign investors. As a result DoD sometimes fails even to gather additional available data, pro or con, bearing on the investment, so its input to CFIUS is limited.

Reviews of proposed foreign acquisitions are further hampered by a shortage of data with which to assess the effects on national security. DINET, DoD's internal information system, has little information on subcontractors²⁴ and does not benefit from industrywide analyses. DoD relies primarily on parties involved in the proposed acquisition to highlight information on current subcontracting relationships and future technology applications.

Lack of data hindered our task force's attempt to assess the extent of foreign ownership even among firms selling directly to DoD. DoD considers a firm to be "American" if the firm is incorporated in the United States, no matter who owns it, so DoD cannot tell from its data base which of its purchases come from U.S.-owned companies and which come from foreign-owned companies located in the United States. Better data would assist future assessments by DoD.

At least sixteen government agencies now monitor foreign investment, but each agency has its own method of data collection and maintenance and each tracks different aspects of foreign investment. Although some overlap among these agencies is inevitable, a lack of coordination yields disaggregated,

²⁴DINET does have data on subcontractors that sell spare parts directly to the government and can link these suppliers to end-use weapon systems. DINET does not have data on material and tooling suppliers unless they also sell spare parts directly to the government.

incompatible information.

Most of the federal government's foreign investment data are generated by the Bureau of Economic Analysis (BEA) at the Department of Commerce. BEA restricts sector analysis of available data to protect the privacy of the individual firms. Even when sector analysis is permitted, however, the task is complicated by the fact that individual firms that produce a wide variety of products must be classified as belonging to only one sector. Japanese auto manufacturers, for example, are carried as wholesalers because their major activity is importing cars.

In summary, the legal authority to block foreign direct investments now exists with the passage of the Exon-Florio Amendment. If all other laws and restrictions fail, DoD has the opportunity to bring its case to the CFIUS forum. But this authority is undermined by a lack of coordinated data on even strategic industrial sectors and by a predisposition of CFIUS to favor foreign investment.

The U.S. policy toward foreign direct investment, as expressed in treaties and international trade forums such as GATT and the Organization for Economic Cooperation and Development, advocates an open investment environment. According to Treasury representatives, performance requirements are prohibited in bilateral investment treaties and discouraged in the treaties of friendship and navigation, with exceptions allowed in both types of treaties for national security. Similarly in GATT, the United States has supported the elimination of all trade-related investment measures (TRIMs), particularly performance requirements. Our task force recognizes that any move to restrict foreign direct investment further in the United States, the most vocal proponent of free trade, would invite further restrictions abroad. But the task force believes that the United States should do more to encourage and shape foreign direct investment in the technologies and industries critical for national security.

The U.S. has already taken the first steps toward performance requirements. Before agreeing to allow Monsanto's silicon wafer facility to be purchased by Germany's Huels A. G., it had to agree to continue supply of components to U.S. semiconductor manufacturers. This action appeared sensible to the task force. When Japan's Komatsu purchased a subsidiary of Union Carbide, CFIUS got a similar agreement from Komatsu. But with this latter case, because the agreement was made voluntarily after the U.S. had already approved the sale rather than as a pre-condition to the sale as with Monsanto, the task force believes the agreement with Komatsu would be harder to enforce.

Performance requirements will probably be hard to enforce, according to feedback to Treasury officials from their counterparts in Canada, where performance requirements are allowed. Long-term government requirements for domestic research and local content limit a firm's flexibility to respond to changing market situations. As a result, flexible requirements and enforcement, perhaps through periodic review, are necessary.

Our task force believes that the benefits to national security through limited use of performance requirements outweigh the drawbacks. Allowing DoD to negotiate requisite performance requirements in the interests of national security--would eliminate the need for a "yes or no" decision on foreign investment and replace it, in some cases, with a "yes, if" type of arrangement. Some task force members thought that adding restrictions in the U.S. might actually help us reduce them in other countries, as was the case with arms negotiations. The entire task force agreed that DoD was remiss in failing to use the national security exception to set performance requirements in a limited number of cases.

OTHER NATIONS' FOREIGN INVESTMENT POLICIES

Whereas U.S. laws and policies on direct investment by foreign-owned companies in the United States restrict such investment only when national security is at issue, other nations have broader controls on such investment. Recently, however, many countries have begun to relax their controls on foreign investment.

Nearly all U.S. trading partners employ laws, data-gathering procedures, regulations, or related business practices that help them shape the type of foreign investment that enters their countries. In most cases, these countries simply restrict investment but when they believe the investment will provide a particular technological or economic benefit, they actively encourage it. In both ways, these nations monitor foreign investment and work to improve the market positions of their domestic industries. Here are some specifics about foreign nation's policies:

1. Most U.S. trading partners (including the governments of Japan, Taiwan, Korea, Australia, Mexico, Canada, and France) require government notification or at least screening of high-value investments. Some governments screen all investments.

2. A number of U.S. trading partners (such as South Korea and Mexico, although both are changing) have prohibited foreigners from acquiring domestic firms. Where governments do not expressly prohibit such acquisitions e.g., in Japan, Switzerland, the Netherlands, and West Germany) the firms themselves or other firms use business practices to fend off unwanted foreign buyers.

3. Many foreign governments have the power to restrict any foreign investment that simply run counter to their national economic interests. In Japan, for example, a proposed foreign purchase must not "harm national security, disturb public order, or hamper public safety." Moreover, a foreign investment cannot

"adversely and seriously affect" Japanese companies in a similar line of business or "adversely affect the smooth operation of the national economy." In making its decision about whether to permit a foreign investment, the Japanese government can consider whether reciprocity exists between Japan and the foreign competitor's home country and whether the foreign investment attempts to evade restrictions on capital control.²⁵

Many foreign governments use performance requirements to shape foreign direct investments in their countries. Different types of performance requirements are used to achieve different goals. For example, the requirement for the use of domestic components, maintenance of certain local production facilities, and especially the licensing of key technologies to local firms contributes to their goal of a strong domestic industrial base.

In some countries, governments lure investment for sectors that have been targeted for growth, either because those sectors are lagging or because external technologies will help the country promote those sectors' world market position. Enticements generally take the form of government loans, tax benefits, or other financial support.

²⁵James K. Jackson, "Foreign Direct Investment in the United States," CRS Issue Brief, November 28, 1989, p. 16.

TASK FORCE RECOMMENDATIONS FOR ACTION

1. Get better data on critical industries.

- a. DoD should define the industries for which it considers U.S. ownership or location critical to national security. A short list, based on the list of twenty critical technologies DoD has already developed, could serve as a starting point. (A separate task force under the Defense Science Board has recommended a more elaborate method of selecting DoD's critical industries and has outlined methods and techniques for fostering their growth).
- b. However these industries are defined, DoD must then analyze them in detail. Much of the necessary information on competitive positions and extent of foreign ownership already exists in other government agencies. Such an effort would involve integrating data from the Bureau of Economic Analysis and from the Census Bureau. DoD should assess the relative economic health of the domestic industry (in defense-critical technologies) of which the targeted U.S. company is a part.

2. Improve the CFIUS process.

- a. Stronger congressional oversight should be encouraged. Given the importance and the sensitivity of foreign direct investment, measures to ensure accountability and fulfillment of its congressional mandate should be strengthened. One approach is to have CFIUS activities and perceived trends reported annually on an appropriately classified basis to the heads of the agencies participating in CFIUS, the National Security

Council, and oversight committees. This reporting would lessen any dissonance between executive and legislative committees monitoring foreign investment.

- b. CFIUS should review not only the market position of a targeted U.S. firm and the domestic industry in question but also the business practices and market strategies of the potential foreign buyer. CFIUS should consider the general tendency of foreign-owned manufacturing firms to import components and to perform less domestic R&D, and project the possible effects of such actions on the targeted firm and the U.S. industry. The task force believes that the language of the CFIUS charter is flexible enough to permit such a review. If CFIUS itself deems otherwise, however, the language of the charter should be changed to enable a broader review perspective.

