

Budget versus Market Allocation

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Introduction

One basic problem in any society is how to allocate the resources in an efficient manner. A second fundamental problem is to solve the problem of ownership or how the means of production are to be owned. The efficiency question is how to devise a system whereby the resources are allocated to various uses in such a way that it would not be possible to achieve a better result had the resources been allocated differently. The ownership problem relates to basic questions about equity and power in society. Although the two problems are different their solutions are related to each other. How is an efficient system to be devised given the restriction that the means of production are predominantly owned by the public or by the private?

One fundamental type of resource allocation system employs competitive prices as the tool for allocating resources to producers and consumers. It presupposes the existence of markets where *scarcity prices* are determined by the interaction between demand and supply. Could such a market system exist in a society where ownership is predominantly public?

Another fundamental type of resource allocation system employs *administrative prices*, i. e. planning and central coordination. A ministry of production and consumption – a Central Planning

Board – decides how resources are to be allocated among alternative employments – *budget allocation*. Such an allocation system is typically employed in an economic system where the resources are owned by the state. But could such an allocation system really be efficient?

Resources could be owned predominantly by the public or the private. And resources could be allocated by means of the budget or the market mechanism. Combining these distinctions we have the following basic alternatives remembering that all politico-economic systems combines these properties in some mixture (Drewnoski, 1961), Figure 1.

The contradiction between capitalism and traditional socialism is about two of the possibilities, but there are two other alternatives which are relevant for the systematic analysis of comparative politico-economic systems. In the Western World the developments in their politico-economic systems since the Second World War have meant that more of planning has been inserted into an economic system that used to be very much based on private ownership (Johansen, 1977). Budget allocation and market allocation have been combined in more equal doses – the so-called mixed economy of the welfare state (Lybeck, 1986). At the same time the seminal development in the OECD countries of a process of public sector

ALLOCATION MECHANISM

OWNERSHIP		Predominantly Market	Predominantly Budget-Making
	Predominantly Public	Market Socialism	Command Economy
	Predominantly Private	Capitalism	Mixed Economy

growth has meant that public ownership of resources has increased tremendously. How far is it possible to expand budget allocation within the confines of extensive private ownership of the means of production? The major development in the socialist world has been the opposite one, to try to insert more of markets into a system of public ownership of the means of production (Lindblom, 1977). Is it possible to achieve an introduction of markets into an economic system based on public ownership of the means of production?

These four combinations of types of ownership and types of allocation mechanism may be regarded as ideal types. Real world politico-economic systems more or less approximate these four models. Whereas the models of capitalism and market socialism are genuine theoretical ones consisting of a number of principles the other two models are different. The models of a command economy and a mixed economy are more descriptive ones meaning that they formulate what is typical about existing politico-economic systems. However, it is vital to maintain the distinction between model and reality. The theories of capitalism and socialism have to be checked against a body of data about existing politico-economic systems. The problem of evaluation is acute with regard to the pure models of capitalism and socialism where it is always possible to claim that real world systems constitute a somewhat perverse institutionalization of the pure model principles. Thus, one may argue that an empirical finding about system performance is due to the unfortunate workings of the real system rather than inherent in the operation according to the mechanism in the model. Thus, these models need to be evaluated on both theoretical grounds and on the basis of empirical data.

The relevance of the models to countries in the Third World cannot be doubted. The basic problem of *development administration* is to make crucial choices about allocation mechanism and ownership structure in order to promote development goals (Hirschman, 1958; Verma & Sharma, 1984). The Indian debate about the place of planning in an economy with large scale private ownership is highly relevant in this context (Mareshwari, 1984; Baradhan, 1984).

The functions of planning

The concept of planning is often employed in discussions about politico-economic systems. Yet,

it is far from clear what is meant by "planning" (Wildavsky, 1972; Lundquist, 1976). Several distinctions may be made between different kinds of planning (Johansen, 1978):

- Macro-economic planning or the regulation by the state of fiscal, monetary and trade parameters in order to influence macro-economic targets.
- Micro-economic planning or the control of the state of basic decision parameters.
- Comprehensive planning or the attempt to control the whole economy in more or less detail.
- Indicative planning or the effort to influence the economy by means of selective measures that work out their own consequences.

In a market economy the relevance of macro-economic planning by means of indicative planning mechanisms is seldom questioned although there has been a reaction in the early eighties among the OECD-nations against an optimistic and perhaps naive adherence to Keynesian principles. Micro-economic planning is not in agreement with a market economy as it is characteristic of budget allocation. Comprehensive planning is typical of command economies.

Whereas planning may be employed in systems based on market allocation as well as in command economies, the distinction between competition and budget allocation as the medium of allocation is a sharp one. Budget allocation occurs in both command and market economies though in quite different amounts. Whereas budget allocation in socialist systems covers all types of goods it used to be confined in market economies to the provision of public goods (Buchanan, 1968). In a system where the state or the public owns most of the means of production is it necessary to resort to a command economy? Is it possible to employ market type decision mechanisms and achieve planning although different from comprehensive planning in a command economy (Tinbergen, 1952)? In any economic structure the role of prices is crucial, but we must distinguish between competitive and administrative prices. To what extent may various ownership structures be combined with different allocation mechanisms?

