UNIVERSITY OF BOMBAY DEPARTMENT OF ECONOMICS

THEORIES OF STATE INTERVENTION

BY AJIT KARNIK

THEORIES OF STATE INTERVENTION

AJIT KARNIK

Department of Economics
University of Bombay

ABSTRACT

In this paper we are interested in examining the. Various theoretical approaches to State intervention that have been offered by different schools of thought Such an exercise assumes importance in a world situation when a large number of societies are going through a painful transition process. We do not concern ourselves with discussing the specific situation of any particular economy in transition while seeking to delineate the role of the State. Even though the latter is an interesting exercise, our objective here is to identify general principles in the pursuit of redefining the role of the State. Four different approaches towards State intervention have been discussed in the paper: neo-classical, public choice, transactions costs and information theoretic. The essential features of each of these approaches have been studied and compared with one another.

THEORIES OF STATE INTERVENTION

Ajit Karnik
Department of Economics
University of Bombay

1 . INTRODUCTION

In recent years there has been a major revaluation of the role that the State is expected play in a modern economy. World events have necessitated this revaluation. For a long time two paradigms dominated the discussion regarding the role of the Stace: at one extreme was the so-called capitalist model with a very limited role for the State and at the other extreme was the centralised planning paradigm with a very limited role for markets. The capitalist model, in its classical form, gave primacy to the markets with minimal interference 'from the State; in fact the State was expected to be a weak State operating in a The experiences of Chile in Latin America and the East Asian miracle countries challenged this classical capitalist model. Even though in these economies the markets were, by and large, free and private enterprise dominated, the State was far from weak. In fact, in at least some of these countries, absence of democracy may have contributed to their success. The East Asian countries in a sense created a new paradigm: the managed capitalist economy. Under this new paradigm the role of the State had to be redefined so different was it from the role envisaged under the classical capitalist system.

^{*} Much of the research related to this paper was done during two terms spent at St. John's College, Cambridge, UK in 1995. The generosity of the College and the support and hospitality of Jeremy Edwards is gratefully acknowledged.

At the other and of the spectrum even greater cataclysmic changes were taking place. Moat of the rigidly planned economies of Eastern Europe, including the Soviet Union, went through a crisis which made a move away from the earlier system almost Inevitable. In all of these countries as well the role of the State had to be redefined. In fact, in most of these countries Where the transition was vary sudden, the old State had disappeared and the new recreated State was not even in place. This interregnum was marked, in some cases at least, by a descent into a virtual state of nature.

In this paper we are interested in examining the various theoretical approaches to State intervention that have been offered by various schools of thought. Such an exercise assumes importance in a world situation when a large number of societies at re going through a painful transition process. We do not concern ourselves with discussing the specific situation of any particular economy in transition while seek! g to delineate the role of the State. Even though the latter is an interesting exercise, our objective here is to identify general principles in the pursuit of redefining the role of the State.

The plan of the paper is as follows: We have a total of 8 sections, including this one. In the next section, that is, section 2 we look at the political philosophy issues underlying the social organsiation in the context of which State intervention is posited. Section 3 begins the discussion on the theories of State intervention, the first of which, the neoclassical approach, is examined in section 4. Section 5 looks at the public choice approach while section 6 discuss the transactions cost or institutional approach towards State intervention. In section 7 we look at the information theoretic approach to State intervention. Finally, section 8 compares the various approaches towards State intervention and offers some concluding remarks.

2. ISSUES IN POLITICAL PHILOSOPHY

The issue of the role of the State is closely connected with the social organisation within which the State to presumed to exit. The social organisation that is envisaged for society should conceivably form a continuum from the minimalist or libertarian viewpoint to the maximalist or collectivist viewpoint. However, from the point of view of analysis the following taxonomy of a theory of society seems appealing:

- 1)Libertarian
- 2)Liberal
- 3) Collectivist.

Libertarian View

According to the Natural Rights Libertarians State intervention is morally wrong except in very limited circumstances. For Nozick (1974) a minimal State, limited to the narrow functions of protection against force, theft and fraud, enforcement of contracts and so on, is justified; any more extensive. State will violate persons' rights not to be forced to do certain things and is unjustified. This proposition indicates the libertarian predilection for a night-watchman State. Such a State can have no legitimate distributional role except in correcting past wrongs. It is surprising that, not only would Nosick's approach oppose redistribution in a Pareto efficient framework, but also oppose all Pareto improving State Intervention (Atkinson and Stiglitz, 1989), Such Pareto improving intervention can make a person better off without making anyone else worse off; there is thus no redistribution involved and hence no infringement of any individual's liberty. The Empirical Libertarian approach, of which Hayek (1960) is an important contributor, has three strands the primacy of

Individual freedom, the value of the market mechanism and the assertion that the pursuit of social justice is not only fruitless but actively harmful because it can end up destroying individual liberty. Similar views can be attributed to Friedman (1962) Who believes like Hayek, that the State has no distributional role, other than for certain public goods and for strictly limited measures to alleviate destitution.

Liberal View

Two notions of liberalism may be distinguished: utilitarianism and Rawlsian.

The Utilitarian aim is to distribute goods so as to maximise total welfare. Goods may be interpreted broadly to cover goods and services, rights, freedom and political power. Maximising includes the following: goods must be produced and allocated efficiently and they must be distributed according to the principles of equity.