3. Take specific actions to shape foreign investments.

- a. If a foreign buyer proposes to purchase a U.S. firm that is considered critical for U.S. national security and if DoD determines that U.S. location or control of a firm's technology or production capacity is critical to U.S. defense, DoD should informally encourage domestic parties to reach alternative domestic solutions. This process will be facilitated by use of the information and contacts developed in the in-depth industry analyses suggested in Recommendation 1(b).
- b. DoD should also take the initiative to expand use of various mechanisms as incentives for other U.S. firms to purchase the targeted company and maintain U.S. ownership. Such tools in a particular case might include loans and purchase guarantees as authorized by the Defense Production Act, R&D grants, or direct procurement. However, to be effective, these tools must

be made operational through increased authority from OMB. Under current OMB circulars, even defense loan and purchase guarantee authorities must be fully budgeted in an appropriation while other contingent liabilities, such as domestic housing programs, are not. These restrictions are discriminatory and a disincentive to further use.

- c. When a U.S. buyer cannot be found or when foreign ownership is determined to be acceptable but long-term domestic capacity is essential, DoD should have the authority to impose certain performance standards on a foreign buyer as a prerequisite for approval of the acquisition. Such performance standards could include the requirements that--
- foreign holder should license critical technologies to a U.S. firm, or conduct certain specialized research and development within the United States with a high proportion of U.S. technicians, managers, engineers, and scientists; and
 - the foreign buyer should maintain a certain level of U.S.-located facilities to produce key products with a high proportion of U.S. technicians, managers, engineers, and scientists.
- d. In the interests of national security, DoD may deem it essential to ensure access to a certain critical technology controlled by a small number of companies, especially foreign companies or countries. In such cases DoD should go far beyond the restrictive screening role now played through CFIUS; instead of waiting for foreign companies to initiate investment, DoD should actively recruit such investment, by taking the following steps:

- o DoD should first ensure that its policies and those of other federal agencies do not pose obstacles for the foreign-owned firms. Enforcement of DoD directives and executive orders on the security of information and technology may have to be relaxed.
- o DoD should then seek out owners of tightly controlled technologies and encourage them to locate in the United States, and meet the performance requirements specified in par 3(c) above.
- o If foreign firms remain reluctant to invest in the United States, DoD should consider restricting access to DoD procurements.
- o DoD should seek authority from the Congress to use access to the broader U.S. commercial market as incentive for foreigners to bring their technologies here.

TERMS OF REFERENCE

The DBM subcommittee on Foreign Ownership and Control should consider the following task:

- . Review and examine the potential national security impacts (both negative and positive) of foreign ownership and control of U.S. manufacturing and high technology firms.
- . If there is a negative impact, either short or long term, review the reasons why and describe how it is affecting national security.
- . Does the Government review and analysis possess the necessary safeguards and, if not, how should DoD and other agencies address the issue.

The subcommittee will develop DOD policy guidelines and procedures to assure:

- . Timely notification of merger/acquisition activity.
- . Effective analysis and evaluation criteria.
- . Minimal negative impact on national security.
- . Coordinated DoD position.

Preliminary Issues to be Reviewed.

I. Historical Information

- . What extent is the defense industrial base owned/controlled by foreign interests?
 - . Allied countries
 - . Non-allied
 - . Eastern/Communist bloc
 - . At prime contractor level
 - . At subcontractor level
- . Is foreign ownership involved in the 215 defense critical industries and/or the 22 critical technologies?
- . Is the trend increasing, if so, why?
- . Are there specific targeted industries/technologies where foreign ownership is growing or dominant?
- . Has there been any negative impact?
- . What are the short and long term implications?
 - . Technology/R&D
 - . U.S. competitiveness
 - . Industrial base capacity
 - . Mobilization capability
 - . Capital investment
- . What historical information is available?
- . What facts support foreign investment, why?
- . How do other foreign countries view U.S. investment?
- . How are U.S. firms treated by other countries?

II. Policy and Procedures

- . What is the DoD policy on foreign mergers and takeovers?
- . What is the notification process for mergers and acquisition?
- . Are there adequate safeguards for notification and analysis?
- . Is there interagency input?
- . What is the DoD data base?
- . Are all appropriate offices of DoD involved in a determination?
- . What is the review and evaluation criteria?
- . What external elements must be considered?
- . How and who in DoD assembles the facts to make a sound decision? DINET...SOCRATES!
- . Is there a Government policy in this administration?
- . What actions might minimize negative and maximize positive impacts of foreign ownership and control?

III. A key tasking will be the development of review and evaluation criteria to permit an effective analysis of a potential foreign investment. The following elements of analysis should be considered a starting point for the development of this criteria.

Type of industry

- . Research and Development
- . Manufacturing
- . Infrastructure
- . Service

Location of Facilities

- . Manufacturing
- . Assembly only

Type of Activity

- . R&D
- . Acquisition
- . Merger
- . Expansion
- . New operation

What are the anticipated changes to operation?

- . Product
- . R&D
- . Assembly
- . Existing contracts
- . New Technology
- . Reinvestments
- . Jobs
- . Subcontracts
- . Markets

Importance to Department of Defense

- . Planned mobilization company
- . Critical sensitive technology (22 defense critical)
- . Qualified producer
- . Sole source supplier
- . Critical industrial sector for defense-related innovation
- . Classified work
- . Existing government contracts
- . Long term logistics

Impact of Labor

- . Unique skills
- . Number of jobs
- . Type of jobs

Impact on Industry (short and long)

- . Competition
- . Other supplier chance
- . Unfair supports

Acquiring Company Background

- . Country
- . Reasons for acquisition
- . Other holdings (U.S. and international)
- . Track record (technology transfer, intellectual property rights)
- . COCOM
- . Future operating plans
- . Operations in Communist countries
- . General relations with U.S.
- . Political Implications
- . Reciprocal agreement (country)
- . Social responsibility track record
- . Environment, safety, employee relations history



**REPORT OF THE DEFENSE SCIENCE BOARD
TASK FORCE**

**FOREIGN OWNERSHIP AND
CONTROL OF U.S. INDUSTRY**

JUNE 1990

#420

**Prepared for the Under Secretary of Defense for Acquisition
Washington, DC 20301-3140**

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This report was prepared under the overall guidance of the DSB Industrial Base Committee, chaired by Mr. Howard Samuel, President of the Industrial Union Department, AFL-CIO.

The Task Force on foreign Ownership and Control of U.S. industry was formed in mid-1989 (1) to analyze the consequences of foreign ownership and control of U.S. industry and (2) to recommend any changes in federal policy necessary to ensure access for the Defense Department to the technologies, components, and services essential for the national defense. (The original charter of the task force, which was appointed by the Under Secretary of Defense for Acquisition, appears in an appendix to this report.)

DoD is most concerned about proposals by foreign investors to buy defense-critical U.S. business assets. Although hostile takeovers, primarily by European firms, have occurred, the most difficult cases involve willing takeover targets. Such firms are usually being sold by their owners because of business difficulties, so simply denying the foreign buyers permission to purchase--the only current remedy--will not solve the underlying problems of the U.S. firm.

As a result of our review of available data and extensive discussions with analysts both inside and outside the government, the task force believes that the government should, after it makes appropriate investigations and before weak firms are put up for sale, actively intervene to help negotiate U.S. mergers, provide refinancing, or offer other support to assist the critical industry. If this intervention fails and cases involving critical assets are still brought before the Committee on Foreign Investment in the United States (CFIUS) for review, DoD should consider seeking formal guarantees of research and production activity in the United States by the potential investors. In cases in which foreign commercial technology essential to defense has a distinct lead over U.S. technology, DoD should actively seek foreign investors and encourage them to invest in manufacturing and research facilities in the United States.

A 1988 Defense Science Board (DSB) study on the defense industrial base¹ divided the issues associated with globalization and foreign direct investment into two categories: technologies in fielded systems (short-term effects) and forward-looking technologies (long-term effects). That report and a later report by the Defense Policy Advisory Committee on Trade found few short-term adverse effects from foreign ownership of U.S. industry.² But both reports were less sanguine in assessing foreign ownership over the longer term, especially when the issue was coupled with the increasing tendency of U.S. defense firms to obtain critical components from foreign sources.

