IMPURITIES IN THE THEORY OF PUBLIC EXPENDITURE

by

Cotton M. Lindsay

Discussion Paper Number 20
Revised August/1972

Impurities in the Theory of Public Expenditure

Cotton M. Lindsay[1]
University of California, Los Angeles

An established mythology among economists holds as a principal tenet that there exists an a priori efficiency argument for government intervention in the provision of collective (hence, public) goods. This implies the empirical proposition that we should expect to observe the provision of such goods to be organized by government. In its normative aspect it argues that non-governmental organization of the provision of collective goods will yield a sub-optimal amount in terms of conventional welfare criteria. It will be argued here that both strands of this myth are invalid. The addition of collective goods to the lexicon of economists adds nothing to the "role" of government which is not already implicit in the theory of perfectly private goods. The myth itself rests on several arguments, each of which attempts to identify some property of government which gives it an advantage over the private sector in performing certain activities. Before moving to a detailed consideration of these arguments, however, let us pause momentarily over some crucial definitions often left ambiguous in such discussions.

Government. In order to state either positive or normative propositions about government behavior regarding collective goods, one needs a theory of government. Such a theory must contain some empirically meaningful definitions (most particularly a definition of government) and a set of objectives and constraints which direct government behavior. The former is required so that we may distinguish government behavior from non-government (private) behavior. The latter is required together with the established properties of collective goods in order to elucidate the relationship of these goods to government behavior.

A government is defined here as the economic agent which wields the dominant force within a society. It is not intended that this brief definition capture the full range of rich and varied meanings with which the concept government is imbued. The government or state may fulfill psychological, sociological, historical, geographic, or religious roles regarding which economists have no expertise. Furthermore a government's influence over the behavior of its citizens may transcend its power to coerce. To the extent that economics is to inform us regarding the behavior of government, however, it must do so with the tools at its disposal and subject to the disciplines conventional to the science. Coercion is a meaningful term to economists, and a definition of government in terms of this activity does not appear flagrantly inconsistent with common usage. Hence, this paper proceeds through a systematic examination of properties of collective goods which suggest or have been alleged to suggest efficient application of force.

Discussion of the definition of government may not be closed, however, without mention of the activity of representation. Most governments today seem to regard it important to establish legitimacy of their positions through claims that they are acting in behalf of "the people." Obeisance of the "governed" may depend upon whether a government does in some sense represent its constituency. One might therefore prefer a definition of government in terms of popular representation rather than force. This alternative has been rejected for two reasons. First such a definition is overly restrictive. Government which regards itself as essentially representative is a historical novelty. Conventional usage applies the term government without prejudice to both Darius I and the existing British Parliament. Secondly, and more importantly, the activity of "representation" thus identified with governments is not empirically differentiable from analogous behavior in the non-government sector. If a theory is to inform us that government as we know it has a comparative advantage in providing certain goods, then we must be certain that the property yielding this advantage is the exclusive province of such a government. More specific treatment of the activity of representation and its distinguishability will be deferred to the discussion on communication costs below.

<u>Collective Goods</u>. These goods were defined by Samuelson (1954) as those "which all enjoy in common in the sense that each individual's consumption of such a good leads to no subtraction from any other individual's consumption of that good." Conventional practice is to separate such collective goods into two classes on the basis of the provider's ability to regulate other people's use of these goods. Implications are held to differ between (a) cases in which the owner may for sufficiently low cost "exclude" others and (b) cases in which such exclusion costs are unprofitably high.

Earl Thompson (1968,1969) has shown that, given the customary assumptions of the perfectly competitive market, private provision will result in gross overallocation of resources to "excludable" collective goods. Harold Demsetz (1970) has argued that relaxation of these assumptions consistent with the reality of particular cases indicates that private producers will provide efficient levels. Minasian (1964) has pointed out that market pricing of excludable collective goods provides valuable information regarding consumer valuations of these goods. To date, however, the presumption of private underprovision of <u>non-excludable</u> collective goods has not been successfully challenged.

It is instructive to note at this stage that excludability is not a property reserved in application to collective goods. It is also costly to regulate other's use of one's private goods. Nor is excludability a wholly technologically determined property. It is affected by the behavior of government. Although examples normally given of prohibitively costly exclusion costs are cast in terms of private exclusion, seldom are private efforts the sole form of protection of any property. The rights to the prototype non-excludable collective good, radio-television beams, are actually policed in Great Britain without the legendary scrambler. These rights are protected the way rights to many private and collective goods are protected, i.e., by placing legal penalties on unsanctioned use.[2] As Cheung (1970) has forcefully argued, it may be more appropriate to question why government isn't enforcing property rights to a collective good before assaying the matter of government intervention to provide that good. Let us abstract from this problem, however, and simply assume that for some collective goods neither private nor government enforcement of property rights is feasible.