Market economy and efficiency

The concept of efficiency in resource allocation has a precise and specific meaning (Layard & Walters, 1981; Bohm, 1976). Three conditions are

sufficient and necessary for an allocation system to be efficient:

- (1) *Efficiency in consumption*: on the demand side of the economy consumers trade with each other in order to maximize their utility. An allocation is efficient if it is not possible after a trade to re-trade and arrive at a position that is better than the first one.
- (2) *Efficiency in production*: on the supply side of the economy producers deliver goods and services. An allocation is efficient if it is not possible to increase the supply of at least one good while the supply of other goods remains constant.

Efficiency in production means that it is not possible to increase output by changing the composition of the factors of production employed. Overall efficiency also requires that efficiency in consumption matches efficiency in production, i. e.

- (3) *Product-mix efficiency*: the value to the consumer of a good equals its marginal cost.

It is possible to show that a market economy may under certain conditions fulfill these efficiency requirements by the employment of the price mechanism as the allocation instrument (Mishan, 1980; Lange, 1940). Given a set of competitive prices concerning goods and factors of production the market mechanism will arrive at a situation where there is efficiency in consumption, in production as well as in the overall economic sense (Lachman, 1986).

These efficiency conditions apply under certain conditions which render the market appropriate for certain types of goods and not others. The market is suitable for the allocation of consumer goods, i. ex. *divisible* goods that have few externalities and are characterized by little of jointness (Musgrave & Musgrave, 1980). The market economy faces severe problems when it comes to non-divisible goods as well as externalities. Moreover, the market is not able to handle overall macro-economic decisions like consumption versus investments. Finally, the problem of determining the distribution of incomes is not solved as we may apply an independent criterion of justice to the outcomes of the operation of the market forces (Nath, 1969; Rawls, 1972).

The basic problem in a model of the market economy is not its internal functioning. To the contrary, if the conditions for market allocation are satisfied there is no cause for hesitation as the efficiency requirement is met. Problematic in relation to market allocation is its applicability as the conditions for a perfectly functioning market economy are narrow (Buchanan, 1985). The situation with regard to a command economy is the very opposite one, as it is the internal mechanics of such a resource allocation system that is problematic.

Command economy and inefficiency

The allocation mechanism in a command economy is the command or directive stemming from the authority of the state. The Ministry of Production in a command economy faces the same requirement for efficiency in consumption and production as the market handles by the invisible hand. How is it possible for a command economy to meet the efficiency requirement in consumption and production? It is necessary to distinguish between two problems in relation to a command economy. The first problem is one of *theoretical possibility*: could a command economy satisfy the general conditions for efficiency in resource allocation? The second problem concerns *practical feasibility*: is it possible in a real world sense to devise a system of resource allocation that satisfies the efficiency conditions though it allocates resources by command?

It has been argued that the Ministry of Production could create such an information system as well as such an allocation system that it would be able to allocate goods and factors of production to consumers and producers in such a way that the efficiency criteria are met (Barone, 1936). However, although this may be theoretically possible, the basic problems concern its practical feasibility (Hayek, 1935; Robbins, 1934).

The practical problem for the Central Planning Board in a command economy is to build up an information system so vast as to include each and every consumer, producer and good. Attempts have been made to formulate a model of a command economy with regard to the production side (Kornai & Liptak, 1963; Heal, 1973). Its key components include:

"The centre, instead of quoting prices, proposes at each step an allocation of all the goods and services in the economy amongst various uses. Then, having proposed

an allocation, it receives information that enables it to assess the marginal contribution to social welfare that a good or service makes in each of its uses. Knowing these marginal contributions, it calculates a new plan in which, by comparison with the first, inputs have been moved from uses where their marginal values are low, to those where they are high." (Heal, 1973:156)

Leaving the consumption aside for the moment grave doubts must be raised as to the practical feasibility of this planning model. How could any central authority store or master knowledge about the marginal productivities in a total economy? This is not possible in a changing world (Caiden & Wildavsky, 1975). Even if the *information problem* could be solved in a small economy the *incentive problem* would still remain. Since it would be rational for each producer to disguise their information about technology a strategic game would result. Participants would try to promote their interests by biased information. If the Ministry of Production attempts to force the directives on producers, then there is no incentive to search for a rational technology.

A command economy may use prices in stead of explicit commands like in a war economy, but these prices would not constitute market prices. Prices may be employed for several purposes (Johansen, 1978). They may reflect the interaction between demand and supply, but they may also express central authority directives. In a command economy prices have the function of conveying to the participants in the economy the conditions for their activity as the central authority considers the situation. The prices of goods and services as well as of the factors of production are strictly controlled meaning that they express the intentions of the Central Planning Board, not the demand and supply of consumers and producers – *administrative prices*.