Our task force focused on that longer-range dimension, seeking answers to the following questions:

- o What is the extent of foreign ownership and control of U.S. industry, particularly in defense-related technology, and what are the trends?
- o How do foreign ownership and control affect the development of the production and technology base required for national security?
- o What policy changes should DoD or the U.S. government overall consider to deal with foreign ownership and control as they affect national security interests?

Before we address these questions, however, it is important to note several overlapping background issues that point up the complexity of trying to assess foreign investment.

¹ Office of the Under Secretary of Defense for Acquisition, "Final Report of the DSB 1988 Summer Study on the Defense Industrial and Technology Base," December 1988, pp. 1-3. Another DSB task force currently has the task of identifying the technologies and industries essential for defense.

²"Foreign Ownership of Defense Related Industries", a paper prepared for DoD by the Defense Policy Advisory Committee on Trade, September 1988.

BACKGROUND ISSUES

Issue 1: Economic Considerations

Concerns about foreign ownership and control are part of a much larger set of questions about the health and competitiveness of the U.S. economy in general, an issue of great interest to DoD but outside its responsibility.

The persistent large U.S. trade deficit encourages foreign direct investment in two ways: (1) The deficit provides the investment capital to foreign firms which cannot be expected to invest it all in Treasury bills or real estate. (2) The deficit stimulates protectionist proposals in the United States. Foreign manufacturers cannot be faulted for investing in U.S. production facilities as a hedge against restrictions that would exclude them from the U.S. market.

A central problem often cited is the cost of capital but the Task Force felt it was really a case of priorities. U.S. investors have tended to underinvest in long-term, high value-added manufacturing technology in favor of leveraged buyouts. If this tendency could be modified, with more capital being invested in longer term oriented research and manufacturing technology, then there would be less pressure for start-up firms to seek foreign financial backing.³

Foreign firms have been providing needed investment capital in the form of direct investments. They earned some of this capital with a positive trade balance and like U.S. firms, seek to further penetrate markets here in the United States. The most important reason that U.S. multinational corporations, for example, cite to support overseas investment in manufacturing is to

³ "Japan's Capital Spending Spree," Fortune (April 9, 1990). This article cites a per capita investment ratio between Japan and the United States of 2 to 1. At the same time the value of mergers and acquisitions was 41.3 percent of all capital investment in the United States compared with 4 percent in Japan.

gain access to foreign markets.⁴

Questions about the health of the U.S. industrial base were being raised as long ago as 1980.⁵ Today, DoD is concerned about the rapid increase in foreign ownership and control of domestic technology and manufacturing assets because, in the long run, the United States might be losing its technological edge. But the question is, should the United States risk interfering with the free flow of investment to protect that leading edge in the interest of "national security"?

Although most analysts agree that investment, both U.S. and foreign, is beneficial for the United States industrial base, some question the current open-door policy. They point out that certain foreign investments, such as in semiconductor manufacturing equipment in the United States appear to have negative effects on the long-term health and competitiveness of U.S. industries which are critical to national security.

Issue 2: Defining National Security

Current policy allows blocking foreign investments that would harm national security. DoD acknowledges its central role in protecting national security but understandably has difficulty in evaluating effects of commercial activity on that charter. Purely commercial industries with products like toys and cosmetics can be ignored by DoD. Clearly, DoD should focus instead on "critical industries." This only slightly improves the problem. Defining critical industries, which ones, and to what subcomponent level, is an extremely complex issue, subject to detractors who then might accuse DoD of picking winners and losers.

Increasing use of high technology by commercial firms makes

⁴Center for National Policy "Survey of Attitudes among U.S. Manufacturers," (Washington D.C., 1987), p. 8.

⁵U.S. Congress, House Committee on Armed Services, Defense Industrial Base Panel, "The Ailing Industrial Base: Unready for Crisis," 96th Cong., 2d sess. (Washington, D.C.:U.S. Government Printing Office, 1980).

it very difficult to separate industries and technologies that are vital for defense systems from industries and technologies that are not. Many of the advanced technologies used in the development and production of defense capabilities have both defense and commercial applications. Such dual-use technologies, processes, and products include computer information processing systems; CAD-CAM systems and processes; multi-axis, high-precision machine tools; advanced composite materials; and microelectronic integrated circuits. Therefore, foreign control of U.S. high tech firms, whether or not they make defense products, must be carefully monitored.

Issue 3: Foreign Dependency

Dependency on foreign suppliers for technology and components essential to equipping our armed forces is an inseparable issue. Foreign ownership can help or hurt U.S. foreign dependency. In the short term, foreign investment in existing facilities helps DoD because the production asset stays in business here in the United States. Long term effects are more difficult to assess.

The increasing interdependence in the world economy makes complete self-sufficiency in advanced industrial sectors almost impossible and undesirable. It can be argued, in fact, that interlocked economies and defense procurements really help to stabilize world security. And most of our economic competitors are still dependent on the United States if not for components at least for complete weapons. While accepting that complete autonomy is impossible, foreign dependency still must be controlled by DoD to retain necessary freedom from foreign industrial constraints.

Commercial competition contributes to problems of foreign dependency. Even in peacetime, commercial motivations compel both U.S. and foreign firms to restrict access to their technology to maintain their competitive advantage. When foreign firms restrict access by competitor U.S. firms, the DoD's access also becomes limited. U.S. national security is negatively affected by foreign investment, the focus of this report, if access to technologies and

production capacities is reduced as a result of this commercial competition. Thus U.S. national security is closely linked to this economic competition.

Some policy analysts have suggested that an international agreement or protocol is needed to deal with problems of foreign investment and dependency. One approach is a reduction of barriers to foreign investment through the Uruguay Round of the GATT negotiations which the United States is now pursuing. Alternatively, the agreement could provide for advance notification and prohibition of retroactive decrees of the kind the United States tried to impose on its European allies regarding materials used for the Soviet gas pipeline.⁶ Although such agreements and protocols may sound appealing, their near-term utility for DoD is probably limited, so we have limited our recommendations to actions that are within the immediate purview of the U.S. government.

The main body of this report begins with a brief statement of the extent of foreign ownership of U.S. industry, followed by short analyses of the dual-use industrial base and an assessment of whether foreign ownership could threaten DoD's assured access to critical defense-related technologies and production processes. U.S. policy and laws governing foreign investment are then reviewed, and the workings of the Committee on Foreign Investment are examined. Following a review of other nations' foreign investment policies, the report concludes with a series of policy recommendations.

FOREIGN DIRECT INVESTMENT IN THE UNITED STATES

Over the past decade, foreign direct investment in the United States has increased rapidly, outpacing U.S. investment abroad.

⁶Theodore H. Moran, *The Globalization of America's Defense Industries* (Washington D.C. September 1989). Moran describes an international protocol that might provide a remedy for some national security concerns. In 1982 the United States attempted to withhold technology from its NATO allies in the Soviet gas pipeline incident, prohibiting both American subsidiaries and overseas licensees of American technology, even though on Allied soil, from carrying out preexisting contracts for sales to the USSR.

Still, total foreign direct investment in the United States remains relatively small. Foreigners control only 12 percent of manufacturing assets, the area of direct concern to DoD, but this figure understates the importance of that control because investments are concentrated in a few industries. What is more important, some of the acquisitions are of firms that have critical leading-edge technology. DoD is concerned about losing access in the long term to this and follow-on technology.

Foreign direct investment in recent years has been concentrated heavily in manufacturing, particularly dual-use, industries predominantly through acquisitions or the establishment of productive assets and real property (as opposed to the purchase of paper or "portfolio" assets). Between 1981 and 1986, the last year for which disaggregated investment data exist, the annual rate of foreign acquisitions of U.S. high-tech interests increased from 30 per year to more than 130 per year.⁷ Since 1986, Japanese firms alone have purchased all or significant portions of 94 American electronics companies. All told, foreign interests now control roughly half of the U.S. consumer electronics industry as well as nearly a third of the assets of the U.S. chemicals industry. If the estimates for 1990 auto imports by U.S. and foreign-owned multinationals are combined with the estimates for autos assembled or manufactured here by foreign transplants, the foreign-based and foreign-owned production in the U.S. accounts for approximately thirty-nine per cent of the cars sold in this country.⁸

Foreign offers for U.S. defense contractors and subcontractors are likely to increase. Reductions in U.S. military budgets and increasing worldwide competition in arms production are forcing a restructuring of the U.S. defense industry. (This restructuring is occurring not only in the United States but worldwide.) Many U.S. defense-industrial firms including primary and secondary

⁷Moran, The Globalization of America's Defense Industries, p. 40.

