

EXCERPT: Conservation, Integration and Foreign Dependency: Prelude to a New Economic Security Strategy

Conservation, Integration and Foreign Dependency: Prelude to a New Economic Security Strategy

Leech, David P., The Analytic Sciences Corporation, 1101 Wilson Boulevard, Suite 1500, Rosslyn, VA 22209, USA

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ABSTRACT: With dramatic changes in the international environment, and the resulting substantial defense budget reductions, defense planners are being forced to grapple with old problems in new ways. The intractability of efforts to foster industrial conversion, and the cumulative record of acquisition reform, are leading toward a consensus about relying more heavily on the commercial sectors of the economy to meet defense requirements. Carrying through with a policy of civil-military integration (CMI) will require a concept of economic security that is more internationally oriented than is traditional for the Department of Defense (DOD) and, at the same time, accommodates very real concerns about foreign dependency. New analytical approaches will be required to help focus attention on high-risk foreign dependencies. One such approach - the *Foreign Vulnerability Index (FVI)* - is developed here. Its strengths and weaknesses are discussed.

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[Text Excerpt, pp. 200-203]

[Note on spellings: GeoJournal is European (Netherlands) which accounts for most of the spelling curiosities as well as the mix of US and UK English. Beyond that there are some typos, such as one instance of 'Herfindal.' No intentional spelling changes have been made from the original.]

Foreign Vulnerability Assessment: Theory and Practice

It was argued above that the autarkic bias of current US policy toward the defense industrial base is not a sound foundation on which to construct an economic security strategy. Autarkic principles are not in any obvious way rooted in sound principles of military strategy and they are very much out of alignment with other facets of DOD policy, such as acquisition reform and industrial conversion policy.

I will argue in this section that the "products" of industrial research, development, production, and service can be considered secure if a nation can be reasonably assured of access to them. I will argue that the question of market access, and therefore economic security, is in large part an organizational issue. It has traditionally been addressed in terms of nationality, ownership, or technology. I propose that the *vulnerability* of a nation to the denial of a critical industrial resource is largely a function of the structure (degree of concentration) of the international market for the resource - rather than its nationality, ownership, or technical characteristics - as well as the structure of the organizations (typically governmental) charged with managing what is, in effect, a

supply cartel. (Of course, there are exceptions to this general principle in cases where the product, service, or technology is integral to warfighting operations. For example, it is possible that for operationally critical technology development - such as encryption technology - vulnerability might be defined primarily by nationality.) Algebraically, this "model" of vulnerability can be expressed as follows:

$V = f(S,I)$, where

V = vulnerability

S = structure

I = interfirm organization

Before proceeding to a detailed discussion of how the proposed "Foreign Vulnerability Index" would be specified and applied, some definitions and assumptions are required. It has become conventional to define "foreign dependency" as a condition in which the DOD's demand for a specific product or service exceeds the domestic supply. Numerous studies indicate that foreign dependency has been progressively increasing along with the more general internationalization of the world economy. "Foreign *vulnerability*," on the other hand, is defined as a condition wherein foreign *dependency* is associated with a significant risk that the foreign source of supply could be cut off.

The causes of vulnerability can be military and nonmilitary. A source of supply may be susceptible to control or interdiction by means of military force. The measure of vulnerability considered here abstracts from such obvious conditions to focus on the non-military causes. The nonmilitary causes of vulnerability are less obvious and more difficult to assess. They include the following: political unrest, or industry- labor strife, in the source country (or countries) resulting in the interruption of supply; simple resource shortages; or *concerted action on the part of foreign producers (with or without the complicity of their host government(s) to restrict access to products or services for economic or political gain*. The difficulty of assessing the risk of foreign vulnerability from non-military causes increases as we proceed from materials and products toward technology and technology development activities. It is the risk of politically or economically collusive action that most concerns us here, but the analysis is applicable to all non-military sources of foreign vulnerability risk.