The advantages of a command economy is that it may make certain types of planning easy. The state could decide the overall direction of the economy. Macro-economic planning making distinctions between consumption and investment as well as between collective goods and consumer goods would become much easier as the amount of central control is so much larger. The central planning model emphasizes knowledge of technological factors for the governance of the economy in accordance with the preferences of the Central Planning Board (Dobb, 1940).

The disadvantages of the command economy

derives from the fact that it runs the risk of being badly inefficient with regard to the allocation of consumer goods or capital. Firstly, there is the *planning problem* as it is hardly possible to construct an optimal plan for the allocation of resource. Secondly, there is the *implementation problem* as even an optimal plan requires successful execution which is no automatic process. Controlling prices and employing them as tools for commanding the economic decisions of consumers and producers means in all probability that neither efficiency in consumption nor efficiency in production will be met. In such a situation we may predict to find the curious expressions of a command economy: severe shortages for some goods, enormous overproduction of other goods, mismanagement of capital resources and a peculiar allocation of the labour force (Kornai, 1986).

In theory the well-functioning of the command economy requires a solution to the planning problem of maximization under given constraints resulting from the existing resources (land, labour and capital) of a function covering the products to be produced (Gregory & Stuart, 1985). In practice the advanced mathematical modelling in terms of grand scale directive planning with both operative plans and perspective plans following the Barone approach is replaced by more mundane methods of iterations and hopefully convergence towards some optimal solution. The standard planning technique in Soviet Union is the so-called material balance method which in a rough way specifies an input-output schema for a number of crucial resources and goods. The huge planning bureaus use prices to allocate resources, but these prices do not reflect changes in demand and supply. They are cost-plus prices meaning that they are based on the average unit production cost in enterprises producing a good (Eidem & Viotti, 1978). The planning bureaus base their administrative decisions on available technology in terms of how much of input resources are needed to produce an output unit given the existing knowledge about production functions. Moreover, the planning bureau may also adjust these prices in accordance with national priorities concerning the goods that should be produced, replacing consumer sovereignty with collective preferences interpreted by a group of planners (Dyker, 1976; Spulber, 1969; Amann & Cooper, 1986).

In an ideal command economy there would be no need for prices. The state would know the relative value of each good in terms of preferences.

No existing economy could, however, be governed in this way. Although the Soviet economy is basically run by means of a large planning framework – allocating resources to various regions, factories and consumers – it employs prices: administrative prices. The single units in the Soviet economy are given a budget within which to make economic decisions about resources. This does not mean that these decisions guide resource allocation, but simply that there is a limit to how far planning can proceed. The economic decisions of consumers and producers are still largely determined by the plan.

Major economic changes then also has to come from the plan. The administrators of the economy must employ various devices in order to gather information about how to increase efficiency. The state must remain alert to various signals from producers and consumers that the allocation of resources is to be changed – queues, overproduction, misallocation, waste. On the one hand, the state must be able to co-ordinate and process a vast amount of knowledge. The problems with a planning system are that the state may not get the right information from producers and consumers and that the state may not be able to process such vast information. There are limits to the capacity of any group of actors to control social systems, in particular economic ones. On the other, there is the serious incentive problem: what is the reward of the various participants in a planned economy – consumers, producers and administrators – to search for and transmit the best available knowledge?

Change in production and management becomes particularly difficult in a command economy as there is no scope for innovation and initiative. To devise a number of success indicators does not help as they may be strategically manipulated in a system based on hierarchical control (Leeman, 1963). The serious problem of efficiency in a command economy has resulted in a search for another resource allocation model that is less based on planning and recognizes the fundamental importance of prices – *scarcity prices*. The socialist models of Lange, Taylor and Lechner are based on an attempt to combine public ownership with market prices (Lange & Taylor, 1964; Lerner, 1944; Mandel, 1986).

The competitive socialist model

The so-called Lange-Taylor model is interesting as it explicitly tries to accommodate a socialist system

of resource allocation to the standard efficiency criteria. It is not based on the notion of a command economy with a huge planning office directing the economy by means of state authority.

The Lange-Taylor model attempts to combine the trial and error procedure of a competitive price mechanism with public ownership of production. The assumptions of the model include: (1) The allocation of capital is to be based on administrative criteria. (2) The allocation of labour and consumption goods is to be determined by the interaction between demand and supply in free markets. (3) The producers of goods are to be instructed to obey the following rules: (a) to choose the combination of factors which minimize the average cost of production; (b) the scale of output is to be determined where marginal cost is equal to the price of the product (Lange, 1964).

Given these initial conditions the state authorities are to start the trial and error process by setting arbitrarily the prices for goods and labour. The interaction between consumers and producers on various markets will then in successive stages lead to a predicament where the prices are adjusted by the Price Board until the efficiency conditions are met. Thus, a socialist economy could use real prices and achieve an efficient allocation of resources.

