DEFENSE Procurement and PUBLIC UTILITY REGULATION

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The United States Government relies upon private firms to produce most of the military goods and services it consumes. To assure reasonable economic results, it utilizes both competition and direct controls over the prices, profits, and managerial decisions of its contractors. Legally, the price of the item procured and who is to supply it are to be determined whenever possible by means of price competition. Perhaps as much as 45% of the procurement budget is spent with some form of price rivalry among alternative suppliers. Conversely, over half of the procurement budget is spent without price competition, and direct governmental cognizance and supervision replaces competition as the regulating force.

This article examines the regulatory task in the military procurement sector of the economy and considers a possible change in the current regulatory framework. This change would confer public utility status on the producers of major weapon systems and utilize the regulatory techniques applied to conventional public utilities. As will be shown, however, applying public utility regulation to weapon system development and production could not ameliorate the current procurement regulatory problem. Improvement of the procurement system requires a different approach.

The following section will consider the nature of the regulatory task in the procurement sector. A public utility status for weapon system producers will then be analyzed. Finally, some alternative and more promising directions for public policy in the defense industries will be briefly mentioned.

**Procurement Pricing**

The resort to direct regulation rather than competition in military procurement primarily stems from two conditions. The first is that for many contracts, it is difficult to specify the characteristics of the products to be delivered. The other is that in most weapon system acquisition programs, the government is “locked-in” to a particular contractor for most of its expenditures.

For items with close civilian counterparts—shoes, trucks, paint, and the like—competition is common in the sense that the government usually has alternative potential suppliers among whom it can select upon the basis of price. The same holds true for many specialized military items, for example, many electronic components.
One requirement for obtaining competition is that the good or service to be produced can be precisely specified. For many military items, particularly major weapon systems such as aircraft or missiles, detailed specification is impossible, at least at the research and development (R&D) stage. The essence of R&D is that some new item with uncertain characteristics is to result. Consequently, the choice of contractors for R&D contracts is usually based on their technical qualifications or proposed designs rather than on price offers.

Even so, at the R&D stage in a program, to acquire a new weapon system the government usually has a choice between a number of potential contractors. Subsequent to this initial contract, however, the “lock-in” or “follow-on” problem results in a substantial limitation of competition. This lock-in phenomenon stems from the strategy the government ordinarily uses to acquire major military weapon systems.

The strategy is to assign a prime contractor the overall responsibility for an entire weapon system acquisition program. This has several advantages to the government. It limits the number of functionally identical items produced by different firms and thereby reduces the logistics costs of storage and maintenance. It also maximizes the production cost advantages associated with learning curves and economies of scale. Most important, using the same prime contractor for all phases of a program makes it possible to assign that firm the responsibility for integrating and coordinating the whole program from the start of the research until the final items enter a military inventory.

This centralization of control is believed to lead to lower costs and better weapon system performance. It also relieves the government of the administrative burdens and expenses incurred when programs are

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transferred from one firm to another. In the absence of giving a single firm responsibility for all phases of a program—research, development, initial production runs, subsequent production runs, spare parts, and so forth—the government must accept the responsibility for ensuring that the technology acquired at one stage by one contractor is passed on to some new contractor. Such a transfer of technology requires expert supervision and control. The government, in most programs, has been unwilling to assume this technology transfer responsibility. Rather, it has preferred to keep the technology transfer from stage to stage an intrafirm matter by using the same prime contractor throughout a program.²

Despite the stress on program integration, contracts (with some recent exceptions) have not covered an entire program.³ Instead, at least one contract is usually let for each major stage or phase in the research-development-production sequence. The reason for this policy is that there is much uncertainty inherent in acquiring a weapon system. In most cases, a program is well along before the system’s performance and cost can be estimated with assurance. The number of items bought depends upon a host of uncertain considerations. Therefore, the government has been unwilling to make the long-term commitments or pay the risk premium a contractor would charge were it required to commit its resources for the decade or so required to develop and produce a weapon system. As a result, most programs involve many prime contracts.

This procedure has the undesirable effect of locking-in the government to a predetermined supplier for all contracts after the initial one. Since the government desires the entire program to be under the cognizance of the system developer, it has no meaningful choice of a recipient for the follow-on
contracts in the program. Consequently, interfirm competition cannot be used to determine suppliers, prices, and profits for the follow-on contracts that account for most of the expenditures on weapon systems.