Alternative Conventions

Theorizing about the behavior of government typically is done in curious fashion. Economists have had considerable success explaining individual and firm behavior in terms of purposeful but constrained pursuit of "self interest" operationally defined. In turning their attention to government, however, this useful approach is usually abandoned.[3] Self interest as the motivator of behavior is jettisoned in favor of "public interest" with all the ambiguities implicit in such an objective.

Moreover, the failure of most conventional treatments to attempt a description of the technology of government has impeded discussion of the constraints which government confronts in pursuing any objective. The results of market behavior are not compared with realistic government-involved alternatives --- but rather with abstract "optimality conditions" which may or may not be realizable. Government corrects market failure, presumably with a costless wave of the hand. The emptiness of this approach is apparent when we ask why, if government may correct market failure, it relies upon markets for the organization of any behavior? If governments perceive and expedite efficient allocation of resources in the provision of collective goods, what prevents them from doing the same for private goods? This theory does not explicate a relationship between government and collective goods. It predicts unlimited government involvement in the economy.[4]

Attempts to confront the difficulties associated with government intervention in connection with collective goods are limited to explorations of the game theoretic consequences of various decision rules (Samuelson 1954), (Musgrave 1960). It is alleged that individuals will fail to disclose their valuations of collective goods in group decision processes where unanimity is required for action. Here again, however, the linkage between the analysis and the analyzed is left ambiguous. Identical problems are posed by group decisions in the private sector. Such theorizing then fails to inform us regarding the comparative merits of private group decision processes and those organized under the auspices of government.[5]

Let us therefore address directly the possibility of specific cost advantages in government organization of collective goods provision arising out of its most singular economic attribute, the power to coerce. The choice function of a benevolent government implicit in most of these discussions may be expressed as follows: Governments act to secure benefits for their citizens whenever (1) those benefits may be produced at lower resource cost with government intervention and (2) such benefits may be secured without making anyone worse off.

Left intentionally ambiguous in such a choice function is the mechanism by which the government selects from the infinity of budgetary configurations which might satisfy such a condition the particular constellation of program levels and financing schemes which it ultimately adopts. These questions have been extensively explored elsewhere, e.g. Buchanan (1967), Thompson (1966), Breton (1966), and Lindsay (1972). I wish to limit the scope of the analysis here to the question of whether properties of collective goods together with the technology of government suggest _a priori_ that both these conditions are satisfied for _any_ such programs. In this regard I shall also disregard the obvious unrealism of condition (2). Even when the possibility of logrolling or side payments is considered, it seems clear that no government has been constrained to please everyone with every act. As the mythology we are exploring holds that such opportunities exist and that governments exploit them, it will be retained.

The provision of collective goods requires (as does the provision of private goods) (a) the organization of factors to produce the goods in desired quantities and (b) a distribution of the cost of the reimbursement of these factors among consumers. Regarding private goods, the vaunted "invisible hand" of the market makes unnecessary explicit decisions on these questions by anyone. Entrepreneureal avarice can be counted upon to marshall resources into their most valuable employments, while the impersonal mechanics of price-taking resolve distributional questions. Arguments supporting the efficacy of government intervention in the provision of collective goods may be conveniently arranged around alleged market failures in these two respects.

The first holds that private entrepreneurs, lacking the power to exclude users of collective goods which they produce, will be unable to command payment from these users. Users will refuse to pay since there is no way to prevent them from enjoying a "free-ride".[6] There is thus alleged to be a market failure regarding decision (a) above. Entrepreneurs will refuse to commit resources to the production of non-exclusive collective goods. It is argued that the coercive power of the state is required to elicit through taxes the necessary factor compensations.

The second argument arises in recognition that any surplus resulting from the provision of collective goods is not distributed through decentralized price-taking behavior of users. There are no market prices to serve this function. Explicit agreements regarding both decisions (a) and (b) must be reached among potential users. Each recognizes that, through successful bargaining (i.e. understating his valuation of the good produced), he may influence others to bear a larger share of such support. As resources devoted to deception of this type may be regarded as dead-weight losses to the system as a whole, it is argued that government intervention to eliminate such bargaining (presumably through arbitrary assignment of tax liability) reduces total cost. This view is most closely associated with the spirit of Samuelson's (1954) original argument.