Two detailed models of resource allocation in a socialist economy employing scarcity prices have been developed. The so-called Lange-Arrow-Hurwicz model is an attempt to copy the competitive mechanism of a market economy in a socialist system (Lange, 1936–37; Arrow & Hurwicz, 1960). The LAH planning procedure may be outlined as follows:

“At a given distribution of resources amongst consumers, the central planning board (CPB) quotes a vector of prices. Producers then calculate the production programmes that would maximize profits at these prices, and inform the centre of the supplies, demands and profits that would result. The profits are distributed as the centre may see fit amongst consumers, who then, facing given profit shares and wage rates, choose their most preferred consumption bundles, and inform the CPB of these. The centre now acts as an auctioneer, raising prices of goods in excess demand, and vice versa: and so the process continues.” (Heal, 1973:79)

An alternative to the LAH-model is the so-called Malinvaud process where the centre employs a competitive price mechanism in order to arrive at

knowledge about the production possibilities of the firms which may be used to determine an efficiency locus. The Malinvaud model places a much stronger role with the Central Planning Board (Malinvaud, 1967).

It has been argued that the trial and error method suggested in the LAH-model of a socialist system of resource allocation will face severe practical *information problems*. Will the successive reconsideration of prices by a State Board really work? Would there not be a too slow process of price adaptation to information about the relationship between demand and supply? How is the remuneration to labour to be decided? Is it really possible to have an equal distribution of income at the same time as the wages are to be determined in the market? According to Hayek the iterative revision of prices to be fed into market operations would require a Board of Supermen with perfect knowledge about all production technologies and the behavior of managers (Hayek, 1940). It has also been argued that the so-called competitive solution would not handle macroeconomic disturbances well (Dobb, 1940; Wright, 1947). The Malinvaud process has been criticized as requiring too much coordination between producers.

Another basic problem in the competitive solution remains to be pointed out: the *incentive problem*. Why would managers in the various production units follow the assumptions of the model meaning that they would be socially rational without any remuneration? Why would it not be possible that the managers of production would try to influence the Price Board to set the prices in such a way that any losses will be recovered? Why would managers attempt to minimize costs if they are not allowed to capitalize on the profits? If the profits are to be returned to the Price Board why would managers care about production costs?

The socialist bias in the LAH-model is apparent in the restrictions on capital. Capital would be owned and controlled by the state and profits, interests and rents earned in government enterprises would be distributed as a sort of social dividend unrelated to labour income. But how could there be efficiency in capital allocation given these restrictions?

One way to solve the incentive problem has been suggested in the cooperative version of market socialism (Vanek, 1970; Ward, 1957). Capital would be owned by the state but operated by the participating employees who would be given an opportunity to share the profits of the

firm. The average net revenue per worker would be based on the marginal productivity of the last worker hired. The more competitive the firm the higher the salary of the employees which means there is an incentive to try to improve the firm and its operations. However, it also means that there could be a misallocation of resources if capital could not be transferred to a more productive firm. Thus there could arise a problem of system support as workers in one firm could be considerably worse off than workers in another firm. Besides the problem of motivating management remains.

What is the exact meaning of competition in the LAH-model? Could there really be competition on either side of the economy if severe socialist restrictions concerning wages and ownership are upheld? It may be argued that from a static point of view the competitive solution may achieve efficiency, but how about a dynamic perspective? Why would managers care about the introduction of new technology if the profits are not to be capitalized some way or the other? According to the Austrian school there will be no stationary solution as the economy is always in a process of change and adaptation. If risk and uncertainty are inherent in management, then the incentive problem will be most severe as there would be no reward for the embarkment on a process of innovation (Schumpeter, 1944). What is really the difference between the central planning solution and the competitive solution?

Here it may be the place to mention the original and somewhat startling attempt by Lindblom to bridge the gap between the contenders in the great debate between the adherents of capitalism and socialism. Lindblom argues that a "planner sovereignty market system" is both possible and desirable. He states:

"In the fullest form of planner sovereignty, all production, consumer goods included, would be guided by the purchases of a government that has displaced the consumer as the 'sovereign' Government authority would direct the allocation of resources and the productive processes by buying or not buying final products, or by buying more or less of them;" (Lindblom, 1977:98)

However, production on the supply side would still be private and operate according to market criteria. Wildavsky claims that this separation cannot be done:

"Once government controlled consumption, it would also want to control production. The process would be inexorable – from deciding what should be consumed to regulating how it should be produced. Once government agencies were made responsible for consumption, they would have to regulate production, for consumption depends on quality, dependability, and all the rest." (Wildavsky, 1978:232)

Markets and administration

The competitive solution suggested by Lange, Taylor and Lerner is an attempt to solve the efficiency equations by means of the market mechanism in stead of the administrative solution in the central planning model. The administrative solution is deficient because there exists no such vast and reliable information system available as required. The competitive solution aims at replacing the administrative mechanism with a trial and error mechanism in combination with some severe socialist restrictions. What is the difference in reality?

