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Goods Provision**

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ALTERNATIVE FUNDING FOR PUBLIC GOODS PROVISION

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Introduction

Finding alternatives in public good financing is one of the most recent issues in the government sector. Tax-financed for pure public good is well known results further problems like externalities and economic inequity. Some scholars such as Andreoni (1993) also found that tax-financed contributions to a pure public good incompletely crowded out voluntary giving. Crowding-out was measured at a significant number, 71%. Pricing and tariffs problem in impure public goods, club goods has also made economists, policy maker and analyst start thinking to find some funding alternatives that can get rid out of those problems. Many studies have been conducted to analyze a long-standing problem in club goods such as recreation areas, highways, and communication systems that concerns pricing under conditions of average cost. The pricing solution, so called nonlinear price structures or a two-part tariffs that consists of a lump-sum license fee for each consumer and a toll per unit of utilization still have new possible problems. Lewis (1941) believes that license fee should be calculated very carefully since it has become a reason for potential club members or club good consumers to be driven away¹.

This paper only addresses the qualitative analysis in discussing benefits and costs of the society in applying some alternatives in funding public good provisions, pure and impure one. The alternatives we will discuss in this paper are joint-product good, advertising, and state lottery or video poker. This paper assumes that private sectors are allowed to participate in the public goods provision; so then discussion on whether non-government is able to provide public goods is also briefly reviewed.

¹ Ng and Weisser (1974) give a solution for this problem by considering a uniform license fee across consumers and deriving the pareto-optimal toll, license fee and membership size. They offered two alternatives if increasing returns to scale are present and full financing through congestion-internalizing tolls poses a difficulty: (i) Ramsey pricing that leads to price discrimination, and (ii) price setting equals to long-run average cost that leads to a standard regulated industry.

This paper is organized as follows: section II briefly reviews and summarizes the economic theory of public goods from previous studies on public good provision; section III discusses funding alternatives' benefits and costs; section IV reviews some studies concerning about how to finance the public good provision; and the last section will be conclusions.

Section II

Public goods are characterized by their alleged ability to confer benefits on additional persons without thereby reducing the benefits conferred on others. Moreover, public goods could not be divided among individuals and owing to non-excludability problems.

Samuelson (1955) argued in his paper on the theory of public expenditure that since the marginal cost of consuming public goods is zero, therefore consistent with Pareto optimality condition, the price of public goods should be zero. Demsetz (1964) and Minasian (1964) on the other hand doubted what Samuelson argued by stating that besides social marginal benefits there is also private marginal benefit to users of the public goods, and this benefit can be measured by pricing the public goods. Only where scarcity is absent is it a priori reasonable to charge a zero price. All other goods including public goods are such their provision forces us into resource allocation problem. So then pricing the public goods seems to be more rational than a zero pricing policy.

Another problem of public goods provision is that if the cost of policing the benefits derived from the use of these goods is low, there is an excellent reason for excluding those who do not pay from using these goods. By such exclusion we, or the market, can estimate accurately the value of diverting resources from other uses to the

production of public goods. Starting with this problem, Olson (1965) and Buchanan (1965) began rigorous analysis of the spectrum of goods to analyze what are called impure public goods, a catchall term for any goods not purely public or private which are characterized by congestion and excludable benefit. We could imply that it is also appropriate for us to apply the policy of club goods to the mechanism of public goods provision.

In public goods and public choice theory, the actors in the political marketplace are: voters, politicians, and bureaucrats. These actors make their economic choices to best further their own objectives. But each group is constrained in two ways: by the preferences of the other groups, and by what is technology feasible. The outcome of the choices of voters, politicians, and bureaucrats is the political equilibrium, which is the situation in which the choices made by voters, politicians and bureaucrats are all compatible and in which no group can improve its position by making a different choice. Two types of political equilibrium are possible: efficient and inefficient. Public interest theory predicts that governments make choices that achieve efficiency. Public choice theory recognizes the possibility of inefficient outcomes-of government failure that parallels the possibility of market failure. Later we will see that a decision of which of the alternative funding devices can be applied to fund the public good provision depends mainly on how those three actors deal one to others.

Government vs. Non-government Institutional

The debates for this controversy are still going on until today. Because of the market failure problem, which means the failure of a more or less idealized system of

price-market institution to sustain “desirable” activity², government is strongly suggested to be the provider of public goods. Pigou (1946) support this suggestion by concerning the externalities, in which the action of one economic agent influences the utility or production function of another and no mechanism for compensation exists. For the public goods like national defense, so far there is no country in this world let the private to handle the provision. What government can do in this case is a variety of activities that we can see at all fiscal levels. Governments redistribute income for equity reasons; social security, Medicaid and progressive income taxation are some examples that are seen in many nations. Promotion of economic growth and stabilization of income and employment (i.e) fiscal policy) are other important governmental activities.