⁸Conversation with Peter Unterweger, United Auto Workers research department, April 25, 1990. This does not include Canadian imports or imported components used by the Big Three automakers in the United States.

defense contractors are now up for sale. Sales of defense firms will add to the pressure on government/DoD control mechanisms.

The Benefits of Foreign Investment

What should DoD consider as it evaluates the effect of foreign ownership on national security?

Most of the foreign investment in the United States has been economically and technologically beneficial for the U.S. industrial base. In addition to preserving and building production facilities, foreign investors have provided capital for critical research and development, brought in new technologies, and introduced important production and human resource techniques. The major form of foreign direct investment--acquisition of existing companies rather than construction of new ones--saves jobs and production capacities, which is why state and local governments work so hard to attract foreign investors.

Some less developed countries, unable to attract continued foreign direct investment because of debt and new production technologies which lessen the importance of cheap labor, would welcome a surge in foreign investment.⁹ Any policy recommendations concerning foreign involvement in the U.S. economy must consider the positive effects.

Many U.S. firms, faced with the choice of succumbing to foreign ownership or of going out of business altogether, solicit foreign capital. In 1989, Materials Research Corporation (MRC), a key manufacturer of semiconductor equipment (specifically, sputtering equipment and high-purity materials used for thin-film applications), faced capital difficulties and was unable to secure a domestic financier. Japan's Sony Corporation offered the funds that MRC needed to stay afloat. The loss of MRC would have meant the loss of an industrial base asset important in the production

⁹"International Direct Investment and the New Economic Environment" from the discussions at the Tokyo OECD Round Table, Paris 1989, p. 99.

of semiconductor chips. With MRC, the United States now has at least a domestic location and relatively assured access to 60 percent of the world's production capability for sputtering materials. If MRC had gone bankrupt, our assured access might have been reduced to roughly 2 percent.

A number of other U.S. dual-use firms have also been able to obtain affordable foreign financing for new projects. For example, in just the first months of 1990, five U.S. electronics firms announced major joint ventures with Japanese companies to produce semiconductors. In the latest such partnership, Texas Instruments will get the immediate benefit of Japan's Kobe Steel funding (for more than half of the project) to produce new logic semiconductors. Texas Instruments, in return, will teach Kobe how to manufacture semiconductors, and Kobe will get the bulk of the long-term profits from the venture. Similarly, the chief executive of California's Amdahl Corporation says his computer firm could not afford the designs for customized semiconductor housings if it were not for his joint venture with Fujitsu.

Foreign investment often brings with it plant expansion and new jobs. When Honda undertook a \$450 million expansion in 1987 at the Marysville, Ohio, engine production facility it had established several years earlier, it significantly raised its engine production capacity and added facilities to produce transmissions, suspension assemblies, and brakes in the United States.

By investing in existing U.S. firms and establishing U.S. affiliates, other foreign interests have brought with them technologies that have dramatically improved domestic manufacturing. In 1982, when the British electronics firm Plessey acquired Stromberg-Carlson, a small, faltering U.S. telecommunications equipment maker, Plessey brought in technological innovations that turned Stromberg-Carlson around. Today the firm claims a significant portion of the U.S. telecommunications switching equipment business.

Other foreign investments have substantially improved management techniques, including quality control and specific design and production skills. The world-class efficiency of Japan's Toyota Motor Corporation has been brought to Fremont, California, where a joint Toyota-General Motors assembly facility now uses a modified "just in time" inventory control system to produce in small lots and to reduce average setup time markedly. Moreover, the Fremont plant, which once suffered from low productivity and worker absenteeism, is now being revitalized by Toyota's "quality circles" and job-rotation methods.

Many other benefits could be cited but isolated examples are less important than general behavior. Whereas the majority of foreign investment is judged to be favorable, the task force looked for general patterns as well as specific cases of negative effects. Documenting these, we thought, would help DoD determine whether there are problems that should be rectified by a change in policy. In the next section we consider some underlying differences in behavior of foreign investors and U.S. multinationals that might affect the U.S. industrial base and thereby illustrate some disadvantages associated with foreign ownership of U.S. industry.

The Disadvantages of Foreign Ownership

Many defense and economic policy analysts maintain that the globalization of the world economy leaves little or no substantive difference between the behavior of foreign-owned multinational firms in the United States and that of U.S. multinationals. According to Robert Reich's review of multinational behavior in "Who Is Us?"¹⁰, a company that is headquartered, directed, and owned by U.S. nationals but undertakes most of its R&D, product design, and complex manufacturing offshore may be less "American" than a firm that is headquartered, directed, and owned by foreign

¹⁰ "Who Is Us?", Harvard Business Review (January-February 1990).

nationals but employs Americans for the most part and does most of its R&D and production in the United States. Our task force agreed on the importance of local manufacture and R&D to the definition of "American."

Some recent analyses of the aggregate behavior of foreign investors show that foreign-owned manufacturing firms can be distinguished as a category from U.S.-owned firms by certain characteristics that may, in fact, lead to a compromise of DoD's assured access. In high value-added manufacturing, the import-export behavior of foreign affiliates differs significantly from the behavior of U.S.-owned firms. Norman Glickman, in The New Competitors,¹¹ reports that U.S. affiliates of foreign manufacturers tend to import more components from their native countries. Other researchers concur. In comparing the behavior patterns of foreign-owned multinationals with those of U.S.-owned multinationals, these researchers say that foreign-owned manufacturers here import two-and-a-half times more than do U.S. multinational manufacturers.¹²

A sector analysis by the Department of Commerce points to a different type of import-export distinction for foreign-owned multinationals: whereas foreign affiliates in the nonconsumer electronics industry generally do not import more than their U.S.-owned counterparts, they do tend to export from the United States markedly less than American-owned firms do--roughly 10 percent of shipments for foreign-owned firms versus approximately 25 percent for U.S.-owned ones. According to their analysis, in 1986 foreign-owned manufacturers of electronic components in the United States

¹¹ Norman J. Glickman and Douglas P. Woodward, The New Competitors (New York: Basic Books, Inc., 1989), p. 127.

¹² Edward M. Graham and Paul R. Krugman, Foreign Direct Investment in the United States (Washington, D.C.: Institute for International Economics 1989) p. 57. See also Congressional Research Service Report: James K. Jackson, "Foreign Direct Investment: Effects on the U.S. Trade Balance", (Washington, D.C., 1989).

were a major contributor (\$2 billion) to that sector's overall trade deficit.¹³

Bureau of Economic Analysis data indicate that \$92.7 billion of the \$127.2 billion U.S. merchandise trade deficit in 1986 can be attributed to the net import behavior of foreign affiliates, mostly Japanese. The bulk of this was wholesale trading--imports of automobiles and other Japanese goods--but \$8.2 billion was due to the import propensity of foreign-owned manufacturers located in the United States. Meanwhile, foreign affiliates of U.S. multinationals manufacturing overseas had a positive effect on the U.S. merchandise trade deficit; in 1986, U.S. companies with affiliates abroad showed a merchandise trade surplus with their foreign affiliates of \$10.8 billion.¹⁴

Foreign-owned affiliates in manufacturing also perform less research, when measured as a percentage of sales, than their U.S. counterparts. According to one study, the levels of R&D per American worker are roughly the same for foreign affiliates as they are for U.S. multinationals.¹⁵ But we believe this statistic can be interpreted as showing that the strong propensity of foreign affiliates to import components into the United States generally means that they have fewer U.S. workers for every dollar of sales and therefore a much lower propensity to do R&D here. In 1985, foreign affiliates owned 20 percent of the electronic industries assets but did only 8 percent of the sector's R&D.¹⁶

¹³"The Competitive Status of the U.S. Electronics Sector," Draft Report by the Department of Commerce to the House Appropriations Committee, U.S. House of Representatives, April 1990, p. 49.

¹⁴James K. Jackson, Congressional Research Service: "Japanese Investment in the U.S.," James K. Jackson (Washington D.C., January 1990).