While recent historical examples of the DOD being denied products and services during time of emergency are few and far between,⁴⁶⁾ some argue that the substantial international political campaign prior to Desert Storm was a reflection of our increasing international dependence, and that future scenarios could quite easily produce very different results.⁴⁷⁾ The US has itself been the most strident practitioner of "dependency politics;" and as the locus of technology shifts internationally, the changes of the US ending up on the receiving end of such political pressure is likely to grow.⁴⁸⁾

Allegations of strategic commercial manipulation are also becoming common. The US GAO, identified a number of companies who claimed that Japanese firms delayed selling, or declined to sell them state-of-the-art equipment or parts that were being sold to other Japanese firms.⁴⁹⁾ While apparently unfounded, similar allegations were made about foreign suppliers during Operation Desert Storm.⁵⁰⁾

Returning to the vulnerability model itself, I argue that vulnerability is a function of the structure of the market for the goods in question, and, possibly in spite of that market structure, the existence of collusion-facilitating practices on the part of the aggressor nation. The structure of a market refers to the distribution of market shares within an industry (defined as a collection of firms producing close substitutes). The notion that a measure of market structure can be effectively used as an indicator of collusive potential is standard within the US antitrust community. The most

widely used measure of market structure is the Hirschman-Herfindal index (HHI). It is calculated as the sum of the squared market shares of each producer involved in the relevant market. The ability to collude is believed to be a function of the number and size of the firms involved and the cost communication necessary to police a collusive agreement (which rises with the number of firms involved).⁵¹⁾

The structural approach to framing issues of dependency risk has three important attributes. First, it identifies the essential problem of vulnerability in a manner that is transparent and readily quantifiable. Second, it is not protectionist by nature. That is, even if a source of supply is determined to be vulnerable, the structural approach allows for mitigation without the creation of domestic capacity. The third important attribute of the structural approach to assessing the potential risk of foreign dependency, is that it allows for a monitoring and enforcement scheme that is relatively inexpensive and reduces government exposure to spurious claims of vulnerability.

The essential similarity between the antitrust community's collusion theory and the defense planner's vulnerability problem has been "popularized" by Moran.⁵²⁾ Leading trade policy theorists appear to accept the structural approach in principle.⁵³⁾ Despite general agreement about the utility of the structural approach, there are some important differences between Moran's approach and the one advocated here. First, Moran's 4/50 rule is based on a "concentration ratio" that is less sensitive to variations in market conditions than the Hirschman-Herfindahl index formulation.⁵⁴⁾ Second, the vulnerability threshold established by Moran's 4/50 rule is too low. Though research on this issue is incomplete, there is some indication that the threshold should be in the neighborhood of 2/41. That is, if two firms have market shares of, as a minimum, 26% and 15% respectively, the potential for collusiveness (and, in the international context, vulnerability) is unacceptably high.⁵⁵⁾

The choice of "rules" has very practical political and economic consequences. In essence, a 4/50 threshold would require vulnerability mitigation (ie, market intervention) in far more cases than a 2/41 threshold. In addition to empirical evidence supporting higher thresholds, logic suggests that in assessing markets for technology, or other products and services competing against a wide range of substitutes, higher thresholds are appropriate. (We return to this issue below in the discussion of "technology markets")

In addition to the trade policy community's acceptance of the structural approach, and putting aside the technical discussion about the appropriate vulnerability threshold, another very attractive feature of the structural approach is that it is not, by nature, protectionist. That is, even if the index threshold is surpassed (more on the "threshold" below), indicating an unacceptably high risk associated with the foreign dependency in question, policy makers can correct the problem without creating domestic capability. Rather, faced with unacceptably high dependency risk, *the index number for the market in question can be reduced by purchasing more goods or services offshore*, but from more diverse (less concentrated) sources of supply.

A third very important feature of the structural approach is that it lends itself to relatively low cost implementation. To understand why this is the case requires a short digression on the first step of a foreign vulnerability assessment. That first step is the definition of what is called "the relevant market?" Defining the relevant market requires an assessment of all current and potential competitors. The relevant market can be defined from a buyer's perspective or a supplier's perspective. From the buyer's perspective the relevant market consists of all firms capable of supplying a specific product or service *and its close substitutes*. From a supplier's perspective, the relevant market includes both current producers of close substitutes, *and those firms capable of producing products acceptable to the buyer within a reasonable time frame*.⁵⁶⁾

