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PRIVATE PROVISION OF PUBLIC GOODS AND SERVICES

by

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## INTRODUCTION

The definition of a public good is by no means uncontroversial. Thus Buchanan (1967) states that "any good or service that the group or the community of individuals decides, for any reason, to provide through collective organization will be defined as public" (p.11). This definition is however too inclusive for my purposes. By contrast most theorists have defined public goods in the sense of Samuelson. In practice, this definition may be too narrow. The crucial distinction I will use to define goods which are "public" embraces part of both the Buchanan and Samuelson definitions, and is based on the theorists justification for their public provision because they are presumed to be goods and services subject to "market failure".

In order to put the private provision of public goods and services in this sense into historical perspective it is as well to remember that it was not until the late 19th century that the worldwide move for such public provision began. Thus most infrastructural services and the various components of spending which currently constitute the welfare state- the public goods and services I shall be considering- were privately financed and produced. The expansion of state provision in these areas was part of the general replacement of the 19th century liberal economic order by various forms of statism responding to the seemingly

irreversible egalitarian impulse that the events of 1789 had wrought. It is a nice irony that the events of 1989 ended in the collapse of the most extreme version of this impulse as embodied in the countries of "really existing socialism". But whilst centralised planning and state enterprises producing goods which could be privately provided are largely discredited in not only these countries but also most of the Third World, there is still resistance to the privatisation of infrastructural provision and of the transfers underwritten by welfare states. Technocratic economic theory in fact looks upon such "public goods" as representing clearcut cases of "market failure". We critically examine these theoretical claims in the first part and show them to be wanting.

In the second part we examine the specific arguments made for the public provision of infrastructure and the "services" of the welfare state, and show how in fact these do not provide a convincing case, as there are superior private alternatives available. As for the welfare state type of transfers (including the provisions for the two merit goods of health and education) evidence on the private alternatives is mainly to be found in developing countries, we summarise the empirical evidence on the relative efficiency of private versus public transfers in providing a social safety net in part three.

## I. THEORY

In their well-known textbook Atkinson and Stiglitz (1980) began by making a distinction between the public production and public provision of public goods. They cite defense as an example

of a good that is publicly provided but often is purchased from private producers. Their definition seeks to include any good and service that "is provided freely, perhaps in rationed amounts, to all members of society" (p.483), so that "with public provision there is not necessarily any monitoring of usage, whereas with any price, positive or negative, usage must be recorded" (ibid). They provide the standard reasons for the public provision of such goods as non-excludability of those who do not pay for the good, non-rivalrousness in consumption, and distributional considerations for merit goods such as health and education ( "for which no price is charged for consumption below a specified minimum" (p.486)). The first two characteristics define "pure" public goods in the sense of Samuelson (1954, 1955, 1958, 1969). Of these the non-rivalry in consumption is considered to be the essential characteristic of public goods which leads to the inefficiency of market provision. As a recent survey notes: " While the inability to exclude costlessly exacerbates the efficiency problems of private provision of public goods it is not essential for market failure. The fact that the marginal cost of additional users is zero is sufficient to insure market failure" (Oakland (1987) p.486).

In the standard technocratic literature the optimal conditions for the provision of the public good are then given by those derived by Samuelson, who showed that for public goods in an otherwise perfectly competitive economy the efficiency condition was given by the sum of the marginal rates of substitution in consumption of the different consumers being equal to the marginal rate of transformation between the public and private goods. The

problem in the optimal provision of public goods then reduces in this framework to eliciting the requisite information to determine the demand and individual "tax-prices" for the public good when, given the non-rivalrousness in consumption, individual consumer-taxpayers have an incentive to be free-riders.

One solution is that provided by Lindhal (1919) who showed that if individuals bargain simultaneously about the level of public goods supplies along with the distribution of the cost between them, then the bargaining equilibrium would be Pareto optimal, with the Samuelson efficiency conditions being satisfied and the individual costs paid in taxes by each consumer of the public good would be equal to his/her individual willingness to pay. These individual "tax-prices" would add up to the producer price in equilibrium.(see Johanssen (1963)) But for strategic reasons it would not be in individuals self-interest to state their true preferences, and so once again it becomes necessary to find a "non-market" solution to the problem of providing public goods and services. The subsequent literature on the public provision of public goods is large (see Sandmo(1987), Oakland(1987) for surveys), but for reasons to be discussed below, it is not relevant for public policy.

The basic reason is that the notion of "market failure" on which the technocratic approach to the provision of public goods is based is seriously misleading for public policy. The clearest statement of this was provided some time ago by Demsetz (1970,1973) who argued in contradistinction to Samuelson and mutatis mutandis the subsequent technocratic literature that the public goods

problem formulated as being the optimal provision of goods which are excludable but non-rivalrous in consumption was identical to the standard Marshallian analysis of joint supply. Thus, just as the demand curve for such a public good is obtained by the vertical summation of individual demand curves (in contrast to the market demand for private goods given by the horizontal summation of individual demands), so is the demand curve for the jointly supplied private goods, eg. meat and hides of a cow. Thus just as there will be different prices for the different products jointly produced by a cow, there will for excludable goods be different prices charged to consumers of the non-rivalrous public good. Moreover these individualised prices will be equivalent to the Lindhal "tax-prices" in the technocratic procedures. (see Ellickson (1978)). So, just as there is no reason to believe that the joint products of a cow cannot be provided efficiently by a competitive market, neither is there for excludable public goods.

But for the technocrats, it is this question of "competition" which then becomes moot for the efficiency of the private provision of excludable public goods. Working within the Arrow-Debreu general equilibrium paradigm, it is claimed that the efficiency of an outcome is to be judged by the standards of perfect competition embodied in the derivation of the conditions for Pareto efficiency by the so-called two fundamental theorems of Welfare economics. An equivalent mathematical statement is contained in the Debreu-Scarf game-theoretic notion of the core of an economy, which showed that if the number of consumers and producers is large in a private goods economy, it will converge to

the Pareto-efficient allocation. However, as Samuelson(1969) noted : "as we increase the number of persons on both sides of the market in the case of mutton and wool, we converge in the usual fashion to the conditions of perfect competition. But when we increase the number of persons in the case of a typical public good, we make the problem more indeterminate rather than less" (p.26). By "indeterminate" Samuelson implies that it will not converge to the core. This is true as has been shown by a number of game theorists (see Milleron(1972), Foley (1970)) for the Lindhal allocation for public goods which is equivalent as we have seen to the case of joint supply.