Rawls (1972) is the liberal counterpart of Nozick: for him the natural right and hence the prime aim of institutions is social justice. Thus each person possesses an inviolability founded on justice that even the welfare of society as a whole cannot over-ride. Justice for Rawls has a two-fold purpose: it is desirable for its own sake; but also institutions will survive only if they are perceived to be just. The resulting principles of justice deal with the distribution of economic goods, as well as position, opportunity, skill, liberty and self-respect.

Collectivist View

Twos variants of this view may be distinguished: Fabian Socialism and Marxism.

The Fabian Socialists agree on the importance of equality, but freedom and fraternity are also important. They consider

resources as available for collective use and consequently favour government action. However, there has been some disagreement about whether socialist goals could be achieved within a market order

Marxist share with the Fabian Socialist a belief in equality, freedom, and fraternity. This view clearly calls for a highly active role of the government. It stresses the importance of State ownership of the means of production since private ownership of productive assets is incompatible with the Marxist definition of freedom.

3. THEORIES OT STATE IHTERVENTIOM

The conception of society that one visualises is important from the point of view of examining the theories of State intervention. A society based on minimalist, libertarian principles severely constrain State intervention: once the basic public good, defense, has been provided, no further State intervention can be justified. The immorality of any further State intervention is axiomatic. On the other hand, a society based on collectivist principles completely rejects the market and the operations of the State are all pervasive. The position of the collectivist is in a sense a mirror image of the libertarian position: the failures of the market are seen to be axiomatic. Neither of these approaches, either libertarian or collectivist, allows for a piecemeal approach towards State intervention. Such an approach is, however, consistent with a liberal view of society; that is, a society in which neither the market nor the State is sacrosanct. It is well accepted that both the market and the government may fail. Further, both, the market and the State are viewed as means to an end the end being maximisation of social welfare.

We shall be examining the following approaches towards State intervention:

- 1. Neo-classical approach
- 2. Public choice approach
- 3. Transactions costs approach
- 4. Information theoretic approach

4 • NEO-CLASSICAL APPROACH

The starting point for a neo-classical theory of State Intervention is the two Fundamental Theorems of Welfare Economics. The First Theorem states that, subject to certain assumptions, a general equilibrium, if it exists, will be Pareto efficient. These assumptions are perfect competition, absence of public goods and externalities, absence of non-convexities in production and consumption and perfect information. The Second Theorem, subject to these assumption, plus the assumption of the availability of lump-sum taxes and transfers to the government, states that any Pareto efficient allocation can be achieved as a solution to a general equilibrium system.

The Second Theorem provides a limited role for State Intervention: the State can intervene only by employing lump sum taxes and transfers. Thus the intervention is one, which does not distort decision making on the part of economic agents lumpsum taxes have only an income effect substitution effect. It is important that even this limited intervention by the State would be considered an infringement individual freedom by the libertarians. The government employing lump-sum taxes and transfers relocates individuals on contract curve and in the process carries out a redistributive activity. Such a re-distributive activity would be permissible according to the libertarians only if the initial endowments of the better off individuals were acquired illegally. The State could then, invoking the principle of rectification, intervene in order to carry out this limited redistributive activity. All other forms

of redistributive activity are illegitimate and taxation is considered by Nozick to be theft (since it extracts money from people they would otherwise have allocated, differently) and slavery (since people are forced to spend a part of their time working for the government) (Barr, 1993).

An economy characterised by the assumptions of the two theorems, including the availability of lump-sum and transfers, is known as а first best economy. A violation of any of the assumptions of these theorems leads to second best situations and the broadly labeled as the breakdown of efficiency conditions. Atkinson and Stiglitz, 1989). the efficiency conditions that fail to Among <all hold, neo-classical economics focuses on what are called instances of market failure, as the rationale for State intervention. The State intervenes in the market economy to correct such market failures. is possible to trace back the mainstream theory of intervention to Adam Smith who proposed the. for State: following three duties the

- 1.protecting society from violence and aggression
- 2. protecting every member of society from injustice and oppression
- erecting and maintaining certain public works and public institutions, which will not be erected and maintained by individuals.

Neoclassical theory taking its cue from smith's third duty of the State, identifies the existence of public and quasi-public good as an important cause of market failure. Public goods are characterised by non-rivalness (in consumption) and non-exclusion which makes private provision impossible. Free riding on the part of consumers will mean that no positive price will be volunteered for the benefits of the public good; such benefits, due to non-exclusion, will be available to all individuals.Non-rivalness,

On the other hand, implies zero marginal cost: of additional Adviser this weans that marginal cost pricing will not cover the cost of producing and providing the public good. The market will fail in the presence of pure public goods and such goods will not be provided by the market at all. Examples of pure public goods are legal system, national defense and efficient government. Quasi-public goods, such as transport system, education, research and development, often being too expensive for an individual to produce and make a profit, will be under-provided and would, under certain circumstances, require State intervention,

Other reasons for the failure of the market are:

- 1. presence of externalities
- 2.presence of oligopolistic and monopolistic market structures
- 3. presence of distributional inequalities.

Externalities are interdependencies that operate outside the Market or price mechanism and give rise to a discrepancy between private and social benefits. In such a situation Pareto efficiency cannot be achieved even in the presence of competitive markets. The presence of monopolies and oligopolies implies that prices will be set above marginal costs leading to redistribution from consumers to producers. Such re-distribution raises the possibility of severe distributional inequalities.