The relevant defense market is often very narrowly defined. Deciding who is in, and who is out, requires careful consideration. As we have argued in the context of industrial conversion potential, the often unique requirements of defence buyers strictly limits both the potential for substitution and the prospects of identifying *potential* producers. A number of antitrust cases involving defense firms have supported very narrow (often single product market) interpretations of "the relevant market." For example, in various cases, that courts have preferred "carrier-based aircraft," "airframe subassembly" and "aircraft engine structures"⁵⁷⁾ to "military aircraft"⁵⁸⁾ as definitions of "the relevant market."⁵⁹⁾ Defense product markets, and other high-tech product markets, typically involve rapidly changing technology, significant R&D investments, and, often very specialized tooling and test equipment. These conditions tend to limit the field of relevant market participants.⁶⁰⁾

To take us back to the discussion of how the structural approach to framing issues of dependency risk lends itself to low cost implementation, the foregoing discussion illustrates how focused, and particular, the assessment of foreign dependency and vulnerability would be. Moreover, it illustrates that even the *least* aggregated government statistics are not useful for defining the relevant market. What this means is that it is virtually impossible to construct data bases to systematically monitor foreign dependency in any meaningful way, as has been advocated by some.⁶¹⁾

In lieu of such an approach, DOD could easily adopt a guideline system similar in some respects to that of the Department of Justice, Antitrust Division. Accordingly, anyone seeking protection for an industry or firm on national security grounds, would do so in light of "guidelines" that clearly demonstrate the important analytical issues and the way they will be measured. Only cases that meet the criteria spelled out in the "foreign vulnerability assessment guidelines" would be considered for serious review. In the course of such a review, issues such as the definition of "relevant market" and other pertinent information concerning criticality, market dynamics, and "facilitating practices" (discussed below) would be contested and resolved. An evolving "case law" would develop to clarify important issues and considerations. A forum for the continuous articulation and dissemination of policy would also be established.

The first step in assessing the risk of foreign vulnerability is establishing the structure of the relevant market. The next step requires that firms (or operating units, as appropriate) be grouped by nationality. All "production" (including technology development activity in some cases) originating within the jurisdiction of a sovereign power is aggregating into a "sovereign market share." According to the 2/41 threshold criteria, if the US is foreign dependent (DOD's demand for a product or service exceeds domestic supply), and 41% or more of the world's remaining supply is controlled by two or fewer sovereign powers (provided one firm has at least 26% of the market and the second has at least 15%), the risk of being denied access is sufficient to warrant some form of mitigation.

This brings us to the second component of the foreign vulnerability model proposed above – interfirm organization (I). In brief, sovereigns are not assumed to be equal in their ability to effectively organize export controls. Moreover, some sovereigns could be so effective in organizing what are in effect collusive agreements among competing firms as to render the 2/41 threshold meaningless. (Recall that the ability to collude is thought to be limited by the difficulty firms have in effectively communicating and policing collusive agreements, and that the difficulty increases dramatically, with the number of firms involved.) In other words, to the extent that the state can provide reasonable assurances to competing firms that "cheaters" will not profit from the conditions of scarcity that export controls create, the centrifugal forces of competition can be overcome.⁶²⁾

The organizational effectiveness of the state cannot be assumed. We know, for example, that export control violations have occurred, and it is reasonable to assume that nations are not immune from the problem of ineffectively structured organizations. Drawing on a recent historical analysis of the effectiveness of private sector cartels, we can hypothesize that the cartel-like export control function required to restrict access to foreign supplies depends upon: the autonomy of the export control bureaucracy; its size; and its record of enforcement.⁶³⁾ In other words, relatively effective export control organizations must be *autonomous, big, and mean* (ABM). Operationalizing the ABM test is straightforward. Autonomy is a function of the number of separate sign-off authorities required for a determination to restrict exports. The size of the export control organization (a measure of its clout) can be measured in terms of employees or budgets. And the enforcement record can be measured in terms of fine structures and the number of conviction relative to prosecutions. While the availability of the historical data required to confirm the hypothesis as it pertains to nations' export control organizations is problematic⁶⁴⁾, assessing the relative organizational effectiveness using criteria drawn from the experience of commercial cartels is a fairly straightforward matter that could be undertaken as part of a foreign vulnerability investigation.

The last facet of the proposed foreign vulnerability assessment method to be addressed is its utility for assessing technology dependency. The structural approach just outlined is equally applicable to "technology markets" and "product markets." As discussed above, the internationalization of industrial activity has also affected research and technology development, so defense analysts - among others - are increasingly concerned with technology dependency and vulnerability.⁶⁵⁾ There are only two issues worthy in this regard: the breadth of the "relevant market" and the ability to measure "market shares".