In the absence of price competition, government regulations require that prices and profits be based on costs. It is this cost-based nature of procurement prices that creates the regulatory similarities between the procurement of major weapon systems and public utility services.

The cost-based nature of procurement prices requires a word of explanation. When cost-reimbursement contracts, such as cost-plus-fixed-fee contracts are used, the relationship between cost and price is clear. Most contracts today, however, are of the fixed-price type. Nonetheless, most of these have cost-based prices. Most fixed-price contracts have either a firm-fixed price or fixed-price incentive type of pricing arrangement. The former is the common nondefense commercial instrument. The latter contractual instrument is largely peculiar to the defense area. Under this latter arrangement, a target cost is specified, a target fee is added to it, and the government and the contractor share on the basis of some formula any differences between the target and actual costs. The important point, however, is that even if a firm-fixed-price contract or a fixed-price-incentive contract is used as the contractual instrument, if the purchase is negotiated without price competition, the price will be based on a cost estimate.

This point can be seen by examining the formula for the price to the government of an item purchased with a fixed price contract:

$$ P = C_t (1 + \pi) + (1 - \alpha) (C_a - C_t) $$

where $P$ = price the government pays,

$C_t$ = target cost,

$C_a$ = actual cost,

$\pi$ = profit rate,

$\alpha$ = the sharing rate dividing overruns and underruns between the Government and the contractor. (If $\alpha$ is 1, the contract has a firm-fixed price.)

If the contract is awarded on the basis of price competition, $C_t$, the target cost, is replaced by the bid of the successful firm. In all other cases, a target cost must be estimated, and procurement officials therefore have to be concerned with controlling the contractor’s expenses. Control is required
because, as the formula brings out, the pricing system creates an incentive for contractors to maximize target costs.\textsuperscript{4} Since the fee, $\pi C_t$, is a function of the target cost, the higher the target the greater the firm’s profit.

Procurement policy has attempted to counter this perverse cost incentive in three ways: by (a) incentive fees, (b) adjusting profit rates, and (c) independent cost estimates. None of these, however, removes the disincentive.

The weakness of incentive pricing arrangements can be seen by examining the above formula. The last term in the equation results in the contractor’s profit being adjusted upward or downward, depending upon whether the final cost is smaller or larger than the target cost.\textsuperscript{5} Thus, the contractor has an incentive to maximize underruns. One result of this is an incentive to minimize actual cost. The contractor, however, has no such incentive with respect to target cost. The larger the target cost the higher $\pi C_t$. Also, the larger the target cost the more likely it will be that economies can be practiced that will lead to an underrun, thereby increasing the fee.

Put differently, in evaluating managerial incentives for efficiency, it is important to distinguish between those that arise from the pricing arrangement and those that arise from the source-selection process, i.e., the way the contractor is selected. Once a contractor is selected and a target cost established, an incentive fee provides motivation to try to achieve an actual cost performance less than the target. But this actual cost may not be the minimum efficient cost required to produce the system because in the absence of a competitive source-selection, the contractor has no incentive to minimize the target cost. Indeed, since target fees are a linear function of target costs, the contractor has an incentive to seek as high a target cost as it can persuade the government to accept. If however, the recipient of the contract is selected by means of price competition, the firm has an incentive to minimize the target cost. The lower the target cost the greater is the likelihood of that firm rather than some other receiving the contract.

In short, incentive contracts have advantages, but these do not extend to ensuring efficient target costs. The downward pressure on target costs comes from competition among firms for contracts rather than from the pricing arrangements.

Another way that procurement policymakers have attempted to offset the cost disincentive effects of the current system is by varying the profit rate to reflect differences in the proportion of capital furnished by the contractor, amount of subcontracting, the risk assumed, and past performance. The problem here is twofold. First, the regulations provide no easy way of relating
the adjustments in the profit rate to the cost of the required adjustment in
the contractor’s procedures. For example, while profit rates are adjusted
to account for the substitution of contractor investment for government-
furnished plant and equipment, there is no way of knowing how the profit
rate adjustment relates to the contractor’s cost of capital.