A third argument recognizes the complicated and costly negotiation entailed in attempting to resolve questions (a) and (b) above through voluntary agreement. The generation and transmission of information among users and providers of collective goods entails a cost which is clearly several orders of magnitude higher than associated costs of organizing the provision of private goods through markets. Even when we abstract from the problems of bargaining and free riding, it appears that the costs of transmitting offers and acceptances associated with collective goods may deter their provision.

We may paraphrase each of the "market failures" identified above in terms of the nature of the potential transaction cost savings implicit in that argument. "Free-riding" is associated with uncertainty over the <u>performance</u> of agreed terms of a transaction. Bargaining, on the other hand, is associated with the negotiability of these terms themselves. The third argument implies a potential communication cost saving through government intervention. Each of these arguments will be considered separately below. None will be found to contain the message popular in the mythology described. On the contrary, as Thompson (1971) has suggested, there is nothing in the nature of collective goods which implies that governments have an advantage in organizing their provision.

Performance of Agreed Terms

Let us examine the first argument more closely. It is argued here that owners of collective goods may not withhold them as a device to insure payment from users. Firms therefore decline to enter, aware that they are powerless to market their output. Voluntary marketing may not be counted upon to provide efficient levels of such goods. Force is required to extract payment from "free riding" users.

Considered in isolation, this is simply the familiar property rights issue dressed up in collective clothing. The argument would be equally valid if the good to be produced were perfectly private, and rights to its use were unprofitable to enforce. Exit of firms from any industry would be predicted where producers lost the ability to secure their output from theft. "Free riding" thieves would insure losses for those that remained. Underproduction in terms of conventional optimality conditions is probably the case for any good whose rights enforcement costs are left out of the right hand side.

The only novelty which collectiveness in a good contributes to this general exclusion problem is the possibility that in these cases users may "free ride" on each other as well as on producers of collective goods. Even where producers of these goods are able to market their output effectively, interaction among users appears to portend "market failure." Efficient organization of the provision of collective goods requires cooperation among users. That is, individuals must extend support for such projects beyond the level at which they as individuals would choose to support them . In such negotiations each has incentives to agree to mutual extensions, then to default on such agreements, obtaining in the process a "free ride" on the increased support thus elicited from others.[7] This is true quite apart from explicit bargaining over the terms of such extensions to be discussed below.

For both private and collective goods the problem identified here arises from the apparent nonmarketability of such goods associated with the infeasibility of exclusion. Lacking the power to exclude, both producers and users will decline voluntarily to commit resources for the provision of these goods for exchange. Producers seemingly cannot exchange nonexclusive private or collective goods for money. Users seemingly cannot exchange nonexclusive collective good extensions they might provide for corresponding extensions by others.[8]

The error contained in this argument is the excessive importance attached to exclusion itself as a means of facilitating transactions. Few transactions indeed might occur in such a voluntary environment in the literal sense of the word voluntary implicit in the foregoing discussion. Only quid pro quo exchanges involving simultaneous performance of quid and quo would avoid free rider behavior of this type. Excludability for the purposes of commanding payment from users is infeasible for any goods whose transfers may not be coordinated in this way.

Consider any service transaction, wherein one purchases a flow -- not a stock -- and temporal coordination of payment with the transfer of service is virtually impossible. In actual practice payments are made in discrete lumps corresponding to service flows of specific lengths. These transactions should not take place in such a "voluntary" environment.

Regardless of how the transfers are arranged, one or the other parties to such an exchange may "free-ride". If payment is made before the service is performed, the service provider keeps the payment and provides no service. If payment is to be made after performance of the service, the receiver of the service has no incentive to pay.

In all such cases individual parties to the transactions are vulnerable to "free-riding" from their trading partners. The gains offered by these transactions depend upon performance of the terms by "others" which may not be controlled by the beneficiary. In the service transaction example the terms which are relevant to the purchaser concern delivery, and those of importance to the producer concern payment. In the case of collective goods the analogous terms of concern to any user are the levels of support provided by his fellow users.

The point of this digression is that constraints or options open for private behavior are not limited to the kinds of constraints depicted in this "voluntary" setting. A variety of contracts, both explicit and involving social pressures, customs and etiquette have emerged to deal with just such contingencies. Individuals voluntarily enter contracts, but once agreement is reached, they are bound to performance of the terms. They may no longer "free-ride" even though it may appear in their interest to do so. The essential feature of a contract is that it shifts the incentives of the contracting parties toward performance of its terms and away from "free-riding."