State intervention in the presence of externalities takes the form of Pigouvian taxes and subsidies: taxes being imposed on activities which involve a social cost greater than the private coat and subsidies being provided for activities which involve a social benefit over and above the private benefit. On the other hand, the presence of monopolies and monopoly practices calls for State intervention in the form of anti-trust legislation or regulation on monopoly pricing.

The broad picture of the role of the State that emerces in the neo-classical framework is that of piecemeal intervention in general, markets are assumed to function efficiently i.e. allocate resources efficiently, coupled with localised market failures which calls for a limited State intervention. This, is state intervention in pursuit of efficiency in resource allocation. On the other hand State intervention on grounds of equity is justified only via the second Fundamental Theorem of Welfare Economics. However, provision of certain quasi-public goods may have an equity dimension as well eg. provision of free or subsidised education. In summary, the existence of the State and a meaningful role for it depends on the pre-existence of markets along with a failure of some segments of the markets.

The only objective of the State in the neo-classical framework, is the maximisation of social welfare. The State will intervene only to correct market inefficiencies which impinge on social welfare. The State thus has no other objectives which might conflict with the objective of maximising the welfare of its constituents viz. the consumers. In the terminology of agency theory, consumers are the principals whose welfare is maximised toy its agent, the State. Since there is no divergence between the objectives of the principal and the agent, there is no question of a conflict between the two. The actions of the agent do not have to be monitored by the principals to ensure that social welfare is being, in fact, maximised. In any case, in the static neo-classical theory there is perfect information, all of which is conveyed by market prices. Thus, problems associated with asymmetry of information between the agent and the principal simply do not arise.

5. PUBLIC CHOICE APPROACH

In stark contrast to the Neoclassical approach, the Public Choice approach regards the State as resulting spontaneously from a state of nature; it regards the State functionaries as the

principal of the State and suggests that the objectives of these principal is to maximise their own utility; this leads to State partiality in favour of certain groups as well as inefficiently high levels or outputs and supply which drives growth of the State sector.

The emergence of the State is analysed by Mueller (1989)in the context of gain from trade within a Prisoner's Dilemma framework. The following matrix (Matrix 5.1) emerges from a simple society of 2 individuals.

MATRIX 5.1: PRISONER'S DILEMMA GAME

A		В	Co-operates	Does not Co-operate
Co-opera	tes		(1) 10,9	(4) 7,11
Does	not	CO-	(2) 12,6	(3) 8,8
operate				

The invisible hand of Smith seems to suggest that individuals, out of pure self interest, will trade i.e. be in call (1), with both adopting a co-operative strategy. However, in single plays of the game (or even if the game is repeated a known number of times) the Nash equilibrium will be in cell (3) with both players adopting the non-co-operative strategy. Despite the obvious gains from trade (the move from cell (3) to cell (1) is Pareto improving) the co-operative strategies do not constitute an equilibrium pair. The distribution of utilities that obtains is the one that would emerge in a Hobbesian State of Nature (Mueller, 1989, p.10). From this state of nature, both players become better off by tacitly or formally agreeing not to steal. Such an agreement between individuals could be called a "constitutional contract" establishing property rights and

behavioural constraints on each Individual.

The evolution of co-operation may occur in the context of a prisoner's Dilemma Supergame which is played out an infinite number of times (Mueller, 1989) or via a punishment/tit-for-tat strategy (Axolrod, 1984). The Public Choice school believes that the State comes into existence non-deliberately: it is a result no agent intended, but is one that no agent or group of agents would rather do without (Schotter, 1981). Such an approach to the State solves two problems relating to the pure neo-classical tradition:one, a mechanise for deriving the general will is found; two, the mechanism generates institutions such as the State, without simultaneously requiring the pre-existence (and failure) of other institutions such as the market (Pitelis, 1993, p.108).

The co-operative solution observed in a Prisoner' Dilemma game is dependent on the number of players involved. The larger the number of players the more difficult it becomes to monitor behaviour and detect uncooperative acts. In such a situation, an institution such as the State with its "legitimate* monopoly of force may play the policeman and enforce co-operative behaviour. A counter to this proposition is the argument that State intervention "frees" the individual from responsibility leading to further defection from co-operative behaviour, calling for further State intervention. The process becomes self-reinforcing and has been cited as one possible explanation for rising government expenditures (Mueller, 1989).

In a 2-person situation, when a constitutional contract is agreed upon, a society is born, but a State (as an enforcing agency) is not required. Defection from co-operative, in a 2-person society, is easily detected: there is perfect information. As the number of persons increased beyond 2, information and knowledge about the actions of individuals becomes uncertain. Free riding, without detection/identification, would become a distinct possibility. Society in the sense of a constitution

would continue ho exist, but now a monitoring agency is required. thus proposition being made is that, if their are only two players, a State is not required; if this number rises to three as individual will be unable to know precisely, in the event of a shortfall. in the contribution towards provision of the public good, which of the other two players has defected from co-operative behaviour. This knowledge becomes increasingly fuzzy as tie number of players increases further. Clearly a monitoring agency is required when the number of players increases beyond two if the monitoring agency also has powers to enforce co-operative behaviour, a State has coma into existence in the context of the Prisoner's Dilemma game.

