

The Case Against Privatizing National Security

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Privatization and outsourcing as public policy initiatives have spread rapidly in the 1990s, locally, nationally and globally. Although it has been little studied for this purpose, national defense constitutes a remarkable and long-lived precedent for such arrangements. Contracting out in the military sector offers an opportunity to study efficiency outcomes and the conditions under which outsourcing succeeds and fails. Pressures to extend privatization continue in the defense sector and reveal longer term political dynamics and feedback effects of outsourcing on policy formation. In this paper, I examine lessons from decades of American experience in national defense for privatization in other sectors and levels of government. I also take up the case of further defense privatization, examining the recent evaluative literature on state and local public service privatization for insights and probing the special national security character of this sector.

Drawing on published accounts and insider interviews with members of the armed forces, Pentagon officials and defense contractors, I show that salutary savings and service quality outcomes rely fundamentally on the existence and persistence of competition, either public/private or private/private. For many military-related activities, the innovative and/or sensitive nature of the good or service makes arms-length contracting impossible. Even where performance contracts are easily written, competition is difficult to sustain. Few cases of military outsourcing require public/private competitions, and when these competitions are won by private contractors, the public sector ability to compete in the future and its in-house ability to monitor contracts are often irrevocably eroded. Success from outsourcing requires capable management on the part of the Pentagon buyer, but such capacity is undercut by the unpopularity of regulation and unwillingness to spend on it. Beyond efficiency concerns, the national defense case shows powerfully the potential for corruption and capture of government by contractors, even to the extent of altering national defense and military policy.

I then turn to recent initiatives for further privatization of national defense, identifying the advocates and the arguments proffered. To inform this debate, I review the record for state and local public services, education and prisons, which confirm the significance of sustained competition and competent oversight. This review also reveals the extent to which savings are gained at the expense of pay and working conditions for employees, a trend suspected in the defense case but undocumented, because contractors currently do not have to share this data with the government. I also review the national security risks posed by further privatization.

I conclude that the current enthusiasm for further privatizing national security is largely driven by commercial concerns and lobbying, that the conditions necessary for translating private provision into efficiency gains are absent in the bulk of national defense activities, that inadequate attention has been paid to the dangers of monopolization and undue political influence, and that current contracting practices lack verification and mandatory evaluation safeguards that would be needed to evoke the promised results. I suggest that an intensification of privatization at this juncture would further endanger the eroding arms-length relationship between the Pentagon and the armed services, on the one hand, and private sector military goods and service providers on the other, with potentially large adverse consequences for effective democratic restraints on the evolution and use of military force.

I. National Defense and the Public Sector

For much of human history, armies were privately organized, and arms were produced by craftworkers for pay, barter or in feudal arrangements. It is only with the rise of the nation state that the twin notions of the state's right to the monopoly of force

and the citizen soldier evolved (Avant, 1999; Adams, 1999). During the great era of state-building, quickened by the industrial revolution, monarchs and republics established public arsenals in which everything from guns to ships were produced and financed directly from the public purse. This system began to break down in the late 19th century, as emerging large corporations pushed for privatization of production and, in some cases, proved superior at producing innovations which could mean the edge in warfare (Kaldor, 1981).

In the 20th century, the United States evolved a more mixed public/private arsenal system than did its European allies, whose military industrial facilities remained largely government-owned and government-operated. A major factor was the emergence of air warfare, the subject of tremendous internal upheaval within and among the armed services. The Army Air Corps, lagging the Europeans for the first couple of decades, turned to the small, private and intensely competitive American aircraft companies for new designs and capable craft. The industry astutely organized as early as the 1920s to lobby effectively for government contracts and finance. In a series of dramatic contests that culminated in the ballistic missile competition in the 1950s, the Air Force's preference for relying on private sector contractors won out over the Army's preference for research and production in its own arsenals (Markusen, Hall, Deitrick and Campbell, 1991; Markusen and Yudken, 1992, Ch. 3; Mings, 1968; Kelsey, 1982). Since that time, the balance of weapons design and production work has shifted to private sector contractors. In recent years, a panoply of services, from communications to military base maintenance and even foreign troop training, have followed suit.

Privatization can be defined, in John Donahue's (1988) usage, as the "delegating of public duties to private organizations."¹ The nature of national security as a public good has been understood for decades and is non-controversial. The basic argument is that national defense is both non-excludable and non-depletable. There is no way of providing it in a decentralized "fee for service" manner @ everyone would have an incentive to "free ride" on their neighbors, as indeed some countries do (Baumol and Blinder, 1998; Sandler and Hartley, 1995). There are no serious proposals on the table to disperse the armed forces and leave defense to each corporation and household, although futurists do ponder this prospect. Nor is the contracting out of combat operations contemplated.

Nevertheless, public sector monopoly of the use of force and responsibility for national security poses knotty problems of efficient provision and potential for innovation. Theories of bureaucratic satisficing suggest that public sector managers and employees may not be motivated to maximize returns to the citizenry. As with any monopoly, incentives to innovate and improve quality of services are not as salient as under competitive market conditions. Furthermore, no one would argue that the public

1 Confusion over the term inheres in the multiplicity of arrangements for providing and paying for public services and who owns the facilities with which they are provided. Radical privatization would involve the public sector vacating a responsibility altogether and leaving it for market provision. Some public services are paid for by fee for services rather than from general revenues, but remain publicly provided. Outsourcing involves public payment for services and provision by private for-profit and non-profit providers on a contractual basis @ some would not term this privatization. See Stafford and Jondrow (1996) for property ownership-based distinctions.

sector should not rely on private sector provision of materials and services where the private sector comparative advantage is clear. Imagine if government were to manufacture its own paper, paper clips, computers and telephones, for instance @ the prospect is ludicrous. Some argue, too, that outsourcing and competition provide cost visibility @ that the government customer begins to see more clearly what it is paying for while simultaneously learning better business practices (Tighe, Kleinman, Jondrow and Trunkey, 1996).

The key distinction between public and private, or outsourced, provision is whether the provider is acting as a private entity on contract, subject to profit-making discipline, or is operating within the public sector and thus subject to direct democratic and civil service accountability systems. The enormity of the difference in behavior and motivation of agents operating under these two very different incentive systems is not well understood or acknowledged by most analysts. Competition among providers is supposed to blunt the opportunistic edge of actors in either sector. But as we shall see below, the incentives for private sector managers encourage them to pursue extra-economic routes toward profitability, such as lobbying and campaign finance, with negative consequences for the operation of the system as a whole.

II. The Evolution and Extent of Pentagon Privatization

National defense is one of the most heavily outsourced activities in the federal government. Since the early 1970s, the share of all defense-related jobs performed private sector contractors has climbed rather steadily from less than 40% to around 50% while the share in military and Pentagon civil service jobs has declined from over 60% to around 50% (Figure 1). Between 1972 and 2000, the number of armed services personnel fell by 39% and civilian DOD employees by 42% while defense industry employment climbed by 10% (Oden, 1999). Outsourcing of RDT&E, in particular, has increased dramatically @ Navy technical centers outsourced 50% of RDT&E by 1996, up from 30% in 1970 (Tighe, Kleinman, Jondrow and Trunkey, 1996: 5).

The size of the defense contractor force is very large in absolute terms @ an estimated 2.2 million in 2000. Activity in DOD and national security-related agencies like DOE, with its nuclear weapons complex, and NASA, is far more heavily outsourced than for most other government agencies.² Brookings Senior Fellow Paul Light, in a creative study of the “shadow workforce” - the true number of people supported by federal government spending and mandates - identified almost five contract and grant jobs for every Defense Department civil servant in 1996, with ratios three and six times that size for NASA and DOE respectively (Table 1). He found, in contrast, only 1.5 private sector jobs for each civil servant in the rest of government.