Government "enforcement" of contracts may or may not be efficient. Most contracts in the private sector lack even the implicit threat of legal recourse because they are unenforceable or simply not worth collection costs. These contracts are nevertheless honored. This is true because "enforcement" mechanisms exist in the private sector, as well. All that is required is that each party to a contract place himself in a position where the choice of defaulting is more costly than the choice of performing the terms. This may be done privately by "making a down payment", putting up collateral", or even the more subtle guarantee of one's good name.[9]

A theory of contracts elucidating the nature and extent of government involvement in their enforcement is beyond the scope of this paper. Some general principles seem clear, however. Government "enforcement" involves confronting the contracting parties with essentially the same choice offered by private enforcement mechanisms. Failure to comply with agreed terms (or at least failure to satisfy other parties) procures penalties (imposed costs) for the nonperforming party. To the extent that the government imposes sanctions of this type by attaching wealth, the techniques are virtually identical. If assets may be seized by government, they may be placed in escrow voluntarily by contracting parties to guarantee performance. No obvious advantage of government enforcement suggests itself. On the other hand, for some individuals and some contracts the value of nonperformance may exceed the net worth of assignable assets. In these cases private enforcement of the type discussed is not possible. Government enforcement remains possible, however. Governments have the power to take from individuals things which (at least in our society) they may not assign, i.e. their freedom or their lives.

Collectiveness in a good may imply that transactions to organize its provision necessitate explicit contracts stipulating the level of support to be provided by each user. The necessity of contracts whether for collective or private goods does not imply that government enforcement of their terms is efficient, however. Superficially at least, government involvement arising out of considerations of exclusion in transactions seems likely to be predicated upon the size of the stakes involved. As far as exclusion is concerned, then, collectiveness is neither a necessary nor sufficient condition for government intervention. Government involvement arising out of exclusion considerations is a question relating to the theory of contracts -- not to the theory of collective goods.

Negotiability of Contract Terms

The so-called "free-rider problem" is not, in and of itself, an efficiency argument. It is an individual distributional objective. Seeking a "free ride" is essentially seeking a lower price. The fact that some individuals are successful at obtaining a lower price to themselves in these circumstances (by inducing others to pay higher prices) is important only to the extent that such financing arrangements affect the levels of collective goods produced, and then only where more efficient levels might be produced by altering these arrangements (reducing transaction costs).[10] We have just examined the argument that such a transaction cost savings might be achieved by foreclosing the opportunity to gain a larger "free-ride" by abrogating cooperative agreements to extend support. A second potential transaction cost saving is held to exist in government intervention to forestall "strategic" understatement of valuations of collective goods.

This behavior also follows from individual pursuit of larger "free rides." In this case, however, these endeavors take the form of attempts to convince others that forthcoming support will be less rather than more than is planned. Furthermore, though frequently linked with exclusion, bargaining over terms of the provision of collective goods will exist even where perfect exclusion is practiced. Price taking behavior is observed in markets for private goods -- not because exclusion is feasible for these goods (witness bilateral monopoly markets) -- but rather because sellers have no incentives to cut prices of these goods below market clearing levels. As Thompson (1968) has pointed out, owners of collective goods will seek to price-discriminate since they sell the same good to all buyers.[11] It is convenient to continue the argument here in terms of nonexcludable collective goods, however.

A naive form of this bargaining argument holds that the mere presence of potential gains from strategic behavior in voluntarily organizing to provide collective goods leads individuals to permanently announce undervaluations of them. At least this is the only coherent meaning I am able to attach to a broad range of cryptic statements regarding "strategic" or "game-theoretic" behavior in such contexts. The truth is, of course, that bargaining is by its very nature <u>temporary</u> behavior and is engaged in only so long as it is expected to pay. One declines a profitable offer only so long as (and if) in doing so one expects to get better terms. One plans to do business eventually.

Recall that where exclusion is not feasible, users must organize the provision of collective goods through contracts explicitly stipulating the contribution to be paid by each. As long as suboptimal quantities are provided, there exists a potential contract among users involving mutual extensions of support which will provide gains <u>to all</u>. Any users will decline to enter such a contract only if he expects to obtain a more favorable contract. If it is known that a particular offer is the <u>last</u> to be considered, the possibility of subsequent more favorable terms is foreclosed, and no negotiator will be influenced to decline on false terms. As indefinite negotiation is costly to all, time limits and deadlines for contract finalization will be agreeable to all. As the deadline approaches, it is in the interest of each to "own up", to suggest contract revisions toward efficient levels. Each will experience a welfare loss if he has not done so before the deadline expires. Agreement by all parties to efficient levels of support for collective goods is thus predicted to occur voluntarily. Strategic behavior may <u>delay</u> contracting for efficient levels of support, but is not predicted to represent a permanent obstacle.

