Nonexcludability and Government Financing of Public Goods

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Many economists consider public goods to be a case of market "failure." They argue that the free market cannot finance the optimal amount of public goods. Therefore, they say, the government must finance their provision. In this paper I shall challenge this view. Three well-known arguments supporting this view will be presented and critically examined.

The definition of public goods to be used in this paper is those goods that are characterized by both nonrival consumption and nonexcludability. These are the so-called "pure" public goods. The three arguments that I shall challenge, however, focus on the nonexcludability characteristic. In addition, I shall assume that large numbers of people are involved and therefore that transactions costs are high. By making such extreme assumptions I wish to disarm the strongest case in support of government financing of public goods and to put to rest this particular "market failure" justification for government economic activity.

One argument which criticizes the free market's ability to provide public goods is a basic one. This argument states that because a public good's provision costs exceed its benefits for each individual concerned, a voluntary arrangement must be made among those individuals to provide the good collectively. But when large numbers of people are involved, transactions costs are high. If the good is being provided *via* voluntary arrangement, there is an incentive for individuals to become free riders—to refrain from paying their full share of the costs of providing the public good (or their full share of the future costs of provision) and, instead, to let others pay. Owing to imperfect exclusion from consumption, free riders can enjoy the good's benefits without contributing anything toward its costs.

The second argument states that since individuals will tend to become free riders because of the presence of a free-rider incentive, a less than optimal amount of the good, at best, will be provided in the free market. The only way by which an optimal amount of the good can be provided is if the government finances the good's provision. The government's receipts, coer-

cive taxes, are not vulnerable to the free riders' tactics. No one will be able to refrain from paying their full share of the good's costs.

The third argument states that all individuals concerned may be made better off by paying taxes to finance the public good's provision. It is argued that

> In those cases where the welfare of the various members of the economy is partly dependent on each others' activity, it is possible that persons in pursuit of their own immediate interests will be led to act in a manner contrary to the interests of others. To the extent that such a situation is general, the members of the economy may find themselves busily engaged in the frustration of each others' desires. In these circumstances it may be to their mutual advantage to restrict their activity so as to prevent this happening . . .[W]here [voluntary] arrangements cannot be relied on, it becomes advantageous to the members of the economy to have their activities restricted by coercive measures.[1]

In short, free riders and contributors both may find it advantageous to have the free riders' activities restricted. Thus, all persons may benefit by paying coercive taxes to finance the provision of public goods.

In answer to the first argument I agree that a free-rider incentive exists owing to imperfect exclusion. But it is not necessarily true that the free-rider incentive is the only incentive that is present. There may be other incentives that motivate people to act. Focusing narrowly on only one incentive does nothing to further intelligent discussion of public goods provision. For example, there may be incentives for individuals to act in accordance with good will, Christian charity, Kantian duty, civic pride, or any number of other reasons for individuals to contribute their full share toward the private provision of public goods. And, one's contributing need not necessarily rest on the assumption that similar demonstrations of "conscientiousness" will be forthcoming from others. It is far from being necessarily true that anyone will be concerned with such externalities. If a person is not concerned with these externalities, he will contribute whether or not others benefit gratuitously from his actions.

In short, I contend that there are too many incentives that may motivate individuals to contribute or not to contribute. In light of this observation, singling out the free-rider incentive as *the* significant incentive is an extremely arbitrary procedure.

The second argument is scarcely more reasonable. Certain economists opine that if the free market provides public goods, a less than optimal amount of these goods, at best, would be forthcoming because of the free riders' refusal to pay their full share of the goods' costs. Yet, this belief is based on the faulty presumption that the free-rider incentive is the only incentive which is present. The presence of a free-rider *incentive* does not insure that any of the individuals involved will become free riders. Because of the possibility that other incentives may exist, it is impossible for anyone to foretell in what quantity public goods will be provided in the free market,

if they are provided at all. The most that one can say is that if a person values a certain quantity of a public good (or if he values an additional unit of it or if he values sharing its costs) more than he values the alternative uses of the resources he would forego, he will participate in the financing of that good in the free market. If not, not. Thus, asserting that there will be a tendency for individuals to become free riders and that public goods will be underprovided in the free market is unjustified.