number of players increases As detection/identification of free riding becomes difficult, the extent of free riding would increase. Rarely will it be the case that a society will collapse to cell (3), i.e., collapse to a state of nature, if an insignificant minority reneges on cooperative behaviour. Such a collapse to cell (3) implies that society is so fragile that even a single defection from co-operative behaviour will set motion a process whereby everyone defects from co-operative behaviour and the society sinks into a state of nature. the context of public goods provision, defection of a minority of players from co-operative behaviour will rarely lead to complete non-availability of such goods very few public goods have the property that they can be provided if and only if all individuals contribute towards provision. Such a situation, In effect, places a veto power in the hands of each Individual. Besides, with a large number of individuals, the contribution each individual is so small that the shortfall in total collection will not affect availability of the public good, so long as a significant proportion of individuals do not defect from co-operative behaviour. What will however happen is that there will be a re-distribution of welfare from the contributing member to non-contributing members. Such a situation can be modeled by alternative game situation viz. the game of chicken (Matrix 5.2)

Matrix 5.2 GAME OF CHICKEN

А В	Co-operates	Does not Co-operate	
Co-operates	(1) 3,3	(4) 2,3.5	
Does not co- operate	(2) 3.5,2	(3) 1,1	

The distribution of utilities in the 4 cells of the game of chicken is such that for the row player the following holds:

$$cell (2) > cell (1) > cell (4) > cell (3)$$

It may be noted that for the Prisoner's Dilemma game the distribution of utilities leads to the following ranking for "the row player:

$$cell (2) > cell (1) > cell (3) > cell (4)$$

The main difference in the ranking of cells between the two games is that the position of cell (3) and cell (4) is interchanged in going from one game to the other. Thus in the Game of Chicken the players value the public good so much that each is willing to contribute even if the other does not. Thus the availability of the public good does not cease even when agents defect from co-operative behaviour. This is a situation where the utility of being in a society exceeds the disutility of non-cooperative behaviour of some individuals. By all experience this seems a more realistic way of characterising a society than the Prisoner's Dilemma members of society continue to Most be convention-abiding even when a minority, possibly miniscule, contravenes the law or the conventions of society and appropriates undue benefits.

In either of the game situations the State may emerge to monitor the actions of individuals and it may emerge as a sequence of human design. This is contrary to Hayek's (1976) who considers institutions to be the result of human actions, but not of human design.

The Public Choice school differs from the neoclassical paradigm in one other important respect. Neo-classical theory assumes that States maximise social welfare. According to Public Choice theory State functionaries are assumed to maximise their own personal interest, as does every rational economic agent (Schumpeter, 1942, Downs, 1957, Niskanen, 1973, Nordhaus, 1973, Mueller, 1989). In the terminology of agency theory, the principals in the neoclassical analysis were the consumers whose welfare is maximised by the State, acting as the agent of the principals. According to the Public Choice perspective the State is itself the principal, 3eeking to maximise the welfare of its functionaries. This feature of the Public Choice approach raises the possibility that the State will not be a neutral participant in the economic process, but may favour sectional interest in order to further its own welfare. Legislation favouring powerful interest groups may be passed in return for financial and voting support. This deflection of the maximisation process from social welfare to State functionaries' welfare may not necessarily evoke a reaction from the majority because of "optimal ignorance". This is a situation where the cost of obtaining information concerning State action is equal to or exceeds the costs of remaining ignorant (Cullis and Jones, 1987).

6. TRANSACTIONS Cost APPROACH

The Coase "theorem* suggests that market failures by themselves need not result in State intervention if individuals can internalize such imperfections. Coase (1960) puts forward the proposition that if the State establishes clear property rights, then any externalities that emerge in the market can be

internalised by economic agents. If further public goods and monopolies can be seen as instances of externalities, then the State has no role to play except in establishing property right Of course, the results of the Coase theorem rests on whether individuals can actually internalize externalities costlessly, cooter (1989) indicates that this will be unlikely in the presence of transactions costs.

The starting point for an analysis of transactions costs is Coase (1937). This work of Coase explains why firms exist and also makes a conceptual distinction between the firs and the market. The key feature of the firm is its internal suppression of the price mechanism and the allocation of resources within the firm by command rather than through prices. The main reason why It is profitable to establish a firm would seem to be that there is cost of using the price mechanism. .it is true that contracts are not eliminated when there is a firm but that they are greatly reduced. K factor of production (or the owner thereof) does not have to make a series of contracts with the factors with whom he is co-operating within the firm, as would be necessary, of course, if this co-operation were a direct result of the working of the price mechanism* (Coase, 1937, p.390-391).

Following from this approach Williamson (1985, p.1) hay developed his central thesis that economic institutions (such as the firm) have the main purpose and effect of economizing on transactions costs. However, even though the term transactions cost is used widely it lacks a clear definition (Hodgson, 1993, p.81). Williamson (1985, p.19) has called these costs the economic equivalent of friction in physical systems; Arrow (1969, p.48) defines transactions costs as the costs of running the economic systems. In similar vein Cheung (1993, p.51) describes transactions costs as all those costs that cannot be conceived to exist in a Robinson Crusoe economy. Thus, these costs will include costs of contracting and negotiating, measuring and policing property rights, of monitoring performances and of organizing activities,

With this understanding of transactions it is possible to analyse market failures more systematically and build up a rationale for State intervention. Proceeding from his 1937 paper case (1960) views market failure as arising due transactions case:

"In order to carry out a market transaction it is necessary to discover who it is that one wishes to deal with, to inform people that one wishes to deal and on what terms, to conduct negotiations leading up to a bargain, to draw up the contract, to undertake the inspection heeded to make sure that the terms of the contract are being observed and so on. These operations are often extremely costly, sufficiently costly at any rate, to prevent many transactions that would be carried in a world in which the price system worked without cost* (p.15).