As discussed above, determining the dimensions of the relevant market is absolutely fundamental to a sound assessment of foreign vulnerability. It requires careful consideration of the buyers ability to substitute and of potential competitors' ability to switch from one activity to another. This is no less true of "technology markets." If we conceive of technology development activity as a spectrum, ranging from tacit know-how to codified information, to engineered prototype devices.⁶⁶⁾ the scope for substitution and switching is greater in the early phases of technology development, and decrease as the commercialization stage is approached.⁶⁷⁾

The other important issue in assessing technology dependency and vulnerability is the ability to allocate market shares. One truly exiting possibility regarding the structural analysis of technology markets is the potential to use highly detailed patent data to identify both the participants in the relevant technology markets, and the extent of their involvement. As discussed above, one of the limitations of readily available government industry statistics for use in foreign vulnerability assessments (as well as antitrust analysis) is the lack of sufficiently detailed product market data. By contrast, and in spite of certain limitation, because of its purpose in distinguishing very specific inventions from one another, patent data allows for very fine grain comparisons and categorizations by technology, company, inventor, and inventor location.⁶⁸⁾ The *basic* structure of the US Patent Office Code allows for a categorization of 128,000 subclasses of technology. And the potential to do automated searches of patent text suggest an extremely refined analytic capability.

Furthermore, researchers have defined metrics for segregating technologically and economically significant patents that can be used to narrow the field of potentially significant rivals. Important measures include: technological activity indicators, quality indicators (economic and technological), technology cycle time indicators, intercompany linkage indicators, and technology acquisition target indicators.⁶⁹⁾ These measures will allow defence planners to identify participants in a relevant technology market (by individual, technology niche, and corporate affiliation); anticipate the acquisition of attractive technology "producers" by foreign and domestic firms; assign "market shares" to holders of economically significant patents; and, potentially, to project product market

outcomes. So, despite some analytical difficulties traditionally associated with analysis of technology markets, and technology vulnerability, with the innovative use of patent data bases we can anticipate a solid analytical capability, potentially surpassing our ability to assess product market vulnerabilities.

To summarize, the prevalence of foreign dependency is likely to be accelerated by defence industrial base and acquisition policies that stress civil-military integration and greater reliance on the commercial industrial base. The structural approach to assessing the risk of foreign vulnerability asserts that vulnerability is largely a function of the international distribution of "production" capability and the ability (not to be taken for granted) of various nations' export control bureaucracies to effectively manage cartel-like organizations. The approach is increasingly accepted by the international trade policy community, and provides a practical solution to monitoring foreign vulnerability risk while avoiding the costs associated with spurious claims of national security injury. Perhaps most importantly, the structural approach provides a decision support framework that can serve as a bridge between traditional, autarkic, approaches to vulnerability risk mitigation and those required for an increasingly international technological and industrial base. The FVI method outlined above could become a standard tool in situations concerned with the national security implications of international trade and investment. These include: Buy America determinations; "232" trade cases; DPA Title III investment; and Exon-Florio investigations. In the concluding section, some implicit assumptions of the structural approach are considered.

Visions of the Future Security System

Implicit in the structural approach to assessing foreign vulnerability risk, is an internationalist vision of the future international order. Because this is not the only reasonable vision of the future, a brief discussion of alternatives is in order. An economic security strategy requires such a vision. Looking to the future one can foresee any number of international constellations. For the purpose of exposing the bias of the structural approach, I will briefly consider two.

The FVI method described above implies a vision that is comfortable with transnational collaboration and mutual dependency. Moran describes this as a policy of "transnational collaboration" whereby the long-term common benefits of relatively free international trade are pursued through multilateral trade relations, emphasizing agreements as to the acceptable boundaries of domestic industrial policy. One of the self-admitted problems with this approach is that we have no idea where it all ends. According to Moran, Germany imports 57% of its high-technology goods vs. 16% for the US.⁷⁰⁾ The perennial defence analyst's question ("how much is enough"?) is left unanswered.

