
Threat I:

Denial of Goods or Services by a Foreign-Controlled Supplier

Popular debate during the period when the Exon-Florio provision was attached to the Omnibus Trade Act of 1988 vacillated between two poles, a situation that has not changed substantially in the contemporary period. At one extreme is a preference for autarchy—national self-sufficiency—and for maintaining domestic ownership of crucial goods and services and at the other a studied indifference to the nationality of producers and suppliers.

According to the first perspective, a nation should produce internally all goods and services vital to its functioning. The corollary in an age of global ownership is that a nation should preserve ownership of domestic firms that provide crucial goods and services in the hands of its own citizens. This pole of reference is not merely theoretical: Congressional statements regularly express a preference for national self-sufficiency accompanied by full domestic ownership, and independent expert bodies—such as the Defense Science Board—demonstrate grudging reluctance to abandon this ideal (Gansler, forthcoming).

But policies promoting autarchy or self-sufficiency are prohibitively costly. They deny a nation the benefits that derive from international comparative advantage: the gains from lower costs due to different natural endowments, from specialization (“what each nation does best”), and from economies of scale. An autarchic bias holds back dynamic gains from the pressure that comes with international competition to improve productivity and innovate. The desire to keep ownership of crucial sectors in national hands deprives the home economy of the capital, management, and technological edge that foreign owners might bring to local companies. Moreover, the adoption of autarchic policies by any major player in the

international system is likely to provoke similar responses on the part of other nations, with the result that the two countries shut each other off from mutually beneficial interchanges of trade and investment. US interests are therefore best served by designing policies for foreign acquisitions of US companies that the United States would find acceptable if copied by other governments around the world.

According to the second perspective, a nation should rely on whatever combination of economic actors that can perform most efficiently, in the belief that national welfare is maximized with free trade and free flows of investment and technology; the question of foreign ownership of or control over sources of supply should not be allowed to influence market outcomes. This approach limits itself to examining the functioning of markets and the performance of economies without paying attention to the citizenship or national origin of the actors involved.

Over time the debates evolved into a more sophisticated understanding that three criteria are necessary for there to be a credible likelihood that a good or service can be either withheld at great cost to the economy or provided based on unacceptable conditions:

1. the industry must be tightly concentrated,
2. the number of close substitutes limited, and
3. the costs of switching suppliers high.

If suppliers are many in number, are dispersed in location and ownership, and offer easily substitutable goods and services, there is no credible national security threat, no matter how vital the good or service.

Early Illustrative Cases: 1982–91

The case from the 1980s that most effectively illustrated the perils of relying on a foreign-owned supplier emerged from the European experience with the local affiliates of Dresser Industries and General Electric in building the Soviet gas pipeline (Hufbauer and Schott 1985). While neither Dresser nor GE entered Europe via acquisition, the case illustrates the problem of dependence upon sole-source foreign suppliers.

After the Communist declaration of martial law in Poland in 1982, the Reagan administration retaliated against the Soviet Union by issuing a unilateral and retroactive order to the Dresser and GE parents to cancel their contracts to provide high-performance pumping stations for the pipeline. To the consternation of the Europeans, the subsidiaries of these US companies in France and Germany became a vehicle for diktat, causing significant delays and high switching costs for the gas line developers. The French government issued a counterorder directing Dresser's French subsidiary to proceed with the shipment of 21 pipeline booster compres-

sors. In theory, the presence of Dresser facilities on French soil provided tangible assets for the French government to threaten to take over and managers (including American managers) for the French government to threaten to throw in jail. Rather than ensuring compliance, however, a transatlantic corporate stalemate resulted, until US and French authorities broke the impasse at a higher political level. The European governments realized that they were too dependent on the US-owned affiliates, even though the affiliates were operating within European borders (an observation that will be significant in the discussion of “remediation” in chapter 5).