The importance of strategic behavior for economic discussion is that it seems to impose transaction costs which might be eliminated by government intervention. Bargaining for better terms than those which are already acceptable is alleged to be costly but socially unproductive. It diverts resources away from production toward purely acquisitive (redistributional) activity. Total output might be increased, it is argued, if resources devoted to "bargaining" were directed toward production. If the final distributional outcome of such negotiations could simply be imposed externally, these bargaining resources could be freed for more productive employment. It should be possible, it is argued, to <u>impose</u> such an outcome which would provide each of the contestants with a settlement which exceeds his expected share from allowing such bargaining to run its course. Government intervention of this type is thus alleged to be Pareto efficient.

Again, however, the argument relies on a demonstration of gains to be had through introduction of an economic mechanism into a theoretical environment lacking such a mechanism without explaining why private markets will not produce it or whether they in fact already do. If each bargainer expected to gain from the <u>imposition</u> of settlement terms, then we should expect the bargainers themselves to seek services of someone to do exactly that. Each bargainer who might otherwise be influenced to hold out for better terms will recognize (where it is true) that the expected net effect of all such bargaining on his own wealth is negative. Voluntary agreement to binding arbitration would be profitable. No force is necessary to influence people to take profitable action.

Nor is imposition of terms the only way in which bargaining costs may be avoided. Recognition of the costs of strategic maneuvering is doubtless responsible for the rich assortment of formalized collective decision-making apparatus observed in the private sector. The institutionalization of bargaining "focal points" into formal market "rules" has been discussed by Schelling (1963). In the private provision of collective goods (as is the case with legislative organization) contributions are often fixed in terms of some variable which is parametric as far as individual behavior is concerned. Rules requiring contributions which are the same for all or proportional to income, family size, property assessment, front footage, etc. eliminate the incentive to conceal valuations of collective goods. Strategic refusal of "acceptable" offers will not be contemplated where such rules are in effect because the rules themselves foreclose the possibility of such refusals eliciting superior terms. Such rules are willingly accepted by bargainers without coercion where they are expected to provide gains.[12]

More importantly, bargaining simply should not be a factor in most cases. Strategic refusal of an "acceptable" offer will be contemplated only if subsequent more favorable offers are anticipated. Buchanan (1968, p. 93) has pointed out that, where many bargainers are involved, the refusal of an offer by any bargainer is unlikely to secure for him a more favorable offer on subsequent rounds. It is quite likely to yield a less satisfactory one. Given the complexity of the offers which must be floated and the costs implicit in their formulation and circulation, refusal by any interested party can usually be expected to result in a dropping of the entire matter. The expected result of a strategic refusal in these cases is not more satisfactory terms but rather a lost opportunity for gain.

Finally, the argument that government should arbitrate in bargaining situations imputes to government an insupportable omniscience with respect to the welfare of bargainers. It implies that arbitrating agents of governments can distinguish between "genuine" refusals of unacceptable proposals and strategic refusals aimed at eliciting more favorable terms. It assumes that governments which impose terms upon disputing financers of collective goods can recognize among the disputants those who are bluffing and those genuinely "at the margin". Realistically, however, governments lack such discerning powers. Only the disputants will know when arbitration will yield gains and when it will not. Where it will, we should expect voluntary submission of disputes to arbitration. Where it will not, arbitration will be rejected if the decision is left to the individuals concerned. Governments, on the other hand, cannot distinguish between these two cases.

Strategic or bargaining behavior offers no special insights for the argument we are considering. There is no *a priori* argument for government intervention to minimize transaction costs associated with bargaining over voluntary support for collective goods provision. Such behavior would not be expected in large number situations. Where it becomes a factor, private means exist to eliminate it. And government intervention of the type contemplated here is predicted to yield results inferior to those expected from voluntary arbitration.

In total, the popular depiction of private "voluntary" behavior as regards nonexclusive collective goods is inaccurate and inconsistent. The "free-rider" is described as a cheater on agreements and an avowed noncontributor to "public interest" type projects. Such a portrait is poorly drawn indeed. This fictitious creature has been wrought from an overly circumscribed view of options which exist for private organization of markets and ill-conceived "game theoretic" caricatures of bargaining behavior. All users of jointly provided nonexclusive collective goods are "free riders" whether they contribute or not. That is, all enjoy the benefits of that amount of the collective good financed by others. If "free rider" arguments are intended simply to demonstrate the superiority of collective (multilateral) contracting over bilateral trade where collective goods are concerned, then they are valid. If, however, we are to interpret them further to imply that such collective agreements may only be arranged or policed under the auspices of government, then such assertions are invalid. Individuals will eschew voluntary participation in collective goods projects only temporarily if at all. Typical behavior in this regard should not consist of feigned disinterest, but should exhibit active sponsorship of contractual arrangements which obligate themselves and others simultaneously to such projects.