But does this matter in practice for the efficiency of the market provision of excludable public goods? Not unless one uses "nirvana" economics to judge the efficiency of an actual market economy by the Utopian ideal of Pareto efficiency. For, even for private goods it is child's play to show that deviations from the perfectly competitive norm are ubiquitous because of incomplete markets (including those for externalities). It is however claimed, most recently by Stiglitz(1995) that, neoclassical public economics can provide practical policy measures for Pareto improvements even in such necessarily imperfect real world markets, through a system of optimal taxes and subsidies. Its theoretical base is claimed to be the working out of this optimal tax structure in Greenwald and Stiglitz (1986). Its relevance is however strictly limited. First because its implementation raises questions both about the character of the mandarins required to implement these 'optimal taxes', and second, because in a dynamic economy, the optimal

structure will have to be continually changing and the requisite information will not be readily available to the authorities- as Hayek (1945) noted a long time ago.<sup>1</sup>

On the first question concerning political economy, Greenwald and Stiglitz note in a footnote :

"It might be noted that we ignore any discussion of the political processes by which the tax-subsidy schemes described below might be effected. Critics may claim that as a result we have not really shown that a Pareto improvement is actually possible" (note 7, p.234).

Quite!

Whilst on their claim:

"that there exist Pareto-improving government interventions ..[and] that the kind of intervention required can be simply related to certain parameters that, in principle, are observable" (p.231),

they are in their concluding comments forced to concede:

"we have considered relatively simple models, in which there is usually a single distortion (one kind of information imperfection, one kind of market failure). Though the basic qualitative proposition, that markets are constrained Pareto efficient, would obviously remain in a more general formulation, the simplicity of the policy prescriptions would disappear. Does this make our analysis of little policy relevance? The same objection, can of course, be raised against standard optimal tax theory. (Some critics might say, so much the worse for both.) Though simple expositions of optimal tax theory often focus on the case of independent demand curves, in the general case, one needs to know all the cross elasticities of demand, and these are seldom available. What is worse, if one abandons the unrealistic assumption of the standard optimal commodity tax formulation (eg. Diamond-Mirrlees (1971), with their assumption of 100 per cent pure profits taxes, no restrictions on commodity taxation, and no (progressive) income tax), then the informational requirements on the government are even greater" (p.258)

Quite!

To those of us who spent our misspent youth on advocating the second-best shadow pricing Little-Mirrlees rules which were the precursors of this "new" dirigisme, its policy irrelevance is hardly surprising.<sup>2</sup> As I noted in The Poverty of Development



Economics : "the very analysis which seemingly establishes a prima facie intellectual justification for the Dirigiste Dogma provides, in its fullness, the antidote" (p.16).

So what has gone wrong in the theoretical discussion of "market failure", which has led our mainstream theorist to look upon all public goods as important instances of such failure, so that even the provision of excludable public goods is assumed to require tax-finance? It is due to the subtle but important shift that has occurred in economists notion of competition from the classics -spanning Adam Smith to J.S.Mill- to modern mainstream economics. The latter's intellectual moorings are provided by the so called Arrow-Debreu theory of general equilibrium, which it is claimed gives precision to the claims of the classics on the virtues of the market (see Arrow and Hahn). But as Blaug (1987) points out one needs to note:

" the subtle but nevertheless unmistakable difference in the conception of 'competition' before and after the 'marginal revolution'. The modern concept of perfect competition, conceived as a market structure in which all producers are price-takers and face perfectly elastic sales curves for their outputs, was born with Cournot in 1838 and is foreign to the classical conception of competition as a process of rivalry in the search for unrealized profit opportunities, whose outcome is uniformity in both the rate of return on capital invested and the prices of identical goods and services but not because producers are incapable of making prices. In other words, despite a steady tendency throughout the history of economic thought to place the accent on the end-state of competitive equilibrium rather than the process of disequilibrium adjustments leading up to it, this emphasis became remorseless after 1870 or thereabouts, whereas the much looser conception of 'free competition' with free but not instantaneous entry to industries is in evidence in the work of Smith, Ricardo, Mill, Marx and of course Marshall and modern Austrians. For that reason, if for no other, it can be misleading to label classical economics as a species of general equilibrium theory except in the innocuous sense of an awareness that 'everything depends on everything else'" (p.443).

It is equally surprising that the "Chicago school" as

Kirzner for instance has noted "maintains that the competitive market economy displays systematic regularities only to the extent that it can be reasonably fitted into the perfectly competitive mold. Subsequent [to Frank Knight] generations of Chicago theorists would maintain that as a matter of fact the real world competitive market can so be fitted" (p.103). Thus we are now in the situation where most theorists on both sides of the market-dirigiste divide use the Arrow-Debreu model as their paradigm.

This has always seemed bizarre to me. For it is child's play to show that because of incomplete markets, external effects and the existence of public goods, "market failure" defined as deviations from the perfectly competitive norm is ubiquitous, but the corollary that this then requires massive corrective public action is highly dubious to say the least. For as Hayek amongst others has emphasised any real world market is a discovery process which unlike "planning" makes use of the division of knowledge which is unavoidable in any real world economy. The actual market outcomes for the provision of private or excludable public goods cannot be judged by the irrelevant theoretical ideal of perfect competition. There is no reason to believe, in the abstract that efficient private provision cannot be made for excludable public goods, just as there is no reason to believe that the provision of the myriad of private goods in imperfect markets is inefficient- in the sense that it could be improved upon by some real world alternative.

This leaves non-excludable public goods, which are properly categorised as collective goods, of which the most important are national defense and the legal system. Though some libertarians (see Hoppe) would deny that even for these collective goods tax finance is needed, I can see no plausible way in which these core governmental functions can be provided without tax finance. Thus they will have to be publicly provided though not necessarily publicly produced. As my topic is the private provision of public goods, no more need be said for my purposes about these collective goods.

## II.PRIVATE VERSUS PUBLIC PROVISION OF SOME MAJOR PUBLIC GOODS

The major public goods most States have sought to provide through tax finance are various aspects of the infrastructure as well as transfer payments related to the Welfare state. In developing countries many private goods were also provided and produced in public enterprises, but the justification for this was always ideological and not economic. With the events of 1989 - as much as the manifest inefficiencies associated with such enterprises - having discredited the underlying socialist ideology, nearly all countries at least in principle accept the need for their privatisation. In this part we examine to what extent the excludable private goods and services still ubiquitously provided through tax-finance can be privatised. I deal first with infrastructure, and then with welfare (including provision for the merit goods of health and welfare).