¹⁵Graham and Krugman, Foreign Direct Investment in the United States.

¹⁶"The Competitive Status of the U.S. Electronics Sector," tables 19 and 21.

Furthermore, although even these relatively low levels of R&D are welcome, the benefits of some of the R&D that foreign affiliates undertake here should not be overstated. For example, Japanese automobile makers in the United States spend only one-sixth the amount of money on R&D as a percentage of gross revenue that U.S. firms spend, and much of the Japanese makers' R&D money is spent on application marketing efforts (e.g., customizing autos for particular emissions standards) or on "listening post" work (gathering existing research data from open U.S. sources).

These generalizations may not apply to industries which, by their nature, must carry out research and production-intensive activity on-site. For instance, because it makes sense to ship crude oil to the local market and to refine the oil locally, Shell Oil refines in the United States the petroleum that Shell intends to sell in this country. Because Shell refines petroleum here, it invests heavily in American labor, plant expansion in the United States and related capital costs that will benefit this nation technologically and economically. Similarly, foreign chemical manufacturers with a large U.S. customer base produce their goods here. As a result, firms like Hoechst, Unilever, and Ciba-Geigy are also considered positive foreign investors. Pharmaceutical makers need to have research workers near the government licensing agencies such as the U.S. Food and Drug Administration. This phenomenon is not unique to foreign-owned multinationals; U.S. multinationals operating overseas demonstrate the same tendencies.

If the behavior of foreign firms in these categories is similar to that of U.S. firms--without preference for imported components--then other types of foreign owned, high value-added manufacturers, such as makers of electronics, machinery, and autos, must account for observed differences between United States and foreign-owned multinationals as a group.

An alternative theory--referred to as product cycle theory--holds that, over time, foreign investors gradually increase local

production and research and become more like domestic firms. Evidence to support this theory exists in the automobile industry where several Japanese transplants have increased use of locally produced components. Honda and others have begun assembly of engines and transmissions in the US and analysts predict that average U.S. manufacturing content¹⁷ for the transplants will increase to 50 percent in 1990. Some analysts contend that this trend has been accelerated by protectionist pressures.

An important consideration for DoD is whether, in the long term, a particular foreign investment will endanger national security by hurting the long-term economic competitiveness of a U.S. industry. Whereas the Sony buyout of MRC Corporation gave the New York-based MRC access to needed capital and kept the company located in the United States, control of the only major U.S. firm producing sputtering targets for semiconductor companies was transferred to the Japanese. Although domestic location is preferable to foreign location, there are potential national security problems in losing control of technology to economic competitors in essential industry sectors.

DoD is concerned about the loss of control of technology whether it is caused by U.S. industry contracting for offshore R&D and production or by foreign investments which might diminish domestic capability. The movement of component production offshore by U.S. owned firms, which is by no means restricted to industries that are commercially oriented, has weakened or reduced total defense-related technology and production assets in the United States. Some members of the task force believed that DoD should consider restrictions on U.S. buyers and owners of U.S.-located critical industries, but our charter limited this study to the foreign aspect.

¹⁷U.S. manufacturing content is a better measure than local content because it excludes nonmanufacturing elements like profit. Using this calculation, U.S. car makers would probably have only 85 percent U.S. manufacturing content rather than the 90 percent local content usually cited.

DoD's assured access has been threatened by foreign investment in a number of instances. Under the federal government's emergency powers authority (the Defense Production Act) DoD may requisition materiel or services from any domestically located establishment that may be needed in the event of a national crisis, so it is implicitly better for the federal government to depend on a foreign-owned source within the United States than on a foreign-owned source offshore.¹⁸ Therefore, DoD ought not to resist foreign investment in general, but rather ought to be more aware of potential problems with foreign ownership of U.S. high-tech companies and ask for assurances or guarantees from some potential foreign buyers as a prerequisite for approving the sale. Examples will help to illustrate this point, even though they occurred prior to Exxon Florio, because they demonstrate the need for government involvement beyond the current yes or no CFIUS response to foreign investment.

One such problem occurs when a foreign firm acquires a U.S. center specializing in military research which allows access to technology and commercial markets. For example, in 1987, International Telephone and Telegraph sold control of its telecommunications holdings here in the US and in Europe to Compagnie Generale d' Electricite (CGE), a firm controlled by the French government. CGE contributed significant telecommunications assets in Europe to the venture and gave a large amount of cash to ITT. ITT retained as part of the deal a minority 37 percent stake in the joint venture called Alcatel N.V. which is now the world's second largest manufacturer of telecommunications equipment. Alcatel then consolidated ITT telecommunications assets, closing down ITT's Advanced Technology Research Center in Connecticut and

¹⁸ From the national security standpoint, the best combination of the two determinants of control-ownership and location--seems to be U.S. owned and located, with location the overriding consideration. Title 1 of the Defense Production Act authorizes the President to order "acceptance and performance" of defense contracts. Firms located in the United States are subject to U.S. laws.

through reorganization, moving from Reston, Virginia approximately 50 digital switch engineering support personnel to France. The Valtec-ITT plant in West Boylston, Massachusetts was subsequently closed and its equipment transferred to the Celwave plant in Claremont, North Carolina. Restructuring was not limited to the U.S. Alcatel also closed a research center in the United Kingdom and moved the staff to Germany and France.

But the real concern for DoD was that a part of ITT's Electro-Optics Products Division in Roanoke, Va was not transferred to ITT Defense along with most of ITT's government and defense business. Instead, this division was split, with the night vision goggle business transferred but the fiber optic business going under Alcatel's control. The rationale was, according to ITT later, that the military fiber optics program was inseparable from the commercial fiber optics business which was in turn a major part of the telecommunications business. It was not practically possible to segregate. Army officials considered the impact of canceling the high-technology classified program with Alcatel and soliciting again for a new contract. AT&T also had bid on the ITT contract to develop the data link and could may have been awarded a new contract in the interest of protecting classified information. According to program management personnel, the French firm Alcatel brought no new technology to the program, rather that ITT clearly had the lead. In early 1987, Alcatel was given a clearance under the U.S.-French reciprocal information security agreement to allow Alcatel to continue work on the Army program. The potential delay of renegotiating with a new contractor was not considered warranted by the need to protect the technology in the FOG-M program at that time.

Using classified technology acquired from work on contracts assumed from ITT, Alcatel is now a subcontractor for Army's development of the Fiber Optic Guided Missile (FOG-M) program, supplying optic fiber and data links. Recently, Corning Glass was selected to be the supplier of optic fiber as the program moved into full-scale development but Alcatel will still supply both the

air and ground electronics units for transmitting data across fiber optic lines. In addition to a direct affect on DoD, this case has implications for U.S. commercial competitiveness because we allowed a foreign-owned competitor to purchase U.S. Government-financed fiber optic research. At the same time, the U.S. share of the world fiber optic market dropped from 54.2 percent in 1986 to about 40 percent in 1988-89 due to a lack of access to foreign markets.¹⁹

Again, this case illustrates the depth and subtlety of the issues needing constant policy reflection, yet which completely elude the current CFIUS investigations.

Assured access may also be compromised by foreign ownership that leads to or facilitates an erosion in the U.S. production base for key end-use industries. Some foreign interests that acquire U.S. facilities reduce U.S. firms' local production capacity or the local availability of certain products. A case in point is the purchase of New Hampshire Ball Bearings, Inc, (NHBB) by Minebea Company, Ltd., in 1985 which some government officials feared might hasten the decline of the U.S. ball-bearing industry. Despite informal reassurances from Minebea to the contrary, these officials feared that the firm would not invest adequately in the production of miniature ball bearings to ensure the competitive production of these military-critical parts in the United States. After a direct request to the President by the Japanese prime minister, the investment was allowed to proceed. The combined capacities of Minebea and NHBB made it the largest miniature and instrument bearings supplier in the world, claiming more than 80 percent of the world's small (9mm and under) bearings market.²⁰

Minebea did invest \$30 million in NHBB's Petersborough

¹⁹ U.S. International Trade Administration, International Competitiveness Study of the Fiber Optics Industry (Washington, D.C.: September 1988, p. 25.