On the other side, some other people suggest that private or non-government institution is better to be a public goods provider to promote the competition and therefore leads to a better efficiency, of course government intervention still represents, but not as a provider. Coase (1960) was the first economist who realized that the mere existence of an externality was not a sufficient reason for government intervention and thereby opening way for exploration of alternative institutional structures in public goods provision. Klein (1983) in his study support the private provision of public goods by stating that with private provision, the force of the private agreement is much greater, so the ground for social ties is more fertile. Demsetz (1970) moreover says that government and the policy such as taxation sometimes misrepresent the demand of public goods from the society, and the policy are unlikely to be related closely to benefits.

The study of alternative nongovernmental institutional structures has been motivated in part by the realization that governments are characterized by their own

² “Activities” broadly defined, to cover consumption as well as production of goods.

political analogues of market failure and also by the apparent success of alternative institutional arrangement for dealing with conflicts over scarce resources. Thus, nongovernmental corrections to market failures have continued to grow in importance. Some mechanisms have been proposed, including Clarke-Groves taxes, which provide individuals, in the absence of income effects, the proper incentives to reveal honestly their preferences for pure public goods. In the instance of local public goods, Tiebout (1956) hypothesis suggested that the mix of public goods-tax packages offered by various local jurisdictions would induce an optimal partitioning of population through a process of voting with one's feet. This process is believed to lead to efficiency, provided that there were no impediments to mobility and that there were a sufficient number of jurisdictions to choose from. Cornes and Sandler (1986) showed that nongovernmental alternative to the provision of public goods can be provided by club theory.

Question about what institutional structure could be the best provider of public goods now becomes more important since technological factor come into the topic. The level of exchange and police cost that are required for effective marketing and the costs of government substitute services depend on how well the technology influences the operating markets and government. Technological advances have made it possible to choose whether or not to exclude individuals from consumption of public goods and emerging technological developments will make the use of markets or governments more economic than they are now. Again, there are alternatives ways of providing and distributing consumption services to individual, and the choice between them can often involve a choice between technologies exhibiting varying degrees of excludability and

indeed, non-rivalry. Technology is one of the key answers of how nongovernmental institutional structures correct the problem of market failure and externality.

I would like to argue in this paper, that no matter what the institutional structure is, the provision of public goods should be based on the efficiency or optimality because the technological advances have made it possible either for government or non-government sector to internalized the externalities, correct the market failures and furthermore to achieved the Pareto optimality or efficiency in public goods provision.

Section III

Alternative Devices to Finance the Public Goods Provision

The use of taxation for the provision of scarce goods must be defended on grounds other than the usual rationale of their being public goods. As we have seen, insofar as efficiency is concerned, the fact that nonpurchasers from the acquisition can derive side benefits by others of these goods is inconclusive. Taxation is the most common application of zero pricing policy according to Samuelson. However, Demsetz (1964) brilliantly the weakness of this device, he mentioned indirect cost implied by zero pricing over taxing policy which is that the tax will lead to inefficiency small rates of production of other goods (assuming competitive markets). This is most easily seen by supposing that an excise tax is levied on other goods to finance the public goods. Levying of an income tax will inefficiently reduce the quantities of income generating activities undertaken by those taxes. Property tax would tend to discourage the seeking out of more valuable uses of property. Demsetz also believes that in a world in which exchange and police cost of providing alternative political devices are all zero, reliance on the political mechanism of a smoothly run democracy will result in less efficiency that will reliance

on the market. In a one-man, one-vote democracy, where votes are not for sale, the polling place will generate information that is based on majority's principles rather than on maximum benefit principles. In spite of the problem it has, for some public goods that have a high police cost, taxation may be the most practical method of finance though.

Tie-in Sales or Joint Product

Besides taxation there are other methods which are likely to arise in the market and which will lower the required police cost. As we have seen, extending the firm and the practice of sale-in-combination may overcome many instances of high exchange cost. These devices can also be used to reduce high police cost. Using famous railway example, Demsetz (1964) stated that the extension of the firm together with the combination-sale devices that are associated with differential land rent are extremely important alternatives to government action. These devices can extend considerably the usefulness of markets for revealing and measuring the value of many side effects. Klein (1983) called this alternative as tie-in sales or joint product and stated if it makes collective goods are possible to provided successfully by the private sector. There are other indirect devices for internalizing via combination sales. The activities of labeling, branding, and advertising allow for internalization of side effects by tying in the sale of information with other goods. Clubs can also provide a nongovernmental alternative to the provision of public goods.

Advertising

Radio and Television are two kinds of public goods that very well known can be provided by advertising device very successfully. Demsetz (1964) mentioned briefly how possible the advertising can finance the provision of television and radio. Further we can also take a look how Minasian (1963) critics Samuelson about how television provided in his paper. Advertising surely becomes more popular as one alternative device in financing the public goods since many governments realize the limitation of the amount of their budget and how inefficient the public goods provision by governmental institution. The takes over from government to nongovernmental institution in public goods provision surely need consideration about how non-government institutions finance their activity to provide the goods or service. Advertising initially is one of the alternative devices under a most common device so called “tie-in” arrangement. In tie-in arrangement, the public goods are provided by tying its provision with its complement private goods provision.

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