The second part of the problem is more fundamental. After the profit rate is
adjusted, it is applied against the target cost to determine the profit or fee.
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The third way that the government attempts to protect the public interest
in obtaining the correct target price is by making its own independent
target cost estimates. The difficulties with this procedure will be obvious
to anyone familiar with the dreary history of attempts to determine public
utility rate bases.

One difficulty is the information base available to the government, consisting
of contractor-furnished records. When target costs are negotiated by the
government and contractor on the basis of data furnished by the latter,
there is good reason to worry about the parity of information. Even if the
government had full access to all relevant data, however, it is questionable
that the appropriate prices could be estimated accurately enough to regard
cost analysis as an assurance of reasonable target costs. Cost allocation
is always a difficulty. More serious, cost estimation cannot take into
account the incentive function of prices. With prices determined by supply
and demand, the entrepreneur has an incentive to seek cost-reducing
innovations. With a cost-based pricing procedure mechanically applied,
this effect is removed and cost analysis cannot build the incentive back into
the cost calculation.

Also, cost estimation cannot take into account interfirm differences in price
policy and efficiency that frequently lead to a substantial spread between
cost quotations in competitive situations. Cost analysis techniques are
designed to estimate some “normal” or “average” price. In fact, among
defense contractors in competitive situations, differences between the average of the bids and the minimum bid frequency run from 20 to over 100%. These differences are probably due to differences in pricing objectives and firm efficiencies. With variations among supply prices of these magnitudes, it is hard to see how cost analysis could provide estimates of minimum supply prices. In short, cost analysis cannot assure that the prices negotiated for weapon systems are socially efficient.

This brief outline of procurement pricing procedures throws into focus some important similarities and differences between the regulatory task in the procurement and public utility sectors. The first point to note is that in both sectors, direct government regulation substitutes for competition by the barriers to competition in the procurement areas, which are different from those in the public utility sector. Direct regulation has been imposed on public utilities for a variety of reasons: cost conditions that lead to “natural monopoly,” “destructive” or “excessive” competition, and many other reasons. In all cases, however, the dissatisfaction with competition has stemmed from the structure of the market.

In the weapon system area the situation is different. For aircraft and missile systems, the industrial structure (the number of firms, their sizes, entry conditions, and so forth) is not significantly less competitive than most major manufacturing industries. The barriers to competition stem from the characteristics of R&D and the administrative techniques adopted by the government to buy major weapon systems. Specifically, the uncertainties inherent in the R&D process limit competition for an important part of the
procurement budget. More important, as measured by dollar expenditures, is the use of the same prime contractor for all stages of a program in order to avoid the technical and administrative responsibilities of interfirm transfers of technology. This strategy means that most weapon system purchases are made in a noncompetitive environment. In short, the barriers to procurement competition are not primarily due to industry structure. The barriers are to a considerable extent the result of the government’s procedures for buying weapons.

A second point to be noted is that both weapon system and public utility prices are cost-based. This means that both sectors share many of the same regulatory problems. It is also the reason for considering the application of a public utility regulation model to defense procurement.

The final point concerns a significant difference between procurement and public utility prices and profits. Public utility profits are paid on the basis of one input—the assets furnished by the firm. Procurement profits, in contrast, are based on the total cost of the contract. This difference not only distinguishes public utility and procurement prices, it creates the major procurement problem. Since fees are a linear function of target costs, there is an inherent and perverse advantage to the contractor in having high target costs.

The efforts of procurement policy makers to offset this cost-increasing incentive all have serious limitations. Consequently, it is reasonable to ask if it would not be salutary to replace the present framework of procurement control with one based on public utility regulation techniques.