The firm emerges as an institution designed to overcome these transactions costs, though it is not the only institution so designed. An alternative to the firm is government regulation, which can influence the way in which factors of production are used. The government is thus a super-firm of a very special kind (Coase, 1960, p.16). The government is different from the firm in that it can avoid the market and forces of competition altogether, which a firm can never do. Further, the government with the enormous powers at its disposal can get things done at lower cost than can a private organisation.

Arrow (1970) states that transactions costs are associated with any mode of resource allocation including the market. Market failure is the particular case where the transactions costs are so high that the existence of markets is no longer worthwhile (Arrow, 1970, p. 68). There are two main sources of transactions costs: exclusion costs, which get to be prohibitively high in the case of public goods and costs of communication and information.

The existence of the latter coats is an implicit admission that prices do not convey all information that may be necessary to carry out a transaction. A third type of transactions cost is ' noted: costs of "disequilibrium*. These costs may arise even under perfect information since it takes time to complete the optimal and either transactions take place inconsistent with the final equilibrium or they are delayed until the computation is completed (Arrow, 1970, p.68). In the timeless Walrasian general equilibrium, disequilibrium costs are nonexistent since no transactions take place except at equilibrium prices; it is the explicit allowance for the passage of time that leads to disequilibrium costs. Arrow concludes like Coase that "the State may frequently have a special role to play in resource allocation because, by its nature, it has monopoly of coercive power and coercive power can be used to economise on transactions costs" (Arrow, 1970, p.69).

The reasons for the existence of transactions coats have been noted by Williamson (1985) to be bounded rationality. opportunism and asset specificity. Noting the divergences between neoclassical economics and transactions costs will help. Neoclassical economics makes the behavioural assumption of maximising which is unobjectionable if the relevant costs are taken into account. This however is not done and the role of institutions is suppressed: firms are productions functions, consumers are utility functions and optimising is all pervasive. The device of contingent commodities which is employed in Arrow-Debreu models permits comprehensive inter-temporal trading without the need for contracting. Bounded rationality is the guiding assumption of transactions coats economics: as noted by Simon (1961) economic agents are intendedly rational but only limitedly so. With rationality being bounded, costs of planning, adapting and monitoring transactions need expressly to be considered.

The level of self orientation differs in neo-classical economics from the transactions costs economics. The self-

nearest seeking neoclassical economic agent plays the game by the rules which have already been fixed and there is no deviation from this rule based behaviour. In transactions costs economics, agents are characterised by opportunism. Which is self interest seeking with guile (Williamson, 1985, p.47). This obviously means that even if there were rules of the game, these may be broken: thus lying, stealing, cheating along with more subtle forms of opportunism are permitted. The notions of moral hazard and adverse selection in the insurance literature already incorporate the notions of opportunism. In essence what these two notions involve and what underlies the notion of opportunism is a cordition of informational asymmetry.

Specificity of assets introduces imponderables into contracts in a way that is not conceivable in neo-classical economics. Asset specificity includes specificity in physical assets, human assets, location and dedicated, assets. The existence of non-salvageable, i.e. capable of being used in alternative employment, characteristics in an asset introduces impediments in a transaction, which is not the case with neoclassical nonspecific assets. Thus neoclassical transactions can take place within markets where faceless buyers and sellers exchange standardised goods at equilibrium prices.

The transactions costs arising from bounded rationality, opportunism and asset specificity lead to instances of market failure and in such cases as well the coercive powers of the State could help economise on such transactions costs. Thus the neoclassical rationale for State intervention is generalised via the transactions costs approach. Transactions costs become the general pause of market failures and economising on transactions costs is the prime reason for the existence of the State.

There is however one problem with this transactions costs rationale for the existence of the State. As per Coase (1937), firms exist to minimise the transactions costs associated with using the market or the price mechanism; however firms cannot

avoid the market altogether, though the state can. given this and the fact that the State can economise on transactions costs more efficiently through its coercive powers, why does not the State replace both the firm and the market? The answer lies in the fact that no solution can be costless. There is no reason to believe that government regulation will not worsen the problem of market failure or even possibly introduce failures of another kind. The literature in public choice is replete with instance of government failure. This is the reason why firms and markets continue to exist in the presence of government or regulation even though the coercive powers of the government may lend it an edge in terms of efficiency in resource allocation.

In view of the fact that all institutions, market, firms and governments involve transactions costs in their operations, no single institution can displace the others. Transactions costs in the use of the market mechanism, leads to firms; firms may also fail and involve high transactions costs; the failure of markets and firms - private sector failure - leads to State intervention, which itself maybe beset by government failure. Government failure could be seen as the combined result of rationality and opportunism on the part of State functionaries, giving rise to excessive transactions costs (Williamson, 1985) . Opportunism of State functionaries arises from the possibility of exercising the vast discretionary powers that are at the disposal at the State. Both kinds of State functionaries, elected or nonelected, are capable of such opportunism, which results in the manipulation of the economy for partisan ends or leads to a quid pro quo between State functionaries and interest groups. The net result of such opportunism is that State intervention, which was initiated to efficiently allocate resources in the presence of market failures itself, leads to a further mis-allocation of resources. Thus market failure, which was the original cause of State intervention, persists and to that is added a further kind of failure in the allocation of resource, namely, government failure. Such government failure adds further to the transactions costs which were the primary cause of market failure. The failure

of both, the State and market, thus results in institutional failure. Given the failure of all institutions to perform certain transactions economically, the right mix would have to be chosen on the basis of overall transactions cost* minimisation.