It would seem as if the competitive solution reduces the tasks of the Ministry of Production from a giant comprehensive planning body to a small price board making adjustments here and there. This is not so, however. The Price Board in the competitive solution would need extensive knowledge – pure information undisturbed by tactical considerations – in order to control the behaviour of managers. Is average cost really minimized? Is price really equal to marginal cost? Why could not various managers co-operate and try to influence the price or hide information about the cost function? Who could judge whether there really is free entry to the market in a socialist state where the state controls access to capital? Is it not conceivable that it will be difficult to operate markets where the availability of capital is not free?

Some goods may display economies of scale meaning that there will be losses for the managers when price is set equal to marginal costs. If the Price Board is asked to change the price so that losses are eliminated, then why could not the Board be equally willing to change the prices for other goods? Would it not require the same amount of extensive information as in the command economy to be able to judge the cost function of various enterprises? It seems as if the competitive solution also requires a Central Planning Board.

The information requirements are no less for-

midable in the competitive solution than in the central planning solution. And both face the same incentive problem: How could the participants in this type of resource allocation be trusted with an ambition to act according to the rules? Just as there would be an advantage for managers in a command economy to misrepresent costs in order to maximize their own advantage, so there would be no incentive for managers in the competitive solution to minimize costs, if they could not count on that some of the profits would be made available to them.

The difference between a Central Planning Board and a Price Board would in effect be marginal. No Central Planning Board would ever be able to allocate all resources without the use of some price mechanism. And no Price Board would ever reach an efficient allocative state if it did not have access to comprehensive knowledge about production possibilities as well as made the correct decisions about the release of the socially owned capital resources.

Market socialism?

The idea of market socialism was launched due to the inefficiency problems of a centrally planned economy. The informational requirements on a Central Planning Board would simply be too great to handle by any social organization. However, the proposals for or models of a combination of markets and a socialist economy are ambiguous with regard to two basic problems, the position of a coordinating body and the range of the use of markets to allocate resources.

All models of market socialism assume some coordinating board, but the scope of its operations and its power differs. Given the fact that the Coordinating Board has the responsibility for allocative efficiency it seems difficult indeed to restrict its operations. Even if it employs competitive prices it would still face the requirement that it itself operates rationally. What mechanism in market socialism would guarantee that the coordinators make the correct decisions? It seems as if the theories of market socialism simply assume that the Coordinating Board will consist of highly competent people that are unambiguously devoted to the efficiency goal. But why would this be the case? *Sed quis custodiet ipsos Custodes?*

The incentive problem recurs at the management level (Bergson, 1982). There is no mechanism that will reward the managers to act in a way that is socially productive as long as profits cannot

be capitalized by the managers. The same problem appears again with regard to labour. If wages are to be set on the basis of an equality requirement, then it is difficult to see why labour would behave in way that is conducive to collective rationality.

On the consumption side market socialism was meant to strengthening the principle of consumer sovereignty in socialist economies. The use of administrative prices in command economies means that effective demand would show up in other ways than via the price mechanism. There is a constant danger in a command economy of replacing consumer preferences with the preferences of the coordinators. Not even market socialism could accept the principle of consumer sovereignty as the co-ordinators would make crucial choices about the division between consumption and investment as well as the long range orientation of the overall economy. What would be the incentives for co-ordinators to make the correct decisions?

The incentive problem is the most difficult problem that market socialism faces. How is it to be solved given the tension between the use of market prices on the one hand and the restrictions of a socialist economy on the other? The literature on capitalism versus socialism tends to focus on the information problem that arises as markets are replaced by planning, but the incentive problem is more severe. It accounts for the widespread feeling of apathy in several socialist countries where reforms aiming at market socialism have been tried but where the incentive problem has not reached at satisfactory solution. It also explains the development of a sharp tension between the official economy and the unofficial or black economy in socialist systems.

Institutional requirements

Could a socialist production system be efficient? How much of market like operations and mechanisms could be inserted into a socialist economy in order to raise productivity and affluence? These questions were much debated by a few economists in the last fifty years (Bergson, 1981). The debate is clearly relevant to the recent attempts in the communist world to promote efficiency in their economies. The practical lessons are that a command economy is possible but not efficient. In order to promote efficiency the price mechanism has to be resorted to in the sense that prices reflect scarcity of values. This in turn requires that the

reward function of the price system is recognized meaning that it will pay for the participants to communicate truthfully and behave rationally in relation to economic parameters. Only if a socialist state allows private incentives is it possible to employ the price system to allocate resources in an efficient way. The socialist restrictions of the Lange-Taylor model means that the competitive solution will be a variant of the command economy model. How could there be efficiency in production if managers are not allowed access to a capital market as well as permitted to capitalize profits without the intervention of the state?