Services comprise a growing share of privatized defense activity. By 1996, service workers rather than production workers accounted for nearly three out of four contract-created jobs, up more than 50% since 1984. Even with precipitous cuts in procurement contracts from the 1990s peak, the defense service contract workforce grew by 14%, including researchers and operators of various government facilities

² Other agencies provide national security services, such as the CIA and NSA, and others could be considered part of the national security burden, such as the Veteran’s Administration. They are excluded from consideration here.

(Light, 1999: 23-24). Service contracts proliferated especially in the information technology area, as hardware purchases required ever greater numbers of contract employees to install, maintain, trouble-shoot, operate and integrate them (Bertheau, 1998). While large weapons systems @ aircraft, missiles, tanks - still dominate the popular image of a defense contract, services are in fact the modal purchase. Private operation of government facilities, for instance, accounts for about 135,000 more jobs than does the aircraft industry as a whole (Table 2). Companies like BDM, Computer Sciences Corporation and SAIC, practically invisible to the public when compared with Lockheed Martin or Boeing, have become major suppliers @ Computer Sciences Corporation had become the nation's 12th largest contractor by 1997, with defense sales in excess of \$1 billion (Bertheau, 1998: 243). A small portion of these service activities have been competed as part of the A-76 process in which both government agencies and private sector firms are invited to bid, the results of which are reviewed below. Still, public-private competitions cover only a tiny fraction of the official and unofficial national security workforce.

In short, the private sector is increasingly the locus for work involved in national defense, from research and design of weapons systems to the training of troops in "friendly" countries. Furthermore, privatization is occurring in areas that come much closer to the core functions of military and security activity than in the past. How can government managers determine which activities are safe and sensible to outsource? And how can they assure themselves of the expertise needed to monitor and work with a growing "shadow" Pentagon?

III. Expected Gains from Privatization and Recent Evidence

What does the venerable literature on the economics of national defense suggest about efficiency gains in outsourcing? What can be learned from recent public/private competition in the defense sector? What concerns beyond short term efficiency must be weighed in the outsourcing process? In this section, I address each of these in turn.

A. Defense Economic Arguments

A thin but durable literature by economists concludes that military privatization will produce cost savings and higher quality, more innovative services only if 1) true and sustained competition is operable, 2) the Pentagon as customer is clear about its requirements and able to articulate this in its RFPs and contracts, and 3) the Pentagon has adequate oversight talent to ensure that private contractors deliver the goods and services promised. My own interviews with participants in defense contracting reaffirm the significance of these in the 1990s.

Effective competition is essential in this process, because private contractors are fundamentally profit-seeking firms whose first loyalties are to their shareholders. If competition is limited or absent, contractors can be expected to raise prices, suppress innovation and quality, hide information about true costs and product/service traits @ in short, to engage in opportunistic behavior which creates a "moral hazard" for the Pentagon customer. In recent years, purely short-term asset gains have driven some privatization activity, as in the 1990s defense mergers (Markusen, 1998b).

Unfortunately, less than perfect competition plagues a very large portion of the market for defense services for several reasons long understood by defense

economists (Peck and Shearer, 1962; Sandler and Hartley, 1995). First, most contracts are relatively long term and even if competitively bid, create a bilateral monopoly once signed. This not only forces the government into active oversight, but can distort the original bidding process, as firms have an incentive to “low-ball” bids, knowing they can negotiate add-ons later. Second, even where there is persistent competition, it is often oligopolistic in nature and increasingly so, with the dramatic implosion in the number of large prime contractors in the mid-1990s. When credible suppliers diminish in number to three or fewer, the probability that they will collude on price and/or quality is rather high. In reality, there are increasing returns to scale in many areas of defense outfitting and servicing, although we do not have very good estimates on the exact nature of these scale economies (Flamm, 1999). This means government must choose between the higher industrial base retention cost of trying to keep more competitors in business or the higher monopolistic cost of buying from one or two suppliers. Third, ensuring and policing competition is an expensive project for the Pentagon. Many defense managers would rather not have to hassle with the procedures, political pressures and staff time involved, and thus will not necessarily vigorously pursue competition.

To complicate matters, there are cost reasons to resort to privatization even if it means excess profits for sole source contractors. For one, there is the problem of surge capacity. Not all goods and services are required in equal quantities on a regular basis @ contracting out for these rather than continually keeping people on payroll is on the face of it an economic choice. This strategy, though, raises problems of industrial base preparedness. Will private firms maintain the capability to produce under crisis situations if the government is not paying to keep lines “hot?” A second reason involves dual use capabilities. Some firms are able to spread overhead, R&D and production costs over commercial as well as government operations, lowering the cost to government. Under these circumstances, even a monopolist who is raising price and restricting output might be able to provide a service at lower cost than an in-house team. Finally, a large cost advantage of private sector contractors is the ability to offer people less in wages and benefits and job security than the armed forces or civil service is permitted to do, a “savings” which simply redistributes from workers to citizens and is considered repugnant by many (Light, 1999). Of course, the ability of the Pentagon to capture the benefits of lower costs in these latter two cases depends on its degree of knowledge about the suppliers’ cost structure.

Clarity of requirement is another minefield faced by Pentagon privatization efforts. Indeed, the greatest success to date in recent outsourcing has been achieved in the purchase of off-the-shelf components and relatively small projects. But a large portion of Pentagon requirements are technologically uncertain by their very nature and defense-unique (and thus not amenable to “dual use” production), making it more difficult to delimit the performance of the weapon or service in an RFP. Frequently and reasonably, the armed services may want to alter performance as the contract unfolds or if the contractor suggests a better way of doing or making things which both parties would favor. Where requirements are not clear or are evolving, the Pentagon will tend to favor suppliers with a track record rather than accept the lowest bid or more promising but untested ideas. Privatization is of limited value when weapons and services are more complicated and unique than those readily available in the spot market (Sclar, 1997: 24).

Finally, the success of private provision of defense goods and services depends heavily on the Pentagon's ability to monitor cost, quality and performance. This is unnecessary if the armed services are buying off-the-shelf components where there are several products among which to choose, or if an underperforming contractor can be quickly fired and replaced with another. But generally, neither of these conditions hold. Where a component or service is highly customized and few competitors persist, the seller confronts powerful incentives to manipulate performance criteria and withhold data, often under the guise of protecting proprietary information (Sandler and Hartley, 1995).

B. The Pentagon's Public-Public Competitions

We should expect the Pentagon, with its decades of contracting experience, to have a more sophisticated evaluative capacity and a track record in weighing public against private provision than do state and local governments. Indeed, Pentagon officials in both Republican and Democratic administrations have taken the challenge of competition in contracting more seriously than most other agencies. They have led the federal government experiments in asking their own departments and the military services to compete with private sector providers for various functions. Much more is known about the outcomes of these competitions (though not the longer term results) than of other Pentagon outsourcing initiatives which are not publicly/privately competed but simply subjected to formal private sector bids or let on a sole source basis.

To encourage commercial buying, the Eisenhower administration initiated public/private competitions in the 1950s. They became codified in 1967 in the A-76 budget circular which established a process whereby government agencies would compete with private sector bidders for existing government operations, a process reinvigorated by the Reagan administration (Kettl, 1993). General Accounting Office studies have concluded that certain defense activities lend themselves more readily to privatization because they involve simple, repetitive tasks requiring low-skilled labor and can count on attracting many competitors from the private sector, especially because competitors do not need much up-front capital to bid. Prime candidates are family housing, property and vehicle maintenance, civilian personnel administration, food service, security and law enforcement (Stafford and Jondrow, 1996, 10). These have been the chief subjects of completed and planned DOD A-76 competitions.