### INFRASTRUCTURE<sup>3</sup>

The public provision of infrastructure has been justified on the grounds of it having public goods aspects (uncongested highways or parks) as well as being natural monopolies. It being argued that private producers in such natural monopolies will inevitably exploit consumers, so there is at least a need to regulate such utilities, and it may even be cost effective to convert them into public enterprises. But is this viewpoint correct?

#### 1. "Competition for the Field" vis a vis "Contestable Markets"

The UCLA industrial organisation school has provided a distinctive and important answer to this question, which unfortunately is not as well known as the various dirigiste regulatory regimes currently being touted by mainstream theorists. The basic idea has been labelled "competition for the field" by Harold Demsetz, following a distinction due to Edwin Chadwick in the 19th century between it and "competition within the field".

It differs from the later development of the notion of "contestability", in so far as the latter is concerned with

competition between an existing incumbent and potential entrants to the natural monopoly. By contrast, competition for the field as its name suggests is concerned with the competition for becoming an incumbent in the first place. This has important consequences for the price-output configuration and hence the competitive efficiency of the economy. In the theory of contestable markets it has been shown that, in equilibrium, the only rents the incumbent of a natural monopoly can acquire are the incumbent's sunk costs, associated with the monopoly which a new entrant would have to incur in moving in and out of the monopoly. If an outsider can enter and exit a market without incurring any transition costs, then the natural monopoly would be perfectly contestable, and despite economies of scale and scope, the incumbent insider would not be able to garner any rents. But as there are unlikely to be many natural monopolies in which these transition costs are insubstantial, from the view point of contestability theory insiders would usually be able to extract rents equal to these transition costs from consumers.<sup>4</sup>

The situation is very different from the viewpoint of competition for the field. Here the competition takes place before production begins, with would-be natural monopolists competing for the right to serve the market in which each rival could serve the market at the lowest cost, adopting the best technology. In this competition for the field as Demsetz showed in his famous essay "Why regulate utilities?", the potential rents of the natural monopoly would be competed away with the best bid amongst the rivals being accepted by the community for becoming the incumbent of the natural monopoly. Thereafter, there would be a distinction between insiders and outsiders, and substantial transition costs for the latter- in sharp contrast with the conclusions of contestability theory. For without these entry barriers, the potential cost reductions associated with scale economies may not be realised by the successful incumbent. How often there should be competition for the field, or equivalently for how long a bidder should be given a franchise to the natural monopoly, will depend upon the particular supply and demand conditions for the output of

the natural monopoly. Also, there is no reason why there should not be contractual conditions attached to the possibility of renegotiation of the terms of the franchise before its expiry. In fact given uncertainty on this account, the rivals bidding for the franchise will take account of these renegotiation costs in their bids. Similarly, if there are likely to be future cost reductions because of technical progress, which would lead to future rents for the incumbent, these too would be taken into account in the rivals bids for incumbency if they can be forecast, and the best bid again will involve the whittling away of these potential future rents.

As regards windfalls, which could be positive or negative, there need be no inefficiency resulting from this unavoidable uncertainty. For just as in any real world market, say the near perfect markets for commodities, economic agents suffer positive and negative windfalls all the time without this leading to any persuasive case for regulation. However, in the case of natural monopolies, as these windfalls could continue for some considerable period of time, there could be political pressure for their curtailment if they are positive, and the danger of bankruptcy for the incumbent and hence of a disruption of supply if they are negative. This would provide a case for some renegotiation clause in the contract granting a franchise to a natural monopoly.

But what cannot be laid down is some ideal form of contract. For given the ubiquitousness of imperfect information and the associated uncertainty, agents can only search for the best available mutually advantageous contract. In Hayek's felicitous phrase the market is par excellence "a discovery process".

## 2. Game Theory

In contrast with this UCLA view on regulation we have the emerging technocratic view on the regulation of natural monopolies. This is based on the frail framework of non-cooperative game theory.<sup>5</sup> As the leading lights of game theory recognise, it is of very limited practical relevance because of the plethora of Nash equilibria which can be generated (Binmore(1990), Kreps(1990)). Though of use in training the intellectual muscles of the young, it

has not as yet yielded any robust policy relevant results in my view.<sup>6</sup>

#### ON PRIVATISING INFRASTRUCTURE SERVICES

So how in practice should the current and future provision of infrastructural services in electricity, natural gas, water, sewerage, roads, telecommunications, be dealt with? Though there are some important differences between these different "utilities", they have one common feature. The natural monopoly element in their provision consists essentially of the "networks" they use to "ship" their products. They provide common "transportation" facilities for all possible users rather than being dedicated to individual ones.<sup>7</sup> Thus an electricity grid, a gas pipeline, a system of telephone lines, water and sewage pipelines, railway track and of course roads are "networks". All other aspects of the provision of the services of these utilities can be made competitive by allowing multiple users of these networks to service consumers.

Thus consider the provision of electricity or gas. There are three stages, and ideally they should be separated by having for instance separate companies in each. First there is the production stage, second the transmission stage through the common "network" and finally the distribution stage to consumers. There is no reason why the first and last of these stages should not be competitive. If rival firms are free to produce electricity as they see fit, and to service users on the common "network" there is no intrinsic reason why the production and distribution of electricity need require regulation. It can be produced and distributed like any other commodity by competing firms.<sup>8</sup>

This leaves the "common" network. Here there are two choices. The first, is for it to be communally owned and financed through taxation, but built and run through a franchise given to the bidder who offers to build and supply the network and its services at lowest cost to users. The services of the network would then be available to any user at a fixed fee, or if thought desirable because of administrative costs say- free. This is the solution for instance adopted for most public roads in many

countries.

The second is a purely privately financed alternative. Consider electricity. First, each regional grid is set up as an independent private time-bound franchise. This franchise is then auctioned to the bidder who offers to execute the quantity - quality terms of the franchise at the lowest cost to users during the fixed period the franchise will operate. The bidder who bids most for the existing grid whilst meeting the other franchise conditions gets the franchise for the stipulated period.

At the end of the franchise there are two options. One, is for the grid to return to the "community" which then auctions a new franchise for the grid as before. This reversal of the assets in the expanded "network" to the community is very much the practice, for example, which China has adopted in its foreign direct investment projects.

The other alternative is for the incumbent of the grid to obtain the highest price anyone is willing to pay for the grid, subject to the new price-quality and expansion conditions. Of course the incumbent would also be able to participate in the bidding procedure.

