The Mercantilist Challenge to the Liberal International Trade Order

by

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The international trade conflicts that now appear so prominently in the press are not simply ordinary trade frictions that can be dealt with in a routine way through existing institutions and within agreed rules. These new conflicts are the signs of fractures in a mature trading system, fractures appearing under the weight of problems and events that were not central when the current arrangements were established and that cannot be easily resolved within its logic and rules. While the objective of an open trading system remains important, the task of sustaining open trade is likely to prove ever more difficult because of state intervention in business, itself a response to changes in production and in the international division of labor as well as to the economic troubles of the 1970s and 1980s. Present trade problems will prove more enduring than the political controversy over pipeline sanctions, the aggressively low value of the yen, or even the severe economic downturn that has exacerbated sectoral tensions. Consequently, American policy faces a real dilemma because policies that would effectively defend the competitive position of American firms might further undermine the open trading system itself.

Basic conflict over national economic position and advantage underlies many of the present trade troubles. In the narrowest sense, the question is which countries will create substantial commercial advantage in the growth industries of the future and which ones will be able to defend employment in today’s mainline industries during that sectoral transition. More broadly, the very international rules setting the appropriate roles for government in national and international economic life are being challenged and the premises of multi-lateral trade arrangements are being questioned.

There are those who believe that reordering the international monetary system and, in particular, setting stable and workable exchange rate parities, would resolve many of the sectoral trade problems we now encounter. The present valuation of the dollar and rapid shifts in

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monetary values which dramatically alter the competitive position of firms without changing the underlying nature of industry creates problems that might not otherwise exist. This Article\(^1\), however, proposes that neither a restructuring of the monetary system nor a quick technical fix in the trade rules will dissipate the basic challenge to the present trade order. Unless we are careful, a real struggle for international economic position and national distribution of future economic growth—problems never raised within the GATT system—will result in an unmanageable surge in mercantilism which will undermine the present liberal trade system.

The Article will begin by describing the nature of the "liberal economic order" under the GATT, followed by an examination of how the system is being challenged by new policies of mercantilism. Finally, we will discuss the problems that the new mercantilism poses to the United States, and propose an appropriate American response to the challenge.

I

THE LIBERAL ECONOMIC ORDER: THE GATT SYSTEM

The rules and arrangements that govern most international trade are set forth in the General Agreement on Tariffs and Trade (GATT). That system has evolved through seven multilateral trade negotiations, the most recent being the Tokyo Round. The objectives of GATT from the beginning have been substantially to reduce tariffs and other barriers to trade through reciprocal trade agreements, and to assure that all nations would be treated equally. All countries would receive "most favored nation" treatment in that concessions made to one nation would apply to all parties to the multilateral agreements. Deviations in practice from the GATT principles have been framed as exceptions and "escape clauses." Trade zones which existed before GATT, such as the British Commonwealth preferences for developing countries, regional free trade areas, and customs unions, have all been tolerated. For national industries damaged by specific reductions of trade barriers, there are escape clauses that allow governments to impose import restrictions to ease adjustment. As protection against inequity, however, governments may retaliate against dumping or subsidization. Through GATT, domestic policies that distorted trade were made the subject of international negotiation, though no multinational enforcement procedures have ever been established.

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1. This Article draws heavily on recent books by John Zysman and Stephen Cohen. J. ZYSMAN, GOVERNMENTS, MARKETS, AND GROWTH (1983); AMERICAN INDUSTRY IN INTERNATIONAL COMPETITION (J. Zysman & L. Tyson eds. 1983) [hereinafter cited as AMERICAN INDUSTRY]; FRANCE IN A TROUBLED WORLD ECONOMY (S. Cohen & P. Gourevitch eds. 1982).
The objective of unrestricted and non-discriminatory trade has been to increase economic efficiency. Since production costs and structures in the various advanced countries were thought to converge, it was believed that expanded trade would result in greater specialization. Countries should produce what they make most efficiently and trade for the rest. Even a country with an absolute disadvantage—a higher domestic cost of production for all traded commodities—gains from free trade by exporting those goods in which its absolute disadvantage is least. Comparative advantage, usually assumed to depend on relative factor proportions or availabilities, is revealed by examining what goods a nation trades under conditions of free trade. Product specialization by companies and higher incomes for all trading nations would result from expanding exchange, and general welfare would increase for all. After the self-defeating era of protection between the World Wars, the gains from expanded trade in the post-World War II era were exhilarating.

The GATT system is based on the following premises. First, trade arrangements that are built on multilateral negotiations among all nations are preferable to bilateral or other partial arrangements. Second, trade will be conducted by private actors in markets in which prices are set by a free interplay of supply and demand. Third, free trade will generate the expansion of all economies, if only each will bear the strains of internal expansion and adjustment. Fourth, government intervention is seen as a distortion of the market aimed centrally at delaying domestic adjustment to international price signals. These assumptions ignore the potential influence of development strategies on trade. They assume that national differences that might be considered trade barriers can be negotiated away in the same manner as tariffs and quotas. Yet, eliminating external barriers is very different from sacrificing pre-existing domestic advantages.

The premises of the GATT system are ill-fitted to many of the new realities of international trade. The assumption that governments "negotiate" about the rules of trade, leaving the market to settle the outcomes, has become less tenable. Governments are increasingly negotiating trade problems directly. Moreover, in each of the issues discussed below, domestic economic practices and the role of national government power in the world economy become the direct subject of negotiation.

3. Id.
II
THE LIBERAL ECONOMIC ORDER AT WORK

For a generation the liberal trade system succeeded, trade among the advanced countries expanding dramatically. This resulted in greater specialization of production, and undoubtedly contributed to the long period of economic expansion.\(^4\) Expanded trade also meant that each national economy became more dependent on events abroad. Financial dealings created a web of connections among the several advanced nations. Free convertibility of currencies, one of the objectives of the post-war design, meant that domestic money supply and interest rates could not be completely insulated from external conditions. Then, beginning in the 1960s, a truly international financial system emerged which was institutionally separate from any national economy, and in particular, immune from American authority.

The American trade deficits in those years meant that more dollars were being paid out for foreign goods and services than were being demanded to buy American products. Ordinarily those dollars would be sold by foreigners back to American banks, creating a pressure to lower the relative value of the American currency. The American dollar, however, was a reserve currency, which meant that it could be used as a medium of exchange in international transactions and as a banking asset abroad. Demand increased for dollars to serve as "reserve" and "transaction" currency. The American deficit was consequently translated into a pool of expatriated dollars. By the early 1970s there emerged a eurodollar system in which dollars were held outside the U.S. and used abroad. In the mid-1970s, the eurodollar system expanded greatly as OPEC nations began investing their huge petrodollar surpluses in European banks. By the end of the 1970s, the pool of dollars outside American control was thought to be as large as the American money supply, perhaps as much as $1 trillion.\(^5\)

The multinational corporation (MNC) became the emblem of this era in which private economic actors gained greater power, operating across national borders. During the past thirty years, the MNC was a primary vehicle through which American competitive advantage in technology, product development, and management technique was exported or transferred abroad.\(^6\) Yet the preeminence of the MNC was not an inevitable market outcome of improved communications and transportation technology. The extraordinary expansion of the MNC

\(^4\) Id.
\(^5\) CHASE MANHATTAN BANK, CHASE INTERNATIONAL FINANCE, Feb. 4, 1980. There are many studies on the evolution of the Eurocurrency system; see, e.g., P. EINZIG, THE EURO DOLLAR SYSTEM (1970).
after World War II depended on American international political influence for rules that facilitated its operations abroad, and on domestic laws that tipped corporate choices toward foreign direct investment and away from export strategies.\(^7\)

Importantly, the bargains that host countries struck with the American MNC's depended in the end on the administrative resources of the host government and the economic structure of the country.\(^8\) The Japanese showed that a government could act as "gatekeeper" to the national economy, breaking up the package of management, finance, technology, and control represented by the MNC and forcing the pieces to be recombined under national authority. A number of cases, the French and Japanese being the best documented, suggest that domestic resources can be mobilized effectively to neutralize or accommodate international constraints.

In sum, attention in the post-war years was focused on the emerging rules of the liberal order and on the constraints international markets and multinational companies placed on governments. While the role of politics and government in shaping economic events has come back into focus, the emphasis still is on the autonomous importance of market events, and the capacity of governments to respond to events, not to shape them. It is not that multinational corporations and private international financial markets have diminished in size or importance, but rather that state strategies to shape markets have become more prevalent, more powerful, and more central to the future shape of the international economic order.

III

THE MERCANTILIST CHALLENGE

There are three broad groupings of particular state strategies that threaten the liberal trade order of the GATT system. Each will be considered in turn.

A. Creating Advantage: The Developmental State in the Liberal Economy

The "developmental" state, of which Japan is a notable example, pursues the competitive development of specific economic sectors in the short run with the long-term purpose of assuring the industrial base required for expanding the entire economy. Its central purpose is the


promotion of growth. Critical sectors, those that by their links to other industries can affect the entire economy, are thus seen as a form of industrial infra-structure. The Japanese have demonstrated clearly that under some circumstances developmental policies can work. They have shown the path and the stakes. In Japan, systematic government policies sought to move the economy from labor intensive goods such as textiles, to capital intensive goods such as ships and steel; through consumer durables such as televisions and automobiles, into the advanced technology sectors of computers and soon aircraft. Other advanced countries have also pursued such developmental goals, but not as effectively in most cases.

Japan is a fast growth system in which the government has made a commitment to promote aggressively international industrial competitiveness for essentially national security purposes. In Japan, the plan to create advantage in selected sectors was organized around a bureaucratic elite that gave purpose and direction to the economic ministries. Those bureaucrats have three sets of tools available to them. The first is administrative discretion, that is, the ability to discriminate in favor of one company and against another. There are no protections of "due process" or procedures of civil litigation to interfere effectively with bureaucratic power. The second tool is a state-dominated financial system that allows state bureaucrats to be players in the industrial marketplace. Administrative discretion thus becomes an immediate force in the marketplace. Third, the budgeting procedure is so completely controlled by the bureaucracy that the allocation of state funds is often invisible and not subject to legislative control or even scrutiny. This powerful bureaucratic machine is insulated from detailed political supervision—or interference—by a conservative majority that provides the symbols of power and general direction, leaving the bureaucrats free to act.

The state bureaucracy defines and pursues detailed and often sector-specific industrial goals. The state is indeed a marketplayer, a role with no equivalent in this country excepting a group of Pentagon-related industries. Consequently it has been mistakenly suggested that within the single management structure of "Japan, Inc." there is no competition. In fact there is real, often intense competition in the Japanese market. The coexistence of government direction of economic outcomes and real competition can be reconciled if the system is seen as one of controlled or limited competition.

10. J. Zysman, supra note 1. For a discussion of French policy, see ch. 3.
Controlled Competition. In the Japanese system there is every evidence of intense competition between firms, but that competition seems to be directed and limited both by state action and collaborative efforts of the firms and banks. State bureaucrats do not dictate to an administered market, but they do consciously contribute to the development of particular sectors. They also help in a detailed way to establish conditions of investment and risk that promote long-term development and international competitiveness. An agency like the Ministry of International Trade and Industry (MITI) is not so much a strict stage director as a player with its own means of interfering in the market to attain its goals. Government industrial strategy assumes that the market pressures of competition can serve as an instrument of policy. The pressures of the market are not something to be overridden by government, but rather something to ride. Government policy does not simply make use of competitive forces that arise naturally in the market, but rather often induces the very competition it directs by creating the market for products and the conditions for high returns. A seemingly assured profit attracts the entry of many competitors.