How far is it possible to accommodate private incentives without breaking the socialist assumptions of the economic system? The debate about the possibility and efficiency of a socialist economy has focussed far too much on abstract equilibrium conditions bypassing crucial *institutional* problems. The basic difficulty in a socialist economy is not to derive a set of solutions to the standard efficiency conditions but to devise and maintain institutions that implement these solutions in the short run as well as in the long run. It seems as if the two models of a socialist economy – the competitive model as well as the central planning model – makes far too strong or simplistic institutional assumptions about the practicality of managing a large economy along socialist lines.

It is impossible to discuss the possibility of change in allocation mechanism without taking the institutional structure for ownership into account. If market mechanisms are to be employed instead of planning or administration, then private ownership must be allowed. If one favours efficiency in resource allocation, then one has to accept the institutional requirements and consequences of the working of the market. The fact that a country has an ownership structure that is fundamentally public implies that there are definite limits to the scope for the operation of the market mechanism. The introduction of market socialism in communist systems is always of limited significance and restricted to a few types of divisible goods. Often it is accompanied by a process in which attempts to broaden the relevance of the market mechanism is curtailed by a fear for the consequences for the structure of ownership and property rights. Public ownership limits the use of the market mechanism to such an extent as to make the whole idea of market socialism superficial.

Looking at the various attempts at some type of

market socialism in the communist world – in Russia, Hungary, Yugoslavia, China – we may predict on theoretical reasons that these reforms will pass through an ambiguous process of implementation characterized by opposite forces. Either the reforms will be curtailed after a while or restricted to a narrow sector of the economy. Or there will be a severe incentive problem as apathy will be the response to a situation where private initiatives are allowed but not rewarded. The relevance of market socialism to developing countries is limited due to the fundamental contradictions between the need to maintain control and the pressure to extend market operations. It is symptomatic that the economies characterized by rapid and steady growth have not attempted to adopt the model of market socialism. On the contrary, the economies of the pacific area have successfully tried a model of state led capitalism (Zysman, 1983). If the institutional analysis is widened to include trade unions and political factors, then the practicability of market socialism would have to be even more confined.

Budget allocation

Extensive budget allocation instead of market allocation in a system with considerable private ownership of the means of production and consumption has become typical in the OECD countries. The relevance of budget allocation has been on the increase in capitalist systems for several decades transforming these private societies to mixed economies although the seminal process of public sector expansion has now come to a halt (Webber & Wildavsky, 1986). There is a limit to the process of public sector growth it appears. The distinction between a mixed economy and a command economy is a qualitative one and the transformation of a society with strong private ownership and existing market mechanisms into a system oriented towards the planning mechanism would require structural changes that are far more encompassing than yearly increments in a slow process of public sector growth.

Budget allocation takes place in the yearly budgetary process where requests look for appropriations and appropriations result from the consideration of competing requests (Wildavsky, 1984). The principal tool for deciding what requests will be which appropriations is the authority of government, not the voluntary agreement between producers and consumers. Budget allocation is characterized by considerable staility

in that there is a short-term plan about how resources are to be employed and for what purposes which is of a determinate form.

The mechanism of allocation in the budgetary process is not based on competition and exchange but rests on the authority of government to decide on the basis of cost calculations from one supplier, the bureau. Budget allocation is a strategic game between two actors, the government demanding a service and the bureau supplying the service on the condition that total costs will be covered. Thus, we have the typical feature of the budgetary process that marginal value will not equal marginal cost (Niskanen, 1971).

Budget allocation is based on monopoly and hierarchy. Goods and services are produced by one supplier and consumed by the citizens without any choice of an alternative. Quantity is determined by the authorities on the basis of various considerations including citizen preferences as revealed in some political process or collective preferences as defined by some authority. The kind of price employed is an administrative one fixed with regard to various deliberations. The program is uniformly provided by the authority to be consumed in equal ways by its clients. Quantity is determined in the budgetary process as a result of the game interaction between government demanding a program and the bureau supplying the program. There is large scope for negotiation and strategic behaviour in the budgetary process as described by Wildavsky.

Prices serve administrative functions in budget allocation. On the one hand appropriations may be regarded as producer costs stating how much resources the bureau may use. A typical itemized budget is one where there is a detailed production function plan with price tags for each input. A decentralized budget formula implies that the bureau identifies the combination of inputs given a budget constraint. Consumer prices in the budget take the form of taxes or charges which are determined on the basis of political criteria.

The basic principles of public administration structure budget allocation. The means and ends of programs are determined in a plan document which singles out the supplier and identifies the production functions. There is a predetermined structure of monopoly suppliers, the bureaucracy. There is no competition between the bureaus as they have been assigned long-term tasks, which are unique for each bureau. Clear standards for the operation of the bureau are laid down and the

output of the bureau is regulated by means of technical and legal criteria. Complaint is to be expressed by means of voice, not exit (Hirshman, 1973).