Plummeting to very few under the Bush administration, A-76 competitions were revived by the Clinton Pentagon. Despite the Gore "reinventing government" initiatives, however, the A-76 process has become all but moribund in other branches of government while DOD competitions have been accelerating (Table 3). In December of 1997, the Pentagon launched its Defense Reform Initiative, which targeted 237,000 additional civilian and military positions for public-private competition under the A-76 process.³ If the Pentagon proceeds with these competitions, the potential shift of additional jobs into the private sector would likely be about 15% and could run as high as 30% (Light, 1999: 148-9). Private sector firms won approximately 50% of the

³ The number was later revised downward to 229,000 between 1997 and 2003, from which DOD expected to save \$6 billion in cumulative savings and \$2.3 billion in recurring savings each year thereafter (GAO, 1999b: 1)

competitions through 1995 and 60% between 1995 and 1998 (US General Accounting Office, 1999a: 1).

What is the record on A-76 competitions? Extant studies compare bids by private and public agencies but, with few exceptions, do not track actual performance. In other words, they assess the *promise* of savings rather than their achievement:

Estimates of savings in the 20- to 30-percent range or higher have been cited in some assessments of previous competitive sourcing studies but often have been based on initial savings estimates from previous competitions, rather than on actual savings over time (US General Accounting Office, 1999b: 4).

Nor do published assessments address changes in the quality of service.⁴

The few studies that have been done of longer-term outcomes @ mainly by the Center for Naval Analysis (CNA) and GAO - offer mixed results. A CNA study of surface ships found that readiness was about the same whether the work was done in a public (Navy) yard or a private yard (Keenan, et al: 1994). A study of successive private contracts for maintenance of the Navy's TA-4J trainers found that the contractors (Lockheed, Burnside OTT, Grumman, UNC) performed better than the Navy in-house team in almost every case, but that for a period of around two years, contractors' initial performance was worse than that of the in-house team (Reeger, 1997: 2, 8)

Public/private competitions do generate bids and plans which would, if implemented, save the Pentagon money. CNA studies on A-76 competitions up through 1995 conclude that the DOD realized recurrent annual savings of approximately \$1.5 billion, or about 30%, with the in-house teams winning about half of the competitions (Snyder, Trost and Trunkey, 1998: 5; Trunkey, Trost and Snyder, 1996: 9). Simulations by CNA suggest that 65% of total savings were achieved simply by the exercise of competing, while the other 35% was due to "inherent comparative advantages of the private sector and the increased number of bidders. Even if there is no private sector cost advantage, more bidders would lead to larger expected savings (Trunkey, Trost and Snyder, 1996: 3)." The CNA analyses have been emphatic in concluding that "competition produces the savings and not outsourcing per se" (Trunkey, Trost and Snyder, 1996: 9). They do not reveal the extent to which private sector cost savings are due to an ability to pay people less or hire them less than full-time.

The CNA studies suggest that across the Department of Defense, savings from competing functions provided by military personnel far exceed those from competing functions performed by civilians. Disproportionate savings here are due in large part to the expense of rotation. The 1995 Commission on Roles and Missions found that *all* ashore support positions in the Navy could be outsourced (*Directions for Defense*, 1995; Kleinman and Trunkey, 1998; Tighe, Kleinman, Jondrow and Trunkey, 1996: 2-3). Despite this evidence, future competitions are targeting civilian employees @ about 79% of the 225,506 positions planned for competition as of early 1999 were civilian positions compared with only 21% military (US General Accounting Office, 1999b: 5).

The US General Accounting Office reviews of A-76 competitions are less sanguine about the size of achievable savings and the ability to sustain them. GAO

⁴ All studies I have been able to uncover have been done by government agencies (DOD and GAO) or FFRDC's like Rand and Center for Naval Analyses (CNA) @ none apparently have been done by academics or independent think tanks.

concluded that estimates of competitive savings provided to Congress have been overstated, because “DOD has not fully calculated either the investment costs associated with undertaking these competitions or the personnel separation costs likely to be associated with implementing them.” DOD benchmarked competition costs per position at \$2000, but actual costs run more on the order of \$7000 to \$9000. The armed services engaged in very limited comprehensive planning to identify specific functions and locations for competition. Only the Air Force has carried out a comprehensive assessment, and that exercise found a potential shortfall in viable candidates for competition. GAO also found that the services are having a difficult time adequately conducting the competitions and monitoring the outcomes because they have significantly fewer in-house personnel trained to deal with A-76 programs than before the 1990s downsizing (US General Accounting Office, 1999b: 1-2, 9-10).

Generic problems raised in other public sector cases rear their difficult heads here as well. On the perennial overhead issue, GAO finds that the widely applied 12% government overhead rate used by the DOD lacks an analytical basis and could thus either understate or overstate actual overhead costs on any particular competition. It also found that even in the fairly mundane tasks comprising the bulk of competed functions, changes do occur in outsourcing contracts, sometimes fairly soon after the contracts are awarded, reducing the magnitude of savings expected over time. GAO identified few performance problems among the 53 competitions it reviewed. Two contracts were cancelled for poor performance, one a storage and warehousing contract at Fort Riley, Kansas, and the other a grounds maintenance contract at Keesler Air Force Base in Mississippi, and at least one case of public sector failure to perform was also identified (US General Accounting Office, 1999a: 9-10, 12, 16).

The GAO studies conclude that the potential for savings is largely driven by reductions in personnel costs. It is impossible for this author to determine the extent to which these savings result from the ability to pay employees less in wages and benefits, a greater reliance on temporary or less than full time employees or efficiencies from multi-tasking. In all probability, each of these accounts for some of the savings. The reason that savings cannot be properly allocated to these distinct attributes of personnel systems is that the private sector firms refuse to share this information, claiming it is proprietary. In all likelihood, many citizens would object to government savings achieved purely by undercutting employee salaries and benefits, as a bipartisan group in Congress did in the defense merger-related “payoffs for layoffs” flap in 1997 (Markusen, 1998a).

In summary, this review finds that evaluations of the gains to Pentagon privatization are narrowly drawn, largely prospective rather than retrospective in nature, and confined chiefly to cost and not quality assessment. They lack the sophistication of social science methodology applied in other areas of public sector privatization.⁵ Anecdotes about successful cases are often reported as the basis for advocating further privatization. Although one hears about failures, it is difficult to find written accounts

⁵ Consider this from the introductory paragraph of one CNA study: Some opponents say that outsourcing and privatization actually increase costs, but experience argues the opposite. Here are some examples that confirm that using the private sector often results in lower costs, particularly when competition is involved....” (Stafford and Jondrow, 1996: 5).

similar to those available from independent analysts working on other sectors. A large part of the problem is that DOD does not systematically track or update its savings estimates subsequent to competitions. Even the GAO has had difficulty prying data from the Pentagon. It has criticized the databases DOD uses to record savings and track them over time (US General Accounting Office, 1999b: 4; 1999a: 1).

The A-76 process provides visible and documented comparisons of what private and public sector providers claim they can do and for that reason, as well as the salutary effects of competition noted above, it is welcome. Much less can be said about competitions between strictly private competitors, and even less about the 50% or so of DOD purchases that are let on a "sole source" basis (Congressional Budget Office, 1995: 42).

C. Beyond Economics: Corruption, Competence, Undue Policy Influence

A number of weighty matters cannot easily be accommodated within the narrow efficiency cost and quality calculus on which I have relied in the analysis above. One set involves concerns peculiar to national security, to which I return below. Another set encompasses issues which may plague other public service outsourcing efforts: the potential for corruption in contracting relationships, the loss of public sector buyer competence to understand and monitor the goods and services it is outsourcing, the potential for contractors to influence policy and public spending unduly, and the possibility that government policymakers will deliberately engage in outsourcing to shirk responsibility or circumvent the law. Here, I briefly summarize this latter set.