While competition is real, the mechanisms for government and the private sector to avoid "disruptive" or "evasive" competition are also present. Vertical integration within groups of companies which have agreed on specialization within a set of competing firms, as well as the often cited run of capacity expansion and cut-back arrangements, are all signs of limits on competition. That these arrangements to manage the market often break down is not evidence that they do not operate or do not matter. In semiconductors today, as in steel a generation ago, these collaborative arrangements appear central to Japanese international success.

Controlled competition is designed to foster economic expansion. From the beginning of the postwar era, the Japanese economic bureaucracy had a strong commitment to moving labor from low-productivity sectors into high-wage industries, as well as moving out of agriculture.

11. Id. at 234-51.
Thus, labor-intensive light industry declined while capital-intensive heavy industries with higher wage structures grew.\textsuperscript{15} Resources were channeled into industries for which there was a growing domestic demand and potential economies of scale. The target was a greater production of machinery, metals, chemicals, and ships.

The constant theme of Japanese policy in these years was consciously to create comparative advantage in high-value-added industries rather than to remain focused on the labor-intensive industries that might seem appropriate to an economy with a scarcity of raw materials and capital. The decision to create a comparative advantage in capital-intensive and technology-intensive industries such as steel, refining, automobiles, and electronics was a political victory by MITI over, among others, the Bank of Japan.\textsuperscript{16} The industries recommended for development by MITI were in the Bank's view the "most inappropriate industries for Japan then, in the eyes of the state theory of comparative cost."\textsuperscript{17} The governor of the Bank of Japan argued that policy should promote exports that conformed to this traditional view of an international division of labor.

MITI reasoned differently and chose industries that were likely to expand with increases in income and that offered the possibilities of economies of scale from concentrated investment. The idea was that these could become export industries which would drag the rest of the economy along in their wake. The automobile case is the archetype of the effort to create comparative advantage in capital-intensive manufacturing sectors. Public investment laid down the infrastructure to permit a swift rise in auto usage, and the domestic market was closed to outsiders. Under governmental leadership, a competitive auto components industry was established. Competition between the assemblers accomplished the rest.

MITI domination of industry in support of an expansion policy worked as long as expansion generated growing profit opportunities. The competitive gains from such expansion policies—measured by the fall in producer costs, domestic prices, and export prices—ran out, according to Ueno, around 1967.\textsuperscript{18} The policies of direct administration therefore succumbed to less direct forms of intervention, as a period of reconstruction and the building of heavy basic industry gave way to an era of Japanese competitive advantage in manufactured goods. Today,

\textsuperscript{15} Speech by Chalmers Johnson, The Policy Dilemmas of America's Response to the Challenge of Japan, Foreign Correspondents' Club (Tokyo, Dec. 1982).

\textsuperscript{16} Patrick & Rosovsky, Japan's Economic Performance: An Overview, ASIA'S NEW GIANT, supra note 13, at 1.

\textsuperscript{17} Ueno, The Conception and Evaluation of Japanese Industrial Policy, in INDUSTRY AND BUSINESS IN JAPAN, supra note 14, at 375.

\textsuperscript{18} Id. at 396.
MITI's attention has shifted to the new growth sectors, such as the electronics industries, and to the management of industrial transition situations. Equally important, the government now influences capital allocation indirectly through the banking system rather than through direct controls.\(^\text{19}\)

The limits on MITI's capacities belie the extent of its influence as well as the significance of the Japanese pursuit of actively created comparative advantage. MITI rejected the limits of neoclassical equilibrium economics and recognized how government manipulation of the conditions of business competition generate national advantage.\(^\text{20}\)

The Japanese state has exerted directing influence on the economy in two principal ways. First, it was a gatekeeper controlling the links between the domestic and the international economies. The discretion to decide what to let in and out of Japan permits the gatekeeper to break up the packages of technology, capital, and control which multinational corporations represent. In other words, MITI carefully controlled the terms of foreign penetration—especially via direct investment—into the Japanese economy. The Ministry of Finance operated selective controls over inward foreign investment. Foreign loans were encouraged but equity investment was not, and foreign efforts to control Japanese firms were actively and successfully discouraged. MITI controlled technology imports, forcing foreigners as much as possible to sell raw technology in the form of patents, licenses, and expertise. Foreign firms were, in general, obliged to settle for royalty payments for the use of their technology, rather than with product sales in Japan. Neither money nor technology enabled an outsider to buy or bull its way into a permanent position in the Japanese market. This closed market gave Japanese firms a stable base of demand on which to build networks of competitive production and distribution.

Second, the government acted as a "Front Office", prodding, promoting, manipulating, guiding and financing domestic firms to achieve rapid expansion and development. For targeted sectors, the state assured research and development funds and production financing. Since these funds, like the other levers of administrative guidance, did not have to be provided evenhandedly, the money could be used to bribe or push firms along routes favored by the government. Japanese capital was not made available to international borrowers or for massive off-shorings of production by Japanese firms in sectors thought by MITI to be important to the nation's future economic strength. The government actively encouraged domestic competition with extensive

\(^{19}\) Johnson, \textit{supra} note 15.

\(^{20}\) \textit{See generally} Tyson & Zysman, \textit{American Industry in International Competition}, in \textit{American Industry, supra} note 1, at 15.
support for expanding firms. Thus, the government helped provide cash for investment, tax breaks to assure cash flow that maintained liquidity, research and development support for technology, and aid to promote exports.

These public policies changed the options of companies. Without protected markets, private companies, in many cases, could not justify the initial investment. Without external debt finance, the funds to make the investments would not have been available to the firms. The speed of expansion in sectors such as automobiles or steel involved staggering investment sums. In 1960 Japan produced only 160,000 cars. By 1970 it was producing 3.1 million cars, and by 1980, more than 8 million cars a year. Such rapid expansion cannot possibly be supported by internal profits; it must be financed by borrowing. The industrial boom was of necessity debt financed. Yet, without special tax arrangements and a policy of diffusing lending risk, the debt would have been unmanageable for both companies and banks. Rapid expansion built on credit causes serious cash flow problems for companies; debt implies a high fixed cost of capital, which can leave the companies very fragile financially. The Japanese tax system responded to these problems by allowing very rapid depreciation schedules. For favored industries with strong export performance, the depreciation rates could exceed fifty percent. Rapid depreciation schedules greatly eased the companies' debt-generated cash flow problems, thus improving their competitive position. Such government policies encouraged Japanese companies to view their investments as part of an integrated business rather than as a series of specific choices with discrete benefits.

This bias toward long-term payback also encouraged superior production economies. Real competition in large-scale and stable internal markets creates massive advantages in international competition. Great strength in volume production of commodity components would seem to depend substantially on this strong pattern of sequenced external protection and internal specialization. Across a whole range of sectors there appears to be a common pattern in Japanese business strategies. An initial production volume is built on the domestic market and then steadily expanded through selective exploitation of market niches abroad. Those niches form the opening edge for export drives. Steadily increasing production volumes support the production economies that often make the Japanese the low-cost producers in the market. In a wide range of manufacturing sectors the Japanese use less labor than producers in other countries, demonstrating a remarkable capacity to manage complex mass production processes. Thus, as government policies interact with corporation strategy the public and private objectives converge, because as Sato contends, industrial policy
has been seen in business circles as a means of achieving higher profits.21

Within a protected market the easy availability of capital and technology was bound to attract entrants. However, late Japanese entrants in an industry could be closed out of the market, both by MITI policy and by the established positions of other firms. The fear that delay could mean exclusion produced a veritable stampede to enter the new sectors.22 In an expanding market the competition between firms was for market share, and the intensity of competition was reflected by low profit rates among the larger firms. MITI viewed the stampede for entry, which it earlier had encouraged, and the resulting battle for market share, which limited profit, as excessive competition that had to be controlled. This control would both preserve the viability of the initial entrants and assure adequate market demand to justify efficiently scaled plants for existing producers.

Thus, intense domestic competition was still controlled in many ways. One mechanism to limit competition was jointly agreed-upon expansion plans intended to avoid excess capacity and to assure the introduction of plants of sufficient size to exploit scale economies.23 This jointly planned expansion was very evident in steel, and similar policies are now being used in the semiconductor industry.24 A general awareness developed among competitors that when excess capacities emerged, either from an overly optimistic judgment about market expansion in Japan or from a downturn in demand, the resulting “oversupply” would be managed. Firms would not be driven out of business. Indeed, one American businessman described the system as one in which there is an intense fight over the expanding share of the market, but in which shares of the existing market are left unchallenged.

Another mechanism was used to diffuse the risk of debt financing. The corporate debt was parcelled out among many debts, which limited the risk to each and created a stake for all financial institutions in the survival of heavily levered firms.25 The financial community as a whole thus became committed to projects of national priority. Perceiving Japanese debt as being secured by government guarantees, American banks have lent to Japanese clients with debt levels they would not tolerate in American clients. The result is that the risks to the banks of rapid expansion are in essence managed and controlled, which ironi-

23. Id. at 492.
25. See, e.g., Industry and Business in Japan, supra note 14, at xiii.
cally intensifies the temptation for competitors to enter the market in the first place.\textsuperscript{26}

The mechanisms of debt financing, however, have led to steadily increasing debt levels, making firms and banks vulnerable to abrupt market changes that would endanger any large firm. The collapse of a highly indebted firm could threaten the banks. Since a bank collapse could have serious effects throughout the economy, the company's troubles become a matter of public policy. Despite seemingly very risky corporate financial structures, the system remains stable because government concern with the well-being of firms in favored sectors has been taken as an implicit guarantee of bank loans made to them.\textsuperscript{27} The government, then, is seen as the guarantor of last resort.

The structure of business, as well as the system of state administration and policy, promotes this controlled competition. Japanese developmental policy rested on a business community that before the war developed giant hierarchical firms, inter-company group linkages, and an international orientation. The business community was not only the vehicle but also the political base for the efforts of postwar development.\textsuperscript{28} Equally important, the structure of business provided the basis of collaboration between firms. This was not so much because Japan was an economy of giant firms,\textsuperscript{29} but rather because a number of mechanisms drew the large firms together in common institutions.