There are a number of reasons to favor this latter alternative rather than have the "networks's" capitalised value revert to the community at the end of the franchise. As can readily be shown in the second form of contract where the incumbent recoups the capitalised value of the grid from the highest bidder for the new franchise, the price charged users of the network, and hence the price to final consumers will be lower than with the first option where the grid reverts back to the community.<sup>9</sup> Of course, what the consumer gains through lower prices, he loses through the loss of tax revenue which would accrue if the grid reverted back to the community. But if, for reasons of what may cryptically be called political economy the social value of a dollar of tax revenue is less than one dollar, in contrast to what I believed in my misguided youth,<sup>10</sup> consumers may be better off getting their dissipation of the potential rents from the natural monopoly through a reduction in prices than through the government budget.

The second reason for preferring the second option where the incumbent "sells off" the grid to the highest bidder after the end of his franchise is that this reduces the time inconsistency in his investment decisions which could arise with the other option of the grid reverting to the community. For in this latter case, he would have an incentive to underinvest in both maintenance and expansion towards the end of his incumbency, and thus run down the assets of the natural monopoly. This would be avoided if he could obtain the capitalised value at the end of his incumbency of the assets he bought, maintained and created during his franchise.

Finally, as the incumbent will usually be a private firm, the trading of its shares on the stock market would permit takeovers by other private firms, which could prevent any monopoly developing on the networks even during the franchise period as has so often happened under regulation.

Now move to the next stage, the transmission of electricity at the intra-regional or local level. The same scheme would be applicable. Intra-regional or local franchises would be set up and auctioned on the same principle as the regional grid.

With any user of the "network" having access to it at the fixed fee determined in the auction for the "network", any company could set itself up without any government regulation to sell electricity to consumers. With the generation of power privatised, these distributing companies would be able to purchase electricity from the cheapest source given the varying demands for power. In fact as has happened in the UK a spot market for delivery of power by competing generators would develop. These generators could also end up specialising, with some finding it profitable to provide base load and others peak load power. There would be no need for government intervention of any sort in either the production or distribution of power.

Similar schemes can be set up for all the other infrastructural services, which do not therefore need to be funded from tax revenues. This would also prevent the regulatory jungle and rent-seeking that the botched privatisation of utilities in the UK has promoted (see Robinson, Beesley (ed)).



Finally it maybe noted that in many countries the contracting out of the provision of many local public services e.g. garbage collection, which was pioneered in the UK is now growing.

#### INCOME TRANSFERS AND MERIT GOODS <sup>11</sup>

Two common justifications of public transfers to provide individuals with an income/consumption level higher than it would otherwise be are for purposes of insurance or to serve distributional objectives- these include the provision of the merit goods of health and education.

In considering these social transfers it is useful to distinguish between safety nets and welfare states. This distinction then turns essentially upon the universality of coverage of transfers under a welfare state as opposed to the restriction of collectively provided benefits under a social safety net to the "needy". Welfare state advocates ,however, are against such targeting as they favor universality as it alone in their view provides a feasible means to achieve the ends sought to be subserved by a social safety net. Some (e.g., Barr (1992)) have argued that, because of the ubiquitousness of imperfect information, markets for risk will be inherently imperfect. Hence, universal welfare states are required as part of an efficient solution to deal with "market failure". This last argument is dealt with below in the context of health care.

An implicit objective of those who argue against targeting and in favor of universal welfare states is distributivist. This is not surprising as they are by and large socialists who subscribe to the common socialist end of egalitarianism. But as I have argued elsewhere (Lal (1993), Lal-Myint (1996)), there is no universal agreement about ethical norms such as equality, so egalitarianism must necessarily be eschewed.<sup>12</sup> The universalized public transfers of a welfare state can not be justified on some universalist ethical grounds.

The need for a social safety net -- to be found in most economies -- is not necessarily a reflection of morality, nor of public action seeking to correct "market failures", but is due to the ubiquitousness of risk in men's lives and the possibility of

reducing its individual burden through various forms of mutual assurance. This could take various forms: through market processes such as insurance, as well as social institutions like the family. The term "social" needs to be clarified in this context. Though it has become coterminous with public (state) action, in its original sense it refers only to co-operative action -- private or public. In this sense to say that there is a need for a "social safety net" does not prejudice whether this should be provided through private or public action.

In this context it is useful to examine the argument of those who seek to justify the welfare state on grounds of market failure. For concreteness this is done in the context of health care.

#### Health Care and Market Failure

The major source of market failure it is claimed is imperfect information (Arrow, Barr). This covers: (i) the purported asymmetry of information between consumers and producers, which could allow the latter to exploit the former; (ii) the lack of perfect information about the specific risks faced by individuals which faces insurance companies with problems of adverse selection and (iii) the lack of information on the present state of nature of the insured which could provide the insured with an "incentive to change this unobservable state in response to insurance coverage" (Pauly, p. 45), that is the problem of "moral hazard". Given these departures from the perfect information assumption required for the perfectly competitive norm of nirvana economics, some (e.g., Barr) have concluded that as "the advantages of competition are contingent on perfect information", greater competition in the health market is undesirable, and hence some form of socialized medicine is required.

But this conclusion does not follow (see Culyer). For, since Stigler's pioneering work, it is well-known that information is a good like any other -- with costs and benefits. With positive costs of acquiring information, it will never be privately or socially optimal to have perfect information in any market. The optimum being given as usual by the equation of the marginal

benefit with the marginal cost of its acquisition.

(i) Ignorant Consumers and Informed Producers: Hence, there is no essential difference between health care and many durable goods markets, in which the producers know more about their goods than consumers. The market response in both cases is for consumers to rely on the producers reputation, second opinions (and in durable markets: personal comparisons of different products), and third party recommendations (for instance through the recommendations of consumer surveys). How much better the consumer wishes to be informed will depend upon his preferences and the costs of acquiring the information. But given the irreducible uncertainty inherently characteristic of the health market, he can never be perfectly informed.

In this respect the choices made in health care are closer to investment decisions about creating productive assets (e.g., factories) whose output and profitability depend upon what will happen in an irreducibly uncertain future. After the debacle of socialist economies engendered by planners hubris, it is now recognized that, irreducible uncertainty or ignorance about certain aspects of the future is unavoidable. To assume it away or reduce it to actuarial risk in some form of centrally imposed plan will lead to worse outcomes than those arising from the decentralized bets placed through a market (see Lal, 1983). Just as financial and economic health is not served by technocratic production planning in an irreducibly uncertain world, nor is physical health likely to be achieved through suppressing the market in health care.

Furthermore, societies have developed means, through internalized moral codes for doctors, to minimize the dangers of doctors exploiting less well informed patients. This is represented by the Hippocratic oath, as well as the "trust" involved in the doctor-patient relationship. In this respect the health care market is likely to be less "exploitative" than that for say used cars!