The specter of corruption has long plagued the Pentagon's contracting relationships and contributes to the rationale for much of the onerous accounting and oversight that contractors complain of and are perennially trying to eliminate. Recurrent scandals have underscored the need for Pentagon vigilance over contracting relationships, especially since the revolving door equips private sector managers with considerable knowledge about the working of the Pentagon and the services.

A second problem is the erosion of Pentagon expertise as a smart purchaser and user of private sector goods and services. The more that research, development and operations support functions pass over into the private sector, the less well-equipped the services will be to understand the product and performance attributes of what they are buying (Donahue, 1989, and Light, 1999). Loss of competence through losing A-76 competitions further chips away at such expertise. As the gap between private sector and public sector pay and prestige widens, it becomes increasingly difficult for the Pentagon to command the best talent.

Third, large and profitable defense contractors, either singly or via their trade associations, can and do influence spending levels and military and foreign policy through their active advocacy of weapons systems and initiatives that will generate more private sector work. Contractors are able to spend corporate earnings on advertising, lobbying and campaign contributions in ways that civil servants cannot. Strenuous lobbying overcame even the highly mobilized and scientifically well-informed opposition to the B-1 bomber and the Reagan Star Wars program, arguably the highest profile weapons initiatives in the post-war period (Hartung et al, 1985). Recent examples of such influence include the undermining of conventional arms export control initiatives in the 1990s and the leadership role played by the aerospace industry - and

Lockheed Martin in particular - in the push for NATO expansion (Hartung, 1998; Lumpe, 1999).

Less visible but perhaps more significant, contractors with their often superior technical expertise are able to sell Pentagon procurement managers and top military leader on pricey and risky new technological projects. In this, they are aided by the lopsided membership of Pentagon advisory committees and their insularity from broader public scrutiny (Adams, 1982). Also, since the end of the Cold War, private contractors have formed a powerful lobby protecting obsolete Cold War weapons systems (Sapolsky, Gholz and Kaufman, 1999). Their Congressional success makes it difficult for the nation to adapt to new security realities and to shift resources towards new approaches such as peacekeeping missions, negotiated settlements and economic development in place of regional warfare.

All of these distortions may occur alongside apparent efficiency gains in terms of short-term quality and price performance. An adequate evaluation of privatization ought to take into account these institutional and political developments. Many of the same problems, as we shall see below, characterize local public sector outsourcing efforts.

IV. Examining the Case for Further Defense Privatization

Given this checkered performance, why have new pressures for privatizing national defense emerged, and how might we use evidence from evaluations of recent non-defense outsourcing to inform this debate?

A. Theories of the Impulse towards Privatization

Among the more intriguing causal theories is Mary Kaldor's positing of a connection between the appearance of periodic industrial depressions and corporate pressures to privatize. In the slump of the 1870s, Britain's shipbuilder Vickers, saddled with enormous excess capacity, pressed the British government to shutter its public shipyards in favor of private contracts to its large, integrated steel and naval facilities (Kaldor, 1981). In the postwar period, the Kaldor effect helps to explain eras of intense pressure on government, with military and/or economy-wide downturns in the late 1950s, early 1970s and early 1990s materializing into greater pressure for privatization.

In the 1990s, the post Cold War dramatic reversal of the Carter-Reagan build-up resulted in contractors scrambling to find new markets. Through a complex process involving Wall Street pressures in favor of "pure play" defense firms, a raft of mergers created a small number of giant defense-dedicated firms (Markusen, 1998b; Oden, 1999). These firms focused their energies on developing new government markets, both at home and abroad, at the same time that their dwindling numbers undercut the potential for full-scale competition. Similarly, excess numbers of underemployed military personnel across the globe materialized into new firms offering to sell military expertise (Avant, 1999; Lilly, 2000).

This latest round dovetails with a more general ideological assault on public sector provision of good and services. Various Pentagon insiders attribute a great deal of the 1990s impetus to the "reinventing government" agenda of authors Osborne and Gaebler (instance Osborne and Gaebler, 1992; Lynch and Markusen, 1994), implemented by Vice-President Gore at the federal level. In fact, the privatization movement received an earlier, major political boost with the Reagan administration's commitment to shrink government even as the size of the federal budget and deficit

rose to record-setting proportions, with defense expenditures increasing by 50% in real terms. Goodman and Loveman (1991) document the conservative intellectual and financial impetus for government privatization beginning in the 1970s.

B. The Advocates for Privatization and their Arguments

In the 1990s, support for outsourcing national security activity became more active and more visible, as private business groups, DOD advisory boards and key managers, and most recently, the new Bush White House, publicly called for its pursuit. For Pentagon managers, privatization offered a means of coping with the conundrum of “two-theatre, go it alone” military policy and force structure which could not be achieved at current budget levels (Bischak, 1999). The Defense Science Board Task Force on Outsourcing and Privatization (1996), heavily populated by large defense contractors, recommended an active privatization strategy, including simply outsourcing rather than relying on the A-76 process with its public/private competitions and focusing more on large, complex business areas involving large numbers of government personnel.

The Defense Science Board studies offer inadequate evidence in support of claims for future savings from privatization. A panel headed by BDM International Corporation head Phil Odeen estimated that \$10 billion a year could be saved through privatizing DOD’s support and maintenance services, while six months later, a second DSB panel estimated the savings at \$30 billion (Erlich, 1996). Nor do these studies analyze the hurdles in contracting out large and complex operations, or why public/private competitions should be abandoned.

At about the same time, Business Executives for National Security, a group begun in 1982 to watchdog the Pentagon on weapons costs and nuclear, chemical and biological warfare, transformed itself into an outspoken advocate for outsourcing. Following a decade of effective leadership on military base closings, where it helped formulate and implement the Base Closings Commission process, BENS in 1996 created a “Tail-to-Tooth” Commission, with a self-described membership of ‘business leaders, former government officials and retired military officers.’ Its goal was to “promote outsourcing and privatization, closing unneeded military bases and implementing acquisition reform” (BENS, 1997b: 1, 5). BENS’ central metric is the relative decline of the “tooth” @ personnel, systems and support in the hands of operational combat forces @ compared with the “tail,” everything else, ranging from data processing, accounting, to housing.⁶

BENS position papers and op eds argued that the Pentagon civilian workforce is bloated, noting that private sector defense workers had lost jobs disproportionately compared with the federal defense acquisition workforce (McInerney, 1996: 23). This interpretation used the 1988 peak as its baseline, which included the huge disproportionate increase in private sector defense contracts during the Reagan buildup. As we have seen above, the DOD civilian workforce has fallen steadily while the private sector defense workforce has grown, both in the 1990s and previously.⁷

⁶ The line between the two remains quite blurry, especially with the increasing emphasis on automated warfare and the integration of information technology into armed service operations.

⁷ The BENS published materials frequently assert statements of fact without substantiation. For instance, BENS claims that “the incentives and efficiencies of private sector competition are the guarantors of steady, reliable, services and support. These confidence builders cannot be enforced in the public sector” (BENS, 1998a). In some instances, BENS’ publications alludes to the superior record of its own

BENS' claims that the Pentagon lags behind private sector corporations in outsourcing and that the US lags behind Europeans in privatization are not borne out by the evidence (Light, 1999; Goodman and Loveman, 1991).

BENS called for a "Revolution in Military Business Affairs," an intentional analogy to the Revolution in Military Affairs which it is designed to help fund. This call has been echoed by Secretary of Defense William Cohen and other top DOD officials, among them the most innovative. Dr. Jacques Gansler, President Clinton's Under Secretary of Defense for Acquisition and Technology, has frequently spoken out in favor of outsourcing and more business-like strategies:

To meet the challenge of modernization, the Department of Defense must undertake a revolution in the way that we do business. In other words, we must do business more like private business... My top priority, as Under Secretary of Defense, is to make the Pentagon look much more like a dynamic, restructured, reengineered, world-class commercial sector business (Gansler, 1998b).

