US STRATEGIES
FOR INDUSTRIAL GROWTH
AND WESTERN SECURITY

by

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During the past 300 years, industry has both stimulated and responded to peoples’ rising expectations by exploiting science and technology. Indeed, industrial growth has even become a security ethic for industrialized societies, whether socialist or capitalist. Power, or the means of survival, depends on such growth. Ironically, American strategy for civil-industrial growth and that for military-industrial growth are now in conflict with each other—a conflict that threatens American security and leadership.

Since World War II, US leaders, in the conduct of foreign, as well as domestic, civil-industrial affairs, have been committed to a strategy of multinational interdependence. Washington’s impetus for this strategy can be traced to the Bretton Woods Agreement, the Marshall Plan, the General Agreement on Trade and Tariffs, and many domestic programs that have fostered the growth of employment and export trade. The expansion of the procurement, production, and marketing operations of private industry has made international interdependence a reality of Western political-economic security. During the 1960s and 1970s there was an almost explosive growth in the multinational operations of US firms, and companies based in Western Europe and Japan concurrently expanded their shares of the vast US market. Multinational interdependence became a reality in the effort to assure necessary supplies of both energy and industrial commodities for Western democracies and to provide the technology and facilities needed in the developing countries of the Middle East, Africa, Asia, and Latin America. Today, such interdependence is all but global and irrevocable. National industrial independence is no longer a feasible strategy for the security and industrial growth of Western democracies. Perhaps the most recent dramatic symbol of multinational interdependence was the Ford Motor Company’s advertisement introducing Americans to its new Escort automobile. The Escort was draped in the flags of about a dozen nations whose industries were producing different components.

Yet, US leaders paradoxically remain committed to a pre-World War I strategy of national independence in their conduct of military-industrial affairs. The Pentagon’s procurement policy seems to be essentially one of “buy American.” Its export policy is to “sell American” arms, in competition not only with Soviet-bloc nations but often with NATO allies.

Several reasons are frequently given to explain why the Pentagon strongly backs a “buy American” procurement policy and why US leaders resist a policy of multinational cooperative interdependence.
for defense industries of Western democracies.

One reason is that the security of American military forces would be jeopardized if they depended for their equipment on European or Japanese industries. More specifically, because of the geographical proximity of Europe and Japan to the USSR, European and Japanese industries would be "too easily subjected to interdiction by Soviet military forces." But such threats have long been anachronistic. Since World War II the United States has maintained global strategic military capabilities, and the US military-industrial establishment has grown as dependent on foreign sources for energy and industrial materials as the civil-industrial establishment. If a war with the Soviets were to occur, it would very likely be fought and won or lost with equipment already produced and deployed with US and allied forces.

US-allied military-industrial interdependence would provide common standard equipment, which would increase the readiness and deterrent capabilities of NATO military forces. NATO deploys 31 different antitank weapons, six different rifles, three different kinds of mortar and machine gun, and dozens of different types of aircraft and ground vehicles. General Johannes Stehlin, former Chairman of the NATO Military Committee, called NATO a "military museum." General Andrew Goodpaster, former NATO Supreme Commander, estimated that standard equipment would increase the effectiveness of NATO units by an average of 50 percent, and that of some tactical air units by 300 percent because they cannot refuel or rearm on other members' airfields.

Standard equipment would mean a substantial increase in the ratio of NATO materiel and manpower deployed for combat to that deployed for support. Thus NATO military effectiveness would be improved. In separate studies, the US General Accounting Office and the State Department estimated that between $11 and $12 billion were wasted annually by NATO governments on duplicate programs to develop, produce, and maintain different kinds of defense equipment intended for the same missions.