(ii) Moral Hazard and Adverse Selection: Adverse selection

and moral hazard are again unavoidable features of any real world insurance market.

(a) Moral Hazard: The technocratic public economics school argues that, with imperfect information, the ideal insurance contracts which would exist in a "complete markets" Walrasian equilibrium cannot be offered in any real world insurance market, because of moral hazard and adverse selection. (see Arrow (1965) and Barr ) But is this normative use of the ideal Paretian optima to judge the efficiency of how an actual market outcome copes with problems of moral hazard and adverse selection, justified?

Demsetz is devastating in his negative answer to the above question. He writes:

Moral hazard is identified by Arrow as a unique and irremedial cause of incomplete coverage of all risky activities by insurance. But in truth there is nothing at all unique about moral hazard and economizing on moral hazard provides no special problems not encountered elsewhere. Moral hazard is a relevant cost of providing insurance; ...A price can be and is attached to the sale of all insurance that includes the moral hazard cost imposed by the insured on the insurance companies. And this price is individualized to the extent that other costs, mainly costs of contracting, allow. The moral hazard cost is present, although in different amounts, no matter what percentage of the value of the good is insured. The moral hazard problem is no different than the problem posed by any other cost. Some iron ore is left unearthed because it is too costly to bring up to the surface. But we do not claim ore mining is inefficient merely because mining is not "complete". Some risks are left uninsured because the cost of moral hazard is too great and this may mean that self-insurance is economic. There is no special dilemma associated with moral hazard, but Arrow's concentration on the divergence between risk shifting through insurance and risk shifting in the ideal norm, in which moral hazard is presumably absent, makes it appear as a special dilemma.  
(p. 8)

In other words, much of this technocratic analysis smacks of nirvana economics. The important question as Demsetz notes is "Do we shift risk or reduce moral hazard efficiently through the market place? This question cannot be answered solely by observing that insurance is incomplete in coverage. Is there an alternative

institutional arrangement that seems to offer superior economizing?" (p. 9). This question is now being asked by theorists concerned with the positive economics of insurance. The answers they have come up with in designing their so-called "incentive compatible" contracts in the presence of moral hazard, seem to mimic the market. Thus Laffont (p. 186) finds that such a contract will have both co-insurance and deductibles as essential features!

(b) Adverse Selection: What of adverse selection? As this is the case which Barr (1992) uses explicitly to derive his dirigiste conclusions, it may be worth spelling out the arguments within the technocratic framework more fully. This brings out both why they do not work, and also why as in the moral hazard case there is no a priori case that can be made for any necessary inefficiency of the market solution when adverse selection is an essential feature of health or any other insurance market.

Even in perfectly competitive "full information" markets, efficient insurance contracts will differentiate between different types of risks. Differential contracts with actuarially fair premia based on each individual's "riskiness", and which fully insure the risks, would be offered. This separation of risks, pejoratively labelled "cherry picking", would thus be an essential feature of these perfectly efficient contracts. No contract which pools the risks by charging a common premium for different risks would be Pareto superior (that is could make some one better off without making someone else worse off) to these differential contracts. A pooling contract would thus have to be enforced by legislation and

would imply that low risk individual's subsidize the high risk ones. Eschewing distributional considerations, there can be no "efficiency" justification for these enforced transfers.

Second, with imperfect information, under competitive insurance there would again be a separation of contracts, with full insurance contracts to attract the high risks, and partial insurance contracts (with deductibles say) to attract the low risk individuals. The high risk individuals would even under these contracts -- devised to overcome adverse selection -- be as well as in the case of perfect information. But the low risk individuals would be worse off. This does not however imply that a politically enforced pooling contract would be Pareto superior. In many cases it will not be, and in those cases where some pooling is Pareto superior, it is likely that, competitive insurance companies will offer a mix of contracts, some of which could -- as they do in the real world -- involve pooling. *There is no a priori reason therefore to believe that with adverse selection, and/or moral hazard, there is any political solution which is Pareto superior to that provided by a competitive market.*

This leaves the argument based on alleviating poverty in providing health provision to the "deserving poor" - as they were called by the Victorians. As this distributional argument is also common to the public provision of the other merit good education, the same solutions would apply.

### Education

For education there is no case for monopolized state production as Mill knew over a hundred years ago and as Hayek reiterated in his Constitution of Liberty. As J.S. Mill put it: "If the country contains a sufficient number of persons qualified to provide education under government auspices, the same persons would be willing to give an equally good education on the voluntary principle, under the assurance of remuneration afforded by a law rendering education compulsory, combined with state aid to those unable to defray the expense" (p. 161). State action only needs to finance the poor (ideally through vouchers earmarked for purchasing this merit good).

### Pensions

Social security pensions form a major component of social expenditures, in the West, in the more advanced developing and former socialist countries. They are again justified on "insurance" grounds. In most welfare states, they are pay-as-you-go schemes. In the light of demographic trends in most ex-socialist countries, they are as in the West an economic time bomb (see Lapidus and Swanson (1988), and IMF et. al.(1991), for socialist countries, and Lal and Wolf(1986), Boskin(1986), Feldstein (1995) for the West). In countries where the welfare ethos has become widespread, there is the danger that, it maybe rational to be feckless in providing for one's old age as "the rotten kid meets the good samaritan" (see Bruce and Waldeman (1990)). Hence, some state compulsion in ensuring everyone provides for a basic pension maybe desirable. As in Chile (see Castaneda (1992)) this could be done through

earmarked taxes that are put into fully funded and actuarially fair, private pension funds. For many Western countries and particularly the US as Feldstein (1995) has recently and powerfully argued, the privatisation of unfunded social security pension schemes is of considerable importance on purely efficiency grounds.

This leaves various forms of income support programs -- including disability and unemployment insurance, and transfers to alleviate low end poverty -- which are common in many Western welfare states, and which are being recommended for the transitional socialist economies (see Barr (1992a), Paul), and developing countries (see UNDP). These schemes involve unavoidable "tax-cum-subsidy distortions" because lump sum taxation and subsidization is normally not feasible. The econometric attempts to provide quantitative evidence of the effects on labor supply, consumption and savings of these distortions has been inconclusive (see Atkinson) -- another example of the emerging law that "all econometric evidence is equivocal"! But it maybe useful to examine the possibilities of privatising this component of public services by examining the evidence from developing countries on the relative efficacy of private versus public transfers in providing a social safety net.