**A Public Utility Status for Weapon System Production?**

As community advanced, the case for extending the public utility concept to weapon system development and production holds that the performance of the current procurement system is unsatisfactory in ways that could be resolved by application of public utility regulation technique. In particular, it is usually charged that profits are excessive and should be limited to some “fair” return on investment. The case for application of the public utility concept is illustrated here by D. M. Jones’ article, which raised the main issues by calling for a public utility type of regulation of nine producers of major aerospace weapon systems. In order to avoid setting up a straw man, it will be useful here to summarize and consider briefly Jones’ position.
Jones holds that subjecting the contractors of major weapon systems to public utility regulation could achieve the performance standards identified with workable competition. Specifically, he desires to eliminate excessive profits, and the “hoarding” and “squandering” of technical and creative skills, as well as duplication of research and design efforts. According to Jones, public utility status would place the regulated firms “midway between the arsenal concept with its direct government ownership and their present private but privileged position.” Jones particularly stresses the need to change current profit outcomes, in this case by lowering the current rate of return on investment earned by large aerospace firms. Profits should, he believes, be measured by a rate of return on investment and limited in accordance with public utility principles.

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Jones argues at some length that defense market characteristics fit the traditional public utility model. One’s first reaction to this view is that, since public utility regulation has been applied to such a heterogeneous set of market structures, it is unnecessary to debate whether or not the weapons production meets public utility standards. Yet further exploration of the problem of the appropriate rate base for defense procurement indicates that the structure of the weapon system industry becomes extremely relevant. In particular, the issue arises whether the outputs are the same in the defense sector as in the public utility sector.

In general, the goods or services produced by public utility firms are fairly well defined and output capacity can be measured with reasonable precision. The output and capacities of the major weapon system producers are less clear. On the one hand, one can argue that their product is the hardware that comes off the assembly lines. On the other hand, one can argue that their product is the R&D services, and the management and integrative activities that go into the assembly process as intermediate services.

If one adopts the latter position, the problem of measuring capacity becomes extremely complex because capacity has to be evaluated in terms of the ability of the contractor to respond quickly and satisfactorily to volatile
governmental demands for new military items. Indeed, this view of the function of major defense contractors is the basis of what is probably the strongest argument for applying the public utility concept to weapon system producers. The “capability” argument for public utility status asserts that our current strategic posture demands quick responses by defense firms to uncertain and rapidly changing military demands. Like electric utilities, the defense sector must meet “peak-load demands” and this requires standby capability which, the “capacity theory” asserts, can best be provided in a public utility framework. The “capability” argument for public utility status asserts that our current strategic posture demands quick responses by defense firms to uncertain and rapidly changing military demands. Like electric utilities, the defense sector must meet “peak-load demands” and this requires standby capability which, the “capacity theory” asserts, can best be provided in a public utility framework. Current procurement regulation is on a contract-by-contract basis with little direct control over the revenues and profits of firms as a whole. The government, nevertheless, desires that producers respond rapidly and effectively to new demands. Therefore, there has to be enough “slack” in the system to meet peak demands and to allow rapid shifts among programs. The government is, in a sense, buying the general capabilities and capacities of firms as well as R&D and hardware. More precisely, capacity and hardware are joint products. The best way, the argument runs, to finance such products would be to treat these firms as public utilities and be prepared to subsidize current operations if necessary to maintain facilities to meet sudden demands.

Although this is probably the strongest argument for public utility status, it is still unpersuasive. The “public utility commitment” of an electric utility firm implies a responsibility of that firm to meet peak-load demands for certain classes of customers. The analogous problem for procurement is providing sufficient industry capacity to assure peak-load demands are met. Only if profits decline to the point where firms begin to leave the
industry need the government worry about this problem. In fact, recent years have seen a willingness for firms to operate below full capacity and an unwillingness of even those firms that have very low rates of capacity utilization to leave the industry. Government ownership of much of the capital in the aerospace industry undoubtedly decreases the desire of firms to leave the industry. Thus, if the argument for a standby capacity has any policy implication, it would seem to point to more use of government-furnished plant and equipment rather than to public utility status.

Even though the “capability theory” does not seem to justify public utility status for weapon system producers, it points up the significant difference between public utility firms and large defense contractors. In both areas, the regulatory goal is that vague concept, a “fair price.” In the public utility area, however, the product is reasonably well understood so the major emphasis is on eliminating monopoly rents. In defense procurement, we really do not know what the firm should be producing or what its output should cost. Consequently, regulation has to be less concerned with monopoly rents and more concerned with trying to define standards of reasonable costs.

The difference between the desired performance or behavior of defense contractors and public utility firms is also apparent on the input side. The input that has received the most attention in public utility regulation is capital. Public utility firms have been viewed primarily as investment organizations and the pricing system has reflected this view. Linking profits to the firm’s capital contribution provides a set of managerial incentives consistent with this view of the public utility’s responsibility.