US military officials have argued that American forces need conventional equipment capable of global missions (e.g., in tropical and desert as well as arctic regions) while allied forces are confined to regional missions (in Europe). Thus, they allege, military-industrial cooperation and the pursuit of standard weaponry are not feasible because of the different mission requirements for US and European or Japanese forces. But this view is questionable. It is obvious that European and Japanese as well as American security interests require military protection of the flow of oil and other industrial resources from the Persian Gulf, Asia, and Africa, and protection of the flow of manufactured and farm products across the Atlantic and Pacific oceans. The mission requirements and hence the design specifications and operational capabilities of weapon systems for US and allied conventional military forces, then, should be the same.

The per-capita gross national product of Western Europe and Japan has grown to roughly the same as that of the United States: $9056 in West Germany, $6360 in Japan, and $9002 in the United States, according to constant-dollar statistics of the US Arms Control and Disarmament Agency. Yet per-capita annual military expenditures are $355 in West Germany, $84 in Japan, and $508 in the United States. The industrial productivity growth rate in West Germany is five times the growth rate in the United States, and Japan's is seven times our growth rate.

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These countries enjoy significant surplus balances in international trade despite their far greater dependence on imports, while the United States has suffered from trade deficits of more than 30 billion dollars a year for the past several years. Clearly, America's allies are capable of boosting their share of the total defense expenditures of the Western democracies. Why should Soviet-inspired military threats to supplies of energy and other materials for the industrial plants of Western Europe and Japan require a burden of response by Americans that is two or three times greater than the response by West Europeans and more than six times that of the Japanese, when our allies' dependence on secure channels for imports and exports is much greater than that of the United States?

A major reason is that since President Franklin Roosevelt dedicated US industry to serve as the "arsenal of democracy" prior to World War II, US leaders have pursued policies of national military-industrial independence. Forty years ago, while the industrial capacity of other warring nations was being destroyed and then rebuilt, those policies were necessary. Today, they are anachronistic barriers to Western solidarity. Yet, US foreign policy experts seem unmindful of this. They point to the general lack of allied cohesiveness in international relations as a major reason why effective cooperative arms programs are matters of wishful thinking. And they ignore precedents for such cooperation.

In response to US initiatives during the Eisenhower Administration, European allies cooperated with the United States in programs to produce and maintain the NATO Hawk missile system, the F-104 Starfighter aircraft, the NATO Air Defense Ground Environment (NADGE) system, and other equipment and weapon systems. Those initiatives were intended as a final stage of the Marshall Plan to help European NATO nations restore their arms industries and as precedents for Europeans to gain the know-how needed to cooperate with the United States in the development of future weapon systems. Those cooperative production programs were effective; weapons produced in Europe performed as well as those produced in the United States, and at comparable costs. The programs also substantially helped to sustain NATO cohesiveness during difficult times. Even after General DeGaulle withdrew French military forces from NATO command, the French government and French industry continued production of the Hawk missile system. Former US Ambassador to NATO Harlan Cleveland urged the United States to initiate additional cooperative arms programs. He called such programs the "glue" needed to maintain US-NATO cohesiveness in industrial, economic, and political-military affairs during those difficult times.

Unfortunately, under the Kennedy and Johnson Administrations the United States abandoned its policy of military-industrial cooperation before the policy could achieve its objectives, one of which was the establishment of a more equitable sharing of the military-industrial burdens associated with maintaining the security of the Western democracies. Instead of pursuing greater cooperation in the development, production, and deployment of common weapon systems, the US government switched to a policy of promoting export sales of weapons produced in the United States, largely to counter the effects of excessive gold flow and an unfavorable balance of trade. Not surprisingly, the United States military export sales program has resulted in military-industrial competition, which has strained US-NATO relations. Thus, ironically, the US government has been a major cause of the lack of cohesion among Western allies. Perhaps the myopic outlook of US policymakers best explains why they consider US-allied military-industrial cooperation to be wishful thinking at the very time that European and Japanese governments have repeatedly demonstrated their preferences for cooperative interdependence.