### III. PRIVATE VERSUS PUBLIC TRANSFERS IN SOCIAL SAFETY NETS

As the risk of income shortfalls over an individual's lifecycle is ubiquitous, it would be extraordinary if most societies had not found means of insurance against these risks. Historically, destitution and conjunctural poverty were dealt with through five means. The first was through institutions like the



Church, which took one of its primary tasks to be the care of the poor. Individual charity most often through interhousehold transfers from an extended family provided a second means. A third was through organizations of the poor themselves: through self-help organizations (e.g., rotating credit associations like the contemporary Grameen bank), and the mutual friendly societies of 18th and 19th century Britain discussed in Lal (1993a). Fourth, were various underworld organizations engaged in crime. Finally, various forms of insurance embodied in interlinked contracts in factor markets, have historically been the major way of dealing with conjunctural poverty in traditional village economies (see Platteau).

(A) Private Transfers: As in most Western welfare states, public transfers have by and large replaced private transfers for alleviating destitution and conjunctural poverty,<sup>13</sup> much of the evidence on the relative efficacy of private versus public transfers comes from developing countries. Here the role of private inter-household transfers is particularly relevant. Cox and Jimenez (1990) provide evidence to show that they are of considerable quantitative importance in developing countries.

The motivation for these transfers is of some interest. If they were purely altruistically determined (as in Becker's famous "rotten kid" theorem),<sup>14</sup> then it would imply that with intergenerational transfers between parents and children there would be dynastic families which would behave as though they were a single infinite lived individual. Barro's famous Ricardian equivalence would then hold, with public policies such as debt financing and social security being completely neutralized by countervailing private action. <sup>15</sup>

As these implications seem to be highly unrealistic, attempts have been made to explain private transfers as part of an exchange process involving an implicit mutually beneficial contract say between parents and children, who in exchange for their educational expenditure, are committed to looking after their parents in their old age.<sup>16</sup> Lucas and Stark have developed an intermediate model in which both altruism and self-interested exchange are the motives for transfers, and found that it applies satisfactorily to Botswana.<sup>17</sup> The empirical evidence on the motives for private transfers finds them to be mixed.<sup>18</sup>

So studies have tried instead to directly estimate the crowding out effect of public on private transfers. Most of these have been done for the U.S. and find some small crowding out effect. But these are limited by the fact that private transfers form such a marginal part of total income transfers in developed countries, so that marginal changes in them are unlikely to provide robust evidence of crowding out. The developing countries where public transfers are limited is therefore of greater interest.

There are only two available studies. For Peru, Cox and Jimenez (1992) found that in the absence of social security in urban Peru, private inter household old age support would have been higher by 20%. So there is considerable but not complete crowding out of private by public transfers. A study of the Philippines by Cox and Jimenez (1993) is probably more relevant.<sup>19</sup>

They found that transfers were widespread and large. They then simulated the effects on these private transfers of three public policies; unemployment insurance, social security and income grants targeted to the poor. For unemployment insurance they find: "the reduction in private transfers is nearly as large as the boost in income that unemployment insurance gives to households. Ninety-one percent of the increase in household income from unemployment insurance is offset by reductions in private transfers" (p. 19). For retirement income they find that "private transfers would be 37% higher" if retirement income did not exist. On a program to completely eliminate poverty by giving each household the difference between its actual income and poverty line income, they

find that after private transfers adjust: 46% of urban and 94% of rural households below the poverty line before the program would still be below the line after the program! Moreover they give reasons to believe that their estimates of crowding out are biased downwards. This study should certainly give anyone seeking the public transfer route to deal with poverty related to risks in the labor market considerable cause to pause.

These doubts are further strengthened by noting that, private transfers by relying on locally held information, and on extra economic motivations like trust and altruism, can overcome many of the problems of adverse selection, moral hazard etc., which have so exercised the "nirvana" economics 'market-failure' school. For as Cox and Jimenez summarizing the empirical evidence conclude "private transfers equalize income; private transfers are directed toward the poor, the young, the old, women, the disabled and the unemployed" (p. 216).

Public Transfers: Perhaps public transfers can do even better, so that we should not worry if they crowd out private transfers? Public subsidization of the two merit goods -- health and education -- are the major public transfers in nearly all developing countries. In addition social security is important in many Latin American countries. Lal and Myint (1996) summarising these studies of public transfers in developing countries found that their incidence is generally regressive, and that they are very imperfect means of helping the poor.

One revealing piece of evidence suggesting that public transfers not only are more inefficient in poverty redressal than private transfers but also crowd them out is provided by a 1990 World Bank study. This

traced public social sector expenditures for nine Latin American countries in the 1980s...[and] found that real per capita public social spending on health, education, and social security fell during some part of the 1980s in every country in the study. The share of health and education expenditures in total government expenditures also fell, even as that of social security rose. In spite of lower funding, and no apparent increases in equity and efficiency, social indicators generally improved in the 1980s.(Grosh(PH Box 3.4))

Apart from obvious statistical and other biases which might explain this anomaly, the most plausible explanation provided is that, it might be due to "the growing role of non-governmental organizations, and the response of the market oriented private sector to enhanced expectations and demand". That is there was probably a "crowding in" of more equitable and more efficient private transfers to replace the decline in public ones!<sup>20</sup>

Political Economy of Transfer States: Public transfers are clearly not the panacea being touted by socialists of various hues.<sup>21</sup> My general conclusion echoes that of a World Bank report on Honduras: "most social programs benefit primarily the middle class and rich,... Social spending pays for services that might be financed by the private sector" (PH. Box A3.5).

This "middle class capture" of the benefits of social expenditure is not confined to developing countries. It has also been documented for the welfare states of the OECD <sup>22</sup> A systemic process is clearly at work. It is the political economy of redistribution in majoritarian democracies. In a two party majoritarian democracy, politicians will bid for votes by offering transfers of income from some sections of the populace at the expense of others. Models of this political process (which do not need to assume a democracy, but rather the interplay of different pressure/interest groups ) <sup>23</sup> show that there will be a tendency for income to be transferred from both the rich and the poor to the middle classes -- the so-called "median voter". Even if social expenditures are initially intended to benefit only the needy, in

democracies such programs have inevitably been "universalized" through the political process, leading to what are properly called transfer rather than welfare states, which primarily benefit the middle classes.

The poverty alleviation that may occur as a by product of the expansion of the transfer state is moreover bought at a rising dynamic cost. With the universalization of various welfare schemes, political entitlements are created whose fiscal burden is governed more by demography than the conjunctural state of the economy. With the costs of entitlements rising faster than the revenues needed to finance them, the transfer state, sooner or later, finds itself in a fiscal crisis. This process is discernible both in developing and developed countries.