²⁰ Department of Justice antitrust concerns about the merger also were overruled during the CFIUS review process.

facility--but for production of larger bearings; Minebea now makes most of its miniature bearings in Thailand. The firm also stopped all production at NHBB's Jaffrey, New Hampshire, plant and moved it, according to Minebea, to Chatsworth, California. Minebea officials say the move was intended to "rationalize production." The evidence, however, suggests otherwise. Although Commerce Department and DoD officials have been told that the Chatsworth plant produces 600,000 bearing units per month, 1986-88 Customs affidavits indicate that production was well below half that amount. Furthermore, U.S. government personnel who have visited the Chatsworth plant report that low levels of apparent activity at the Chatsworth plant make it nearly impossible for the facility to produce the level of bearings that Minebea claims to be manufacturing in California.

Investigations by Customs and DoD have revealed that, rather than producing the bearings in Chatsworth, Minebea has been shipping at least some bearings from Thailand and Singapore to the Chatsworth facility. (In 1989, Minebea imported \$45 million worth of products from Singapore and Thailand.) Once at the Chatsworth facility, the bearings have been housed in "shields" manufactured at a second NHBB facility and stamped "U.S.A."

In view of the fact that 80 percent of America's ball bearings come from foreign sources and that NHBB may have been the largest U.S. producer of certain military ball bearings, Minebea's substitution of foreign imports for all or part of the production of military bearings at Chatsworth production seriously threatens the assured access of the U.S. military. Even before losing Minebea, DoD could not meet its estimated bearing surge requirements for a conventional war.

Just as foreign firms can (and do) withhold technology from their U.S. commercial competitors, foreign monopoly market power could, for political or strategic reasons, eventually cause other key technologies to be withheld. Therefore, DoD should be concerned about dependencies on upstream sectors in which monopolies or

oligopolies enable foreign governments or industrial cartels to dictate how firms operate and how certain technologies are used. Although there have been no specific instances of this type of behavior resulting from foreign investment in the U.S., the U.S. government has attempted to dictate to our allies as mentioned earlier. Current trends in the commercial arena should alert us to the potential for such situations to arise.

Evidence of the willingness on the part of U.S. allies to withhold technology from us is increasing, probably in direct relation to the extent of technology leadership. For example, Nikon makes its semiconductor "stepper" manufacturing equipment available in Japan up to 24 months before it will sell the devices to nondomestic firms. Although Nikon claims that this helps get the "bugs" out of the equipment before it is sold abroad, a number of U.S. semiconductor manufacturers complain that this practice allows manufacturers in Japan to remain ahead of U.S. competitors in the production of next-generation semiconductors. This practice is common to machine tools used in other industries such as automobile manufacturing, as well. In another, somewhat more disturbing instance for DoD, a Japanese firm is known to have withheld the sale of an advanced microelectronics package for supercomputers to a U.S. firm, because the sale would have stripped another Japanese computer producer of its competitive advantage.

The United States has laws to protect national security against the negative effects of foreign ownership but in general still maintains the most open investment environment. In the next section we discuss existing U.S. policy and laws and point out weaknesses that should be remedied.

U.S. POLICY AND LAWS REGARDING FOREIGN INVESTMENT AND NATIONAL SECURITY

Of all nations, the United States has the most open door policy toward foreign direct investment. Since World War II, the United States has had the world's largest economy and understandably has been the staunchest proponent of free trade. As the world's biggest foreign investor, the United States has had an interest in keeping its own doors open.

The Laws Before 1988

Although U.S. foreign investment laws date back to the early 1800s, the first law that provided national-security-related restrictions on foreign investment was the 1917 Trading with the Enemy Act, which empowered the President, in times of national emergency, to intervene in foreign purchases of U.S. assets or in the activity of foreign-owned entities in the United States. Nearly sixty years later, Congress passed the International Emergency Economic Powers Act, which prohibited the President from permanently nationalizing foreign assets seized in a national emergency.²¹

Over time, Congress has also enacted several measures that restrict foreign ownership in certain industries tied especially closely to national security. In the United States, foreigners may not invest in nuclear energy, control oil pipelines, own U.S.-flag vessels, purchase more than 25 percent of a U.S. airline, hold an undersea cable license, or hold a broadcasting license (although foreign ownership of cable broadcasting firms is becoming prevalent).

The most directly relevant prohibitions to foreign direct investment in the U.S. defense industry are the executive orders

²¹Graham and Krugman, Foreign Direct Investment in the United States.

that have established DoD's program on foreign investment, control, and influence (FOCI) over the past three decades. Through these executive orders, DoD's Defense Investigative Service can demand that foreign owners, in order to retain their ability to continue working on classified contracts, operate under U.S. management through nonvoting trusts or proxy arrangements. In essence, foreign investors are allowed to keep the profits but are excluded from strategic company decision making. Thus although foreign ownership is not legally blocked, the effects are controlled.

The FOCI program appears generally effective in protecting classified information, but even this long-standing program is under pressure to change. According to representatives of foreign multinationals, some acquisitions that allegedly would bring additional efficiencies are discouraged. DoD is aware of the trade-offs between information security and benefits of additional investment. In 1981, recognizing that some foreign owners might prefer to give up defense work rather than to operate through this arm's length arrangement, DoD developed an alternative provision for more management control by the foreign firm--called special security agreements--which exist as an exception to general policy. The trade-offs allowed by these agreements are the subject of ongoing debate.²²

Laws Governing the Security of Sensitive Technologies

In addition to these federal regulations to protect classified information, the United States has laws to keep sensitive technologies from falling into the hands of potential military adversaries.

DoD has reasonably effective policies to control the negative effects of foreign investment that involves the transfer of

²²U.S. General Accounting Office Statement for the Record before the House of Representatives Committee on Armed Services, "Defense Industrial Security," March 21, 1990.

classified or even sensitive information. The effectiveness of the law in application is more questionable with respect to long term assistance in securing access to advanced technologies.

The 1988 Omnibus Trade and Competitiveness Act and the Committee on Foreign Investment in the United States

In 1988, the Congress enacted the Omnibus Trade and Competitiveness Act, which, in addition to establishing new rules to prevent circumvention of unfair trade restrictions with "greenfield" foreign investments²³, included the Exon-Florio Amendment. This amendment explicitly authorizes the executive branch to intervene in foreign acquisitions that may adversely affect "national security." The law does not explicitly define this term or give examples of adverse effects.

The U.S. government body responsible for administering the Exon-Florio Amendment is the Committee on Foreign Investment in the United States (CFIUS). Originally established in 1975, CFIUS is an interagency committee chaired by the Assistant Secretary of the Treasury for International Affairs. It includes representatives from the Departments of Defense, Commerce, Justice, and State; the Council of Economic Advisers; and the Offices of the U.S. Trade Representative and Management and Budget.

CFIUS is responsible for analyzing proposed acquisitions that may endanger "national security" and for making a recommendation

²³The "greenfield" laws in Section 781 of the Omnibus Trade and Competitiveness Act prohibit foreigners from establishing "screwdriver" operations in the United States solely for the purpose of bypassing American antidumping restrictions: appropriate duties are applied to the components imported for assembly unless an adequate percentage of value is added in the United States. But serious loopholes still exist in this law: Congress never specified what percentage of a plan is permitted to be a "screwdriver" operation in such instances. Moreover, if there is no trade dispute under way or on record, these laws do not apply.

to the President on whether the investment should be blocked or allowed to proceed. Judging simply by the number of cases reviewed, CFIUS is not blocking very much. As of the end of February 1990, 270 cases had come before CFIUS. Seven of these cases were investigated; four recommendations were referred to the President; and one foreign investor, a Chinese national firm, was ordered to divest its share in a U.S. aerospace firm. This accounting understates CFIUS effectiveness, however, because some cases are withdrawn or resolved before CFIUS makes a recommendation to the President. Although no one can accurately estimate the number of takeovers that are not even attempted because of the Exon-Florio Amendment, in at least one case a firm has voluntarily added reassurances that critical R&D or production would remain in the United States (Monsanto). In other cases, such as Perkin Elmer, the offer to purchase has simply been withdrawn.