A 1967 study by the Rand Corporation concluded that the Japanese government had increased its funding and procurement of F-104-J aircraft by 20 percent because Japanese firms participated with US firms in production. Also in 1967, when British firms
were offered a fair opportunity to compete for contracts to develop and produce equipment for the “Mallard” field-army communications systems to be procured for US, British, and other allied forces, the British government agreed to fund 30 percent of the estimated $200 million development cost, far more than its proportionate share, considering the total number of Mallard systems to be deployed. In a similar case, the Norwegian, Danish, Belgian, and Dutch governments agreed to purchase the US-designed F-16 fighter aircraft because the Pentagon agreed to manage a cooperative program in Europe under liberal terms that allowed their industries to participate in production and export of the F-16.

A US policy that relies more substantially on the defense industries of allied nations would provide allied governments the incentives they need to increase their defense expenditures. Their industries would share in the development and export of high-technology defense equipment to the US market. If the United States, the European NATO nations, and Japan each spent the same percentage of their GNPs on defense, and if the aggregate of these expenditures equaled the current total, simple calculations indicate that the US defense budget could be safely reduced at least 25 percent. Thus, cooperation among the United States and its allies on arms production could mean savings of more than $60 billion in the US budget, a 50-percent increase in the effectiveness of NATO military forces, and a significant contribution to solving the US problems of inflation, unemployment, and stagnating productivity.

Neither consumer goods, nor industrial goods, nor services are produced by military spending. As one observer put it, “You cannot live in, wear, or ride an international missile or antipersonnel bomb. Neither can such products be used for further production.” But even though military products cannot be consumed or used productively, workers in defense industries still demand consumer goods. Prices are therefore forced to rise because a relatively stable store of goods must do for all workers. Additionally, these same defense industries draw very heavily on limited numbers of skilled workers trained for high-technology jobs. In the process, prices are further inflated because federally guaranteed “cost-plus” contracts permit defense contractors to bid up prices for such scarce manpower as well as raw materials.

Oil prices set by OPEC have commonly been blamed for high inflation in the United States. But in West Germany and Japan, which import all of their oil, inflation rates have been about five percent; the United States imports about 40 percent of its oil and, until recently, had an annual inflation rate of 13 percent.

One billion dollars expended for defense creates about 76,000 jobs; for mass transit, 92,000 jobs; for construction, 100,000 jobs; and for health care services, 139,000 jobs. The defense industry is more capital-intensive and less labor-intensive than other industries. Fewer jobs mean less income for people and lost tax revenues for government. Interest rates are forced upward because the government must borrow to meet its cash needs. Higher interest rates cause recession in markets and industries for housing and automobiles, whose customers depend on mortgage and installment loans at moderate interest rates. Thus unemployment rises in those industries. Unemployment rates and crime rates are highly correlated, especially in metropolitan areas, as is well known and acknowledged by leaders of industry and government. We can see, then, that excessive defense expenditures can add indirectly to the internal security problems of government. For these reasons, savings in US defense expenditures would help greatly to reduce problems of high unemployment and social insecurity.

The decline in growth of productivity in the United States is the major cause of inflation and, for US industry, lost shares of world markets for steel, automobiles, machine tools, and consumer electronic equipment. Between one quarter and one half of all scientists and engineers in the United States are engaged in research and
development for weapon systems. America has fallen behind in productivity improvements within civil industries. During 1976, the United States and West Germany each spent 2.3 percent of its GNP on research and development (in the public and private sectors combined), and Japan spent 2.0 percent of its GNP for the same purpose. Most of the expenditures were to improve civil-industrial products and processes. The US government, however, spent 50 percent of its research and development budget on military programs, more than four times the proportion spent by the West German government and 25 times the proportion spent by the Japanese government. As noted earlier, inflation rates in West Germany and Japan have, in the recent past, been five percent, whereas in the United States the rate has been about 13 percent. The annual productivity growth rate in the United States has been less than one percent, compared with five percent in West Germany.