North (1981) puts together the neoclassical and public choice Ideas to produce a unified theory of State Intervention. In North's model a utility maximising ruler is assumed who trades services such as protection and justice in return for revenue that collected from the subjects. This ruler acts discriminating monopolist b1' devising property rights for each so as to maximise State revenue, subject to the constraint potential entry by rivals providing the same services and motivated by the same concerns. Such rivalry may be situated in a democratic context where competing political parties vie for electoral favour; alternatively, in a non-democratic context, the competition for political power may be less elegant, in any event, the objectives of State services are (1) to maximise the rents accruing to the ruler and (2) reduce transactions costs to enable output maximisation and thereby increase tax revenues accruing to the State. Note her* that the neoclassical view of the maximiser of social welfare is State as а completely disregarded. also there is a clear divergence of interest between the principal (the consumers) and the agent (the State).

Two factors lead to inefficient property rights: competition from potential rivals for power and transactions costs. Under the first, the State has to build up a support base to thwart the ambitions of rivals, this is achieved by favouring powerful constituents or interest groups, even if this results In inefficiency. On the other hand, transactions costs associates with metering, policing and collecting taxes provide incentives for granting a monopoly. North (1981) concludes that "these two constraints operating together account for the wide spread of inefficient property rights. In effect the property rights structure that will maximise the rents to the ruler is in conflict with that that would produce economic growth" (p.28).

7: INFORMATION THEORETIC APPROACH

The information-theoretic approach to economics (stiglits, 1994) provides an alternative approach to State intervention. This approach is also based on market failures, but goes deeper than the neo-classical approach. The neo-classical approach merely identifies the various areas where markets fail and these are seen as possible a anues for government intervention. The transactions costs approach goes into detail regarding the underlying causes of market failure and also indicates why State Intervention is not all-pervasive. The information theoretic approach also seeks to identify the underlying causes of market failure, principally arising from the absence of perfect Information; further, like the transactions costs approach, limits on the extent of State intervention are analysed.

The First Fundamental Theorem of Welfare Economics provides the Intellectual foundations of the belief in market economies. KB noted earlier, it states that, given certain assumption, a competitive equilibrium is Pareto efficient. Competitive equilibrium is understood to be a situation where supply equals demand; if demand were not equal to supply, forces would be set in motion which would change the situation, 'so that the original situation would not be one of equilibrium. in economies with imperfect information Recent work established that competitive market equilibrium may characterised by demand exceeding supply (eg. Stiglitz-Weiss (1981) models of credit rationing) or supply exceeding demand (eq:Shapiro-Stiglitz (1984) model of unemployment with efficiency wages). It may be noted that the term "competitive market* refers to the situation where there are participants on both sides, but ill which number of information maybe imperfect (Stiglitz, 1994, p.285)

The Theorem assumes that there is perfect information and that this information is fixed and that there is a complete set of risk markets, Should this assumption not be satisfied, then

market may not be constrained Pareto efficient i.e. State intervention may be unambiguously welfare improving. Thus one would observe that there would be market failures associated with information. This can be appreciated once it is realised that: information has all the properties of a public good: non-rivalry in consumption and non-exclusion or at least very costly exclusion (Stiglitz, 1993). It is well-known that the market is unable to provide a sufficient quantity of a public good, including information: there would be under provision, of information as well. Thus the optimal amount of information that agents require to maximise -heir welfare would not be available costlessly and agents may have to expend effort to gather additional information. In standard neo-classical theory all the information that an agent requires for decision making is conveyed by the prices prevailing in the market. If agents are to have an incentive to collect information beyond that conveyed by information should not be perfectly prices, then this disseminated in the market. If there were a complete set of markets and if all information were conveyed by prices no agent would spend any time, effort or money to acquire additional information (Stiglitz, 1994).

Asymmetries of information may often limit the opportunities for trading. If there is complete disclosure of information or as In the standard neo-classical theory all information is conveyed by prices, trading can be a positive sum game. However, with asymmetric information the possibility of cheating (opportunism or self interest seeking with guile in the terminology of transactions costs economics) crops up and the trading situation assumes the form of a Prisoner's Dilemma game. Such asymmetries Qt information give rise to imperfections in many markets including the insurance markets, futures markets, markets for user cars, etc.