The European experience with Washington directives to Dresser and GE set the scene for US concerns about Japanese acquisitions of American companies during the tumultuous period surrounding the passage of the Exon-Florio provision in 1988. Specifically, there was apprehension that foreign ownership of a firm producing goods or services crucial for the functioning of the US economy, and for which there are no readily accessible substitutes, could create a liability in the event of a political conflict between the host and originating countries.

The Exon-Florio provision arose from a broad concern about the possible decline of US high-tech industries, a concern aggravated by aggressive competition from Japan. In the context of rather shrill rhetoric about “the Japanese threat,” however, there emerged an increasingly sophisticated appreciation of what constituted genuine cause for alarm and what did not.

The case that provided the principal impetus for the passage of the Exon-Florio provision was the proposed sale of Fairchild Semiconductor by Schlumberger of France to Fujitsu in 1987. Commerce Secretary Malcolm Baldrige joined Defense Secretary Casper Weinberger in arguing that the sale would give Japan control over a company that served as a major supplier of chips to the US military. Other US semiconductor firms joined the argument against making US defense industries dependent on outsiders for high-tech inputs. Fujitsu withdrew its bid for Fairchild, however, before the completion of analysis to determine whether foreign “control” and “excessive dependence” were valid apprehensions. Shortly thereafter National Semiconductor acquired Fairchild at a substantial discount from the proposed Japanese price, previewing the outcome of the CNOOC-Unocal case (chapter 3). Allegations about threats to national security can become a convenient vehicle for competitors to advance their own takeover plans and have to be evaluated independently and rigorously on the merits.

The battle over Nikon’s 1989 proposal to acquire Perkin Elmer’s “stepper” division exhibited the kind of careful assessment that the Fairchild Semiconductor case lacked. Steppers are advanced lithography equipment used to imprint circuit patterns on silicon wafers in the semiconductor industry. At the time of the proposed acquisition, Nikon controlled roughly half of the global market for optical lithography and Canon con-

trolled another fifth (Bergsten and Noland 1993, 141). If the acquisition were allowed to proceed, it would have placed quasi-monopoly power in the hands of Nikon (and, by extension, the new owner's home government) and would have significantly constrained the number of sources from which US producers could purchase this semiconductor machinery. Here there was solid justification for a worry that Japanese authorities would acquire the potential to direct the company to delay or deny new products, services, and technologies to US buyers.¹

The following year debate about Nippon Sanso's proposal to acquire Semi-Gas Systems incorporated a more formal method of evaluation based on concentration of suppliers. The CFIUS process had originally approved the incorporation by Hercules, the US parent company, of Semi-Gas, provider of cabinets that store and distribute the toxic gases used to make chips. But the US Department of Justice pointed out that the acquisition would raise the new Japanese owner's share of the global market to 40 percent and announced therefore that it would lodge an antitrust challenge to the proposed sale. This degree of market concentration raised not just the possibility of monopolistic pricing but also the specter of other forms of sales discrimination. Once again US semiconductor firms, as well as Sematech, the Pentagon-supported industry consortium whose objective was to boost the competitiveness of the US computer chip manufacturing industry, were justifiably wary of finding themselves at the mercy of a foreign supplier of these specialized components.

In 1991 Senator Lloyd Bentsen (D-TX) held hearings at which US semiconductor firms asserted that Japanese firms were disadvantaging US equipment users by withholding or delaying sales of state-of-the-art technology. A US General Accounting Office report (US GAO 1991)² did not find convincing support for these assertions or for other illegal or predatory behavior on the part of Japanese suppliers. But the concern about the Japanese government instructing US subsidiaries of home country companies to behave in ways inimical to US national interests was not without foundation—Japan's Ministry of International Trade and Industry, under pressure from Socialist members of the Diet, did force Drexel, the American subsidiary of Kyocera Corporation, to withhold advanced ceramic technology from the US Tomahawk cruise missile program (US House of Representatives 1991, 179).