Although widely alleged, it is not true that results of US military research and development expenditures have “spin-off” advantages for US civil-industrial growth. On the other hand, German and Japanese firms, using the same technology in the hands of US firms (indeed, often under license from US firms, and much of it developed originally from US military research and development), have improved their steel, electronic, automotive, and machine-tool products to outsell comparable US products in civil-industrial markets in the United States and overseas. Why the difference between German and Japanese exploitative capabilities and those of US firms? US manufacturers, unfortunately, have developed a debilitating indolence and lack of motivation that stem from their doing business with the Pentagon.

The Pentagon’s procurement policy of “buy American” has created spin-off disincentives for US manufacturing firms to improve productivity and to keep inflation under control. Defense contractors are not subjected to the same competitive pressures that their civilian counterparts experience because it is in both the military and political security interests of the Pentagon not to permit a major defense contractor to go out of business. Less than five percent of military hardware procurement funds are expended for contracts awarded to competitive bidders under terms of a firm, fixed price. In fact, to placate powerful members of Congress, labor unions, or defense contractors, the Pentagon sometimes awards contracts for equipment not truly needed by the armed forces. The Office of Management and Budget and the Office of the Secretary of Defense conducted a joint study in late 1976 indicating that more than $400 million was being spent annually to keep 20,000 workers in defense firms producing more tactical aircraft than would be needed even under conditions of total mobilization for wartime.

Defense contractors risk very little private capital. The defense procurement offices authorize as “progress payments” up to 90 percent of contractors’ cash needs for working capital expenditures and nearly 100 percent for fixed capital expenditures for industrial plant and equipment. Meanwhile, cost overruns, schedule slippages, and faulty equipment have been more the usual than exceptional results of weapon system acquisition programs.

Thus, instead of creating more jobs, income, or spin-off technological advantages, Washington’s expenditures for defense, and its policies for arms manufacturing independence, create not only a noncompetitive malaise and economic stagnation in American industry, but also a strain in relations with other Western democracies. Additionally, there are problems in relations with nonaligned nations arising from such policies.

Ostensibly, US arms exports are intended to achieve long-standing objectives of containing Soviet expansionism or to promote stability and prevent violent change of government in nonaligned nations. Actually, however, Western governments compete with each other for export sales of arms in order to counteract the effects of deficits in international trade and payments.
arising from their oil imports. Additionally, arms exports reduce the cost of weapons development, in that governments of nonaligned nations, through arms purchases, help absorb the mushrooming costs of ever more sophisticated weapons. Whatever their purposes, US arms exports to nonaligned nations have grown dramatically with ironic results.

During the period 1965-80, the United States increased its arms exports to 42 nations by 50 percent over the volume of exports during the preceding 15 years. Over that same period, there was also a 50-percent increase in the number of military coups and combat engagements experienced by the governments of those 42 nations. In a political climate aggravated by the importation of US-manufactured arms, the governments of Chile, Guatemala, and Zaire were overthrown. The military forces of Greece and Turkey fought each other, using American weapons, as did the forces of India and Pakistan. Overall, the number of military regimes increased while the number of democratically elected civilian governments decreased. The record reflects a correlation between increased arms imports and an increase in violent change or a decrease in stability in those governments of nonaligned nations importing US arms.

Iran spent $1.5 billion for imported weapons in 1969; by 1978 the Shah had increased annual arms imports to $19.2 billion. The US Export-Import Bank extended more than $1 billion in loans to finance those imports at interest rates lower than the Treasury paid to finance the US debt. One export agreement involved the Navy’s F-14 fighter-bomber equipped with Phoenix missiles—one of the most technologically advanced weapon systems currently deployed by our Navy. This sale was approved perhaps as much to provide $80 million of cash-flow needed to keep the Grumman Corporation (the prime contractor for F-14 aircraft) financially solvent as to keep Iran secure from military threats. In 1979, the Shah was ousted by anti-American Islamic fundamentalists. Today, because of military violence and political instability, energy supplies from the Persian Gulf are less secure than they were 10 years ago.