Long term planning in a mixed economy is of a different nature. It is also based on a plan document but it lacks the determinate form. It is more of a projection and a guess than a real commitment as to the path to be travelled. Short-term budget allocation and long-term planning have certain advantages which may make them attractive alternatives to market allocation. However, there are certain disadvantages which have become more apparent in the era of big government.

The budget

The government budget is a promise about who can expect what money. It is a real commitment meaning that there is a high probability that resources will be forthcoming, particularly so in rich countries (Wildavsky, 1986). The stability has a one year periodicity. Typical of short-term budget allocation is, however, that the one year periodicity tends to extend to a long-term stability as stated in the theory about incrementalism. Once appropriations are fixed they are non-negotiable. People can predict that services and goods are forthcoming and employees may trust that their salaries will be paid. The budget document is transformed into expenditure decisions which may be called upon in due time. Uncertainty is minimized, predictability maximized.

Stability when considered advantageous tends to characterize the over time development of the budget meaning that changes will only be marginal. The theory of incrementalism used to be the established explanation of the short-term budgetary process. It was considered valid up until budget-making became more erratic and shifting as a reaction to a more volatile environment. Yearly changes became non-marginal and programs were really extinguished. It remains to be seen whether non-marginal budget-making amounts to a real change or if it simply is the exception that confirms the rule. The relevance of incrementalism hinges on the interpretation of the concept of marginal changes as well as the occurrence of changes in appropriations. It could be the case that incrementalism overemphasized the extent of stability that used to take place before the turmoil in the early eighties or that the eighties meant a decisive break with the past.

A society that trusts budget allocation for a large number of services and goods values control and predictability highly. Government lays down what to expect for one year for a wide variety of utilities. This enhances security of employment and makes it possible to control outputs in accordance with regulations. Short-term cost efficiency is traded for long-term stability and predictability. Budget allocation is the attempt to make the future controllable and predicatable in terms of pre-determined criteria. The information contained in the budget is a one-way communication that states what will take place and how. Budget allocation is the authoritative allocation of values for a society. And authority if benevolent may accomplish beneficial outcomes.

Budget allocation enhances *similarity*. The emphasis on similarity follows from two sources: rationality and a preference for equality. Budget allocation is a method to inform about how resources are to be used to accomplish a number of goals. And information has its own requirements. In a system of big government it becomes impossible to take each and every factor into account and to treat each appropriation differently. Hence the need for standardization and similarity. To allocate by means of a budget is to employ rules and rules are expedient if they are universal comprising as few exceptions as possible.

The drive for similarity is further strengthened by the preference for similarity in societies with big government. Big government is both an effect of and a cause of the trend towards similarity. Budget allocation is preferred to market allocation because it makes possible the control of outputs which makes standardization possible at the same time as it further enhances similarity for its own reasons.

Budget allocation initiates a need for more of budget allocation. Budget allocation creates clients that tend to hang on to their appropriations and if possible further increase them. And people are looking for new appropriations to become clients of budgetary programs. Budget allocation has its adherents among those that favour stability and value predictability. Once an item of expenditure is accepted on the budget it has a strong probability to remain there for long periods of time.

A variety of arguments have been put forward to account for the expansion of budget allocation (Tarschys, 1975; Larkey, Stolp & Winer, 1981; Wildavsky, 1985). The growth of the state is essen-

tially a political process through which the budget has driven out the market as the mechanism of allocation. The process is a universal one in systems with a structure of predominantly privately owned means of production. The resort to budget allocation is based on a preference for administrative prices instead of competitive prices. It is considered that a number of problems and deficiencies may be better attacked by the use of the budget instrument – preferring public policy solutions to market failure. Essentially, it is a preference for stability and predictability as well as similarity. The use of administrative prices means that allocative processes comprise a limited number of choice participants – bilateral monopoly – and that allocation decisions by government and bureau may be predicted and controlled.

Whereas there is a search in communist systems for more of market allocation and its derivatives – rapid adjustment, flexibility and mutual adaption – the opposite tendency has characterized the development of the political economies of the OECD countries.

One has resorted to government in order to allocate the welfare state goods and services though these could not be classified as pure public goods. The budget instrument has been considered superior to market allocation in relation to a number of utilities where the elements of jointness and non-excludability have not been conspicuous. In relation to health, social services, and education predictability and similarity have been deemed more important than flexibility or efficiency.

Hierarchy has replaced markets in the economies with extensive private ownership. The budget instrument appears to handle the transaction costs in a complex society characterized by bounded rationality and opportunism with a small number of powerful actors better than the market; internal organization will drive out market exchange systems when these conditions obtain (Williamson, 1975) whether in the private sector or in society in general. Combining the *transaction* argument with the stability and similarity argument there is a strong case for budget allocation in relation to semi-public goods.