For developing countries the Lal-Myint study shows how this process is clearly visible in those countries in our sample (Uruguay, Costa Rica, Sri Lanka, and Jamaica) that under the factional pressures of majoritarian democracies have created and expanded welfare states. All four welfare states were financed by taxing the rents from their major primary products. With the expansion of revenues during upturns in the primary product cycle, political pressures led to their commitment to entitlements, which could not be repudiated when revenues fell during the downturn in the price cycle. The ensuing increase in the tax burden on the productive primary sector (to close the fiscal gap) led to a retardation of its growth and productivity, and in some cases to the "killing of the goose that laid the golden egg". Thus whilst there was undoubtedly some poverty redressal as a result of the

expansion of these welfare states, over the long run the entitlements created damaged economic growth on which they were predicated, and hence eventually became unsustainable. Similar processes leading to the fiscal crisis of the state are to be found in many other developing countries.<sup>24</sup> Not surprisingly, many of these countries with over extended welfare states are now seeking to rein them back.

Very similar problems are also visible in the more mature welfare states of the OECD.<sup>25</sup> In some countries which had gone furthest down the public welfare route, the late 1980s and 1990s saw a growing questioning of the welfare state in the West, and in some cases its partial or virtual dismantling.

#### POLICY IMPLICATIONS.

What are the conclusions for policy which follow from this discussion.

The first is that nothing should be done which would damage the existing private institutions and channels which provide for private transfers to deal with destitution and conjunctural poverty. "Forbear" should be the watchword for every proposed scheme which seeks to alleviate poverty through public transfers.

The second is that, if for whatever reason, public money is sought to be transferred to the "needy", this is best done through private agencies. Particularly for the 'merit goods' - primary health care and primary education - even if there is a case for public financing there is none for public production. As the World Bank's Bolivia Public sector expenditure review noted:

in the health sector, NGOs deliver the most effective service. In education, several communities have asked

the largest NGO to manage their public schooling, indicating the perceived better quality education offered, even with much higher student: teacher ratios in NGO schools. ...The public education system spends more than 10 times more per child than the largest NGO, which provides high-quality education.

(PH, Box A3.1; also see Jimenez et. al. (1991))

The third, is that the very problems of moral hazard, adverse selection and monitoring cited by "nirvana economics" as requiring public insurance, in fact argue for fostering the alternative private route which capitalizes on the comparative informational advantage of private agents with local knowledge . These private welfare channels can be promoted by various methods of co-financing them with public funds.

A radical proposal maybe worth considering. This would channel all foreign aid and domestic public expenditure on social programs and that for "safety nets" for alleviating destitution and conjunctural poverty through NGOS (national and international charities). But to avoid the crowding out of private by public transfers this public funding should only be provided on a matching basis. The only reservation I would have about such a scheme is the continuing economic illiteracy shown by so many NGOs's.

#### ENDNOTES

<sup>1</sup>Newberry and Stern have advocated the application of this optimal tax theory to developing countries. But as they note it assumes that "the government has coherent, unified and largely benevolent objectives, captured in the social

welfare function, and we search for ways in which the tools available to it can be used to improve the measure of welfare" (p.653). That the theory is irrelevant for most developing countries is patently obvious as most of their polities do not even come close to these assumptions about their character. Whilst if a predatory state or rent-seeking society is accepted as likely, the optimal tax rules are no longer valid even within this framework. (see Lal (1990a)). For a trenchant critique of optimal tax theory see Harberger (1987), who moreover notes that it is based on a philosophy of government- the social engineering view- which differs from that of classical liberalism.

<sup>2</sup>See Lal (1980) for one of these exercises in irrelevance, and Lal (1993) Chp.1, of how I came to eschew this public economics approach to public policy.

<sup>3</sup>This section is based on Lal(1996).

<sup>4</sup>I have found this theory particularly useful in thinking of the natural monopoly which is the State. In Lal (1988) I develop a model of the predatory state in which contestability plays a central role. The model is used to explain the rise and fall of empires in India over the millennia (see *ibid*, Ch.13.2).

<sup>5</sup>See for instance Gilbert and Newberry (1994), which also has references to this literature.



<sup>6</sup>But see Laffont and Tirole (1993) for an attempt to provide a textbook for the dirigiste technocratic regulator!

<sup>7</sup>See Kay (1994) for this illuminating characterisation of the natural monopoly element of utilities. But I do not subscribe to the technocratic regulatory conclusions of his argument.

<sup>8</sup>Recently the notion of "network externalities" has been advanced by Katz and Shapiro(1985), which are claimed to lead to market failure. But most of these for instance in computer networks, telecommunications, are examples of pecuniary externalities as rightly emphasised by Liebowitz and Margolis (1994). But as Buchanan and Stubblebine (1962) pointed out a long time ago such pecuniary externalities are Pareto-irrelevant and do not constitute examples of market failure. (Also see Lal(1994),Chp.11)

<sup>9</sup>Thus suppose the sum bid by the successful incumbent for the existing grid is  $K$ , and the price he agrees for the bid is  $p$  per unit, and also the level of expenditures on expansion and maintenance he incurs to meet the 'quality' dimension of the franchise are  $E(t)$  and  $M(t)$  in any year  $t$ . The quantity of the service he hopes to sell in any year is  $Q(t)$ . If his discount rate is  $r$ , and the franchise's life is for  $T$  years, the incumbent's present discounted value of his costs and benefits for the first option, under which the grid

reverts back to the community at date T, will be given by:

T

$$\int_{t=0}^T \{ [p \cdot Q(t) - E(t) - M(t)] / (1+r)^t \} - K = 0 \quad (1)$$

If he can sell the grid under the second option, at the end of the franchise for the sum  $K'(T)$ , he will with the same quality requirements concerning expansion and maintenance as before, bid a price  $p'$  to break even, so that :

T

$$\int_{t=0}^T \{ [p' \cdot Q(t) - E(t) - M(t)] / (1+r)^t \} - K + K'(T) / (1+r)^T = 0 \quad (2)$$

As the potential incumbent should be indifferent between these two choices, (1)-(2) = 0, which yields:

$$p - p' = K - K'(T) / (1+r)^T \quad (3)$$

The price under the second option will be lower depending upon the expected capitalised value of the grid the current incumbent can garner at the end of his franchise.

<sup>10</sup>See Lal (1980), and Lal (1993) Chp.12, for why I now believe the shadow price of public funds is likely to be less than unity.

<sup>11</sup>This part is based on Lal-Myint (1996) Chp. 9.