Developing nations as a whole increased their annual rate of arms imports from $6.3 billion in 1969 to $16.7 billion in 1978, 81 percent of the value of weapons imported by all nations. About two thirds of those imports were from NATO nations and one third from Warsaw Pact nations. Political and economic conditions in nonaligned countries can hardly be said to have been more stable or secure in the late 1970s than they were 10 years earlier, before the occasional governments increased their annual rate of arms imports by nearly 300 percent. On the contrary, destabilizing military activities have made it much more difficult for Western governments to assist in improving public infrastructures in nonaligned nations, or for Western companies to invest in and develop markets for industrial or agricultural commodities and manufactured goods. Further, those nations are having difficulty meeting interest payments on loans to finance their arms imports. Indeed, their default in payments for such loans could threaten the security of Western banking and currency systems.

Many argue that if Western governments restricted their arms exports, then governments of developing nations would turn to the arms industries of Soviet-bloc nations. But this view is questionable. First, Warsaw Pact industries cannot match the capacity of Western industries to deliver weapons and provide necessary support services. Second, and more important, Soviet influence in Asia, Africa, and Latin America has never been as strong as Western influence. Most nonaligned countries realize that Western democracies can provide more of the capital, technology, managerial skills, and market outlets they need for their development and security. Angola, Algeria, Zimbabwe, and even Libya maintain strong economic ties with Western industries, notwithstanding their ideological differences with Western governments. Egypt and Somalia rejected their roles as military surrogates of the Soviets. Some observers have suggested that Cuba would also, if the United States was receptive. The recent Can
Cun conference on international economic order and the rising immigration of poor and oppressed people to Western countries also indicate that the majority of nonaligned nations would much prefer to do business with the West.

In 1975 the Pentagon employed 5000 people at a cost of $135 million to promote exports and provide procurement, maintenance, supply, training, and transport services associated with its arms export programs. More than 90 percent of US arms exports require the government to provide such support services, while only 10 percent of the exports are via direct agreements between defense contractors and foreign governments. According to the General Accounting Office, foreign governments do not reimburse the United States for all support expenses involved in arms exports. In addition to the government’s absorption of such expenses, US defense contractors paid bribes and kickbacks of over $100 million to foreign officials in order to promote arms exports. Such payments were said to be a normal competitive way of life in foreign countries. But should it be considered normal for bribes to be paid by two defense contractors competing for a single procurement contract agreement between the United States and a foreign government? Such scandals occurred in Holland and Italy. In yet another case, the Japanese government stopped deliveries of, and threatened to cancel $1.3 billion in unfilled orders for, Lockheed patrol aircraft because bribes of $7 million were paid to Japanese officials. The embarrassing revelation of such activity led to a change of Japanese prime ministers and a strain in US-Japanese relations.

As noted at the outset of this discussion, the primary means of assuring freedom, progress, and political and economic security for democratic, liberal-capitalist societies has always been the growth of their civil-industrial operations, not their military-industrial operations. These are times of scarcity of capital, materials, energy, and, not least, of the skilled manpower needed for growth of industrial capabilities. These are also times when gaps between rich and poor are widening and straining the bonds of civility and peaceful coexistence, bonds required for strengthening Western security and the multinational industrial interdependence to which the United States is irrevocably committed. It would therefore seem far preferable for the United States and its Western allies to concentrate with nonaligned nations more on strengthening civil-industrial establishments than on equipping military forces with more expensive, deadly weapon systems. Growth of Western arms industries has not strengthened Western security. Instead of competition, US-allied cooperation in developing, producing, and exporting weapons to nonaligned nations would reduce unnecessary pressures for expanding the arms race.