1. The 2000 case of ASML of the Netherlands acquiring Silicon Valley Group to create the world's largest maker of semiconductor lithography equipment posed the same problem. In this case, however, prominent US industry figures—including Craig Barrett, CEO of Intel—lobbied in favor of the acquisition. The dilemma was between dependence on a quasi-monopolistic foreign supplier and reliance on a less capable (and perhaps failing) national producer—a quandary that will resurface in the discussion of "remediation" in chapter 5.

2. Starting on July 7, 2004, the GAO's legal name was changed from General Accounting Office to Government Accountability Office.

Last, experiences during Operations Desert Shield and Desert Storm in 1990–91 illustrate that dependence on foreign suppliers, even for military mission-critical technologies and components, does not necessarily constitute a threat. During these operations, the US Department of Commerce received 91 requests from US companies for assistance in expediting the delivery of products to support US military operations; of particular urgency were parts needed for a radio search and rescue signal that was difficult for Iraq to intercept during a period when Saddam Hussein was trying to capture downed pilots for propaganda value. Five of the required products originated from foreign suppliers (US GAO 1993, 8); the US Department of Commerce contacted the British and Japanese embassies for help. A subsequent GAO investigation found no evidence that foreign companies or governments did not freely cooperate with the United States to expedite the five orders (US GAO 1993).

Critical Is Not Enough: The Case of a Russian Oligarch Acquiring Oregon Steel

“Critical” implies a large negative impact if the economy had to do without the goods and services in question. For CFIUS strategists and congressional overseers, both the likelihood and the impact of having to “do without” cannot be separated from an appraisal of both the availability of close substitutes for those goods and services and the switching costs.

To illustrate the need to balance concern about the “criticality” of a good or service with attention to the degree of concentration among suppliers, I simulate what might justifiably have been CFIUS consideration of the 2006 acquisition of Oregon Steel by the Russian company Evraz, which has close ties to a Russian oligarch, Roman Abramovich, who enjoys friendly relations with the Kremlin.

Could this acquisition pose a national security threat to the United States? Based on the criteria outlined above, for a foreign acquisition to pose a threat that the United States is becoming dangerously dependent on the foreign supplier, CFIUS strategists have to evaluate *both* whether the good or service in question is crucial to the functioning of the country’s economy (including but not limited to its military services) *and* whether there is a credible likelihood that the good or service can be withheld (or that the suppliers, or their home governments, could place conditions on provision of the good or service).

The first evaluation clearly raises concerns: Steel is a major component of more than 4,000 kinds of military equipment, from warships, tanks, and artillery to components and subassemblies of myriad defense systems. Uninterrupted access to steel is also crucial for the everyday functioning of the US civilian economy.

But the second evaluation dispels those concerns: In the international steel industry, the top four exporting countries account for no more than 40 percent of global steel trade. Alternative sources of supply are widely dispersed, with ten countries that export more than 10 million metric tons (Belgium-Luxembourg, Brazil, France, Germany, Italy, Japan, Russia, South Korea, Turkey, and Ukraine), and 20 additional suppliers that export more than 5 million metric tons.

Thus although the steel industry remains vital to US national economic and security interests, the multiplicity of sources around the world means that there is no realistic likelihood that an external supplier (or group of suppliers) could withhold steel from, or place conditions on delivery to, US purchasers or the US government. The globalization of steel production allows US users to take advantage of the most efficient and lowest-cost sources of supply without worrying that the United States is becoming “too dependent” on foreigners.³

Thus the first guideline prevails: If alternatives are difficult to find, the acquisition might be legitimately objectionable; if alternatives are abundant, the acquisition poses no threat. The second guideline, about the distinction between what is “crucial” and what might be “denied,” will appear again in the examination of CNOOC’s proposed acquisition of Unocal in the next chapter.