The trading companies, an early link between the insulated domestic economy and its external sources of supply, represent one such mechanism.\textsuperscript{30} The \textit{Zaibatsu}\textsuperscript{31} groupings of companies were dissolved during the American occupation, but groupings around large banks known as \textit{keiretsu} have been established that now tie firms together. There are several forms of \textit{keiretsu}, ranging from groups with close inter-company ties to loose, largely financial arrangements.\textsuperscript{32} While there is a debate on the precise form or degree of operating cohesion in these groups, the fact is that a majority of company stock in Japan is

\textsuperscript{26} See Caves, \textit{supra} note 14, at 488.
\textsuperscript{27} See, e.g., \textit{id.}; Ueno, \textit{supra} note 17; Katzenstein, \textit{supra} note 12; Tresize, \textit{supra} note 13.
\textsuperscript{28} See Tresize, \textit{supra} note 13. The support of big business is a core part of his argument that MITI followed pressures rather than structured the economy.
\textsuperscript{29} Although levels of concentration in the economy as a whole and of sellers in specific markets are as high as in the United States. Caves, \textit{supra} note 14.
\textsuperscript{31} \textit{Zaibatsu} were highly concentrated oligopolistic banking groups that were critical to Japanese strength before World War II. T. PempeL, \textit{Policy and Politics of Japan} 14 (1982).
held by other companies or banks.\textsuperscript{33} This provides still another set of inter-company ties. Nor is the world of small companies in disarray, as many of the small firms are linked as suppliers to larger companies. Small firms are not inevitably relegated to subordinate status; some have grown to compete directly with the giants. Finally, while cartels are nominally illegal, an enormous number are in fact exempt from the general prohibition. In 1973 there were nearly one thousand authorized cartels. The bulk were small-business and export cartels, but there were a dozen depression and rationalization cartels as well.\textsuperscript{34} These several forms of inter-company links provide the organizational infrastructure for controlled competition.

Developmental states such as Japan pursue clearly defined goals of industrial expansion rather than attempting simply to let market forces steer the economy. The capacity of a government to act as a player in the market in pursuit of developmental goals rests on specific financial and administrative arrangements that virtually demand government intervention in the workings of the market. Such purposeful and systematic promotion of growth differs from the liberal or regulatory character of American economic and political theory.

The notion that comparative advantage does not develop as static trade theory suggests, but can be created, underlies the concerted government strategies to create international industrial advantage. In Japan, that intellectual argument took concrete form a generation ago as a fight over policy between the Bank of Japan and MITI. Traditional trade theory does not deal well with questions that do not fit its static orientations and its assumption of perfect competition. More importantly, it certainly does not confront the role government can play in creating comparative advantage.\textsuperscript{35}

The influence of government policies on the dynamics of comparative advantage becomes clear when one allows for the possibilities of differing production technologies in different countries. In most sectors, comparative advantage rests on relative capital endowments, and these are the result of accumulated investment. There are only a few industrial sectors in which comparative advantage is given in the form of fixed natural resource endowment. Consequently, government policy can gradually turn a temporary competitive disadvantage into enduring comparative advantage if it promotes the gradual accumulation of physical and human capital that underlies production technologies.

\textsuperscript{33} Miyazaki, \textit{supra} note 32.
\textsuperscript{34} Caves, \textit{supra} note 14, at 487.
\textsuperscript{35} For a detailed discussion of the matter, see \textit{American Industry}, \textit{supra} note 1 (esp. Chapter 1); and J. Zysman, \textit{supra} note 1, at ch. 1.
In short, national comparative advantage is in part a product of national policies over time.

The implication is that many governments are attempting to create enduring advantages and to alter—in their conception—the national place in the world economic hierarchy. In competition among the advanced countries, these government strategies create intense trade controversy in sectors such as electronics and aircraft. The U.S.-Japanese high technology trade negotiations—currently underway—are sparked by just these issues. The development strategies of newly industrializing and oil-producing countries pose problems in other sectors. Although many American industrialists would like to forbid such state strategies, it would be difficult at best to enforce a judgment that Japanese or French domestic practice is illegal. Those who pursue developmental strategies do not accept "free" market outcomes as inevitable or automatically legitimate.

Let us consider two cases in which developmental strategies have affected competition in high-technology sectors among companies from advanced countries: electronics and aircraft. The electronics case deals primarily with the Japanese government efforts, while the aircraft case will focus on European and, in particular, French strategies.

**Japanese Electronics.** The advanced electronics sector, including the sub-industries of telecommunications, computers, semiconductors, and machine tools, demonstrates how Japanese industrial structure, government policies and firm capacities intertwine to promote international competitiveness in a sector the government considers crucial to the future economic development of Japan. The common element of state promoted and organized development runs through each industry.

Japan's computer industry went through six stages, each carefully orchestrated by the government. Throughout, the government limited the growth of foreign firms in the Japanese market and fostered the development of domestic technology. The constraints on outsiders were effective: carefully spun red tape, "buy Japanese" policies, and formal and informal trade restrictions. IBM had a strong technological lead over its Japanese rivals until the mid-1970s, and its product line, service record, and vast scale economies gave it a dominant position in the world market. Yet from the early 1960s its market share in Japan dropped. Although IBM had a wholly owned Japanese subsidiary, the government declared its products as foreign and treated them as if they were imports.

In the early 1970s, the Japanese market was slowly opened to foreign competition, at least formally, though careful mechanisms were put in place to assure that the healthy development of the domestic
industry would not be disrupted. As the door to the domestic market inched open the government restricted takeovers by foreign firms and made the formation of wholly owned subsidiaries difficult. Access to the Japanese market seemed, each year, to be getting nearer, yet somehow remained just beyond the grasp of the strongest foreign firms. Today, domestic computers control ninety percent of Japan's public market.

While limiting foreign access to the domestic market, the government promoted domestic demand and financed technological development. By establishing a government-financed leasing company, which often provided below-market interest rates, Japanese companies could match or better IBM's leasing terms. Indeed, the company, the Japan Electronic Computer Corporation (JECC), even bought back obsolete machines, which created a market for new models, and then sold the older machines to small businesses, which diffused the technology. A variety of special tax arrangements served the same purpose.

The government has supplied one quarter of all funds for computer-related research and development in Japan, and has initiated the major projects required for rapid technological advancement. The money served not only as an indication of government priorities, which made it easier to borrow funds for continued expansion, but absorbed part of the financial and executive risk in pursuing these sectors. Since the scale of the total government effort was less than that of many individual major American companies, direct government support is not surprising. Government financing has also been used to rationalize the industry's research effort. Specialization in research, in turn, has led to specialization in production.

The semiconductor industry also exemplifies the pattern of external protection and domestic promotion. Here, market power as much as government policy serves to close the market to foreigners. Six major Japanese producers dominate the market. They are vertically integrated firms that manufacture electronics systems products and serve end markets primarily in consumer electronics, computers, and communications. They account for seventy-nine percent of all semiconductor sales. Yet only a small percentage of products are consumed in house; each company specializes in certain products, selling those to others and buying other components from competitors. Volume markets for maturing products can quickly be created by agreeing on and maintaining short-term patterns of specialization. Importantly, major semiconductor firms were themselves parts of integrated electronics companies, which in turn were usually part of industrial-banking groups, or *keiretsu*. In-house purchases, internal specialization, and ex-
ternal protection are thus complementary.\footnote{The aircraft story is constructed from a number of studies: \textit{Boeing Commercial Aircraft Company, International Competition in the Production and Marketing of Commercial Aircraft} (1982); J. Quittard, \textit{Airbus} (1979); M. Giget, \textit{Analyse en terme d'avantage technologique des relations entre les structures internes de production et les modalités d'internationalisation de l'industrie aérospatiale américaine} at 210 (Dissertation, 3e cycle, Ecole des Hautes Études en Sciences Sociales, Paris, 1979).}

Because electronic components play such a vital role in advanced telephone and data transmissions systems, the communications industry has been used to promote the electronics industry. Nippon Telephone and Telegraph (NTT), a public corporation which maintains the domestic telecommunications network, provides the system and conducts central research. It buys its equipment from outside suppliers. NTT serves as a mass market through which domestic companies competing in international markets can be nurtured but from which foreigners are excluded. Before deregulation, Bell and its regional companies bought from their in-house producer, Western Electric. Western Electric, however, was forbidden from selling in open markets. After deregulation, the several markets will be opened to competition, including foreign companies.

\textit{Competition in Aircraft.} The French also attempted a similar effort to promote an electronics industry, but they have not succeeded.\footnote{J. ZYSMAN, \textit{Political Strategies for Industrial Order} 152 (1975).} The French were simply not able to assemble the Japanese package of external protection and intense competition in sectors such as electronics, where rapid adjustment in shifting markets and evolving technology are critical. However, in sectors demanding substantial amounts of capital and state-controlled or influenced markets, such as aircraft, the French have been much more successful. Airbus Industries is a joint subsidiary of the major aircraft manufacturers of France, Germany, the U.K. and, to a smaller degree, Spain. Through the consortium companies, the commitment to each national member is made by its government, and about seventy percent of the consortium is government owned. The program is considered the one truly successful joint European program translating technology development into commercial venture.

When Airbus was launched in the early 1970s, American aircraft producers completely dominated the world market, producing ninety percent of all planes.\footnote{B. BLUESTONE, P. JORDAN \& M. SULLIVAN, \textit{Aircraft Industry Dynamics} 57 (1981).} The Europeans saw the American preeminence as artificially created, a commercial spin-off of military programs. Certainly jet bomber programs were the research and development base
from which the first successful commercial jets were derived. Even the Boeing 747 program had its origins in the Air Force competition for a jet transport, a competition finally won by the Lockheed C5A.

American producers by contrast viewed their success as the natural result of their competitive acumen. Each new aircraft requires investments of hundreds of millions or even billions of dollars, often meaning that a company's position in commercial aircraft is staked on each gamble. The key to success is achieving volume sales, both to bring down production costs through scale and to achieve a return in a short enough time to justify the original investment. In the view of American producers, unfortunate crashes of early jet aircraft and a failure to adapt aircraft to continually shifting airline demands drove the Europeans out of the game. Moreover, Americans emphasize that European aircraft production costs have always been higher than American costs. Boeing in particular would assert that its ability to adjust production levels, despite determined layoffs, has permitted it to remain profitable despite fluctuations in market demand. The American commercial aircraft companies see the world through an optic of investment returns achieved by a private company in a competitive market.

Airbus has a strategic vision of how to become a permanent presence in competitive aircraft markets which sharply distinguishes it from all earlier European aircraft programs. The strategy has three components, each dependent on government initiative. The first is to create a family of airplanes, each technologically competitive with its American equivalent. Two members of that family have been built, the A300 and the A310. The third, the A320, will be a fifteen-seat plane. The development costs of the A series have been enormous. This has meant the commitment of substantial government funds, estimated to date to exceed $5 billion (1982 dollars). These funds are given either as investment or as reimbursible advances.

In form, Airbus looks like an entirely private venture operating with paid-in capital and loans. The questions are what returns are expected from "investments" and what are the terms and payment schedules of "advances"? To the extent that lower than market rates of return or slower-than-commercial repayments are acceptable to member governments, Airbus Industries operates under looser financial constraints than its American competitors.

Privately, European sources acknowledge that Airbus is subsidized, and that even if Airbus sells another 150 A300 models the pro-

40. Boeing Commercial Aircraft Company, supra note 38.
gram as a whole will still lose money. Losses, however, are at present inconsequential. The European objective is to establish a permanent position in world commercial aircraft markets, as well as to sustain the development of the technologies embodied in advanced aircraft. Domestic production limits imports while producing jobs. Direct commercial subsidies are justified as a means of reentering a world market from which American subsidies, albeit in the form of defense expenditures, excluded them. Airbus, then, is using government assistance to compete in an otherwise openly competitive industry.