Still further, these economists attribute government with the sole ability to provide the optimal amount of public goods. Which is the optimal amount? It is the amount at which the sum of the individuals' marginal rates of substitution equal the good's marginal rate of transformation. It is said that government is able to provide the optimal amount by forcing everyone concerned to pay their full share of the good's costs—that is, to pay in accordance with the benefits which they receive from the good's existence.

The naivete of economists who believe that government can provide the optimal amount is remarkable. To subscribe to such a dubious view, one must assume not only the possession of perfect information but also that the government can get individuals to reveal their true preferences. But this procedure clearly begs the question. In the absence of such assumptions, how is the government to determine what each individual's true preferences are?

Some economists believe that voting schemes and questionnaires can reveal preferences concerning public goods. This belief, however, is a highly questionable one. Respondents may lie or may be honestly mistaken about their "desires." With voting schemes and questionnaires, individuals are not faced with an actual choice concerning public goods—they are faced merely with a choice of how to answer the particular questions posed at that point in time. (It is well known, for example, that strategic answering is a "problem" which economists conducting benefit-cost analyses must confront. Yet, this is not a mere "problem;" it casts a dubious light on the validity of using willingness-to-pay surveys and other such devices to estimate the amount of consumer surplus.)

It is clear that if true preferences are to be revealed at a specific point in time, consumers must be faced with an actual choice concerning public goods—whether or not to pay for a particular public good and, if so, how much to pay. If individuals voluntarily pay for the public good, then and only then can anyone be certain that those individuals preferred to pay for it and how much they preferred to pay. Voting by means of actual choices is the only means by which individuals' preferences can be revealed. (I emphasize voting by means of *voluntary* action because, as Aristotle states, "an act done under constraint is one in which the initiative or source of motion comes from without, and to which the person compelled contributes nothing."[2])

Such voting, however, can be present only in the free market. For it is only in the free market where property rights are specified and enforced in accordance with the full operation of private property that exchanges are mutual and voluntary[3]—that people can demonstrate their preferences by means of voluntary action. Since government financing of public goods does not involve voluntary action but coercive taxes, it is difficult to see exactly how government can provide the optimal amount of public goods.

The third argument states that individuals may be made better off by being forced to pay to finance public goods' provision. This argument rests solely on the questionable foundation of psychological speculation. Baumol and other economists who argue thus regard individuals' preferences as somehow existing independently of their actions. These economists include in their utility analyses their own speculations concerning the specific motives that drive individuals to make specific choices. Yet such analyses lie far beyond the scope of economics. In economics, all that is known is that people act. Economics is concerned with the implications of the fact that men act. Men's specific desires are relevant to economics only inasmuch as they are manifested in specific choices by taking specific voluntary actions. These are the only desires that can be used as economic data.

Economists cannot say justifiably that people can be made better off by paying coercive taxes, since they are not making voluntary choices but are forced to pay. It is impossible for an economist to know whether a person is made better off by paying taxes. I shall attempt to confirm this proposition further by considering a possible situation from a "psychologizing" economist's perspective. The futility inherent in proposing the "better off by being coerced" argument when it is supported solely by psychological speculation, will then be made more explicit.

A psychologizing economist may say that the following groups of people benefit from coercion. (1) The people benefit who paid their full share of a public good's costs in the free market. With coercion, they now enjoy an increased amount of the good without having to contribute any more toward its costs. (2) The people benefit who formerly paid for the good and who resented the "parasitic" nature of the alleged free riders, but whose resentment did not discourage them from continuing to pay their full share of its costs. (3) Certain "free riders" benefit—those who would have paid for the public good in the free market, but only if everyone else had paid. Their resentment of the "parasitic" nature of the other free riders discouraged them from paying. (Undoubtedly, Baumol and Frech refer to this latter group, among others, when they state that people may be made better off by being coerced.[4])

The first two groups benefit from coercion because they now enjoy a larger quantity of the public good without having to contribute any more toward its costs. In the free market, they had been paying such that the marginal

benefits received just exceeded the marginal costs incurred, given the quantity of the good present. In a sense, one could say that these two groups are now free riders; they are receiving additional benefits owing to the larger quantity of the good available—a larger quantity that is now being paid for by the former free riders.