An opposing view foresees a fundamentally different future international order.⁷¹⁾ The growth of the international economy, according to this view, has been a product of American economic and technological dominance. And as that dominance has started to wane, the extent and nature of internationalization has changed. In sectors such as electronics, it is argued, the international economy is already characterized by national concentration rather than globalization and interdependence. Moreover, looking to the future, we can already see the beginning of an international security order in which Europe and Japan have sufficient military, industrial and political capability to define and protect their own security interests. This future is radically different from one in which the US lead by overwhelming economic, technological, and military strength. Transnational collaboration and mutual dependency spell vulnerability and manipulation from this perspective, and are intolerable.

The contention between these views is classic. The history of economic policy is replete with formative debates between those that view the sovereign nation as the centerpiece of economic

health, and those who view a supra-national market as the anchor of economic policy.⁷²⁾ Current economic policy debates in the US concerning competitiveness.⁷³⁾ foreign direct investment,⁷⁴⁾ and trade policy,⁷⁵⁾ are very much a part of this tradition. As yet, it is unclear what the dimensions of the new economic security concept will be. The Clinton Defense Department recently announced a reorganization that places responsibilities for industrial conversion, dual-use technology, international programs, and industrial base policy under the Assistant Secretary of Defense for Economic Security.⁷⁶⁾ Broader acquisition policy appears to be one course toward civil-military integration, and a decision support framework has been outlined here to ease the transition to a more internationalized defence industrial base. The stage is set for a new concept of economic security.

[Citations Excerpt, pp. 205-206]

46) During the Vietnam War, a Japanese firm is alleged to have denied US access to ceramic semiconductor packages for cruise missile components. T. Moran, "Managing the Defense Industrial Base in an Era of Lower Defense Budgets," (Draft), June 1992, p. 24.

47) Martin and Susan Tolchin, *Selling Our Security*, A. Knopf, 1992, p. 148, and pp. 170-202.

48) T. Moran, *American Economic Policy and National Security*, Council on Foreign Relations Press, 1993.

49) US Business Access to Certain Foreign State-of-the-Art Technology, United States General Accounting Office, September 1991.

50) The Services' Efforts to Provide Logistics Support for Selected Weapons Systems. United States General Accounting Office, September 1991.

51) G. Stigler, "A Theory of Oligopoly," *Journal of Political Economy*, Vol. 72, February 1964, pp. 44-61; O. Williamson, "A Dynamic Theory of Interfirm Behavior," *Quarterly Journal of Economics*, Vol. 79, November 1965, pp. 57-607; A. Philips, *Market Structure, Organization, and Economic Performance*, Harvard University Press, 1962; F. Scherer and D. Ross, *Industrial Market Structure and Economic Performance*. Houghton Mifflin Company, 1990.

52) T. Moran, "The Globalization of America's Defense Industries: Managing the Threat of Foreign Dependency," *International Security*, Vol. 15, Summer 1990, pp. 57-100. D. Leech proposed a more sophisticated measure of market structure than the one popularized by Moran in L. Lembo et al., "Foreign Vulnerability of Critical Industries," TASC, March 1990. The presentation in this article is an extension of the authors earlier work.

53) The following authors cite Moran's structural approach approvingly: E. Graham and P. Krugman, *Foreign Direct Investment in the United States*, Institute for International Economics 1989, pp. 86-88; L. Tyson, *Who's bashing Whom*, Institute for International Economics, November 1992, pp. 44-45; and W. Sandholtz et al., *The Highest Stakes; The Economic Foundation of the Next Security System*, Oxford University Press 1992.

54) The 4/50 approach (whereby if four foreign firms - or nations - control more than 50% of an international market, then that market is considered "vulnerable" and worthy of some form of national security protection) is unable to distinguish between the collusive potential of a market controlled by four firms, each with 25% market share, and one controlled by four firms wherein two firms each control 45% of the market and the two remaining firms controlled 50/0 each. The Hirschman-Herfindahl index would measure a significantly higher potential for collusion in the second case than in the first, while the 4/50 would discern no difference. See J. Kwoka, "The Herfindahl Index in Theory and Practice," *The Antitrust Bulletin*, Winter 1985.