Analytical Lessons Learned

The European experience with Dresser and GE and the US concern about Nikon–Perkin Elmer and Nippon Sanso–Semi-Gas illustrate that a severe concentration among suppliers can give rise to concern about a potential takeover of a US industry or supply whether or not the government where the proposed acquirer is headquartered is an “enemy” (or “hostile”).⁴ There may be dangers associated with a foreign acquisition even when the home country of the acquirer is normally a friend or ally. The decision to approve, or disapprove, a proposed acquisition by a company from China, India, Russia, or any other nation does not have to be a litmus test for the long-term strategic relationship between that country and the United States.

The “sophistication” that distinguishes this approach from the desire

3. Does this mean that every foreign acquisition in the steel industry should be approved? In 1983 the Department of Defense (DOD) objected to the Japanese purchase of a US specialty steel producer on the grounds that the US firm’s output was essential for the production of military aircraft (Jackson 2007, 4). Rather than showing the number of alternative suppliers or estimating the ease or difficulty of switching among suppliers, DOD simply classified the product specifications as secret, rendering analysis by outsiders impossible.

4. The proposed acquisition of the LTV missile division by Thomson-CSF of France (analyzed in chapter 3) illustrates the same proposition.

for self-sufficiency is that dependence on foreign-owned suppliers qualifies as worrisome *only if*, as explained above, the number of suppliers is highly concentrated, substitutes are not readily available, and the switching costs are high (Moran 1990, Tyson 1992). Whether for semiconductor equipment or other crucial inputs to a national economy or its defense industrial base, the crucial criteria are the availability of alternative sources and the ease of shifting from one provider to another. For the threat of delay, denial, or blackmail or the placement of limitations on access or use to be credible, the unavailability of substitutes is the necessary condition.

This analytic tool allows CFIUS strategists to distinguish cases that are legitimately worrisome from those that are not. Many industries will claim that they are “critical” for American economic or military security—and rightly so. But these claimants deserve special attention from CFIUS only if the three criteria are satisfied.

It is important to emphasize that the relevant concentration test is the global market, not the domestic market, and the relevant measurement is whether a proposed acquisition increases the concentration in the global market to a worrisome extent, not whether the acquired firm is the last producer on US soil. Furthermore, whether the target of proposed acquisition is or is not a supplier to the US military is not of analytical importance for Threat I, independent of the number of rival suppliers and the switching costs. A competitive well-diversified foreign supplier base for US defense industries is a source of strength for the US military, not weakness (Gansler, forthcoming).⁵

If the degree of concentration in the industry points to a realistic capability for the home government to manipulate the actions of the newly acquired firm, foreign government ownership may not matter. Thus Dresser Industries became a pawn in the policy struggles between the United States and Europe, and Nikon a pawn in the evolution of the US-Japanese relationship, even though the parent firms were fully privatized. To be sure, independent owners of a fully private company may resist home-country directives with or without success; Dresser Industries, for example, led a fierce fight in Washington to oppose the pipeline policies of the Reagan administration, to no avail.

Is there a precise concentration measure that can be used to separate cases where the possibility of supply manipulation is credible from cases where it is not? In antitrust theory a concentration test helps policymakers judge the empirical likelihood that even the most willing participants will ultimately fail in their efforts to collude successfully. But there is no precise degree of concentration above which more consolidation leads to collusion

5. However, for Threat III—foreign acquisition as a method of infiltration, surveillance, or espionage directed against US government purchasers of goods and services from the acquired company—the issue of whether the military, DOD, or US government agencies are customers is important.

and below which it makes collusion impossible. What is most needed is a straightforward way to dismiss foreign acquisition cases where the risk of delay, denial, or the imposition of conditions is highly unlikely. In chapter 5 I propose that the US Department of Justice/Federal Trade Commission guidelines for mergers and acquisitions offer a useful reference point to guide CFIUS strategy, and (like the similarly structured guidelines of the European Commission Directorate-General for Competition) they are acceptable as the basis for mirror-image strategies on the part of other governments. The guidelines may provide a heuristic separation device, but cases along the margin are almost certainly going to be judgment calls.