The second goal of Airbus is to use the European market as a launch point for new aircraft. The scale of the American domestic market presently provides a home in which American aircraft producers can define and launch new products. Airbus wishes to create such a secure domain as well, ignoring that the domestic American market has in fact been fiercely competitive. Airbus wants its government sponsors to pressure their domestic airlines to buy the planes. National co-sponsorship means co-production and a stake in the sale of the planes. European planes would then be launched by sales to European airlines. The French thus hope to see the world divided into an American market, a European market, and the rest of the world where the products then compete.

The third element of the strategy is to use state influence in sales to this “third market.” We shall return to the issue of state trading in a later section.

In sum, the American aircraft firms are organized quite differently from Airbus, and operate under constraints that are diverse enough to affect the terms of competition. Consequently the different approaches to industry and markets become political issues. The issue is how to reconcile these conflicting approaches. At one extreme, the Americans would simply like the Europeans to stop state involvement in commercial aircraft development, but this will not occur. At the other, the Europeans would like the Americans to accept the state strategy without otherwise tampering with the rules of international trade, which is not likely either. The terms of an accommodation between the American producers and other European competitors are not clear. The Americans fear that continued state subsidy will endanger their interests and impose an unfair competitive handicap. The Europeans see no reason to accept as given American domination of the aircraft markets. Since, in the open American market, leadership in both engine and airframe sales has been volatile, even when one firm has appeared to have a commanding position, a compromise that sets limits on European ambitions in exchange for American acceptance of Airbus would contain serious risks for both sides.
The Newly Industrializing Countries. In the 1970s both France and Japan were able to mount a challenge to American advantage on a solid base of industrial experience and technology. In a range of other countries from Brazil to Taiwan, state officials have sought to use the power of government to create an industrial base. Japan's success in developing competitive advantage in stages of industrial production brings into question the utility of static versions of international trade theory in understanding competition among advanced industrial countries. Similarly, the Newly Industrializing Countries (NICs) force us to reconsider the debate over trade and development.41

Liberal economists looking at trade between the advanced countries and the developing nations have emphasized that direct foreign investment both transfers technology and raises the effective rate of investment in the developing country. They argue that open international trade benefits the weak countries as well as the strong. The state, in their view, cannot profoundly alter the consequences of market structure and market forces; it can only establish proper domestic incentives that allow the private sector to maximize its gain and hence maximize public wealth. The radical challenge to this view, developed from a Marxist tradition, has been labeled "dependency" theory, and has strongly influenced policy debates in the Third World, particularly in Latin America. According to the dependency theory, the economic world is hierarchically ordered with the development of the center coming at the expense of the periphery. The hierarchy, in turn, is self-sustaining. Thus, foreign investment distorts autonomous development, permitting the advanced countries not only to drain wealth from the dependent nations but effectively to control their economic and political development.

The effect of international trade on a country seeking development depends on the ability of the government to determine the terms on which foreign capital enters the country. As argued above, the Japanese government was able to break up the MNC's package of capital, technology, and management control. The ability of a particular government to act as gatekeeper to the outside world and promoter of development within depends on its own internal structure and domestic resources. The government of a country having a large domestic market that attracts foreign investors and skilled domestic technicians will achieve a better bargain than one that has neither as a bargaining chip.

What is common to the NICs—as distinct from the other developing countries—is the ability of their governments to act developmentally, that is, consciously creating advantage in specific sectors in order to alter the structure of the domestic economy and its place in the international hierarchy. The NICs must be seen as mercantile states. As such they represent part of the mercantilist challenge we consider here.

The NICs affect the advanced industrial countries in three distinct ways. First, they are a new source of exports. Between 1960 and 1970, yearly NIC exports to advanced countries grew tenfold, reaching a total of $44 billion. Those volumes continue to grow. In global terms the imports are not dramatic, representing between one and two percent of total manufactures.42 Moreover, the aggregate costs of such imports are usually paid for by increased exports of the advanced countries to burgeoning markets in the NICs. Until now, exports of manufactures from the less developed countries have been focused in a few sectors, so the impact on employment in the advanced countries tends to be concentrated in particular regions. To date the greatest impact has been felt in textiles, clothing, toys, electronics, and electrical machinery.

In addition, as the NICs and other developing countries attempt to substitute domestic production for imports from advanced countries, they shrink the market available to foreign producers. This is clear in the steel industry, where indigenous production is slowly eliminating export markets for American, European, and Japanese producers. Third, the NICs will themselves become exporters, often to other Lesser Developed Countries (LDCs), of plant and equipment as they master the techniques of process and product innovation. How quickly this occurs and on what scale is hard to judge; Brazil and Korea, for example, are making important efforts in these directions but are now suffering from the collapse of the international market for producer goods.

Finally, the NICs represent important markets for the advanced countries. NICs must buy capital goods, advanced equipment and services, and increasingly more sophisticated consumer goods. They will not be able to produce all consumer goods internally, and demand for them will rise with income. The balance of these effects is hard to judge, but clearly the pressure on the advanced countries to adjust their production will be great.

42. J. ZYSMAN, supra note 1, at ch.1.
B. Managing Surplus Capacity: The Negotiation of Industrial Transition

The second set of trade problems concerns the management of surplus capacity, whereby companies negotiate with governments to reduce supply to meet existing demand. The notion is very distant from conceptions of "free trade," for it calls for active government participation in industry. Surplus capacity has a multitude of sources, the most important being decline in demand, diverging production costs, and government policies that serve to resist decline of uncompetitive industries while speeding the expansion of successful sectors.

When the U.S. steel industry is operating at forty-four percent capacity and the European industry at fifty-three percent capacity, every surge in trade has critical implications for the profitability of each company and for employment in each nation. Subsidy, protection, and devaluation all appear as means to export unemployment and maintain profits. Such difficulties are not new, as the history of the Great Depression suggests.

The entry of new producers, often from developing countries, into international markets has contributed as much as recession to the present problems of excess production. The production costs of the new producers are below those of established companies. In some cases, such as segments of the shoe and textile industries, lower labor costs are the cause. In others, such as autos and steel, basic innovations in the process of production are at the root of diverging production costs.

The series of bilateral deals to limit exports from one specific country to another are called Orderly Marketing Agreements (OMAs). These "voluntary" export restraints ostensibly stay within the rules of GATT, but step beyond them in spirit. They have cropped up as developing countries penetrate advanced country markets and as firms in one advanced country enter product sectors dominated by established firms in another advanced nations. At first these arrangements were viewed as exceptional bargains that simply detracted from the broader move toward freer trade. Or, in the case of the American legislation implementing the Kennedy Round of trade negotiations, such restrictions were a price to be paid to the textile industry to obtain its acquiescence to the broader trade legislation. Later, an entire set of rules was devised in the textile sector to provide a common international framework for negotiating these bilateral arrangements. The Multifibre Agreement (MFA) removed textiles from the general liberal trade regime and established a multi-lateral system to regulate protection.

The management of surplus capacity is problematic in several ways. The Europeans and Japanese normally manage excess capacity
at home through cartels or cartel-like arrangements. Consequently, the Europeans and Japanese are prepared to negotiate market sharing arrangements internationally. Such arrangements are legally impossible in most cases in the United States. As a partial result, American policy responds to international excess capacity through external protection.

Financial subsidy is another means by which the Europeans protect their industries. For example, multi-billion dollar subsidies in France went into saving a bankrupt steel industry. American policy, by contrast, has provided tariff protection which has intended higher prices and high corporate profits as the means to finance adjustment. Indeed, the steel conflicts between the U.S. and Europe in June 1982 hinged technically on how to calculate the value of government subsidy. The existence of fundamentally different notions of the role of government in the economy makes international negotiations about "surplus capacity" exceptionally difficult.

A related problem is the management of industrial transition, a shift in resources from one sector to another forced by the need for firms to exit from industries plagued by excess capacity or by shifts in competitive advantage. American policy tends to leave the process of industrial transition to the financial markets, mergers, and the bankruptcy court; the executive assumes a hands-off attitude toward the outcome of such proceedings. The Chrysler and Lockheed cases are certainly exceptions, and the extensive debate over specialized legislation required in each case simply underlines their exceptional character.

Other governments tend to become involved in these adjustments of the domestic economy. In France an interministerial committee handles these matters, while in Japan MITI takes the lead role. Those governments that do choose to intervene profoundly reject the notion that social and economic structure should be left to the international market to determine.

What is at stake in the international negotiations that result is often precisely which companies in which countries will be able to survive the transition to a different pattern of products or a new system of production. In a politicized world economy, one in which some governments are attempting to structure market outcomes, a liberal econ-

43. A paramount example is the French Davignon steel plan, a government influenced or structured cartel.
44. See Cohen, Galbraith & Zysman, Rehabbing the Labyrinth: The Financial System and Industrial Policy in France in France In A Troubled World Economy, supra note 1, at 65-72.
46. J. ZYSMAN, supra note 1, at 153, 237-42.
omy with a passive government may find itself at a disadvantage in many situations. The nature of the political problem posed by oversupply depends on the source of the excess capacity. The following examples illustrate how countries deal with these problems in specific sectors.

Limiting Trade in Automobiles. A voluntary restraint agreement that limited Japanese penetration of the American automobile market was established on May 2, 1981. The accord was intended to give American producers a breathing space to adjust to the new competition. The Japanese agreed to limit the number of passenger cars shipped to the United States to 1.68 million units (for passenger cars only) or about 16.5 percent of the market. As total demand dropped, the Japanese share of the American automobile market rose to 21.8 percent in 1981.

The deepening recession has obscured the debate about why the Japanese were in fact able to enter the American market so easily. To some extent, Japan's success can be linked to the successive energy crises of the 1970s. Before American automakers were able—or more importantly, willing—to downsize their vehicles, Japan's fuel efficient cars were able to fulfill the changing desires of America's drivers. A second and more compelling explanation is that the Japanese achieved fundamental innovations in the organization of auto production that give them an enduring advantage in price, product variety, flexibility of product mix, and product quality. In these areas a fundamental divergence in the capacities of auto producers is occurring. The collapse of the British automobile industry in the late 1960s was the direct result of the inability of British producers to reorganize production to meet world standards. The British heritage of small plants and confused union structures could not be reordered. Much of the production that survived there did so only with substantial government subsidy. Britain fell below the competitive standard of the American and European producers. The Japanese by contrast stepped above that standard.

48. See Friedman, Beyond the Age of Ford, in AMERICAN INDUSTRY, supra note 1, at 358. A substantial debate rages about why American firms did not make the shift to more fuel-efficient cars sooner. The industry would contend that after the 1974 oil crisis, the real cost of petroleum dropped until 1978, and after the first shock American consumers shifted back toward large cars. Whether Detroit should have anticipated the second oil price crisis, or whether in fact an encrusted upper echelon of auto executives were so entrenched in their ways that they could not adjust to the market, or whether in fact Detroit had missed the signs in the late 1960s and early 1970s that a market for small cars was emerging does not change the analysis that an abrupt shift in the mix of products was required.
Analysts in 1980 estimated that on a $5,000 car the Japanese had a staggering cost advantage of as much as $1,500 over the Americans.\textsuperscript{50} It is true that American auto workers are exceptionally well paid in comparison with manufacturing workers in other sectors, and that the average manufacturing worker in America is better paid than the average worker in Japan. Nonetheless labor costs account for only one-half of this difference in automobile costs. Differences in material costs were insignificant. Where, then, is the rest of the cost gap?