Such predictions are not inconsistent with observed behavior in the private sector. Explicit support contracts for the provision of collective goods are far from uncommon, ranging from "fair share" deduction agreements for charities to cost sharing arrangements among neighbors for construction of backyard fencing. The emergence of organizations to promote common goals, today accepted as a way of life, is not accidental. The not insignificant number of private citizens who are members of civic and charitable organizations is difficult to reconcile with the conventional view of the rationality of "free-riding". These observations are perfectly consistent with a broader, more realistic view of rational self-interested behavior.

Communication Costs

One argument remains to be considered. This argument itself is rarely articulated but may be discerned "between the lines" of much of this discussion.[13] It recognizes that in principle non-performance of terms can be eliminated through contracts, and resource-wasting bargaining may be controlled with private arbitration and market rules. It holds, however, that such contracts are simply infeasible in most of the relevant cases. In the typical setting (such as would be involved with any collective good whose benefits reached beyond one's immediate neighborhood) the costs of merely communicating offers of terms, etc. among all potential participants in such joint projects would be prohibitive. Mutually beneficial opportunities to provide collective goods will be missed as a result.

This may indeed be true. The per capita cost of privately communicating for the organization of the provision of certain goods may exceed individual valuations of the services of those goods. For this fact to have implications for the argument which we are examining, however, it must be shown that communication costs are <u>lower</u> when the communicating is done through the government. Recalling our definition of government as the wielder of dominant force, there appears little in it to suggest obvious economies in communication.

Some may consider the representative system associated with many existing "democratic" regimes to be a potential economizer on these costs. The representative of each constituency may be considered to be a reliable estimator of the wishes of members of that group and may be seen to act <u>as he considers they would act</u> regarding the proposals he confronts. Efficient programs might thus be predicted to emerge from such a process without communicating the particulars of each program to each citizen for review and response.

As noted earlier, this appeal to non-general and non-essential properties of government is fallacious. Many governments lack any popular representation. Such a theory tells us nothing about the behavior of non-representative governments. More importantly, examination of the activity of "representation" itself reveals the process to be merely a special case of a phenomenon widely observed in the private sector. While it is true in principle that communication economies exist when representative processes replace universal participatory democracy, the argument says nothing about "representation" existing uniquely in association with government.

Similar agency relationships permeate the private sector. Tour guides, business managers, union stewards and journal editors all "represent" in the sense that they make decisions in behalf of others. Trusts, corporations and trade unions are simply the most obvious cases of private institutions which are functionally indistinguishable from representative processes associated with government. Each involves an explicit transfer of some authority to an agent who may enter into contracts in the name of the individual represented. As representation is purchaseable in the private sector, representative processes associated with government offer no obvious advantages in communicating.

Conclusion

It may prove helpful to recapitulate in terms of a more or less complete statement of the conventional "public" good scenario drawn from the literature. Consider the following quotation from Haveman (1970, p. 42ff.):

> Because one can not economically be excluded from the benefits of a public good once it has been provided, private firms have no incentive to produce and market these commodities. Any potential buyer would refuse to pay anything like what the commodity is worth to him. Indeed, he would be likely to express an unwillingness to pay anything at all for it. He would reason: "If I simply sit tight and refuse to pay, I may get the benefit of the good anyway, if someone down the line provides it for himself -- after all, it is a public good." However, if each buyer reasons this way (and presumably he will), the good will not be provided. Public goods will only be provided if collective action, usually through a government is taken. Only through collective action can the availability of worthwhile public goods be assured.
>
> The existence of public goods...in the real world is, therefore, another reason why the market system fails. Their existence provides

> an additional economic rationale for the range of economic activities undertaken by government.

The first three sentences seem clearly directed toward the performance problem. Lacking the power to exclude as a device to extract payment from users, private firms are seen to be unable to "market" collective goods. The possibility that compensation might be ensured through contracts (which may be privately enforced) is overlooked. At sentence four the theme changes. The bargaining aspect of the transaction is introduced with the conclusion that each will decline to offer voluntary financing in the expectation that others will provide it. Such a conclusion is impossible, however, as long as communication exists among potential users. If communication is possible, enforceable contracts will be negotiated, and each user will _know_ how much support to expect from others. A bargaining problem remains in such circumstances, though, as we have seen, no _a priori_ governmental role emerges from such considerations. The first paragraph concludes with a _non sequitor_ to the effect that the foregoing has implied "collective action," failing to recognize that collective action does not dispose of the bargaining problem.