America’s “arsenal of democracy” has become a global arms-industry hegemony. The US strategy of national military-industrial independence conflicts with the necessity for multinational industrial interdependence. The policies for arms procurement and exports are seriously eroding US political and economic security at home and abroad. Recent events in Poland and instability in the Middle East, Latin America, Asia, and Africa now require stronger cohesion and leadership among the Western democracies than perhaps at any other time since World War II. If the United States would abandon its policies of military-industrial exclusion and competition and instead adopt policies for US-allied cooperation in funding, developing, producing, and exporting common conventional weapons, then political, economic, and military security for the West could be strengthened and US leadership restored.

Compared to competitive, independent programs, each US-allied cooperative arms program would create a larger common-defense market, with greater opportunities for sustained income and employment for all partner nations. US and allied contractors would be free to compete, consort, or merge interests. Thus, they would be able to improve productivity and industrial efficiency.
as well as military security in a manner compatible with a strategy for multinational industrial interdependence and economic growth. Surplus and redundant arms production capabilities could be eliminated along with their costs. Pressures on US and allied governments to compete with each other for military exports to nonaligned nations would also be eliminated. Instead, these governments would cooperate, while their industries became more efficient and less indolent.

Perhaps most important, European and Japanese allies would have the incentives they need to boost their defense expenditures, because the United States would assist in providing their industries the export opportunities they need for their economic security. Cooperation would bring about a greater equality in the capabilities and burdens of Western defense and, at the same time, improve military effectiveness and reduce total defense expenditures. Conceivably, it could also increase the credibility of NATO's conventional military capabilities so that Western powers could achieve deterrence and pledge a "no first nuclear strike" policy in response to the Soviets' pledge not to initiate the use of nuclear weapons. This would mean a substantial reduction in the burdens of Western military security borne by Americans for too long after the industrial plants of Europe and Japan had more than recovered from damages they sustained during World War II. Washington could accrue significant savings that it could reinvest to reduce the Federal deficit and to increase productivity, employment, and exports of consumer goods and industrial products. The results of such reinvestment would more than compensate for the decline in growth and employment in the US defense industry.

It is reasonable to conclude that US leaders of industry and government have much to lose and almost nothing to gain by sustaining their policies of military-industrial independence while trying to strengthen military and economic security. On the other hand, US leaders have very little to lose and much to gain by initiating policies of military-industrial cooperation with other Western democracies. Multinational industrial interdependence and growth are essential for controlling the arms race and increasing political and economic security in Western and nonaligned nations.

NOTES

8. Ambassador Cleveland spoke of cooperative programs as "glue" for US-NATO solidarity in several meetings with the author.
10. As Assistant Director, International Research and Engineering Programs, Office of the Secretary of Defense, the author served as Chief US Negotiator for the Mallard Cooperative program with Canada and Australia. In 1966-67 the author initiated terms that the UK government found attractive for its industry, therefore agreeing to fund 30 percent of the estimated development cost of Mallard equipment. This meant a 30-percent reduction in US contributions to the Mallard development.
11. The US government assumed responsibilities and expenditures that neither US firms nor French and Swedish contractors or their governments were willing or able to afford. See US General Accounting Office, Foreign Military Sales—A Potential Drain on the U.S. Defense Posture, 2 September 1977.
15. Ibid.
17. unpublished findings of studies by the Logistics Management Institute, in Washington, serving the Department of Defense on matters of procurement contracting policies and performance. The author was a consultant and Vice President of LMI.
19. US General Accounting Office, *Military Sales to Iran* (Washington: GPO, 1974). The fact that interest rates on loans to Iran were lower than those paid to finance the US government debt was not published but was reported to the author, who served as Acting Assistant Director, General Accounting Office, 1974-75.

20. The agreement to export F-14 aircraft to Iran included an $80 million advanced payment by the Iranian government to the Grumman Corporation at a time when Grumman (like Lockheed) was known to be in financial difficulty.