The Japanese, it would appear, have made basic innovations in the organization of production. Management of parts flows, for example, has allowed the Japanese to maintain very low levels of stock. Anecdotes tell of automobile seats unloaded directly from delivery trucks onto the assembly line. One French manufacturer notes that Japanese producers hold one hour transmission part stocks while his own company is obligated to maintain one month stocks of the same part to assure continuity of production. Inventories have to be financed, and consequently savings are realized from not having to maintain such stocks. Furthermore, comparisons of auto manufacturers in Germany and Britain show that worker productivity using the same machinery is dramatically different.\textsuperscript{51} Those studies suggest that the organization of production, a management responsibility, is the primary cause of variation in productivity. It is clear for these reasons that radical variations in production cost occur among major producers and account for shifts in competitive positions.

Unfortunately for their American competitors, the Japanese also seem to have achieved a greater real variety in product. Chassis and engine type is the best measure of real variation in product, rather than superficial finishing characteristics used to distinguish models. This measure suggests that the Japanese have a product variation per 100,000 cars that is over three times the American variation.\textsuperscript{52} Since economies of scale in automobile production are thought to be great, the question becomes how the Japanese are able to achieve both product variety and low cost. Clearly one possibility is that variety is expensive, but that cost savings achieved elsewhere in the production process compensate. Variety thus becomes a part of quality which the Japanese are able to offer because production costs are low. There is a second possibility. Using programmable spot welding machines, the Japanese appear to be able to run a variety of products down the same assembly line, achieving volume across a range of products. The implication is that market segments can be attacked with truly different

\textsuperscript{50} DEp'T OF TRANS., \textit{supra} note 47.
\textsuperscript{51} CENTRAL POLICY REVIEW STAFF, \textit{THE FUTURE OF THE BRITISH CAR INDUSTRY} (1975).
\textsuperscript{52} Friedman, \textit{supra} note 48, at 360-62.
products, and as market demand for products within the range shifts, it is easier to vary the composition of output. Although this interpretation is not confirmed directly by American auto companies, American consumer electronic producers do attribute part of the Japanese competitive strength in their industry to similar production strategies.

If Japanese producers have indeed created enduring competitive advantages, then the time required for a successful competitive adjustment may be quite long. In this case the OMA, intended to be a temporary interference with free markets, may become a lasting instrument of internationally negotiated market shares and a means of providing a lasting subsidy to American producers at the expense of consumers. If the experience with OMAs in other industries is any guide, the Japanese will soon fill their quota with more expensive higher margin cars, leaving lower-priced, lower-margin cars to other producers. In other words, the OMA may once again force adjustment on our competitors, encouraging them to shift into the most profitable product lines.

The Japanese managed this innovation in production as volume in their home market expanded. The jump from 160,000 cars in 1960 to 8,000,000 in 1980 meant the rapid introduction of new assembly lines. Innovations in production could be introduced in new facilities rather than having to write off or reorganize existing facilities. Backwardness proved to have its advantages. The steel industry provides a similar example.

Cartels and Protection in Steel. The news media are currently presenting the steel story as a struggle between governments to protect production and jobs in a declining market. As mentioned earlier, the Europeans have attempted to arrange an ordered cutback in the European steel industry through a Community-sponsored cartel. Within the ongoing cartel negotiations, firms and governments have pursued radically different strategies. The Germans have attempted to avoid subsidy, except where their firms were thought to be competitively penalized by government subsidies to their rivals. The French and British have poured funds into their industries. The conservative French government of Giscard d'Estaing in fact was forced effectively to nationalize the major firms when the debt burden of the companies became unmanageable. The cost of that financial restructuring was estimated at several billion dollars. The Japanese have a tradition of recession cartels to manage decline. By all evidence the arrangements in steel are extremely effective. *The Economist* reports, for example, that five major steel producers have maintained seventy percent of the Japanese steel market over the years 1971-1981.\textsuperscript{53}

\textsuperscript{53} *Japan Steels Itself Against Competition*, *Economist*, Jan. 9, 1982, at 61.
The trigger price system in the United States, which in 1978 established minimum selling prices in the U.S. market for foreign companies, sought to cushion the American market from events abroad. Steel sold below that price was presumed to be dumped or to be benefitting from subsidies. Continuing threats from American steel companies, particularly from U.S. Steel, to initiate massive dumping suits, have prodded the government to enforce stringently the trigger price system. Behind the protection—whether appropriate as a defense against foreign subsidies or not—American companies have pursued several strategies. The largest, U.S. Steel, saw profits jump after the establishment of the trigger price system, and has used that money to diversify, the purchase of Marathon Oil attracting the most attention. Bethlehem Steel, by contrast, has attempted to move into specialty steels, and the many companies operating minimills expanded profitably in their specialized niches.

Managing production cutbacks worldwide without provoking outright protection is a central problem in this sector. Between 1974 and 1980, world production capacity rose by better than ten percent, although production was dropping. This further diminished the rates of utilization. Production fell the most sharply in Japan and the EEC, where capacity had increased the most. There, governments have sought to modernize capacity to improve competitiveness. In the French and British cases, the governments have until recently resisted shutting down outmoded facilities and reducing labor even while building new facilities. At the same time, the growth of steel production in newly industrializing countries has meant a loss of export markets for producers in all advanced countries. In essence, the extended recession hit in the midst of a period of basic readjustment in the industry.

The American position in this semi-negotiated international reshuffle has its origins in the choices made by American producers a generation earlier. American producers engaged "political muscle to protect their oligopoly of the domestic market and thus to insulate themselves for a time from the need to restructure." As a result, the United States industry has expanded little since 1964 and has seen its share of the world market dwindle. The 1950s was the last period of American expansion. Some 50 million tons of annual capacity were added then. During that period, America was still the dominant world producer and the domestic market was an oligopoly effectively immune to foreign competition.

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54. This discussion is drawn from Borrus, supra note 45.
The largest American companies built very traditional plants in the 1950s using then standard technologies. The problem was that a relatively untried alternative was available, the basic oxygen furnace (BOF) process, which was to make possible lower cost production and to threaten the industry pricing structure. At the time only the small U.S. companies took the risk of introducing the new BOF process.

The Japanese, like the small American firms trying to expand market share, took the risk, but also engaged state aid to assist their competitive development. Capacity in Japan grew from 24 million to over 100 million net tons in the 1960s, financed by long-term low interest debt, and after these efforts the Japanese had the world's most competitive steel industry.

The American producers had expanded production in the 1950s, but in the 1960s they faced stable demand with a now-outmoded technology. The transition out of the old technology was therefore done in piecemeal fashion, although substantial sums were spent. Together, the major integrated steel producers saw their competitive position erode during the long period of slow growth that preceded the current recession. The situation of the major producers is not uniform, and some, such as Inland, have remained competitive. Minimill producers and specialty steel producers saw their position improve in this transition.

**Textiles and Adjustment.** Government negotiated restriction on market access has become the norm in the textile industry. The industry has established its own set of rules and procedures for these arrangements. The MFAs represent a sector-specific regime for managing trade which is built on premises of negotiated outcomes rather than the GATT concept of free trade. This system of "organized free trade" grew up as a response to the problems of industrial adjustment and to changes in the products and producers that had a competitive advantage, though not as a reaction to recession.

The movement toward global protection began in the United States where the textile and apparel industries have attempted to insulate the domestic market from international competition in response to global market changes. They have pressed the U.S. government to impose quotas, arguing that low profits, unemployment, and plant closings are due to imports. In 1955, under pressure from the United States, Japan limited exports of a few cotton products. Today the United States severely restricts imports of cotton, wool, and synthetic-fiber goods under the global MFA, which controls virtually all world

trade in textiles and apparel.\textsuperscript{56}

When the first demands for protection were made, imports were not the major problem plaguing the American industry. The industry was being disrupted, rather, by a shift from natural fibers to artificial fibers, as well as a shift in production from the Northeast to the Southeast. Government policies, moreover, created real problems. Agricultural policies raised the price of cotton in the domestic market, putting American textile producers at a disadvantage in competition with foreign producers, who had access to cotton at the lower world market prices. Aid programs to developing countries also helped establish foreign textile industries that later began exporting to the American market. These developments affected American firms differently, depending on their products and geographic location. Consequently, the industry had no common interest in any domestic policy to facilitate adjustment, but all firms had an interest in insulating the domestic market from foreign competition. Because major segments of the textile-apparel industries are labor intensive, competition from firms in low-wage countries steadily intensified.

The protectionist system was constructed in three steps. In the first phase, 1955-61, "government policy evolved from a relatively free trade position, with only tariffs in effect, to a bilateral system of import control on cotton textile and apparel goods from Japan."\textsuperscript{57} That bilateral agreement was extended at the end of the first phase to a multilateral agreement that controlled national restrictions on cotton textile and apparel imports. The original restrictions on cotton had led to restriction on Japanese cotton textiles, then to restrictions on textiles and apparel from other exporting countries.

In the second phase, 1961-73, restrictions on cotton goods were extended to products made of other fibers. Foreign producers responded in the same way in textiles as they had to restrictive agreements in other sectors; they changed the mix of products, shifted the location of production, and changed the countries to whom they sell. Moreover, producers from countries not covered by an original agreement often begin producing for export when such restrictions are imposed on rivals. Foreign cotton textile and apparel producers shifted into woolen and manmade fiber products for export to the United States, and even cotton imports grew as new countries entered the textile export business. The result was both the broadening of product restrictions, and European support for a general system of restrictions; exports displaced from the American market had begun to affect the Europeans.

\begin{itemize}
\item \textsuperscript{56} Id. at 252.
\item \textsuperscript{57} Id. at 253.
\end{itemize}
The Europeans took the initiative in the third phase, beginning in 1974. The European Community responded to the influx of LDC products by pressing for a major modification of the MFA in 1977. The modifications allowed the EEC to conclude even more protectionist bilateral arrangements with LDC producers. In response, the U.S. textile and apparel groups urged the U.S. government for more restrictive bilateral agreements because they feared a diversion of exports back to the American market.58

Some unique features of the textile industry produced this organized exception to the free trade model. First, the impact of new producers on established markets was quite substantial over the twenty years. Second, the fragmentation of the industry into small producers in each country meant that either formal or informal cartel arrangements would be very hard to negotiate. Third, the mass of small producers meant a geographic diffusion of political influence in the United States and Western Europe. In each country, the industry was also a major employer, drawing union support behind the protectionist drive. Yet arrangements among producers or informal agreements among governments were not manageable, even though the political clout of the industry was substantial.

The fundamental force behind the government management of surplus capacity in these sectors was the effort to control the process of industrial transition. Certainly recession aggravated the problem and made government conflicts more intense, but the need for what the French would call “organized free trade” arose from the desire to control the consequences of market changes. Even were the recession to end, the pressure for negotiated trade to balance national interests in many of these sectors would not dissipate.