Cases come before CFIUS by way of parties involved in a proposed acquisition: Firms that would be directly affected by the foreign takeover or government members of CFIUS may voluntarily raise the issue of the takeover's effects on national security. Some critics contend that this voluntary notification leaves a potential gap in the oversight but the task force believes that a mandatory notification requirement could result in a great increase in filings with a decrease in analysis of essential cases.

CFIUS has thirty days after such a petition is presented to complete an initial assessment to determine whether to begin a 45-day in depth review.

During the initial review and any follow-on investigation, the national security review process moves as follows: The case is referred to all CFIUS participants, including DoD. Within DoD the case is sent to the Defense Technology Security Agency (DTSA), which reviews it for issues related to technology transfer and to DoD's needs for certain dual-use technologies. DTSA sends it to the Defense Investigative Service, to other DoD staff organizations, and to each of the military services. As mentioned,

the Defense Investigative Service reviews the case to ensure that the proposed acquisition will not compromise classified information. The Under Secretary of Defense for Acquisition reviews the potential impact of the case on the industrial base via the Office of Industrial Base Assessment, which uses the Defense Industrial Network (DINET) to seek information on the firms involved in the case.

The DoD analysts who review CFIUS cases have roughly two weeks to complete their initial assessments on whether a full investigation is required. Within forty-five days of the initiation of such a full review, CFIUS must make a final recommendation to the President. Under authority of the Exon-Florio Amendment, the President may choose to block the acquisition or let it proceed.

One problem with CFIUS is that the chairman, a Treasury Department official, has a primary goal of alleviating the overall budget and foreign trade deficits. Foreign investment is not only unavoidable but positively desirable as a means of repatriating U.S. consumer dollars that cause imports to exceed exports. Obviously, the Treasury Department does not want to frustrate the desire of foreign firms to invest capital in the United States. Many members of the task force believe that the appointment of a co-chairman from an agency without this bias would bring more balance, but the group was unable to reach consensus on this issue. A practical concern is that a committee co-chairmanship would dilute the clear line of responsibility.

The main failing of CFIUS, though, is that it does not take a long-term perspective in dealing with foreign ownership and control. Its charter does not appear to preclude it from considering these critical broader issues, but the current focus of the CFIUS review is usually limited to whether the firm being acquired has defense contracts or subcontracts. Even if the firm is a direct supplier to DoD, it is hard to prove that DoD's assured access is threatened. Does it matter in the long run that a

company is owned by an economic competitor? Will it bring advanced technology to the United States? It is difficult to answer these questions without a crystal ball, although there is reason, as pointed out previously, for DoD to be critical of foreign ownership. Some DoD officials believe that even to request the in-depth 45-day investigation sends the wrong signal to foreign investors. As a result DoD sometimes fails even to gather additional available data, pro or con, bearing on the investment, so its input to CFIUS is limited.

Reviews of proposed foreign acquisitions are further hampered by a shortage of data with which to assess the effects on national security. DINET, DoD's internal information system, has little information on subcontractors²⁴ and does not benefit from industrywide analyses. DoD relies primarily on parties involved in the proposed acquisition to highlight information on current subcontracting relationships and future technology applications.

Lack of data hindered our task force's attempt to assess the extent of foreign ownership even among firms selling directly to DoD. DoD considers a firm to be "American" if the firm is incorporated in the United States, no matter who owns it, so DoD cannot tell from its data base which of its purchases come from U.S.-owned companies and which come from foreign-owned companies located in the United States. Better data would assist future assessments by DoD.

At least sixteen government agencies now monitor foreign investment, but each agency has its own method of data collection and maintenance and each tracks different aspects of foreign investment. Although some overlap among these agencies is inevitable, a lack of coordination yields disaggregated,

²⁴DINET does have data on subcontractors that sell spare parts directly to the government and can link these suppliers to end-use weapon systems. DINET does not have data on material and tooling suppliers unless they also sell spare parts directly to the government.

incompatible information.

Most of the federal government's foreign investment data are generated by the Bureau of Economic Analysis (BEA) at the Department of Commerce. BEA restricts sector analysis of available data to protect the privacy of the individual firms. Even when sector analysis is permitted, however, the task is complicated by the fact that individual firms that produce a wide variety of products must be classified as belonging to only one sector. Japanese auto manufacturers, for example, are carried as wholesalers because their major activity is importing cars.

In summary, the legal authority to block foreign direct investments now exists with the passage of the Exon-Florio Amendment. If all other laws and restrictions fail, DoD has the opportunity to bring its case to the CFIUS forum. But this authority is undermined by a lack of coordinated data on even strategic industrial sectors and by a predisposition of CFIUS to favor foreign investment.

The U.S. policy toward foreign direct investment, as expressed in treaties and international trade forums such as GATT and the Organization for Economic Cooperation and Development, advocates an open investment environment. According to Treasury representatives, performance requirements are prohibited in bilateral investment treaties and discouraged in the treaties of friendship and navigation, with exceptions allowed in both types of treaties for national security. Similarly in GATT, the United States has supported the elimination of all trade-related investment measures (TRIMs), particularly performance requirements. Our task force recognizes that any move to restrict foreign direct investment further in the United States, the most vocal proponent of free trade, would invite further restrictions abroad. But the task force believes that the United States should do more to encourage and shape foreign direct investment in the technologies and industries critical for national security.

The U.S. has already taken the first steps toward performance requirements. Before agreeing to allow Monsanto's silicon wafer facility to be purchased by Germany's Huels A. G., it had to agree to continue supply of components to U.S. semiconductor manufacturers. This action appeared sensible to the task force. When Japan's Komatsu purchased a subsidiary of Union Carbide, CFIUS got a similar agreement from Komatsu. But with this latter case, because the agreement was made voluntarily after the U.S. had already approved the sale rather than as a pre-condition to the sale as with Monsanto, the task force believes the agreement with Komatsu would be harder to enforce.

Performance requirements will probably be hard to enforce, according to feedback to Treasury officials from their counterparts in Canada, where performance requirements are allowed. Long-term government requirements for domestic research and local content limit a firm's flexibility to respond to changing market situations. As a result, flexible requirements and enforcement, perhaps through periodic review, are necessary.

Our task force believes that the benefits to national security through limited use of performance requirements outweigh the drawbacks. Allowing DoD to negotiate requisite performance requirements in the interests of national security--would eliminate the need for a "yes or no" decision on foreign investment and replace it, in some cases, with a "yes, if" type of arrangement. Some task force members thought that adding restrictions in the U.S. might actually help us reduce them in other countries, as was the case with arms negotiations. The entire task force agreed that DoD was remiss in failing to use the national security exception to set performance requirements in a limited number of cases.

OTHER NATIONS' FOREIGN INVESTMENT POLICIES

Whereas U.S. laws and policies on direct investment by foreign-owned companies in the United States restrict such investment only when national security is at issue, other nations have broader controls on such investment. Recently, however, many countries have begun to relax their controls on foreign investment.

Nearly all U.S. trading partners employ laws, data-gathering procedures, regulations, or related business practices that help them shape the type of foreign investment that enters their countries. In most cases, these countries simply restrict investment but when they believe the investment will provide a particular technological or economic benefit, they actively encourage it. In both ways, these nations monitor foreign investment and work to improve the market positions of their domestic industries. Here are some specifics about foreign nation's policies:

1. Most U.S. trading partners (including the governments of Japan, Taiwan, Korea, Australia, Mexico, Canada, and France) require government notification or at least screening of high-value investments. Some governments screen all investments.

2. A number of U.S. trading partners (such as South Korea and Mexico, although both are changing) have prohibited foreigners from acquiring domestic firms. Where governments do not expressly prohibit such acquisitions e.g., in Japan, Switzerland, the Netherlands, and West Germany) the firms themselves or other firms use business practices to fend off unwanted foreign buyers.

3. Many foreign governments have the power to restrict any foreign investment that simply run counter to their national economic interests. In Japan, for example, a proposed foreign purchase must not "harm national security, disturb public order, or hamper public safety." Moreover, a foreign investment cannot

"adversely and seriously affect" Japanese companies in a similar line of business or "adversely affect the smooth operation of the national economy." In making its decision about whether to permit a foreign investment, the Japanese government can consider whether reciprocity exists between Japan and the foreign competitor's home country and whether the foreign investment attempts to evade restrictions on capital control.²⁵

Many foreign governments use performance requirements to shape foreign direct investments in their countries. Different types of performance requirements are used to achieve different goals. For example, the requirement for the use of domestic components, maintenance of certain local production facilities, and especially the licensing of key technologies to local firms contributes to their goal of a strong domestic industrial base.