Gansler advocates sensible acquisition reforms - reduced inventory, off-the-shelf purchases of commercially available components, and successful base closings (Gansler, 1998a). Despite the business-like talk, the Pentagon has in fact proceeded rather cautiously with public/private competitions, as I show above. It is more common that new support activity is moving directly into the private sector through sole sourcing and purely private competitions.

There may indeed be savings and/or higher productivity to be gained from further Pentagon privatization. But advocates have not buttressed their case with hard evidence, especially given the complexity of the national security mission. Few studies try to unpack the logic of private versus public; most rely on an assertion of the superiority of the private sector. One exception is the 1995 CBO study assessing the virtues of public versus private maintenance of military equipment at the depot level (Congressional Budget Office, 1995). Yet even this study deals poorly with contracting challenges reviewed above: the short and long term evaporation of competition, the potential for corruption, the loss of government competence, and the prospect of undue contractor influence over the conduct of military strategy and policy.

National security responsibilities carry with them life and death consequences that justify its organization under a strict hierarchical military command with civilian oversight. There are many "borders" between public and private provision where officers in the armed services fret that reliance on private providers may place operations at risk. Private contractors operate on a profit-making basis at the ultimate discretion of their shareholders. Management failure, meaning failure to generate sufficient returns, can result in ousting, sale or dismemberment of the firm, or bankruptcy, each of which may have seriously adverse consequences for the Pentagon customer. With privatization, the chain of command is more complicated than if

Commission members @ CEOs of Cisco Systems and Federal Express sit on its Task Force @ in arguing for outsourcing (BENS, 1997; 1998). BENS lobbied for the 1998 Freedom from Government Competition Act, aimed at eliminating A-76 competitions, and when that proved unsaleable, supported the softer Competition in Commercial Activities Act (BENS, 1998b).

Pentagon civilian employees or members of the armed services are performing the work. Either “capital” or “labor” can go on strike: capital, if the returns are disastrous or the work requirements change; labor, if management will not agree on a contract or abide by it. Such risks must be carefully assessed, adding to the complexity of the outsourcing calculus and to its cost. Contingency plans which provide for alternatives may incur considerable costs which must be weighed against apparent outsourcing savings.

C. The Special Case of Privatized Military Training

Outsourcing military training and operations is perhaps the smallest but in some ways the most controversial arena in which privatization is taking place. Around the world, newly-formed private sector teams of skilled military personnel have begun to offer their services to clients who range from legitimate governments, NGOs, the UN, to warlords and drug kings. The prototype of the new generation is Vinnell Corporation, which in 1975 received a long-term contract to create and operate a training center for the Saudi Arabian National Guard (Adams, 1999). Over 9000 contract employees were in the Persian Gulf War theatre in 1990, and 1400 went to Bosnia as part of US peacekeeping forces in 1997 (Light, 1999: 137). Earlier this year, the US and UK hired private firms (DynCorp in the US case) to oversee withdrawal of Serb forces from Kosovo (World Press Review, 1999). The home government’s desire to avoid dicey situations and accountability for outcomes in remote locales appears to be a driving force (Avant, 1999, Lilly, 2000).⁸

The pitfalls of privatizing foreign military training are illustrated by the involvement of Military Professional Resources Inc. (MPRI) in Croatia. MPRI is a northern Virginia firm founded in 1986 by several high ranking, recently retired American military officers. It employs 350 people full-time and can call upon a data base of over 7000 potential employees, all with significant experience in the US armed forces (Adams, 1999; Shearer, 1998; Cillers and Douglas, 1999). In 1994, Croatia hired MPRI to educate its military leaders in western-style civil/military relations. The Pentagon vetted the operation, both by granting the firm an export license and by extensively briefing MPRI personnel before their departure to Croatia. The US was thus able to remain formally neutral while influencing and monitoring events on the ground (Avant, 1999). Observers believe that the firm’s activities enabled the Croatians to launch a successful offensive in Slovenia and the Krajina region, which included a Kosovo-style ethnic cleansing of more than 150,000 Serbs (Danner, 1999; Fox, 1995; Graham, 1995; Zarate, 1998).

Ongoing work by George Washington University political scientist Deborah Avant (1999) raises a series of questions about the likelihood that such firms will be accountable to civilian and democratic goals. Will established systems for holding militaries accountable work just as easily for private firms? Will new systems develop that reflect prevailing norms? Or does the devolution of security tasks to private firms

⁸ US training of often repressive South American military forces has long been a subject of controversy and protest, especially in high profile cases like the Contras. Some argue that there have been de facto government-to-government sales of military services, such as the Kuwaiti and Saudi payments of tens of billions to the US for the Persian Gulf War operations, or the US payments to Korea and Australia to fight in Vietnam.

threaten to empower new groups and transform authority over who decides when, how and over what to fight? Avant distinguishes between extra-legal and clandestine mercenary groups and the new breed of firms like MPRI, who are corporate, operate web sites, and, wishing to be considered legitimate, operate with attention to international law and intend to work only for established governments. She points out that the calculus is nevertheless complex. What happens when a firm's home government's interest and its employers' interest diverge? How will the potential to sell army and air force modernization advice worldwide affect the proliferation of conventional weapons and techniques? Might not these private arrangements alter the career strategies of members of the armed services? These questions begin to convey the extraordinary challenges facing a world in which the best western military training and experience is offered for sale on the private market.

V. Lessons from Privatized Schools, Prisons and Public Services

If hard evidence on the virtues of privatizing military goods and services is scant, what can be learned from much more extensively evaluated experiences in recent outsourcing of K-12 education, local public services and prisons? Privatization of public school management spread rapidly in the 1990s. Although few definitive studies compare privately-managed schools with public counterparts, a recent overview by Columbia University economist Craig Richards and colleagues found that despite higher per pupil expenditures and significant capital investments, privatization had not produced clear-cut gains in student achievement. Nor is there any evidence that education contractors possess proprietary approaches to instruction that are superior to those already in the public domain (Richards, Shore and Sawicky, 1996; Shore, 1996: 18, 46).

Public education, with its diverse constituencies and contested measures of output, may not provide a good comparison for military-related services. But for local public services, spanning the gamut from garbage collection to bus services to gas and electrical utilities and are arguably a better match for military activity, the evidence is troubling as well. Summarizing the 1980s, when rates of contracting ranged from around 25-27% for road paving and trash collection to 10% or less for street cleaning and payroll preparation, Harvard Professor John Donahue found that private contracting appears to be more efficient than public provision for routine functions such as garbage collection and office cleaning. But in other areas, such as running public bus systems or providing utilities, private contractors did not do better than civil servants (Donahue, 1989: 57-78).

Even at the local level, public services turn out to be more complex than privatization advocates anticipate. In studies on vehicle and highway maintenance, Columbia University economist Elliott Sclar found that privatization not only failed to achieve the savings promised but cost taxpayers on the order of 9 to 28% a year more (Sclar, 1997: 1-2, 24). Local government managers found the choice of sellers to be limited, and product quality and prices not easily observed or compared. As a result, they incurred extra costs in administering the contracting process, monitoring work and evaluating performance, and these costs outweighed savings from lower production costs.

Corruption is a recurring problem in localities with outsourced services. Revisiting the endemic graft of the pre-civil service era, Rutgers University management professor Moshe Adler (1999) documents how contractors enjoyed close ties to politicians whose campaigns and personal life-styles they financed while citizens bore the brunt of poor services. Contracting was discarded by practically all American cities in the late 1890s, because it universally failed. Adler concludes that outsourcing was discarded not because it wasn't cheap but because the quality of services was abysmal.