Groups (2) and (3) benefit because they gain satisfaction from both paying for the good and seeing everyone else pay for it.

One discovers, however, that there also may be losers: (a) the free riders who received benefits formerly, but who believed that any payment they could have made would have imposed a cost that would have exceeded these benefits and (b) the "free riders" who either despise or are totally uninterested in the public good. It cannot be said that this latter group had benefited at all from the good's provision in the free market.

It is apparent that an economist must discard these speculative psychological categories because they are in themselves neither objectively perceptible nor deducible. If they are discarded, one can observe that under the free-market scheme the desires deducible from concrete action of winner groups (1) and (2) are identical. Both groups pay for the good. Likewise, there is no difference between the desires demonstrated in action of winner group (3) and loser groups (a) and (b): these groups refrain from paying.

Moreover, having to discard these psychological categories presents a problem for the psychologizing economist. For it exposes the fallacy and superfluity of his analyses. This discarding also poses a crucial question: how will the economist be able to differentiate between the free-market behavior of winner groups (1) and (2) in real life? How is he going to differentiate between the behavior of winner group (3) and loser groups (a) and (b) in real life? It has already been shown that asking these persons about their motivations, or requesting them to vote in some manner according to their respective motivations, cannot be depended on truly to reveal their preferences. Even if he could observe every action these persons made, an economist still could not deduce their respective specific motivations for taking certain actions.

If economists are excluded from speculating about specific motivations for voluntary actions, they are certainly excluded from speculating on coerced actions. When one combines this observation with the proposition that individuals' preferences cannot be deduced from their choices because of coercion, one is justified in concluding it impossible for an economist to know whether individuals would be made better off by coercion. Thus, it is impossible to know whether individuals would be made better off if the government finances public goods' provision.

In conclusion, I wish to reiterate what I consider to be the important conclusions of this paper, and to call attention to another aspect of the theory of public goods that provides fertile ground for further inquiry.

First, there is no guarantee that the free-rider incentive is the only incentive with which individuals are faced in regard to public goods. Because there is no such guarantee, an economist cannot make any definitive statements concerning the quantity of public goods that would be provided in the free market. Furthermore, it is not clear that the government can determine and therefore finance the optimal quantity of public goods. Finally, an economist cannot know whether individuals would be made better off if the government finances public goods' provision.

In this paper I have focused on the nonexcludability characteristic of public goods and have attempted to avoid any discussion of their nonrival consumption characteristic. While nonexcludability has implications for public goods' financing, nonrival consumption has implications for their pricing. The concept of nonrival consumption and its pricing implications are ripe for examination, especially in light of Professor Rothbard's comments concerning "cost"[5] and "joint consumption."[6] Such an examination may further provide the foundations necessary for a reconstruction of the theory of public goods.

NOTES

1. William J. Baumol, *Welfare Economics and the Theory of the State* (Cambridge, Mass.: Harvard University Press, 1965), p. 180.
2. Aristotle, *Nichomachean Ethics* (trans. M. Ostwald, Indianapolis: Bobbs-Merrill, 1975), p. 54.
3. Ludwig von Mises, *Human Action: A Treatise on Economics* (3rd Rev. Ed., Chicago: Henry Regnery, 1966), pp. 654–61.
4. Baumol, *Welfare Economics*, pp. 181–83; H. E. Frech III, "The Public Choice Theory of Murray N. Rothbard, A Modern Anarchist," *Public Choice* (Spring, 1973), p. 150.
5. Murray N. Rothbard, *Man, Economy, and State: A Treatise on Economic Principles* (Los Angeles: Nash Pub. Co., 1970), pp. 290–91.
6. Murray N. Rothbard, *Toward A Reconstruction of Utility and Welfare Economics* (New York: Center for Libertarian Studies, 1977), p. 35.