The several sources of oversupply intertwine, but they call for quite different policy resolutions. First, declining demand calls for a division of the remaining markets among existing producers, each of whom faces the temptation to gain marginal revenue by operating high-cost plants at full capacity and selling the marginal production at below average cost in someone else’s market. Second, divergent production costs pose knottier issues. They make it harder to negotiate a resolution of shifting positions in the market, whether it be the entry of newcomers or a readjustment of position among existing producers. Why should the winners concede at the bargaining table what they can gain in the market?

58. Id. at 265.
C. New Wrinkles in the Export Game: The State as Trader

The state has become a trader, directly negotiating sales and influencing the terms of supposedly private bargains. Leaving arms trade aside, governments are important commercial actors in sectors as diverse as construction, aircraft, and communications. In addition, the state acts as a purchaser, negotiating buyback and barter arrangements. Such arrangements have recently been estimated to represent thirty percent of all international trade.\(^{59}\) While this is almost certainly an exaggeration, counter trade or barter arrangements have grown in significance in recent years, opening a new arena for state action. Undoubtedly, trade with Eastern Europe and OPEC has promoted barter. For example, Soviet bloc countries often prefer to exchange goods for goods because they lack hard currency. Oil barter deals, on the other hand, have been negotiated with OPEC countries as a means for consuming countries to secure oil supplies while securing industrial development contracts for OPEC nations.

Some governments are better organized than others to play the role of “trader.” The same centralization and bureaucratic coordination that permit the French and Japanese to play a developmental role in their economies enables each to act as a trader abroad. Such tied trade arrangements that substitute barter for monetary transactions are thought by most American officials to fly in the face of the principles of free trade. Yet those countries that are technically less suited to this role are often those which are ideologically opposed to such trade activities and condemn them as a violation of the principles of free trade.

State trading, barter, buyback, offset and mixed trade agreements are not new, but their volume is increasing rapidly and their role in the international trade system is changing. From marginal and exceptional practices in a few specialized areas (such as armaments) they are coming to occupy an ever more central role in the organization of international trade.\(^{60}\)

Behind these new wrinkles\(^{61}\)—which are less a flurry of ideosyncratic innovations than the coherent consequences of growing mercan-


\(^{61}\) Examples of these new wrinkles in buybacks, mixed aid packages, offsets and barter abound. GE recently reported losing an important contract for the sale of CAT scanners to Austrian hospitals when a competitor, Germany’s Siemens, agreed to increase production of electrical goods (not CAT scanners) at a plant it owns and operates in Austria, thereby offsetting the purchase with additional Austrian employment. McDonnell Douglas, in order to sell over $2 billion of military fighters to Canada, agreed to locate employment in Canada and to help market
Mercantilism—lie the two basic forces examined above: (1) the rise of the developmental state as a primary actor in the international trade scene, and its increasingly dominant role in both newly industrializing and re-industrializing countries; and (2) the need to manage surplus capacity and to negotiate industrial transition. These forces merge to diminish the role of private, market transactions as the dominant and organizing means of international trade. The dynamic is self-reinforcing. State trading leads to offsets, offsets to mixed packages. As they become accepted practices, expertise and institutions develop to expand, reinforce, and perpetuate the emergent parallel system. Institutions well adapted for success in one system—such as the entrepreneurial firm—find themselves ill-adapted to the other system.

These fundamental tendencies are in turn reinforced by powerful secondary trends. The first, beginning in the mid-1970s, was the sudden availability of funds for developing country governments in which state guidance is central to investment and trade. For some countries, mostly OPEC nations and NICs, the funds came through trade; for others, such as Brazil and Mexico, through borrowing. In both cases, the expanded volume of international trade has meant an expansion of the role of state trading, and a relative diminution of direct market transactions between private buyers and sellers. Another ancillary effect of the growth of mercantilist practices has been the rapid expansion of trade with centrally planned economies.

A third force behind these new wrinkles is the rapid growth of the international arms trade. In many ways the arms trade is the model for the new mercantilism. The armaments sector is the area where it is most difficult to distinguish between economics and politics, between the public and the private sectors. Governments are clients as buyers of arms. But they are also investment bankers, financing not only production, but research, design, and development. In addition they are merchant bankers, finding foreign buyers, organizing the sale, financing the sale, organizing the offsets, dumping the bartered counterparts, and financing services, such as training and maintenance, all of which make the sale—and follow-on sales—possible. The market is characterized by discrete, giant contracts rather than by marginally adjusting commodity flows.

The mixed aid packages, offsets, and barter which characterize those contracts make true prices difficult to compute. The complex financing and cost structures of the manufacturers of large-scale, so-

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a miscellany of Canadian goods. Northrop has similar complex deals all over the world, as do GE, GM, and a host of other major American companies. They are relative latecomers to this game, and recent legislation by the U.S. Congress to permit the involvement of commercial banks in trading companies testifies to our belated recognition of its growing importance. See New Restrictions on World Trade, supra note 59, at 118.
phisticated armaments make real costs equally obscure. The contracts are most often negotiated government to government, with complex political considerations replacing simple price-quality calculations. In many ways the arms trade is the most important quantitative expression of the new mercantilism. It is also of primary importance in developing the mercantilist habits, channels, and institutions which then spin off into other sectors.

In sum, the rules and the structures of the game of international trade are being changed by these institutional innovations. Market trade practices, employed mostly within a small group of Western liberal economies, are being threatened. It is a bit like the effect on football when the hard shell helmet and protective padding were introduced. They first came as defensive measures to protect the more delicate parts of the more vulnerable players. But they quickly transformed the head into a battering ram. To defend themselves, everyone else was forced to adopt the new defensive/offensive innovation, and change the way they played the game. Safety did not necessarily increase; the game did not necessarily improve.

In addition to the traditional aspects of barter, the non-mercantilist barter system has new attributes to respond to today's industrial difficulties. First, bartering permits a vagueness in the price of a product. It skirts anti-dumping rules, permitting market discrimination (selling cheaper in weaker markets) and is therefore a way to survive bad times. Once others do it, even the strongest competitor will sooner or later succumb to the practice. Barter deals should diminish once the world economy picks up, provided that domestic producers do not first find themselves excluded from markets where reentry will be extremely costly and perhaps impossible. Another problem is that some producers may not be able to buy marketing skills and consequently will wish to transfer that problem to someone else. They may be willing to let prices shift against them in order to transfer that selling task to trading partners. Finally, many international transactions are not simply the exchange of one product for another, wine for wool, oil for electronics, as in classical trade theory. They are deliberate efforts to change a nation's economic situation, to reposition its industry in the international division of labor. The Brazilian petrochemicals case, and the European Airbus case, illustrate this view particularly well. Japanese computers, a few years back, were a parallel illustration, among others.

*Technip and Petrochemicals in Brazil.* 62 Brazil's appetite for petrochemicals has been enormous. Ethylene output grew by over forty percent between 1970 and 1977. The state-owned energy companies,

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Petrobras, contracted for giant, state-of-the-art petrochemical plants to be built in Brazil by American multinationals. A small percentage of locally produced goods went into the first plant, and almost no local engineering. A second plant utilized more local engineering, but was still essentially a turnkey operation. A black box was delivered, on schedule, with complete instructions for its operation. For the next series of plants, the Brazilians tried a new, aggressive and risky approach, and they seemed to have succeeded.

The purpose of the multi-plant contract was not merely to create a certain volume of ethylene capacity at a certain price (though that was not neglected), but rather to create competitive advantage through state-of-the-art and self-developing Brazilian engineering capability in process petrochemicals. The state enterprise, Petrobras, requested bids from four international petrochemical engineering firms. The American engineering firms Lummus and Stone & Webster did not wish to create their own competition; their bids did not provide for the kind of technology transfer the Brazilian state sought. Nor did the bid of the German firm, Linde. Only the French firm, Technip, accepted the contract in all its terms. This decision merits consideration.

Technip was started in 1958 by the French government, interestingly enough, to do in refineries exactly what the Brazilians were trying to do in ethylene plant technology. At that time international petroleum firms, and American process engineering, completely dominated the then rapidly growing French market for refineries and continuous process petrochemical technology. Technip was created to acquire the know-how so that a French firm could play a major role in building refineries and process plants, first in France and then abroad. It succeeded mightily. With the substantial help of the French government as a gatekeeper and tough negotiator, Technip was able to appropriate the requisite know-how through a series of contracts. The existence of sufficient technical diffusion permitted the French government to use its tight control over entry into the French market to force a weaker firm, but one possessing sufficient know-how, to convey that know-how to Technip as the price of entry. Government backed, Technip was given a string of major contracts by government-controlled oil companies. It quickly became the number one plant engineer in France and developed enough experience and expertise to begin to venture abroad.

Technip is owned by a consortium of French state-owned petroleum companies, banks, and materials and machinery makers. It was created to act not as a simple firm, but as an instrument of national economic development policy. It has, over the years, continued to act that way. Although it makes profits, it does not seek to maximize
them. In industries such as engineering, where the task consists of designing large and costly plants or roads, the profits of the consulting engineers or planners are a very small piece of a much larger pie. The large profits lie in the provision of the hardware: the machinery, materials, and building supplies. The engineering or architectural firm is often a spearhead for one or a group of such suppliers. Thus, there is nothing particularly unusual about Technip's behavior, but it is an extreme case. It spearheads the industrial core of an entire nation.

The Brazil deal, therefore, represented many things for Technip and its parents. It was an attractive business opportunity in its own right, a chance for a second string company to break into a big, new market, and diversify its operations. Because it was not a dominant company, it had relatively little to lose by giving away the state-of-the-art know-how. There were perfectly sound, normal business reasons for Technip, unlike Stone & Webster, Lummus, and Linde, to jump after the Brazil contract. But beyond that, it was an important foot in the door for French suppliers—and not just suppliers of materials and machines and software for the ethylene plants. The petrochemical venture was seen as the first step in the long-term relationship of cooperation with Brazil. The French contributed petrochemical and computer technology, as well as training in French methods and language; Brazil, in turn, gave France access to Petrobras, the country's strongest industrial force. As a foot in the door for the entire French economy, Technip had advantages—and strategic considerations—that were quite different from competing American and German firms.

Competition in Civil Aircraft Revisited: The International Dimension. The European Airbus, described earlier, exemplifies almost all these new trade wrinkles in one product, in a market where the stakes are high enough to make it more than just another "example." The estimated market for the new generation of wide-bodied aircraft, viewed at present, to be divided almost exclusively between Airbus and Boeing, is variously estimated at between $100 and $150 billion dollars, with the U.S. market accounting for only about forty percent of the total.

Airbus, as we examined earlier, was created as a consortium among European governments. Although it was extremely expensive to buy into the industry, Airbus is beginning to pay off. Starting in the very late 1970s, sales picked up smartly. By 1980 Airbus had about one-third of world sales in wide bodies; last year they reached over fifty

63. Id.
64. Aircraft Financing: Uncommon Agreement, ECONOMIST, Oct. 2, 1982, at 73, 74. See also BOEING COMMERCIAL AIRCRAFT COMPANY, supra note 38.
percent of new orders.\textsuperscript{65} For the Europeans, especially the French, Airbus is proving to be a success in its most important dimensions. It is the most visible and successful example of European economic cooperation (even if twenty-five percent of it is U.S. made). As such, it is politically precious, and must be preserved at almost any cost. It has enhanced European prestige throughout the world by creating a strong European presence in what is seen as a key advanced industry. Without Airbus, the European aircraft industry would likely have disappeared. The European governments may even recoup part of the $5 billion that Boeing viewed as a manufacturing subsidy, and they viewed somewhat differently. But the payback may still be many years off. They must still advance the costs of the A320 program, which seem likely to exceed $1 billion to launch.