The problems of adverse selection and moral hazard arise out Of situations of asymmetric information. The first problem prevents firms from obtaining insurance on their profits: the

firm knows its prospects better than the insurer and the insurer fears that if the firm is willing to pay a premium, it is getting too good a deal. Moral hazard also leads to limited' insurance: the more comprehensive the coverage the leas incentives will agents have to take countervailing actions to prevent the insured-against event. Requiring complete insurance markets In the presence of adverse selection and moral hazard will lead to high premiums that will price out most agents. Thus insurance markets will be thin and combined with transactions costs the markets will be incomplete (Stiglitz, 1994). In the absence of futures markets combined with incomplete risk markets, it is conceivable that the economy can set off on. a path that is locally inter-temporally efficient and only in the distant future does it become evident that the economy is inefficient (Stiglitz, 1394, p.27). In such a situation State intervention, by correcting for the inefficiencies arising out incomplete markets, maybe unambiguously welfare enhancing

Standard neo-classical theory had a theory of State intervention based on market failure: market failure due to externalities and public goods, which called for a well-defined role of the State. But an analysis of market failures based on imperfect information seems to suggest that market failures are pervasive in the economy. Should the government intervene to correct all these market failures, one will necessarily have to assume that the government is endowed with information that is not available to the private sector; also the costs of administering these interventions may well exceed the benefits of the interventions. In the event it may be advisable for the government to intervene only in those area where there are large and important market failures, such as, insurance markets, risks associated with job security and imperfections in the capital markets. Solutions to the relatively less important market failures may best be left to non-governmental initiatives. However even such solutions will require governmental inputs; for instance, the Coasian solution requires establishment of clear property rights.

CONCLUSIONS

We have in this paper reviewed four approaches towards a rationale for State intervention. Each approach was distinctive in terms of its view regarding:

- 1. the role of the State or the rationale for State intervention
- 2. the objectives of the State
- 3 . the relation of the State to the constituents of society
- 4 . the nature of the State

Table 8.1 below presents a summary account of the 4 points lifted above and discussed in detail in the paper.

The neoclassical approach requires the pre-existence of markets and the failure of some of these for the rationale of State intervention to develop. The objective of the State in each of its interventions is the same: maximisation of social welfare.

According to the public choice approach the State cones ii<to existence non-deliberately. However, the view of the State and it functionaries is rather more cynical as per this approach then under the neoclassical approach. The primary objective of State functionaries is the maximisation of their own welfare. In view of this behavioural assumption government failures are endemic and, by default, the market is seen as being welfare enhancing since it limits the powers of the State.

The transactions costs approach views the market and the State as a means to an end, namely, the minimisation of transactions costs. Thus the persistence of transactions costs becomes the principal reason for the neoclassical market failures as well as the principal reason for government failure noted in the public choice approach. The transactions costs approach

TABLE 8.1 A COMPARISON OF VARIOUS APPROACHES TO STATE INTERVENTION

APPROACHES TO STATE INTERVENTION BASIS OF COMPARISON	Neo-classical	Public Choice		Information Theoretic
Rationale for State Interventio	Failure of pre- existing markets	State arises spontaneously from a state of nature	Minimisation of transactions costs	Failure of markets due to imperfect informati on
Objectives of the State	Maximisation of social welfare	Maximisation of welfare of Stale functionaries	Combination of neo- classical and public choice approaches	Maximisatio n of social welfare
Relation between State and constituents of society	Consumers are the principal; Stale is the agent	State is the principal	Combination of neo- classical and public choice approaches	Consumers are the principal; State is the agent
View of the State	Viewed to be benevolent	Viewed variously as malevolent, predator, revenue maximising	Agnostic: neither consistentl Y benevolent nor malevolent	Viewed to be benevolent

embraces both, neoclassical and public choice, approaches toward state intervention. However, since the term "transactions coats defines a precise definition and because of the generality of the term, the efficacy of this approach in a real situation runs into difficulty (Mueller, 1989, p,336).

Finally, the Information theoretic paradigm has a view of the State that is similar to the one in the neoclassical approach. The State intervenes in order to maximise social welfare in response to market failures arising out of imperfect information and because of incomplete risk markets. The crucial difference between the neoclassical and information theoretic approaches is that market failures are far more pervasive under the latter than under the former. In the presence of imperfect information the market would not be constrained Pareto efficient and State intervention would be welfare enhancing. It must, of course be noted that there will be government failures as Stiglitz (1994) discussion on market socialism indicates; it is also not at all certain whether "fair, wise and efficient governments really exist for the "perfect* intrusive intervention that is required by the information theoretic approach (Jaramillo-Valejo, 1993),

In the final analysis the difference between the various approaches towards state intervention stems from the view of the State that is adopted. The neoclassical and information theoretic approaches view the State as being essentially benevolent, having as its primary objective the maximisation of social welfare. The public choice views the State as being no different from the other economic agents in society i.e. selfish and concerned with maximising the welfare of State functionaries. Both of these extreme viewpoints, however, run into difficulties. The neoclassical approach runs into problems because the States are not consistently benevolent; the public choice approach faces difficulties because States do sometimes behave benevolently in the sense of initiating policies, which curtail, their own power in the interest of maximising social welfare.

The transactions costs approach offers an escape from the extreme positions that the other two approaches find themselves in by being agnostic in its view of the State. The market and the State are a means to an end, namely, minimisation of transactions costs in the allocation of resources, and yet both may fail leading to institutional failure. The major drawback of this approach, as we noted earlier, is that no precise definition of transactions costs exists which makes the concept nebulous and difficult to pin down in a specific situation. In spite of this, however, there is no denying the fact that the transactions costs approach tells a very plausible story of State intervention.