In the longer run, local governments risk losing the expertise necessary to manage the contracting relationship successfully. In a study of state and local government outsourcing in New Jersey, Rutgers University public policy Professor Carl van Horn found that in losing the capacity to provide the service themselves, many governments became captives of their contractors, including loss of control over pricing structures. Van Horn also found that follow-on awards are closely associated with contractor contributions to political campaigns (van Horn, 1991: 271-74).

Privately-run prisons share features with national defense not present in the other two arenas: a high level of concern with security and the carefully regulated use of force. By the late 1990s, the number of adults in privately run facilities had reached 64,000 in 140 facilities, 60% of which were privately owned as well as privately managed, and two firms, Correctional Corporation of America (CCA) and Wackenhut, dominated the private market share, with 61 of 91 reported contracts (McDonald et al, 1998). Empirical studies by the General Accounting Office and U. S. Bureau of Prisons, among others, have concluded that privately-run prisons are neither more cost effective or provide better quality services (Gaes, Camp and Saylor, 1998; GAO, 1996; Hanson, 1996; Nelson, 1998).

John Donahue's work explains why. Major technical innovations in locking up people are unlikely. The cost of prison labor can not be reduced much without lowering the quality of the workforce. Effective competition is unlikely to emerge and/or persist once a contractor becomes entrenched. Contracts are unlikely to be adequately written and vigorously enforced or monitored. Donahue argues that private contractors may cause dynamic inefficiencies by detaining prisoners for longer periods (rigging parole recommendations, for instance), by influencing officials and shaping public opinion in favor of harsher sentences and by lobbying against probationary programs (Donahue, 1998: 22-24).

The implications of prison, schools and city services experience for defense privatization are sobering. They demonstrate the crucial role of ongoing competition in evoking superior performance. Even with effective competition, they confirm an inescapable need for public sector managers and employees to set the ground rules, generate and maintain competition, draw up contracts that are clear, with verifiable performance standards, and oversee the outcomes. Yet except in the most routine of services, full scale competition is unlikely in the military realm, a lesson driven home over and over in weapons procurement. Setting out clear performance standards in advance is very difficult, both in operations and in high tech weaponry, and monitoring and evaluating outcomes is tricky and often extremely expensive.

Light's research on federal government outsourcing as a whole reveals a much poorer evaluative record and similar performance and oversight problems. He concludes:

...the federal government knows almost nothing about who is out there, what kinds of benefits they receive, how long they stay on the job, whether the government is sacrificing short-term savings for long-term costs, or even if there are savings at all over what the goods would have cost to produce inside government, and, perhaps most important, where the public service ends and the private service begins (1999:10).

VI. Conclusion

Analysis of the case of national defense provides a number of insights into the microeconomic and political economic consequences of outsourcing public services more generally. Competition, not outsourcing per se, can induce better quality services at more reasonable cost, but only under certain conditions. These include the presence of more than three competitors, the persistence of competition over time, clarity of task and performance requirements, and active monitoring by the government customer and its sustained capacity to do so. The cost of competent oversight capacity must be computed into the calculus for adjudicating competitions. Beyond these efficiency concerns, policy makers must consider the potential for corruption and capture of public decisionmaking by politicians, a more difficult analytical project. No one has been able to evaluate fully the long term costs and consequences of extensive privatization of national defense, and the sheer inability to do so should give advocates of outsourcing anything other than the most routine functions pause.

Reviewing the recent national security debate, I conclude that wholesale privatization is unlikely to assure greater efficiency and/or better performance while it may create new problems. There is almost universal acknowledgement, BENS excepted, that it is not the private sector per se but competition that promises better outcomes. The most important findings of the A-76 and local public sector studies are that 1) even the threat of competition substantially improves public sector performance, at least narrowly construed and in the short term, and 2) in the private sector, more competitors produced greater gains. Of course, there are other ways for public sector managers to evince the same result @ a group within an agency can be replaced by another or lose its functions to yet others. Indeed, to a large extent, public sector agencies do compete with each other @ the services, for instance, compete for certain military missions (Gansler, 1995).

Competitive outsourcing works best when the Pentagon buyer is clear about what it wants, can verify the outcome relatively easily, and is unlikely to change its mind mid-course. Unfortunately, unique features of the military mission undermine precisely these characteristics in many areas, especially in new weapons systems and in military operations. A military policy predicated on technological superiority and continued innovation does not produce the conditions for predictable product/service performance. The necessary secrecy surrounding new weaponry and military operations further encumbers the process.

Even with effective competition and where it is relatively easy to specify outcomes, the seriousness of the national security responsibility may argue for more, not less, in-house provision of services in selected areas. Dual use suppliers might not be willing to put their Pentagon client first, and bankrupt firms would be unable to ship or show up. In these cases, the risk of non-performance must be weighed against cost and other advantages.

The large role that labor cost savings plays in Pentagon and school, local public service and prison outsourcing should also give policymakers pause. Is it appropriate and smart for government to undercut employee wages and benefits, especially when their productivity has not fallen? It is particularly disturbing that the Pentagon does monitor the pay and working conditions of its “shadow employees.” If private prison administrators are required to share employment data with evaluators, why shouldn’t the Pentagon ask this of its contractors?

Where competition is not possible or is limited to oligopolists, DOD managers and the armed services will have to engage in vigorous oversight to achieve technological superiority at the lowest possible cost. In these circumstances, further privatization must be weighed against both the expense of oversight and the likely erosion of competence needed to monitor the supplier and the service adequately. With the rise of remotely managed and directed precision weaponry, there is an increasing danger that information technology vendors and systems integrators will be in the driver’s seat.

One sobering conclusion of this review is that the ability and will of the Pentagon to evaluate rigorously the outcomes of outsourcing do not match up to those in many other areas of public goods provision, especially in the state and local public sector. This could be corrected. The Pentagon carefully monitors costs, especially because of its heavy reliance on cost-plus contracting, and the armed forces care a great deal about weapons and system performance. Yet few integrated evaluations of competitions and their subsequent outcomes are conducted. The A-76 competitions are pioneering in this sense, even given their limitations. However, once a private sector competitor wins a function away from the services or civilian employees, there is nothing to ensure that the government retains the ability to bring such work back in-house. Nor is there evidence that the Pentagon is committed to ongoing evaluation of outsourced activity.

The Pentagon should develop an evaluative culture and capability along the lines of that currently applied to public (and outsourced) provision of health care, welfare, prisons and local public services. To do so, it would have to distance itself more from the contractor community, insist on data sharing, and encourage independent evaluation of its contracts. Unfortunately, the Pentagon is moving in the opposite direction, forging mixed public/private teams on many projects where the public interest may be less than well-served.

Even the best evaluations are confined to economic and technical matters and do not attempt to assess the larger political dangers and feedback effects of increasing reliance on for-profit firms for national defense. The potential for heightened contractor influence over military policy @ through lobbying and campaign financial support for Presidents and members of Congress, through domination of Pentagon advisory committees, and through growing monopolization of the expertise needed to design, build and operate modern weapons @ is troubling (Sapolsky, Gholz and Kaufman, 1999). Just as Adler (1999) shows that 19th century cities lacked the will to discipline their contractors, Donahue (1989) cautions against the long term , close supplier relationships expressly championed by BENS:

Links that begin as arm’s-length transactions tend to evolve into closer relationships. Public officials who work daily with private suppliers, and who rely

on these suppliers to accomplish their missions, come to care greatly about keeping contractors healthy and helpful....If an organizational budget can be increased through political maneuvering..., there will be little enthusiasm for driving hard bargains with suppliers. In any contractual relationship between government and private business, a key question becomes who is representing the broader public interests. Unless there are sturdy provisions to prevent it @ and even if all parties are immune to corruption @ the natural outcome is an alliance between private sector suppliers and government officials at the taxpayers' expense (p. 128).

Advocates of privatization must acknowledge these tendencies and take them into account in public/private choices and in the design of oversight functions.