Airbus has benefitted from state support in other ways as well. High level French officials seem to be marketing Airbusses, using the powerful, complex leverage that only a well organized developmental state can mobilize to encourage sales. The French press regularly reports talks between top government officials, including prime ministers and presidents, where the sale of Airbusses was discussed, usually in the context of a broad package of economic, political, and cultural relations between the two countries. Sometimes this system works in reverse, because outside the U.S. buyers of new commercial aircraft are predominantly governments, or government owned and operated airlines. The complexity and prevalence of this game became apparent when the Australian government announced that as a condition for the Australian purchase of Airbusses, the French government would have to use its considerable influence within the Common Market to increase access for Australian sheep. The French government official (of ministerial rank) immediately engaged France to make such an effort. This is an extreme—and double-edged—example of the complex barter nature of so much of world trade. A state that can organize itself into some kind of a super trading company commands certain advantages in the changing game of international trade.\textsuperscript{66}

There is another side to the Airbus-Boeing competition over the rules of trade, and U.S. firms, especially in aircraft production, are not simply passive, injured parties. As noted earlier, Airbus argues that the U.S. commercial aircraft industry has steadily benefitted from substantial Pentagon subsidies. The Pentagon underwrote development costs of the GE jet engine that powers so many wide bodies all over the world (including Airbus); Pentagon orders for military aircraft that are only slight variations on civil aircraft keep the lines running and

\textsuperscript{65} Airbus-Chronique, \textit{La Documentation Francaise}, 1982.

\textsuperscript{66} Aircraft Financing, \textit{Economist}, \textit{supra} note 64, at 74.
thereby subsidize the commercial market as in the case of the K-135 military jet tanker, which is a relatively minor adaptation of the Boeing 707.67

Airbus's increased sales are due in part to another non-market selling practice that its American competitors oppose vociferously, that is, below-market or subsidized financing and risk insurance. On a big-ticket item like a $50 million airplane, a few points difference on financing can be a decisive advantage. Boeing estimates that a two percent interest advantage on the sales terms outweighs a five percent advantage on fuel economy—the big difference between the new generation of wide bodies and the older generation.68 Below market financing rates for Airbus are commonly acknowledged in the world press.69 Even the French press acknowledges substantial government financing as well as subsidies in each Airbus sale.70 When, after extremely strenuous efforts, Airbus finally broke into the U.S. market with a big sale to Eastern Airlines (its only U.S. sale thus far), Frank Borman, the former astronaut and Chairman of Eastern Airlines, told the employees of that ailing carrier in a much cited outburst of enthusiastic candor: "If you don't kiss the French flag everytime you see it, at least salute it. The export financing on our Airbus deal subsidized this airline by more than $100 million."71

Until a one-year agreement on aircraft financing was reached in September 1981 (and extended for a few more months in September 1982), Airbus financing was available for as little as 7½ percent and constituted a major commercial advantage.72 Airbus, however, did not pioneer the technique of government sales financing. Governments have for years supplemented purely private techniques of export finance in order to assist their companies' sales efforts abroad. Selling abroad raised specific problems which, if resolved, could increase the total volume of trade. Operating on a pay-as-you-go basis, government programs often served to make the financing of foreign trade more effective and were not simply instruments of competition among nations. In the past twenty years, however, such programs have begun to serve as competitive instruments in international competition for capital goods sales. As national instruments of competition, export financing techniques often embody substantial government subsidies. If one na-

67. HARBRIDGE HOUSE, INC., SUR LES SUBVENTIONS DU GOUVERNEMENT DES ETATS-UNIS A L'INDUSTRIE AERONAUTIQUE CIVILE AMERICaine 51 (1978); see also M. Giget, supra note 38.
68. Aircraft Financing, ECONOMIST, supra note 64, at 73.
69. See, e.g., id.
70. Sereni, La France Assisteé, LE NOUVEL ECONOMISTE, Nov. 26, 1979, at 36.
72. Aircraft Financing, ECONOMIST, supra note 64, at 73.
tion's subsidies are met by competitors, then a round of international price cutting ensues. The only advantage from subsidized export comes if the programs in one nation allow greater price cuts than its competitors or make a more clever use of such subsidies. Price cutting through finance, as noted before, makes it difficult to determine exact prices and makes it harder for competitors to respond.

In the early 1970s, efforts began to negotiate limits on the competitive use of such techniques. Those efforts culminated in the 1978 "Arrangement on Guidelines for Officially Supported Export Credits." This Arrangement, like the Consensus reached a few years earlier, excluded military equipment, agricultural commodities, nuclear power plants, many categories of ships, and aircraft. The arrangement in aircraft, known variously as the Gentlemen's Agreement or the Commonline Agreement, has been unstable precisely because the parties to it have sharply different interests. In the financing of aircraft, as in other sectors, several technical matters complicate negotiations on the proper use of finance in competition. Those technical matters reflect enduring differences in the national organization of domestic financial markets as well as more temporary conditions such as domestic interest rates and specific balance of payments conditions. At the core, however, the negotiations sometimes founder on a simple matter. Some governments wish to participate more aggressively in international trade promotion than others. As John Pearce concludes, "[t]hose that have subsidized most have been trying either to increase their market share (France and Japan) or prevent it from declining (Britain), while those that have subsidized least have been comparatively satisfied with their market share (Germany and until recently the United States)."

IV
THE POLICY PROBLEM

The GATT system was constructed on a liberal economic foundation. It assumed that production and exchange would be conducted by private actors and that all countries stood to gain from increased trade, provided temporary dislocations could be accommodated. It intended that the rules of international trade would be built on a multilateral basis, as a deal among all the players, rather than as a result of a patchwork of individual bargains. Finally, it assumed that the rules would be applied evenhandedly, without discrimination or favoritism. The state-centered economic strategies discussed above challenge the various pillars of this system. Individual governments have little reason to

73. See J. PEARCE, SUBSIDIZED EXPORT CREDIT (1980).
74. Id. at 28.
leaves their markets open to challenges to their domestic industries promoted by foreign states. Bilateral deals, now called "orderly marketing agreements," and other explicit market share arrangements among some set of trading nations, tend to push problems toward the markets of those not privy to the bargain. If Japanese cars are kept out of the American market, outlets for the production will be sought in Europe.

The trade conflicts outlined here cannot be resolved simply by agreements about the procedures of trade which merely reiterate the premises and objectives of a liberal economic order—the elimination of tariffs, quotas, and non-tariff barriers on the one hand and multilateralism and non-discrimination on the other. Improving means for resolving conflicts, clarifying safeguard provisions, or increasing the transparency of subsidy are all necessary objectives. The difficulty is in advancing toward such goals in the current environment. All the trade problems discussed here will last beyond the recession, but the drop in trade and growth makes confronting the issues all the more difficult. Outcomes matter more in hard times. Indeed, the mercantilist challenge sets interests in outcomes against a simple defense of the rules of the game. Pearce notes:

A country such as the United States, which at least until recently has benefitted from free trade in manufactured goods, sets its sights on achieving the conditions of a free market, where there is little official intervention, and decisions are determined by market forces. France, which began to develop trade in manufactured goods after other countries, adopts the view that in international trade the free market is a chimera, and that given the plethora of subsidies and other distortions, the best that can be achieved is a balance of interests.\textsuperscript{75}

Unfortunately, American interests have begun to shift.

This mercantilist challenge to the liberal economic order comes as America’s dominant international position in world markets and its ability to regulate monetary and trade affairs have eroded. The consequence is that the United States government’s capacity to exert international trade leadership without regard to the interests of domestic pressure groups is limited. A stable international economic order is thought to be maintained by a dominant power able to sustain the rules. Britain once played that role, and for a quarter century after World War II the United States did. America’s post-war dominance allowed it to shape the international trading system, but within that structure other countries were able to pursue their own national economic purposes with considerable freedom from international restraint. The international rules tended to reflect the American view of economic relations and to express our preferences, but the benefits were

\textsuperscript{75} Id. at 41.
not all one way. Because America’s international position did not have to be shaped by short-term economic goals, considerable room for maneuvering was left to others.

As American economic preeminence has eroded, so has its ability to act as hegemon and to make the substantial side payments needed to sustain all nations’ commitments to the international economic rules. For example, in the trade domain the U.S. was once able to offer access to its market to promote loyalty to the system. Americans tolerated and even encouraged the formation of the EEC and the expansion of Japanese exports to America. In monetary affairs the United States was able to ignore devaluations of foreign currencies against the dollar made to improve the trade position of the devaluing countries. Since the value of the dollar was constant, a stable short-term solution to the international monetary equation would be worked out. Moreover, the Japanese, the Germans, and often the French could systematically undervalue their currency without fear of American countermoves.

Yet even where our ability to support the international economic system has eroded, the U.S. remains by far the strongest single nation in the international economy. We are now tempted to use that power to manipulate and to twist the system’s rules to accommodate our own domestic problems. The 1971 Nixon devaluation marked the point at which the very rules of the system were being visibly twisted to serve American purposes. Reciprocity legislation with Japan, threatening that unless the Japanese market were opened for American high technology firms, the United States market would be closed to the Japanese, is a more recent instance.

The shifting role of the U.S. in the international economy makes the resolution of the current set of problems all the more difficult for two distinct reasons. First, American policy makers and business executives often see the Europeans as neo-mercantilist, unfairly using state power to gain economic advantage in what should be a liberal economic order. Europeans and Japanese, in turn, view our management and manipulation of the system as a different kind of neo-mercantilism. We achieve the same purposes, in their view, by manipulating the international rules to gain advantage and to block political and industrial purposes of other nations.

Second, our trade partners note that while we reject financial subsidies to protect domestic industries or to reorganize them, we resort very quickly to protection. In a recently completed study of trade-impacted sectors it became clear that in each instance where American industry has been jolted by international competition, the primary pol-
icy response has been protection. As long as the sectors facing strong foreign competition were either exceptional or marginal, American policy could live happily with a contradiction between a general commitment to free trade and concrete protectionist policies in the few trade impacted sectors. As discussed above, protection for textiles was the price paid to assure that Congress would pass the Kennedy Round trade legislation in the 1960s and the Tokyo Round legislation in the 1970s, both of which furthered general free trade. However, as autos, steel, televisions, and even semiconductors are pressed hard by foreign competitors, the domestic strategy of protection in the last resort threatens not only the American economy, but also the international fabric of open trade relations constructed in the last years.