REFERENCES

- ARROW K. (1970) The organisation of economic activity: issues pertinent to the choice of market versus non-market allocation. In R.H. Haveman and J. Margolis (eds) Public Expenditure and Public Policy. Markham, Chicago.
- ATKINSON A. B. and J. E. STIGLITZ (19) Lectures in Public Economics McGraw-Hill, Singapore.
- AXELROD R. (1983) THE Evolution of Co-operation, Basic Books, New York.
- BARR N. (1993) The Economics of the Welfare State, Weidenfeld and Nicholson, London.
- CHEUNG S.N.S. (1992) On the new institutional economics. In h, Wiren and H. Wijkander (eds) Contract Economics_f Blackwell, Oxford.
- COASE R.H. (1937) The nature of the firm. Economics_r Vol. 4, pp, 3E6-405.
- COASE R.H. (1960) The problem of social cost. Journal of Law and/ Economics_r Vol. 3, 1-44.
- COOTER R.D. (1989) The Coase theorem. In J. Eatwell et al. (eds) the new Pajlqrave: Allocation. Information and Markets.

 Macraillan, London.
- CULL.1S J. and P. JONES (1987) Microeconomics and the public economic: a Defense of Leviathan. Basil Blackwell, Oxford.

- DOWN A. (1957) An .ECONOMIC Theory. of Democracy, Harper and Row, . New York.
- Friedman M. (1962) Capitalism M Freedom, University of Chicago Press, Chicago.
- HAYEK F.A. (1950) TJie Constitution ojt Liberty. Routledge and Kegan Paul, London.
- HAYEK F.A. (1976) The. Road TQ Serfdom. Routledge and Kegan Paul, London.
- FDDGSON G.M. (1993) Transactions costs and the evolution of the firm. In C. Pitelis (ed) Transactions Costs, Markets and. Hierarchies f Blackwell, Oxford.
- CT\RM1LLO-VALEJO J. (1993) Comments on "The role of the State in financial markets'* by stiglitz. Proceedir.us of the world Bank Annual Conference op Development Economics.
- FTJELLER D.C. (1989) Public Choice JX, Cambridge University Press, Cambridge.
- MISKANEN w.A. (1973) Bureaucracy; Servant ox Master. IEA, London.
- NORDHAUS W. (1973) The political business cycle. Review of Economic Studies, Vol. 42, pp. 1969-90.
- NORTH D.C. (1981) Structure and, Change in Economic History, Norton, New York.
- NOZICK R. (1974) Anarchy State and Utopia, Basil Blackwell, Oxford.
- PITELIS C. (1993) Market and Non-market Hierarchies: Theory of Institutional Failure, Blackwell, Oxford.
- RAWLS J. (1972) A Theory flf Justice. Clarendon Press, Oxford.
- SCHOTTER A. (1981) The Economic Theory gf Social Institution for Cambridge University Press, Cambridge.
- SCHUMPETER J.A. (1942) Capitalism^{*} Socialism ajod Democracy Unwin Hyman, London.
- SHAPIRO C. and J.E. STIGLITZ (1984) Equilibrium unemployment as a worker discipline device. American Economic Review Vol. 74, ., pp. 433-444.
- SIMON H.A. (19G1) Administrative Behaviour, Macmillan, New York.
- STIGLITZ J.E. (1993) Market socialism and neoclassical economics. In P. Bardhan and J. Roemer (ads) Market Socialism: the Current Debate, Oxford University Press, New York.

- STIGLITZ J.E. (1994) Whither Socialism MIT Press, Cambridge (Mass.)
- STIGLITZ J.E. and A. WEISS (1983) Incentive effects of termination: Applications to the credit and labour markets. American Economic Review. Vol. 73, pp. 912-927.
- WILLIAMSON o.E. (1985) The Economic Institutions of Capitalism, Free Press, New York.

The aim of this series is to publish preliminary research findings of the member of the faculty of the Department Economics, University of Bombay. No part of thin paper can be quoted or reproduced without the author's written permission.

The List of Papers Already Published

- 1) Spectral Analysis of Non-stationary Time Series by D.M. Nachane, Paper.no. September 95/1
- 2) Chaotic Economic Dynamics and Business Cycles by M.J.
 Manohar Rao, Paper no. November 95/2
- 3) Farmers and Rulersi Stata Intervention in the 19th Century Deccan Countryside by Nearaj Hatakar , Paper no. 96/J
- 4) Does Chaoa Imply Control 7 h Reaction to the Lucas Critique by M.J. Manohar Rao, Paper no. December 9S/4
- 5) A Modified Hannan Inefficient Procedure for Causal Systems by D.M. Nachane, Paper no. January 96/5
- 6) A Programme For Full Capacity Utilisation In the Indian Manufacturing Sector by L.O. Burange, Paper no. February 96/6
- 7) Regional Trading Blocks and Their Implications For The Indian economy by D.M, Nachane and Lakshmi R. , Paper no, March 96/7
- 8) Promotional and protective Social Security During Economic Reform Study of Two Indian States by K. Seat Prabhu, Paper no. March 96/8

- 9) Financial Policy Coordination in a Keynesian Framework by Romar Correa , Paper no. April 96/9
- 10) Industrial Reforms in' India* Experience and Prospects by7.C. Sandesara Paper*'no. Kay 96/10
- 11) Theories of. State Intervention by Ajit Karnik, Paper, no May 96/11
- 12) The Effectiveness of Fiscal Policy With a Tax Mix by Errol D'Souza Paper no. June 96/12.

For copies and correspondence write to

Neeraj Hatekar

Department of Economic

University of Bombay

Vidyanagarl, Kalina,

Santacruz (East), Mumbai - 98

India.