This view of the firm has much less relevance for the defense area. In the past, the government has been an important weapons producer. With the plants, equipment, and progress payments it furnishes, it is still an important supplier of capital to the major weapon system producers. At times, perhaps half of all assets used to produce weapon systems have been government-owned. At present the government seeks to lessen its role as an investor. Nonetheless, the use of private firms does not rest on the view that investment should be a private function—it rests on the view that private firms have important advantages over government organizations apart from investment. Specifically, as previously discussed, the government’s use of private firms to develop and produce weapon systems stems from organizational considerations. It is believed that private firms are superior to government organizations in developing and coordinating technology. In particular, the government prefers not to have the responsibility for
ensuring the efficient transfer of technology between stages of a program. Thus, it is not the firm as “investor” that is the prime consideration in procurement regulation. Rather it is the firm as “technology-manager.”

In short, the case for applying the public utility concept to weapon system development and production, as represented by Jones’ article, is unpersuasive. The characteristics of weapon systems differ from public utility outputs in ways that make the same type of regulation inappropriate in the two sectors. The weapon system regulation problem is not, as Jones would have it, to remove excessive rates of return on investment. The problem is to motivate a search for less costly methods. The public utility model provides little assistance in the search for efficiency.

Historically, public utility regulation has been reasonably successful in assuring that firms have an incentive to invest and that the rate of return on this investment is in some social sense “reasonable.” Public utility regulation has had much less success in assuring that firms choose the most efficient procedures.\(^{15}\) Nor has traditional regulation been successful in linking profits to the firm’s relative success in seeking new and improved methods of doing business or in adapting to changes in its environment. Yet it is precisely in this area where traditional regulation has been the weakest that the major procurement policy problems lie.

The present regulatory system has two deficiencies. First, there is no assurance that target costs are set at the minimum level necessary to produce the weapon. Considering the perverse incentives inherent in the current system of determining contractor fees, it is hard to avoid the suspicion that weapon system costs are excessive. The second problem is perhaps even more serious. It is that the present system does not link up profits and the contractor’s responsibilities even to the extent that these are linked in public-utility-regulatory policy.

Under the present arrangement, the developer and manufacturer of a system is paid a fee determined as a percentage of the estimated target cost of the contract. Yet, surely, the contractor’s role in a program is not to furnish total cost. But just how is the role reflected in the contractor’s fee?

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At one time, perhaps one might have argued, the success of a development project could be measured by the size of follow-on manufacturing orders. Were this the case, a cost-plus pricing system might provide some rough way of compensating contractors for the importance of the R&D results. Today, however, many developed items never reach quantity production because of changed strategic considerations. Consequently, cost-based pricing cannot be justified as rewarding R&D, and it is not easy to see its relationship to any other functional activity of entrepreneurship.

The problem of defense profits is not that they are too high, but that there is no obvious relationship between profits and the contractor’s responsibilities. Measured relative to the activities they are supposed to induce, profits might be too high, too low, or just right. We can’t tell because we lack a definition of what profits are supposed to reward. There is a vital need to move away from cost-based pricing, define the contractor’s role in weapon system acquisition programs, and relate fees to this function. The contractor’s primary orientation, however, is not providing physical assets; consequently, a public utility pricing system would only further confuse the logic of procurement regulation.

In sum, the case for extending the public utility concept to the development and production of major weapon systems is unconvincing. The need for regulation arises from the lack of competition in the procurement area. This is a consequence of the nature of R&D and the weapon system acquisition strategy adopted by the government. The goal of procurement regulation—a
“fair price”—is the same in both the public utility and procurement areas, but the regulatory task differs. In the public utility area, elimination of monopoly profits is foremost; in the procurement area, the regulatory difficulties stem less from excessive profits and more from lack of knowledge about what efficient costs might be.

A public utility type of regulation for weapon system acquisition would not alleviate this situation. The public utility pricing system is based on rewarding investment. This policy accords with the view of the public utility firm as primarily oriented toward evaluating capital needs and tapping private capital markets for funds. Rewarding investment, however, is not the key role of procurement regulation.