Unlike its larger European allies, the US has evolved a mixed public/private defense establishment which, all its warts exposed, has been marked by greater transparency and arms-length relationships (Markusen and Serfati, 1999). It is quite possible to upset this balance, especially if greater privatization is accompanied by eroding public sector capability and a gutting of the regulatory mechanisms with which the Pentagon disciplines the potential excesses of the profit motive. At base, national security is the ultimate public good and should be subject to democratic oversight in its provision and deployment.

References

- Adams, Gordon. 1982. *The Politics of Defense Contracting: The Iron Triangle*. New Brunswick: Transactions Books.
- Adams, Thomas K., 1999, "The New Mercenaries and the Privatization of Conflict," *Parameters*, Summer 1999, pp. 103-16
- Adler, Moshe. 1999. "Been There, Done That: The Privatization of Streetcleaning in Nineteenth Century New York." *New Labor Forum*. Spring/Summer: 88-99.
- Avant, Deborah. 1999. "The Market for Force: Exploring the Privatization of Military Services." Paper presented to the Council on Foreign Relations Study Group on the Arms Trade and the Transnationalization of the Defense Industry, May, 1999.
- Avant, Deborah. 2000. "Privatizing Military Training." *Foreign Policy in Focus*. Washington, DC: Interhemispheric Resource Center and Institute for Policy Studies: Vol. 5, No. 17: 1-3.
- Baumol, William and Alan Blinder. 1999. *Economics: Principles and Policy*. Fort Worth: the Dryden Press.
- Berteau, David. 1998. "Defense Conversion in Information Technology Service Industries." In Gerald I. Susman and Sean O'Keefe, (eds.), *The Defense Industry in the Post-Cold War Era: Corporate Strategies and Public Policy Perspectives*. Oxford: Elsevier Science: 241-50.
- Bischak, Gregory. 1999. "Contending Security Doctrines and the Military Industrial Base." In Ann Markusen and Sean Costigan, eds. *Arming the Future: A Defense Industry for the 21st Century*. New York: Council on Foreign Relations Press: 37-73.
- Business Executives for National Security. 1997b. *The Revolution in Military Business Affairs*. Washington, DC: BENS, October.

- Business Executives for National Security. 1997a. "Military Recruiting: What Private-Sector Personnel Firms can Teach the Pentagon." Washington, DC: BENS, August.
- Business Executives for National Security. 1998a. "Building Confidence: Partnering between the Defense Department and the Private Sector." Washington, DC: BENS Tail-to-Tooth Commission Update #21, August.
- Business Executives for National Security. 1998b. "Defense Research, Development, Test Evaluation Needs to Rightsize." Washington, DC: BENS Tail-to-Tooth Commission Update #24, October 28.
- Business Executives for National Security. 1998c. "The Competition in Commercial Activities Act: Let business help cut government costs." Washington, DC: BENS Tail-to-Tooth Commission Update #12, March 20.
- Cillers, Jakkie and Ian Douglas. 1999. "The Military as Business: Military Professional Resources, Incorporated." In Jakkie Cillers and Peggy Mason, etc., *Peace, Profit or Plunder: the Privatisation of Security in War-torn African Societies*. Capetown: South Africa: Institute for Security Studies.
- CNA Corporation. 1998. *The Revolution in Business Affairs: Realizing the Potential*. Conference Summary. Alexandria, VA: CNA.
- Congressional Budget Office. 1995. *Public and Private Roles in Maintaining Military Equipment at the Depot Level*. Washington, DC: CBO, July.
- Danner, Mark. 1999. "Endgame in Kosovo." *New York Review of Books*. Vol. XLVI, No. 8, May 6: 8.
- Defense Science Board Task Force on Outsourcing and Privatization, Final Report*. August, 1996.
- Directions for Defense: Report of the Commission on Roles and Missions of the Armed Forces*. 1995. Washington, DC: Government Printing Office.
- Donahue, John. 1989. *The Privatization Decision: Public Ends, Private Means*. New York: Basic Books, 1989.
- Donahue, John. 1988. *Prisons for Profit: Public Justice, Private Interests*. Washington, DC: Economic Policy Institute.
- Erich, Jeff. 1996. "Studies Tout Savings from Pentagon Privatization." *Defense News*. October 7-13: 10.
- Falkenrath, Richard. 2000. Uranium Blues: Economic Interests vs. National Security. *The Milken Institute Review*, Vol. 2, No. 4: 34-48.
- Flamm, Kenneth. 1999. "Redesigning the Defense Industrial Base." In Ann Markusen and Sean Costigan, eds., *Arming the Future: A Defense Industry for the 21st Century*. New York: Council on Foreign Relations: 224-246.
- Fox, Robert. 1995. "Fresh War Clouds Threaten Ceasefire: Secret US Military Advice Helps Cocky Croats Push Toward Eastern Slovenia." *Sunday Telegraph*, October 15: 26.
- Gaes, Gerald, Scott Camp and William Saylor. 1998. "The Performance of Privately Operated Prisons: A Review of Research." In Douglas McDonald, Elizabeth Fournier, Malcolm Russell-Einhorn, and Stephen Crawford. *Private Prisons in the United States: An Assessment of Current Practice*. Cambridge, MA: Abt Associates, July 16.
- Gansler, Jacques. 1995. *Defense Conversion: Transforming the Arsenal of Democracy*. Cambridge, MA: MIT Press.
- Gansler, Jacques. 1998a. Graduation Address, Defense Systems Management College, April 17, 1998, <http://www.acq.osd.mil/ousda/speech/dsmc.2.html>.

- Gansler, Jacques. 1998b. Remarks, Massachusetts Congressional Legislative Issues Forum, March 26, <http://www.acq.osd.mil/ousda/speech/meehan.html>.
- Goodman, John B. and Gary W. Loveman. 1991. "Does Privatization Serve the Public Interest?" *Harvard Business Review*, vol. 69, No. 6: 26-8.
- Graham, Bradley. 1995. "US Firm Exports Military Expertise: Role in Training Croatian Army Brings Publicity and Suspicions." *Washington Post*, August 11: A1.
- Hanson, Robert. 1996. "The Failure of Privatization in the Monroe County Jail: An Exception or the Rule?" Paper presented at the Midwest Criminal Justice Association meetings, Indianapolis, IN, September.
- Hartung, William, et al. 1985. *The Strategic Defense Initiative: Costs, Contractors and Consequences*. New York: Council on Economic Priorities.
- Hartung, William. 1994. *And Weapons for All*. New York: Harper Collins.
- Kaldor, Mary. 1981. *The Baroque Arsenal*. New York: Hill and Wang.
- Keenan, John, et al. 1994. *Issues Concerning the Public and Private Provision of Depot Maintenance*. Alexandria, VA: CAN Research Memorandum 94-65, April.
- Kelsey, Benjamin. 1982. *The Dragon's Teeth: The Creation of United States Air Power for World War II*. Washington, DC: the Smithsonian Institute.
- Kettl, Donald. 1993. *Sharing Power: Public Governance and Private Markets*. Washington, DC: The Brookings Institution.
- Kleinman, Samuel and R. Derek Trunkey. 1998. "Can DOD Continue to Achieve Large Savings from Competition and Outsourcing?" Alexandria, VA: Center for Naval Analyses, CRM 98-143.50, September.
- Kovacic, William and Dennis Smallwood. 1994. "Competition Policy, Rivalries, and Defense Industry Consolidation." *Journal of Economic Perspectives*, Vol. 8, No. 4: 91-110.
- Light, Paul. 1999. *The True Size of Government*. Washington, DC: Brookings Institution Press.
- Lilly, Damian. 2000. *The Privatization of Security and Peacebuilding: A Framework for Action*. London: International Alert, September.
- Lumpe, Lora. 1999. "A Framework for Limiting the Negative Consequences of Surplus U.S. Arms Production and Trading." In Ann Markusen and Sean Costigan, eds. *Arming the Future: A Defense Industry for the 21st Century*: 285-302.
- Lynch, Robert and Ann Markusen. 1994. "Can Markets Govern?" *The American Prospect*. Winter: 125-134.