Collective action, at least in the form of multilateral contracts among users, is implied for efficient provision of collective goods. This fact in no way suggests an "economic rationale for the range of economic activities undertaken by government."

To summarize then, collectiveness _per se_ in a good tells us nothing about whether we would find its provision organized by government nor does it advise us within the accepted norms of welfare economics regarding the desirability of government intervention. In short, the theory of collective goods adds nothing to our understanding of the role of government beyond that long recognized in association with perfectly private goods. Government enforcement of property rights including the terms of transfer of these rights, i.e., contracts, is sometimes efficient. A thorough examination of those characteristics which suggest government involvement in contracts enforcement was not attempted in this paper. Further research into the nature of contracts may yield an understanding of the behavior of government not provided by collective goods themselves.

In large part, however, the confusions found in these discussions appear to be even more deep-seated than a mere commitment to one of the fallacies revealed here. Economists all too often have attempted to theorize about what governments are expected to do or should do without formulating a clear idea of what "government" is and how such an entity is to be distinguished from "private" institutions. Government's ability to correct market failure must emerge from some advantages inherent in organizing behavior governmentally if we are to take this argument seriously. Removal of transactions from markets <u>per se</u> implies only a foreclosed channel for mutually beneficial exchanges. It does <u>not</u> insure superior transactions. Furthermore, such advantages as government is held to enjoy in this respect must be shown to result from attributes exhibited exclusively by governments.

Government has been defined here as the wielder of dominant power in society. This definition appears to capture the only empirically meaningful distinction between economic agents which are private and those which are not. In the foregoing analysis "governments" were assumed to have as their objective function the "best interests of their citizens" simply because such an assumption is implicit in the arguments we have explored. No justification can be offered for imputing such behavior to an entity with the power which governments wield. Construction of better models of behavior of governments must begin by making realistic assumptions about the aims of those with power and the constraints on their behavior. The questions we must ask first are not what sort of goods does the government provide, but rather why does it provide anything. Why doesn't it simply take? If power is necessary to enforce agreements, then how are the agreements representing the consolidation of power itself maintained? If government behavior is actually motivated by narrow self-interest, what constraints direct this behavior into the occassional efficiency serving channels which we observe?

Reassuring results obtain in analyses which assume at the outset that governments always do the right thing. More interesting and informative results are likely to be produced, however, by postulating that government like the other economic agents we deal with, serves our interest only incidentally as it serves its own. The cataloguing and analysis of the influences toward and away from this convergence of interests comprise a rich agenda for future research in the field of public choice.

REFERENCES

Albert Breton, "A Theory of the Demand for Public Goods," Canadian Journal of Economics and Political Science Vol. 32 (November 1966), 455-467.

James M. Buchanan, "Politics, Policy and Pigovian Margins," Economica XXIX (February 1962).

James M. Buchanan, The Demand and Supply of Public Goods, Chicago, 1968.

James M. Buchanan and Craig Stubblebine, "Externality," Economica N.S. 29 (November 1962) 371-384.

James M. Buchanan, Public Finance in Democratic Process, Chapel Hill, 1967.

James M. Buchanan and Gordon Tullock, The Calculus of Consent, Ann Arbor: 1962.

Steven N.S. Cheung, "The Structure of a Contract and the Theory of a Non-exclusive Resource," The Journal of Law and Economics XIII (April 1970) 49-70.

Ronald Coase, "The Problem of Social Cost," The Journal of Law and Economics Vol. III (October 1960) 1-44.

Harold Demsetz, "Information and Efficiency: Another Viewpoint," The Journal of Law and Economics, Vol. XII (April 1969) 1-22.

Harold Demsetz, "The Private Production of Public Goods," The Journal of Law and Economics Vol. XIII (October 1970), 293-306.

Anthony Downs, An Economic Theory of Democracy, New York: 1957.

Robert H. Haveman , The Economics of the Public Sector, New York: 1970.

John H. Head and Carl S. Shoup, "Public Goods, Private Goods, and Ambiguous Goods, Economic Journal Vol. 79 (September 1969) 567-572.

Benjamin Klein, "The Competitive Supply of Money," mimeo (1969), Dept. of Economics UCLA.