More generally, public utility regulation is fairly successful in eliminating monopoly profits and rewarding investment, but unsuccessful in motivating firms to seek the most efficient adjustments of production technique. In procurement, it is not monopoly profit or the stimulation of investment that is the important consideration. It is motivating managerial attempts to decrease the target costs of weapon systems. Little, therefore, would be gained by a change from the present system to a public utility type of regulation.

**Conclusions**

The major conclusions of this analysis are simple and straightforward. The most important is that the basic problems of procurement prices and fees stem from the fact that they are cost-based and therefore present inherently perverse managerial incentives. These disincentives cannot be overcome by such contracting devices as incentive fees, weighted guidelines for profit rates, or better cost estimating systems. Such procedures have virtues but they leave the cost-based nature of most procurement prices unchanged, and therefore the basic procurement problems remain unchanged.

Public utility prices are also cost-based, so procurement and public utility regulation have many common features. Nonetheless, there is a fundamental difference in the two systems. The procurement system bases fees on total costs while the public utility sector bases its fees on the cost of an input—capital. The perverse incentive in public utility industries is to substitute fixed costs for direct costs or otherwise to overinvest. In procurement, the perverse incentive is more general. An increase in any component of target cost will, *ceteris paribus*, lead to an increase in cost.
The question naturally arises about the desirability of shifting from a total cost system for fees to a public utility-like system that bases fees on capital. Applying the public utility concept to procurement would have one advantage. The present total-cost system of procurement pricing makes it difficult to see how fees relate to the contractor’s function. Basing profits on an input has the advantage of providing a nexus between the firm’s activities and its profits. The public utility principle of basing profits on the capital input, however, would provide little assurance in improving procurement system results. Providing productive assets is not the raison d’etre of weapon system manufacturers. The government has previously been a major investor and even today stands ready to be an “investor of last resort.” More important, the use of private firms to develop and manufacture major weapon systems is not based on a preference for private rather than public investment. It is based on a preference for private rather than public organization and management of weapon system acquisition programs. Profit policy should reflect the responsibilities of weapon system contractors. While the present profit policy does not link responsibilities and fees satisfactorily, a public utility profit system would further confuse the logic of procurement profits.

This illogic might be accepted if applying the public utility model to defense procurement would assist in cost control. This is unlikely, however. Public utility regulation has not been very successful in guaranteeing that the operating costs of the firms it regulates represent minimum necessary social costs. Since operating cost control is the major public utility regulation problem, this is a serious argument against extending the public utility concept to weapon system production.

Public utility regulation is not a remedy for procurement ills. Where then should we look? A full answer to this question requires an examination of many more issues than are covered here. Nonetheless, one vital point must be made. The appropriate direction for procurement policy is to attempt to design a weapon system acquisition policy that minimizes the need for cost-based prices.

The basic procurement problems stem from the cost-based nature of procurement prices. Therefore, rather than direct our attention at trying to improve costing techniques, or to design new contract provisions, or trying to apply public utility regulatory techniques, we should be trying to design weapon system acquisition techniques that permit more use of market competition to set prices.
Two primary forces lead to the substitution of direct regulation for competition. The first is the difficulty of using competition to select R&D contractors. The second is the necessity of letting follow-on contracts when the single prime contractor system of organizing weapon system acquisition projects is used. The latter problem seems the most likely candidate for change. There are a number of possible ways of adjusting the organization of contracts to substitute market forces for direct regulation. Examples are: “second-sourcing” as has been applied in some Navy procurement; total program procurements as applied in the Air Force C-5 program; subcontracting competition as applied in the Air Force C-141 program; and separation of various stages of programs for contracting purposes.

These and other ways of using markets more often than at present merit considerable attention. The best solution to procurement regulation is to minimize the need for it.
Endnotes


2 This procedure is most important for aerospace systems. For Navy and Army weapons, there has been more direct governmental involvement in the development-production process. Nonetheless, in general the government has preferred not to be involved in the interfirm transfer of technology for major systems.