- 55) J.E. Kwoka, "The Effect of Market Share Distribution on Industry Performance," *The Review of Economics and Statistics*, February, 1979, pp. 101-109; W. F. Mueller and D. F. Greer, "The Effect of Market Share Distribution on Industry Performance Reexamined," and J.E. Kwoka, "The Effect of Market Share Distribution on Industry Performance; Reply," *The Review of Economics and Statistics*, May, 1984, pp. 358-361.
- 56) Antitrust Enforcement Guidelines for International Operations, US Department of Justice, Antitrust Division, November 10, 1988.
- 57) *Grumman v. LTV Corp.* 665 E2d 10 (2d Cir. 1981).
- 58) *United States v. Ling-Temco Electronics, Inc.*, 1961 Trade Cas. (CCH) 70,160 (N. D. Tex. 1961).
- 59) For a comprehensive discussion of how the concepts of antitrust analysis apply to defense markets see, W. Kovacic, "Merger Policy in a Declining Defense Industry" *The Antitrust Bulletin*, Vol. 36, No. 3, Fall 1991, pp. 543-592.
- 60) W. Kovacic, "Antitrust Analysis of Joint Ventures and Teaming Arrangements Involving Government Contractors" *Antitrust Law Journal*, Vol. 58, No. 3, 1990; William F. Baxter, "The Definition and Measurement of Market Power in Industries Characterized by Rapidly Developing and Changing Technologies." *Antitrust Law Journal*, vol. 53, No. 3, 1984, pp. 717-732; Robert S. Pindyck. "Measurement of Monopoly Power in Dynamic Markets," *Journal of Law & Economics*, Vol. 28, April 1985, pp. 193-223; Janusz A. Ordover and Robert D. Willig, "Antitrust for High-Technology Industries; Assessing Research Joint Ventures and Mergers" *Journal of Law & Economics*, Vol. 28, May 1985, pp. 311-333; and T. Jorde and D. Teece, "Product Market Definition in the Context of Innovation; An Exploration;" UC Berkeley Business School Working Paper No. BPP-29, February 1988.
- 61) See, Significance of DOD's Foreign Dependence, USGAO, January 1991, "Recommendations," p. 7.
- 62) Detecting and deterring "cheaters" is regarded as the central problem in forming cartels. F. Scherer and D. Ross: *Industrial Market Structure and Economic Performance*, Houghton Mifflin Company, 1990, p. 245.
- 63) Debora Spar, *The Cooperative Edge; The Internal Politics of International Cartels*, October 1992, (Draft).
- 64) Data concerning alleged export control violations by signatories of international export control agreements, and subsequent prosecutions, may have been collected by various US intelligence agencies. If such data exists, it is regarded as highly sensitive.
- 65) USGAO, *Symposium on Foreign Dependency Measurement*, February 12, 1992.
- 66) G. Dosi, "Sources, Procedures, and Microeconomic Effects of Innovation," *Journal of Economic Literature*, Vol. 26, September 1988, pp. 1120-1171.
- 67) T. Jorde and D. Teece, "Innovation, Cooperation, and Antitrust" *High Technology Law Journal*, Vol. 4, No. 1, 1989.
- 68) Z. Griliches, "Patent Statistics as Economic Indicators: A Survey" *Journal of Economic Literature*, Vol. 28, December 1990, pp. 1661-1707.

- 69) F. Narin et al., "Technology Indicators in Strategic Planning," *Science and Public Policy*, December 1993, pp. 369-381; M. Moge, "Extracting Useful Information for Technology Management from International Patent Records." September 30, 1992 (Draft); M. Albert et al., "Direct Validation of Citation Counts As Indicators of Industrially Important Patents," *Research Policy*, 20, 1991, pp. 251-259; F. Narin et al., "Patents as Indicators of Corporate Technological Strength." *Research Policy*, 16, 1987, pp. 143-55
- 70) T. Moran, *American Economic Policy and National Security*, Council on Foreign Relations Press, 1993,
- 71) W. Sandholtz et al., *The Highest Stakes; The Economic Foundation of the Next Security System*. Oxford University Press, 1992.
- 72) See, E. Silberman, *The Problem of War in Nineteenth Century Economic Thought*. Princeton University Press, 1946.
- 73) O. Graham Jr., *Loosing Time: The Industrial Policy Debate*, Harvard University Press, 1992.
- 74) R. Reich, "Who is Us?" *Harvard Business Review*, January-February 1990, pp. 53-64; and Tolchin & Tolchin, *Selling Our Security*, Knopf, 1992.
- 75) L. Tyson. *Who's Bashing Whom*, Institute for International Economics, 1992.
- 76) "Reorganization of OUSD (Aquisition and Technology)", The Undersecretary of Defense (Acquisition), May 19, 1993.