Cotton M. Lindsay, "Two Theories of Tax Deductability," The National Tax Journal Vol. 25 (March 1972) 48-52.

Richard A. Musgrave, The Theory of Public Finance, New York: 1959.

William A. Niskanen, Bureaucracy and Representative Government, Chicago, 1971.

Jora Minasian, "Television Pricing and the Theory of Public Goods," The Journal of Law and Economics Vol. VII (October 1964), 71-80.

Mancur Olson, The Logic of Collective Action, Cambridge: 1965.

Paul Samuelson, "The Pure Theory of Public Expenditure," Review of Economics and Statistics Vol. 36 (November 1954) 387-89.

Thomas C. Schelling, The Strategy of Conflict, New York: 1963.

Earl Thompson, "The Perfectly Competitive Production of Collective Goods," Review of Economics and Statistics, Vol. 50, (February 1968) 1-12.

Earl Thompson, "The Perfectly Competitive Production of Collective Goods: Reply," Review of Economics and Statistics Vol. 51 (November 1969) 479-482.

Earl Thompson, "Review of Buchanan's Demand and Supply of Public Goods," Econometrica Vol. 39 (March 1971), 646-649.

Earl Thompson, "A Pareto Optimal Group Decision Process," in G. Tullock, ed., Papers on Non-Market Decision Making, Charlottesville: 1966.

FOOTNOTES

1. I am indebted to Armen Alchian, James Buchanan, Jack Hirshleifer, Earl Thompson and Dean Worchester for reading earlier drafts and offering helpful advice and encouragement.

2. Curiously, it seems to be the case that government enforcement of government rights is pursued more assiduously than is enforcement of private rights to nominally identical property. In the British example just cited, only the rights to the government owned BBC transmissions are protected. Private broadcasters do not share in the revenues collected from receiver owners even though these private transmissions doubtless affect the demand for receivers, hence tax collections. Debt to private creditors may be abrogated through bankruptcy. Debt to the government may not.

3. Notable exceptions are Downs (1957), Breton (1966), and Niskanen (1971).

4. See Demsetz's (1969) discussion of the "grass is greener fallacy." See also Buchanan (1962).

5. This is not to say, of course, that theorizing about the effects of decision rules on the decisions themselves is fruitless. Doubtless there is much to be learned here, viz. Buchanan (1968, pp. 101-170). The point is that such enquiry does not inform us regarding the alleged "publicness" of these processes. See below.

6. See Musgrave (1959, p. 10ff.), Haveman (1970, p. 42ff.), Musgrave (1966, p. 127), Head and Shoup (1969, p. 567).

7. The nature of such choices and their consequences have been explored by Olson (1965) and Buchanan (1968).

8. It is worth noting that theft of purely non-exclusive collective goods is not feasible. Thus it is possible for individuals to produce "their

own" collective good in small "private adjustment" quantities. Private contributions to charity are widely observed while "solid gold cadillacs" remain in the realm of fantasy. If one is to draw normative conclusions about "shortages" of goods arising from the infeasibility of exclusion, it may be that the greater shortages exist for nonexcludable private goods.

9. See Benjamin Klein (1969) for a discussion of the capital value of reputations. This imaginative discussion is cast in terms of competitive supply of non-full-bodied money, though it is perfectly generalizable to all such contract situations.

10. The activity of "free-riding" itself is often depicted as an efficiency problem. This "free-rider problem" is cast in terms of individual calculation (recognition?) that he need not contribute toward support of some collective good which he values since others can be counted upon to supply it. To the extent that such expectations are correct, of course, "free-riding" represents no inefficiency. Buchanan and Stubblebine (1962) have established that external benefits must be both marginal and Pareto relevant before inefficiency is implied.

11. The determinate outcome of Thompson's (1968) description of this process does not follow from price taking seller and buyer behavior, but rather from the extremely disproportionate division of market power assumed there. If buyers may organize to confront competing sellers, then a result much different from his well known oversupply theorem obtains.

12. To the extent to which individual valuations are knowable, these formulas may approach efficient pricing. To the extent that they are not, neither government nor private markets will produce efficiency, if indeed efficiency has any meaning in this context. See Demsetz (1969).

13 It comes perhaps closest to the surface in Samuelson (1954), i.e., "The failure of market catallactics in no way denies the following truth: given sufficient knowledge, the optimal decisions can always be found by scanning over all attainable states of the world and selecting the one which according to the postulated ethical welfare function is best. The solution "exists"; the problem is how to "find" it. See also Buchanan (1967, p. 114ff.).