In some countries, governments lure investment for sectors that have been targeted for growth, either because those sectors are lagging or because external technologies will help the country promote those sectors' world market position. Enticements generally take the form of government loans, tax benefits, or other financial support.

²⁵James K. Jackson, "Foreign Direct Investment in the United States," CRS Issue Brief, November 28, 1989, p. 16.

TASK FORCE RECOMMENDATIONS FOR ACTION

1. Get better data on critical industries.

- a. DoD should define the industries for which it considers U.S. ownership or location critical to national security. A short list, based on the list of twenty critical technologies DoD has already developed, could serve as a starting point. (A separate task force under the Defense Science Board has recommended a more elaborate method of selecting DoD's critical industries and has outlined methods and techniques for fostering their growth).
- b. However these industries are defined, DoD must then analyze them in detail. Much of the necessary information on competitive positions and extent of foreign ownership already exists in other government agencies. Such an effort would involve integrating data from the Bureau of Economic Analysis and from the Census Bureau. DoD should assess the relative economic health of the domestic industry (in defense-critical technologies) of which the targeted U.S. company is a part.

2. Improve the CFIUS process.

- a. Stronger congressional oversight should be encouraged. Given the importance and the sensitivity of foreign direct investment, measures to ensure accountability and fulfillment of its congressional mandate should be strengthened. One approach is to have CFIUS activities and perceived trends reported annually on an appropriately classified basis to the heads of the agencies participating in CFIUS, the National Security

Council, and oversight committees. This reporting would lessen any dissonance between executive and legislative committees monitoring foreign investment.

- b. CFIUS should review not only the market position of a targeted U.S. firm and the domestic industry in question but also the business practices and market strategies of the potential foreign buyer. CFIUS should consider the general tendency of foreign-owned manufacturing firms to import components and to perform less domestic R&D, and project the possible effects of such actions on the targeted firm and the U.S. industry. The task force believes that the language of the CFIUS charter is flexible enough to permit such a review. If CFIUS itself deems otherwise, however, the language of the charter should be changed to enable a broader review perspective.

3. Take specific actions to shape foreign investments.

- a. If a foreign buyer proposes to purchase a U.S. firm that is considered critical for U.S. national security and if DoD determines that U.S. location or control of a firm's technology or production capacity is critical to U.S. defense, DoD should informally encourage domestic parties to reach alternative domestic solutions. This process will be facilitated by use of the information and contacts developed in the in-depth industry analyses suggested in Recommendation 1(b).
- b. DoD should also take the initiative to expand use of various mechanisms as incentives for other U.S. firms to purchase the targeted company and maintain U.S. ownership. Such tools in a particular case might include loans and purchase guarantees as authorized by the Defense Production Act, R&D grants, or direct procurement. However, to be effective, these tools must

be made operational through increased authority from OMB. Under current OMB circulars, even defense loan and purchase guarantee authorities must be fully budgeted in an appropriation while other contingent liabilities, such as domestic housing programs, are not. These restrictions are discriminatory and a disincentive to further use.

- c. When a U.S. buyer cannot be found or when foreign ownership is determined to be acceptable but long-term domestic capacity is essential, DoD should have the authority to impose certain performance standards on a foreign buyer as a prerequisite for approval of the acquisition. Such performance standards could include the requirements that--

-- foreign holder should license critical technologies to a U.S. firm, or conduct certain specialized research and development within the United States with a high proportion of U.S. technicians, managers, engineers, and scientists; and

-- the foreign buyer should maintain a certain level of U.S.-located facilities to produce key products with a high proportion of U.S. technicians, managers, engineers, and scientists.

- d. In the interests of national security, DoD may deem it essential to ensure access to a certain critical technology controlled by a small number of companies, especially foreign companies or countries. In such cases DoD should go far beyond the restrictive screening role now played through CFIUS; instead of waiting for foreign companies to initiate investment, DoD should actively recruit such investment, by taking the following steps:

- o DoD should first ensure that its policies and those of other federal agencies do not pose obstacles for the foreign-owned firms. Enforcement of DoD directives and executive orders on the security of information and technology may have to be relaxed.
- o DoD should then seek out owners of tightly controlled technologies and encourage them to locate in the United States, and meet the performance requirements specified in par 3(c) above.
- o If foreign firms remain reluctant to invest in the United States, DoD should consider restricting access to DoD procurements.
- o DoD should seek authority from the Congress to use access to the broader U.S. commercial market as incentive for foreigners to bring their technologies here.

TERMS OF REFERENCE

The DBM subcommittee on Foreign Ownership and Control should consider the following task:

- . Review and examine the potential national security impacts (both negative and positive) of foreign ownership and control of U.S. manufacturing and high technology firms.
- . If there is a negative impact, either short or long term, review the reasons why and describe how it is affecting national security.
- . Does the Government review and analysis possess the necessary safeguards and, if not, how should DoD and other agencies address the issue.

The subcommittee will develop DOD policy guidelines and procedures to assure:

- . Timely notification of merger/acquisition activity.
- . Effective analysis and evaluation criteria.
- . Minimal negative impact on national security.
- . Coordinated DoD position.

Preliminary Issues to be Reviewed.

I. Historical Information

- . What extent is the defense industrial base owned/controlled by foreign interests?
 - . Allied countries
 - . Non-allied
 - . Eastern/Communist bloc
 - . At prime contractor level
 - . At subcontractor level
- . Is foreign ownership involved in the 215 defense critical industries and/or the 22 critical technologies?
- . Is the trend increasing, if so, why?
- . Are there specific targeted industries/technologies where foreign ownership is growing or dominant?
- . Has there been any negative impact?
- . What are the short and long term implications?
 - . Technology/R&D
 - . U.S. competitiveness
 - . Industrial base capacity
 - . Mobilization capability
 - . Capital investment
- . What historical information is available?
- . What facts support foreign investment, why?
- . How do other foreign countries view U.S. investment?
- . How are U.S. firms treated by other countries?

II. Policy and Procedures

- . What is the DoD policy on foreign mergers and takeovers?
- . What is the notification process for mergers and acquisition?
- . Are there adequate safeguards for notification and analysis?
- . Is there interagency input?
- . What is the DoD data base?
- . Are all appropriate offices of DoD involved in a determination?
- . What is the review and evaluation criteria?
- . What external elements must be considered?
- . How and who in DoD assembles the facts to make a sound decision? DINET...SOCRATES!
- . Is there a Government policy in this administration?
- . What actions might minimize negative and maximize positive impacts of foreign ownership and control?

III. A key tasking will be the development of review and evaluation criteria to permit an effective analysis of a potential foreign investment. The following elements of analysis should be considered a starting point for the development of this criteria.

Type of industry

- . Research and Development
- . Manufacturing
- . Infrastructure
- . Service

Location of Facilities

- . Manufacturing
- . Assembly only

Type of Activity

- . R&D
- . Acquisition
- . Merger
- . Expansion
- . New operation

What are the anticipated changes to operation?

- . Product
- . R&D
- . Assembly
- . Existing contracts
- . New Technology
- . Reinvestments
- . Jobs
- . Subcontracts
- . Markets

Importance to Department of Defense

- . Planned mobilization company
- . Critical sensitive technology (22 defense critical)
- . Qualified producer
- . Sole source supplier
- . Critical industrial sector for defense-related innovation
- . Classified work
- . Existing government contracts
- . Long term logistics

Impact of Labor

- . Unique skills
- . Number of jobs
- . Type of jobs

Impact on Industry (short and long)

- . Competition
- . Other supplier chance
- . Unfair supports

Acquiring Company Background

- . Country
- . Reasons for acquisition
- . Other holdings (U.S. and international)
- . Track record (technology transfer, intellectual property rights)
- . COCOM
- . Future operating plans
- . Operations in Communist countries
- . General relations with U.S.
- . Political Implications
- . Reciprocal agreement (country)
- . Social responsibility track record
- . Environment, safety, employee relations history