Finally, the Europeans and Japanese claim that American competitive advantage in many sectors depends directly on U.S. government policies. They see no difference between Defense Department expenditures that helped speed civilian aeronautic and electronic industry development and their own government expenditures intended to close the competitive gap with the United States. When American negotiators complain of the Japanese joint research ventures in electronics, the Japanese quickly point to the Defense Department's Very High Speed Integrated Circuit (VHSIC) program. Even the production equipment developed for the VHSIC program will not be permitted to be sold abroad. Similarly, the French compare their support of Airbus with the Defense Departments' support of the McDonnell Douglas wing-research program that might put that company back into a strong commercial position. The U.S. claims that the purpose of such Defense programs is not commercial development, and that the rules on coastal shipping which have excluded French oil pipe producers from entering the U.S. market did not originally have a commercial intent. Whatever their purposes, our trade partners retort, these policies have commercial consequences and must be considered in trade negotiations.

If the United States hopes to sustain the system of open trade in the next decades, this position must be addressed seriously. Our trade partners are unlikely to abandon civilian instruments of industrial promotion as long as they believe that our military programs—whether intended or not—create competitive advantage in civilian competition. As we urge Japan to rearm, we must consider how we would react to the creation of a Japanese civilian aircraft industry out of a reestablished Japanese airforce and how we would respond to Japanese justification of electronics-research subsidies on the grounds of national

76. Tyson & Zysman, supra note 20.
security. Development initiated for military reasons will simply have to be considered for serious civilian trade negotiations in the future.

V

AN AMERICAN RESPONSE TO THE MERCANTILIST CHALLENGE

America’s twin trade policy objectives are sustaining an open trading system and maintaining American competitiveness. This poses a potential dilemma. Mercantilist strategies have worked particularly effectively in an open trade system. That openness has been maintained by American commitment to liberal policies, and by the overwhelming preeminence of American economic and political power. Unless American policy now responds to the state strategies discussed above, we risk losing a competitive edge in many sectors. Yet if our own response is mercantilist, then American policy will simply accelerate the present drift toward world protectionism. The result would be a multitude of special privileges and discriminations, hastily constructed trading blocs, and political manipulation of trade.

Whatever specific troubles trade may generate in particular sectors, America has an enduring economic and security interest in an open trading system. With the advanced countries deeply dependent on imported oil, the struggle for competitive markets could become even more political. Increased protectionism would probably result in a drop in trade not compensated by any increase in domestic sales—in essence a further shrinking of demand in an already depressed world economy. Crucially, a fragmentation of the West into rival political-economic blocs would only undermine American hopes for global stability and security. Moreover, aggressive state-led economic strategies are neither compatible with the ideological bent of this country nor particularly suited to the capacities of the federal government. The real task is not simply to reconcile these objectives, but rather to use trade policy as an instrument to promote competitiveness.

We should not expect that a sharp economic upswing, if it occurs, will solve these problems. The end of the worldwide recession would certainly ease some of the trade tension, but it would not eliminate the central conflicts or the need to address them. With the steel industry in Europe and the United States operating at roughly fifty percent of capacity, even after major plant closings, only a substantial increase in demand would reduce tensions. However, the loss of export markets, and the rise in imports as Japan and later the NICs introduced steel-making capacity, were not tied to the recession. Indeed, a faster pace of world growth could have simply accelerated the pace at which new steel producers encroached upon traditional markets. Detroit’s
problems with Japan would not end even if auto sales picked up. Even without restrictions on Japanese exports, such a boom might simply draw in more imports. Similarly, a rise in airplane sales might relieve Boeing's most immediate cash problems, but it would not alter the steady penetration of Airbus into the world market previously monopolized by Boeing. In the past, the problem has been that when world leadership in aircraft production has shifted, it has done so very rapidly; one major success can alter the very stakes of that competitive game.

The crucial question for the United States in the struggle for international comparative advantage is which countries will most fully take advantage of the growth possibilities new industries represent. We are likely standing at an historical divide where the fundamental structure of the economy will be altered. National positions at the end of that transition into the new world of telecommunications, automated production, micro- and bio-technology will likely be enduring. Ironically, if American industrial power wanes, then the United States will no longer be the hegemon to sustain the rules of the open trading system. Thus, the erosion of America's competitive position would increase the threat from industrial development abroad.

Our response to the mercantilist challenge can only be mounted within the framework of the current GATT system. That system embodies an international commitment to open trade that must not be jeopardized. Moreover, the last round of trade negotiations—the Tokyo Round—accepted the notion that domestic economic policies can represent barriers to trade. The problem is implementing such principles when nations profit from side-stepping the letter or spirit of the agreements. Some multilateral enforcement mechanism must be established. While the general principle of eliminating non-tariff barriers to trade may be accepted by the advanced countries, there is no consensus on precisely which policies constitute violations. The Tokyo Round opened to negotiation the reduction of a new range of trade barriers embedded in domestic economic arrangements. The substance of these agreements was left to be bargained later.

Containing the mercantilist threat to the open trading system through negotiations will be a difficult task. Strengthening mechanisms to resolve conflicts and structuring workable safeguards permitting countries to establish temporary, nondiscriminatory protection when national industries are severely damaged by imports are important objectives. Unfortunately, ninety percent of the trade conducted under exceptional quantitative agreements occurred through agreements made outside the rules of GATT. Councils for consultation have not resolved tensions over steel, although temporary peace in export
finance was achieved. Similarly, greater transparency for government intervention would clarify the causes of many conflicts. Yet many governments attempt to conceal the character of their subsidies, not only from trade partners but from domestic rivals and often legislatures.

A primary obstacle to solving the mercantilist threat is that the very purpose of the mercantilist strategies is to create advantage in critical industries and to promote economic development. Consequently, although all countries would pay serious political and economic prices if the trading system disintegrated, countries such as Japan which have been successful in employing promotional tactics will have to be actively dissuaded from using them. Foreign economies, however, resist the pressure to operate according to American principles.

Moreover, in the next years countries are likely to try to prime the growth engine by supporting expanding advanced technology sectors. Even when those policies are not conceived to have an impact on international trade, they inevitably complicate negotiations. Governments in all advanced countries intervene in the market and the affairs of companies, though the reasons for the intervention, the techniques, and the extent of direction over companies vary. Balancing the merits of such intervention in bargaining is difficult. How do we measure the benefits to the civilian aircraft industry of American military programs? Can we even decide whether a Defense Department VHSIC Program will give advantage to American producers or direct resources from more commercially significant approaches to circuit development? How will we respond when Japan wraps promotional programs in military justifications? Similarly, American policy for trade-impacted sectors depends almost exclusively on protection, while European governments resort to financial assistance in the form of subsidies. These obstacles are not insurmountable, and quite evidently these questions are the subject of constant negotiation.

Unfortunately, there are few tools available to the United States directly to limit other countries’ use of mercantilist tactics. The single most important problem is the threat to limit access to the American market. American government negotiators must be wary of this weapon even when it is legally available, both because it invites retaliation and because open international markets have been an important instrument of American foreign policy. However, individual firms have been prepared to press the government through private actions. For instance, petitions brought by United States Steel to the International Trade Commission have forced the hand of the government in international negotiations.

In electronics, however, dumping and predatory pricing suits have not been successful. The classic case was brought by Zenith against the
Japanese color television manufacturers. The length of time the case has taken and the ambiguity of its outcome—the decision now on appeal on a ruling about admissible evidence—have dissuaded other electronics firms from seeking recourse in civil courts. Houdaille Industries, a machine tool manufacturer, tried an alternative route in a petition through the Office of the Special Trade Representative to the President, asking that discretionary powers in the 1971 Revenue Act be invoked to deny the investment tax credit to goods manufactured by companies receiving foreign government subsidies or engaged in cartel arrangements. At issue, in one fashion or another, will be the extra-territorial application of American law, for these suits attempt to use American law to force foreign firms to behave differently in their own home markets as much as to block specific acts in the American market. The difficulty, of course, is that the closing of American markets incites retaliation and jeopardizes the open trade system even while it provides some temporary relief to American producers.

Domestic policies to assure American competitiveness and to create bargaining chips in trade negotiations will be necessary. First, American policies can and should serve to dissuade mercantilist tactics abroad. For example, clear evidence that the American government, through the Export-Import Bank, will match the subsidized finance or mixed aid packages offered by competitors, may well be a prerequisite for an agreement that advanced countries not use such techniques. Similarly, establishing a government-supported program in advanced electronics would create leverage for bargaining access for American firms to Japanese government programs.

Second, in internationally contested sectors, policies intended to promote competitive adjustment may be necessary, simply as a defensive matter. Unfortunately, one set of case studies has revealed that:

In response to actual or imagined competitive difficulties of individual sectors in international trade, the U.S. government appears to have only one policy option: the introduction of some kind of protectionist measures. Equally disturbing is the fact that the case studies reveal the ineffectiveness of such measures in promoting the kind of structural adjustments required to improve economic performance under changing international economic conditions.77

In the absence of policies to promote adjustment, it is likely that politically expedient policy measures will impede adjustment altogether. If the only thing government can offer to industries affected by imports is protection, then coalitions to promote protection will emerge. Government must attempt to construct its own coalitions to support positive adjustment, and domestic policies may be needed to make positive ad-

77. *Id.* at 8.
justment into a viable and attractive alternative to protection. There is a clear choice; government must either place the weight of policy on the side of defensive efforts to maintain the existing structure of jobs, or place trade policy on the side of efforts to assure new high-wage jobs in internationally competitive sectors.

The problem is not simply to find individual solutions for each sector-specific conflict. Proper aggregate policies, required for the competitive adjustments in all industries, will in turn resolve problems that require a more directed solution. For example, if the semiconductor industry is faced with a shortage of capital, then policies that make it easier for high technology entrepreneurial firms to raise capital by reforming the capital markets avoid the need for sector or firm specific policies. In semiconductors, as in the other cases noted here, the problem is one of public support of economic infrastructure. Thus policies to promote competitive development will rarely entail industry or firm specific subsidies.

Much of adjustment will be achieved autonomously in the private sector. Indeed, a generation ago Europe quaked with fear of domination by giant American corporations. Our discussion has highlighted the real power of governments to shape the evolution of international competition. We do not underestimate either the capacities of multinational companies or the significance of private international capital markets; in the electronics industries the tactics of ATT and IBM will be as crucial as those of any government. A recent arrangement between Intel Corporation, an innovative manufacturer of integrated circuits, and IBM makes this clear. Confronted with a strong challenge from Hitachi, IBM has arranged for both production assistance from Intel and the purchase of Intel components. The Intel arrangement has set a precedent with worldwide applicability. In all likelihood international competition in semiconductors will be dramatically different in the following years as a result.

American trade policy since the war has generally been directed at creating a free trade system. This approach stressed the expansion of international trade, which was thought to favor American companies, as well as the multinationalization of American business. Yet specific policies have largely protected rather than promoted particular sectors of the economy and have served to insulate American firms from foreign goods and producers. The range of exceptions to our general commitment to free trade and the number of situations where mercantilist strategies create pressure for additional sectoral actions are increasing. The policy dilemma thus becomes more acute: how simultaneously to
sustain the open trade system and promote the competitive position of American industry. If external protection remains our primary means of responding to the pains of foreign competition, that dilemma will be unmanageable. The only solution is to promote the competitive adjustment of American sectors pressed in foreign competition. All debate over technique and the details of policy aside, the choice is basic. We can promote the expansion of internationally competitive sectors and the move of the national economy into the industries of the future, or we can attempt to preserve the fading past.