For criticisms and defenses of using the same prime contractor throughout a program, see J. S. Dupré and W. E. Gustafson, “Contracting for Defense: Private Firms and the Public Interest,” Political Science Quarterly, June 1962, pp. 161-177; and the discussion among C. Kaysen, P. W. Cherington, and J. S. Dupré in C. J. Friedrich and S. E. Harris (Eds.), Public Policy, Yearbook of the Graduate School of Public Administration, Graduate School of Administration (Cambridge, Massachusetts: Graduate School of Public Administration, Harvard University, 1963).

3 The total program package concept (TPPC) recently applied to the procurement of the C-5 and some other systems is the most important exception.


5 Incentive fee arrangements frequently have “floors” and “ceilings” and in other ways are more complex than shown in the formula, but these complications need not be considered here.


8 The specific objectives he sees are: “Prices that show a reasonable relation to costs; earnings which show a reasonable relation to risk; efficiency in resource allocation through, for example, avoiding the competitive excesses of hoarding technical personnel, squandering scarce creative skills, and duplicating research and design efforts; and innovational advances by removing the pressures toward
preoccupation with tangible and immediate production consequences in the firm’s
development efforts. For labor, it could mean stable employment at a long-run
maximum average wage; for management, more stable earnings prospects; and for
the public, a minimum long-run price and high-quality product.” *Ibid*, p. 300.

9 *Ibid*.

10 For an argument to the contrary, see B. S. Beckler, “Defense vs. Public Utility
Pricing,” *Department of Defense Logistics Research Conference—Individual

11 The analysis of the characteristics of the market and the public policy goals as
outlined by Jones are highly challengeable. On this subject, compare M. J. Peck and
F. M. Scherer, *The Weapons Acquisition Process: An Economic Analysis* (Boston,
Massachusetts: Graduate School of Business, Harvard University, 1962), pp. 17–97;
F. M. Scherer, *The Weapons Acquisition Process: Economic Incentives* (Boston,
Massachusetts: Graduate School of Business, Harvard University, 1964), pp. 1–14;
H. O. Stekler, *The Structure and Performance of the Aerospace Industry* (Berkeley
and C. J. Hitch and R. N. McKeen, *The Economics of Defense in the Nuclear Age*
discussion here of Jones’ position does not imply concurrence, but rather a desire
to concentrate on the fundamental point—the rate base.

12 This argument is explicitly made by J. R. Schlesinger and it is implicit in many
discussions of the need to preserve a mobilization base. See J. R. Schlesinger, “Will
he cites the Schlesinger article, Jones does not develop the capability theory
to support his case for extending the public utility concept to weapon system
production.

13 Each procurement contract is supposed to “stand on its own feet.” This is, in
pricing the goods or service, no attention is supposed to be paid to past or future
contracts. The overall outcome of the various individually regulated contracts
is not a matter of direct governmental responsibility. The procurement situation
contrasts with public utility regulation where the usual regulatory focus is on the
firm as a whole.

The Renegotiation Board does consider profits for the firm as a whole. However,
its consideration is far different from traditional public utility regulation. The
Board’s main concern is not the traditional rate-of-return on an investment rate
base but rather, whether overhead and other cost allowances for the individual
contracts negotiated before production were appropriate in light of the total
plant-loading that actually occurred. See J. F. Weston (Ed.), *Procurement and Profit
Renegotiation* (San Francisco, California: Wadsworth Publishing Company, Inc.,

For further discussion of the similarities and differences in public utility and
procurement regulation, see G. R. Hall, *Defense Procurement and Public Utility
14 Jones notes that a public utility status for aerospace would require an adjustment for government-owned plants and equipment, *op. cit.*, p. 300. He does not consider, however, the functional and ideological implications of the government’s role as investor. Beckler, *op. cit.* p. 82, discusses the inapplicability of the return-to-investment standard, but does not specify what items should be included in the “other cost criteria” that he holds relevant. The Herbert Committee once argued “…the profits of the [airframe] industry are perhaps better expressed not in terms of (a) return on earnings; (b) return on invested capital; (c) return on net worth; (d) return on net sales but to a large extent, in terms and in the sense of a “management fee”; U.S. Congress, House of Representatives, Committee on Armed Services, Subcommittee for Special Investigations, *Report of Aircraft Production Costs and Profits*, United States Government Printing Office, Washington, 1957, p. 3105. The Committee gave no guidance, however, about how the “fee” should be established.