<sup>12</sup>The technocratic approach to public policy has been based on the welfare economics pioneered by Bergson and Samuelson and which Sen has labelled "welfarism". But the trouble with this has always been: how are the judgments about the social good which form the social welfare function to be derived? As Sugden notes: "most welfarists think of social welfare judgments as being made by a particular individual, but from a neutral standpoint. This basic idea can be found, for example, in Arrow's (1963, p. 107) ethically neutral "public official...it can be traced back to Adam Smith's 'impartial spectator'" (p. 1949). In classical utilitarianism, pleasure provided the measure of goodness. But this view flounders on the impossibility of finding a metric for pleasure, in particular one which is interpersonally comparable. Nor, as Sen (1982) has shown in his penetrating critique of "welfarism", is the revealed preference version any more coherent. He has then attempted to argue for his own conception of the social good based on "capabilities" and "functionings", which unlike revealed preference welfarism "does not automatically assert that whatever the individual chooses is good for him. Then, by aggregating in some way the good of all individuals, we can arrive at a conception of the social good" (Sugden, p. 1951). But as Sugden notes "given the rich array of functionings that Sen takes to be relevant, given the extent of disagreement among reasonable people about the nature of the good life, and given the unresolved problem of how to value

sets" it is not operational, and provides no alternative to the measurements of real national income and practical cost-benefit analysis based on Marshallian consumer theory that is the bread and butter of applied economics.

The alternative to this attempt to define the social good -- which Platonic Guardians then maximize -- is an alternative vision of public policy where "society is seen as a system of cooperation among individuals for their mutual advantage. On this view, the primary role of government is not to maximize the social good, but rather to maintain a framework of rules within which individuals are left free to pursue their own ends" (Sugden p. 1948). This is the classical liberal vision of the state as a civil association in Oakeshott's terms (see Lal (1993)). Its contemporary exponents are the Virginia public choice school and the neo-Austrians like Hayek. Amongst philosophers it is reflected in the contractarian tradition of the American liberal Rawls, and the libertarian Nozick. But it should be noted that Sen (1992) has claimed that even this tradition can be subsumed into his own and that its proponents are also egalitarians -- with respect to the good "liberty". But as Sugden argues convincingly, this is a misreading of this contractarian and classical liberal position which cannot be subsumed, as Sen suggests, into a theory of the social good.

<sup>13</sup> In Lal-Myint (1996) we distinguish between three types of poverty-mass structural poverty, destitution and

conjunctural poverty. The first, can only be cured through efficient economic growth, but the other two forms of poverty require income transfers- permanently in the case of destitutes like the handicapped and mentally ill who have no way of earning a living-and temporarily for those who suffer a temporary loss in income say through climatic risk in agrarian economies or the vagaries of the trade cycle in industrial ones.

<sup>14</sup>The rotten kid theorem states that:

when one member [of a family] cares sufficiently about other members to be the head, all members have the same motivation as the head to maximize family opportunities and to internalize fully all within-family "externalities", regardless of how selfish (or, indeed, how envious) these members are. Even a selfish child receiving transfers from his parents would automatically consider the effects of his actions on other siblings as well as his parents. Put still differently, sufficient "love" by one member guarantees that all members act as if they loved other members as much as themselves. (Becker, p. 270)

<sup>15</sup>Warr, and Bernheim and Bagwell, went further and showed that as "propagation requires the participation of two traditionally unrelated individuals, ...there will be a proliferation of linkages between families." This gives rise to even stronger neutrality results.

In particular, no government transfer (including those between unrelated members of the same generation) has any real effect, and all tax instruments (including so-called distortionary taxes) are equivalent to lump sum taxes. In essence, the government can affect the allocation of real resources only by altering real expenditures. The efficiency role of government is thus severely limited, and the distributional

role is entirely eliminated. More generally, ...if all linkages between parents and children are truly operative, then market prices play no role in the resource allocation process: the distribution of goods is determined by the nature of intergenerational altruism.

(Bernheim & Bagwell, pp.

309-10)

<sup>16</sup>see Kotlikoff and Spivak, and Bernheim et. al.

<sup>17</sup>They found that the prediction of the pure altruism model that lower income households will receive higher transfers is not borne out, and that instead as the exchange model predicts there is "a positive association between amount remitted and per capita income of the household from other sources" (p. 910). For in the exchange model the "greater wealth of the family should increase its relative bargaining strength" (p. 906), and thus leads to a higher demand on its "migrants."

But as Lucas & Stark recognize, their data -- which is cross-sectional -- does not allow the altruistic motive for transfers to be tested in a dynamic context. Rosenzweig does so. In a longitudinal study of 6 villages in three different agro-climatic regions in the semi-arid tropics of India he found that

kinship in a risky world not only tends to bond family members in a single location (in a particular way) but kinship ties are able to be sustained over time and space in implicit insurance-based transfer schemes which contribute to consumption smoothing in the face of covariant income risks. (p. 1167)

It is kinship, and common (family) experiences [which] induce trust, knowledge and altruism among family members,[hence] such income pooling

implicit contracts maybe feasible even if spread across wide areas.

(p. 1152)

18 As Cox and Jimenez summarize it:

Some studies find an inverse relation between recipients' resources and transfer amounts received (for instance Kaufman and Lindauer for El Salvador, Kaufman for the Philippines, Ravallion and Dearden for rural households in Java, and Tomes for bequests in the U.S.) But others (Lucas and Stark for Botswana, Cox for [inter vivos transfers in] the U.S., Ravallion and Dearden for urban households in Java, and Cox and Jimenez for Peru) find a positive relation, which contradicts the altruism hypothesis.

(p. 216)

19 As they state:

part of the reason for the low estimates of the degree of crowding out of private transfers by public ones might be due to the fact that the estimates discussed above are derived in environments [in OECD countries] where public transfers are already substantial. These transfers may have already crowded out private transfers to a large extent, rendering the small samples of private -- recipients uninformative. In contrast, the Philippines has almost no public welfare payments, which makes it an ideal case study for gauging the strength of private transfers.

(p. 6)

20

Another piece of evidence is provided by a simple regression I ran on the State level data on per capita public expenditure on health and education between 1976 and 1986 and the changes in literacy rates and life expectancy and infant mortality rates for India, given in Ravallion and Subbarow (1992). In these cross-sections, I found there was no

statistically significant relationship between changes in state level health expenditures and health outcomes, and a statistically significant negative relationship between changes in educational expenditure and literacy!

<sup>21</sup>see Ahmad for a representative sample of this type of viewpoint.

<sup>22</sup>see Goodin and Le Grand.

<sup>23</sup>see Stigler, Meltzer and Richard, Peltzman

<sup>24</sup>see Mesa-Lago (1983, 1990) for Latin America.

<sup>25</sup> see Lal and Wolf, and Lindbeck for the Swedish case.



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