However, there are natural *institutional* limits to the expansion of the budget. The structure of privately owned means of production implies some amount of individual choice which works against the expansion of budget allocation. Budget expansion may be conducive to individual freedom but it

basically means that resources are allocated by one actor in accordance with standardized rules. Regulation is typical of budget allocation, but there is a limit to the regulative capacity of government in systems with private ownership. When take home pay goes down the period of budget expansion is bound to come to an end in systems with private ownership (Rose, 1984). The larger the budget the more serious the efficiency problems.

The structure of property rights defines the limits to the size of the public budget. In practice we find that there is a number of expressions of a reaction towards the expansion of the employment of budget allocation: tax evasion, tax revolt, anti-system parties and a demand for improved efficiency and productivity. All mixed economies in the OECD nations have witnessed both the sharp growth in the size of budget allocation and the saturation of the same process. No country has expanded its public sector beyond 70 % and thus there remains a gap in relation to the command economies although the difference is a structural one and not merely a quantitative one.

Planning

Planning in a mixed economy is resorted to for a different reason than to keep the public household going, viz. to plan the overall development of resources in society. Planning for the long-term development of the economy is a mixture of projection and decision. Planning both attempts to predict the future development of markets and their outcomes but also to influence the working of markets in a manner that is conducive to macroeconomic objectives. Short-term planning of the economy may follow from long-run planning though the link is far less tight than was once expected. Planning is considered advantageous because it could contribute to stability and predictability. And planning procedures are strong in societies where stability and predictability are highly valued. There is, however, a limit to how much of planning can be combined with a structure of private ownership.

Planning may be increased to a certain extent within a system of privately owned resources. In a process of public sector growth where more and more resources are allocated by government planning is bound to increase. There is a need for planning the development of the public household over and beyond what is possible in budget allocation and the strong increase in the public sector

calls for coordinatings mechanism in relation to the market system. However, there comes a border where planning takes over the basic decision functions of the market. Markets and planning may coexist to some degree only. The continued existence of privately owned means of production presents a challenge to planning systems as they reject the drive for control and predictability. The tension between planning and markets implies that either there will be even more of planning or one has to accept that planning may not work efficiently due to the unpredictable uncontrollable interaction with markets.

Planning became as popular in rich as in poor countries after the Second World War. In the Third World outside the communist systems there was a strong belief in combining planning with market allocation as a way to bypass the conflict between capitalism and communism (Caiden & Wildavsky, 1974). Developmental planning was the technique to steer the economy towards the goals of five years plans stating collective objectives. It motivated the expansion of the role of the state in society calling for a number of political and administrative measures. Not only would the economy grow but developmental planning would assure the right kind of economic growth. The strength of these planning techniques varied from country to country. India is of course the most well-known example of developmental planning with a strong socialist dose though maintaining a structure of private ownership (Little, 1982). The many failures of developmental planning have resulted in a reconsideration of the place of market forces in processes of development as well as strategic instruments to bring about economic growth.

Conclusion

Competitive prices have one general advantage over administrative prices: they are conducive to efficiency in resource allocation. They enhance flexibility and rapid adjustment. They reveal the value of goods and services momentarily and serve as an optimum medium of communicating preferences. Their weakness is the lack of stability and predictability.

Competitive prices presuppose the operation of markets with numerous suppliers and demanders. And differences are to be reflected in the market by means of price and quantity. This model operates well in a society with strong private ownership where individuals may express preferences in the

form of possessions. If, however, the emphasis is on control and similarity then competitive prices are not the appropriate medium of communication.

Competitive prices are more conducive to accountability than administrative prices. They offer a range of options from which one may exit when convenient. They force the alternatives to be revealed and they burry the organizations that fail the competition. Administrative prices follow from a trust in government, its capacity to identify problems and implement solutions. Accountability tends to be rule bound and procedural evaluation would have to be complemented by special substantive techniques for evaluating performance like e.g. cost-benefit analysis or relative cost comparisons.

It has been argued that big government may be dismantled in favour of market allocation with regard to welfare state goods and services (Buchanan, 1986). This would presuppose considerable transfer payments in order to maintain a minimum level of income equality. Such a society would constitute a negotiation society that would maximize individual choice and preferences if transactions costs would not become staggering. It would be a flexible society in contradistinction to a society where administrative prices constitute the main medium of communication. Administrative prices operate differently. They are conducive to stability, predictability as well as to control and similarity.

In any society resources have to be allocated between alternative uses. There are two basic media of communication – competitive prices or administrative prices – which complement each other only to a limited extent as stated in the theory of public goods (Buchanan, 1967; Head, 1973). Resources may be owned in two basic ways, publicly or privately. The structure of ownership sets limits to the employment of the two mechanism of allocation. There is a definite limit to the tendency of publicly dominated ownership structures to move towards the use of competitive prices and similarly the continued existence of private ownership means that there is a boundary for the growth of government or the expansion of the operation of budget allocation.

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