- Markusen, Ann. 1998a. "America's Military Industrial Makeover." In Clarence Lo and Michael Schwartz, *Social Policy and the Conservative Agenda*. Oxford: Basil Blackwell: 142-50.
- Markusen, Ann. 1998b. "The Post Cold War Persistence of Defense Specialized Firms," in Gerald Susman, ed., *The Defense Industry in the Post-Cold War Era: Corporate Strategies and Public Policy Perspectives*. Oxford: Elsevier Science: 121-146.
- Markusen, Ann and Claude Serfati. 1999. "Remaking the Military Industrial Relationship: A French-American Comparison." *Defence and Peace Economics*, Vol.
- Markusen, Ann, Peter Hall, Scott Campbell and Sabina Deitrick. 1991. *The Rise of the Gunbelt*. New York: Oxford University Press.
- Markusen, Ann and Joel Yudken. 1992. *Dismantling the Cold War Economy*. New York: Basic Books.
- McDonald, Douglas, Elizabeth Fournier, Malcolm Russell-Einhorn, and Stephen Crawford. 1998. *Private Prisons in the United States: An Assessment of Current Practice*. Cambridge, MA: Abt Associates, July.
- McInerney, Thomas. 1996. "DOD Could Reap Billions in Savings Through Outsourcing." *Defense News*, October 7-13: 23.
- McNaugher, Thomas. 1989. *New Weapons, Old Politics*. Washington, DC: The Brookings Institution.
- Mingos, Howard. 1968. "The Rise of the Aircraft Industry." In Gene R. Simonson, ed. *The History of the American Aircraft Industry: An Anthology*. Cambridge, Massachusetts: MIT Press.
- Nelson, Julianne. 1998. "Comparing Public and Private Prison Costs." Appendix I, in Douglas McDonald, Elizabeth Fournier, Malcolm Russell-Einhorn, and Stephen Crawford. *Private Prisons in the United States: An Assessment of Current Practice*. Cambridge, MA: Abt Associates, July.
- Oden, Michael. 1999. "Cashing-in, Cashing-out and Converting: Restructuring of the Defense Industrial Base in the 1990s." In Ann Markusen and Sean Costigan, eds. *Arming the Future: A Defense Industry for the 21st Century*, New York: Council on Foreign Relations Press: 74-105.
- Osborne, David and Ted Gaebler. 1992. *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*. Reading, Massachusetts: Addison-Wesley Publishing Company, Inc.
- Pack, Janet Rothenberg. 1991. "The Opportunities and Constraints of Privatization." In William T. Gormley, Jr., ed., *Privatization and Its Alternatives*. Madison, WI: University of Wisconsin Press.

- Peck, Merton J., and Frederick W. Scherer. 1962. *The Weapons Acquisition Process*. Boston, Massachusetts: Harvard University, Graduate School of Business Administration.
- Pint, Ellen and Rachel Schmidt. 1994. *Financial Condition of U.S. Military Aircraft Prime Contractors*. Santa Monica: Rand, Project Air Force.
- Porter, Gene. 1998. "Issues in Acquisition Reform" In Gerald I. Susman and Sean O'Keefe, (eds.), *The Defense Industry in the Post-Cold War Era: Corporate Strategies and Public Policy Perspectives*. Oxford: Elsevier Science: 357-373.
- Reeger, Christopher. 1997. *Outsourcing TA-4J Cost and Quality Experience*. Alexandria, VA: Center for Naval Analyses.
- Richards, Craig, Rima Shore and Max Sawicky. 1996. *Risky Business: Private Management of Public Schools*. Washington, DC: Economic Policy Institute.
- Sandler, Todd and Keith Harley, 1995. *The Economics of Defense*. Cambridge: Cambridge University Press.
- Sapolsky, Harvey and Eugene Gholz. 1999. "Private Arsenals: America's Post Cold War Burden," in Ann Markusen and Sean Costigan, eds., *Arming the Future: A Defense Industry for the 21st Century*. New York: Council on Foreign Relations: 191-206.
- Sapolsky, Harvey, Eugene Gholz and Allen Kaufman. 1999. "Security Lessons from the Cold War." *Foreign Affairs*, Vol 78, No. 4: 77-89.
- Sappington, David E. M. and Joseph E. Stiglitz. 1987. "Privatization, Information, and Incentives." *Journal of Policy Analysis and Management*, Vol. 6, No. 5: 567-82.
- Savas, E. S. 1992. "Privatization and Productivity." In Marc Holzer, ed., *Public Productivity Handbook*. New York: Marcel Dekker, Inc.
- Sawicky, Max. 1996. "Contracting and Economic Efficiency." In Craig Richards, Rima Shore and Max Sawicky, *Risky Business: Private Management of Public Schools*. Washington, DC: Economic Policy Institute: 127-176.
- Sciar, Elliott. 1999. *Selling the Brooklyn Bridge: The Economics of Public Service Privatization*. New York: Twentieth Century Fund, forthcoming.
- Sciar, Elliot. 1997. *The Privatization of Public Services: Lessons from Case Studies*. Washington, DC: Economic Policy Institute.
- Shearer, David. 1998. "Outsourcing War." *Foreign Policy*, Fall.
- Shore, Rima. 1996. "A History and Survey of Contracting for Management Services in Public Education." In Craig Richards, Rima Shore and Max Sawicky, *Risky Business: Private Management of Public Schools*. Washington, DC: Economic Policy Institute: 13-78.
- Snyder, Christopher, Robert Trst and R. Derek Trunkey. 1998. "Bidding Behavior in DOD's Commercial Activities Competitions." Alexandria, VA: Center for Naval Analyses, CRM 97-68/January.
- Stafford, Darlene and James Jondrow. 1996. *A Survey of Privatization and Outsourcing Initiatives*. Alexandria, VA: Center for Naval Analyses, CIM 492, December.
- Starr, Paul. 1987. *The Limits of Privatization*. Washington, DC: Economic Policy Institute.
- Tighe, Carla, Samuel Kleinman, James Jondrow and R. Derek Trunkey. 1996. "Outsourcing and Competition: Lessons Learned from DOD Commercial Activities Programs." Alexandria, VA: Center for Naval Analyses, Occasional Paper, October.

- Trunkey, R. Derek, Robert Trost and Christopher M. Snyder. 1996. "Analysis of DOD's Commercial Activities Program." Alexandria, VA: Center for Naval Analyses, CRM 96-63, December.
- US General Accounting Office. 1996. *Private and Public Prisons: Studies Comparing Operational Costs and/or Quality of Service*. Washington, DC: General Accounting Office, GAO/GGD-96-158, August.
- US General Accounting Office. 1999. *DOD Competitive Sourcing: Questions About Goals, Pace and risks of Key Reform Initiative*. GAO/NSIAD-99-46. Washington, DC: GPO, February.
- US General Accounting Office. 1999. *DOD Competitive Sourcing: Results of Recent Competitions*. GAO/NSIAD-99-44. Washington, DC: GPO, February.
- Van Horn, Carl. 1991. "The Myths and Realities of Privatization." In William T. Gormley, Jr., ed., *Privatization and Its Alternatives*. Madison, WI: University of Wisconsin Press: 261-80.
- World Press Review. 1999. "Kosovo: Mercenary Mission." January: 22.
- Zarate, Juan Carlos. 1998. "The Emergence of a New Dog of War: Private International Security Companies, International Law, and the New World Disorder." *Stanford Journal of International Law* Vol. 34: 75-162.