

Evaluating the Evaluators

Performance of Bureau of Public Enterprises

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This paper analyses the performance of the Bureau of Public Enterprises (BPE). It argues that the source of the ineffectiveness of BPE lies in its inability to measure the performance of public enterprises in a way that is both fair to the managers and to the nation. The institutional set up of BPE too significantly contributes to its ineffectiveness. Finding the present system of performance evaluation used by BPE severely lacking, the paper suggests three axioms of public enterprise performance evaluation against which all future efforts of BPE should be judged.

THERE is no other governmental institution in India which has been subjected to such a consistent barrage of criticism as the Bureau of Public Enterprises (BPE). It has been referred to as a fifth wheel which is completely redundant. In its present form, most critics feel, it is neither useful nor ornamental.¹

As far back as 1974 the Committee on Public Undertakings (COPU) of the Fifth Lok Sabha had this to say in its 40th report: The Committee gathered the impression during their visits to public undertakings as well as during the evidence tendered by the chief executives of the public undertakings that the bureau has not been able to discharge its role and functions to the entire satisfaction of public undertakings. Not only have its guidelines or advice not found ready acceptance with the undertakings, it has also not been able to resolve the problems facing some undertakings in any tangible manner. In the circumstances, the Committee cannot but look askance at the heavy expenditure which is being incurred on this top heavy Bureau ...

A decade later not much has changed. Another committee evaluating the BPE could use these times verbatim to describe the situation as it exists now. However, this paper will try to show that the critics have missed the main point. That is the reason why, in spite of this hostile environment, BPE has survived and even prospered over the years. But, first, a word about BPE's background.

THE HISTORY OF BPE

To evaluate BPE's performance it is essential to know its goals and objectives. For this one has to go back in time and examine the original intentions. A proposal to set up an entity like BPE in the Ministry of Industry, the only ministry with many public enterprises at that time, was floating around as early as 1960. However, it never came to fruition. Instead, BPE was set up in 1965 in the Ministry of Finance. It was briefly transferred to the Cabinet Secretariat in January, 1966 (see Exhibit) but by June 1966 it was re-transferred to the Department of Co-ordination, Ministry of Finance. By 1969 it had come to exist as a separate entity under the Ministry of Finance.

THE OBJECTIVES OF BPE

During this turbulent formative period two committees deliberated on the nature and functions of BPE. First, the Estimates

Committee of the Third Lok Sabha in its 52nd Report in 1963-64 recommended the setting up of BPE. Its recommendations were accepted and BPE was set up in 1965. Second, [his issue was taken up by two study teams of the Administrative Reforms Commission, which presented its final report in 1968.

A survey of the proposals by these committees shows, quite convincingly, that one of the main objectives envisaged for the BPE was for it to be a monitoring agency for collecting information and evaluating the performance of public enterprises (Basu, 1984).

Following the Estimate Committee's report the Bureau of Public Enterprises was set up with the objectives of: (a) Reviewing periodically the working of public undertakings; (b) Presenting reports and reviews of the operations of public enterprises to the Parliament or government agencies; (c) Devising steps to improve productivity and profitability; (d) Providing a central point of reference and consultation on important aspects of management; and (e) Exploring avenues of the economy in capital costs.

The final report of the Administrative Reforms Commission also consisted of a similar but expanded list of objectives.

REASONS BEHIND THE PERCEIVED FAILURE OF BPE TO ACHIEVE ITS OBJECTIVES

As mentioned earlier there is no dearth of criticism levelled against BPE. However, they suffer from two major weaknesses.

First, the critics have adopted a very partial approach with a restrictive perspective. They have, in general, looked at a specific function of BPE and found it lacking, without looking at the total picture. Second, in most cases the solutions offered are equally unconvincing. Therefore, BPE has continued to survive in its original form without being effective.

This paper, in contrast, argues that problems associated with various aspects of BPE's functioning are inter-related. It also delineates the conceptually sound method to search for an alternative. It argues that the source of all the trouble with BPE's functioning lies in its inability to evaluate public enterprise performance. If one cannot distinguish "good" performance from "bad" performance then the public enterprise game is all over. If a "good" manager and a "bad" manager are treated to the same way because of one's inability to distinguish between

them, then the former will have no incentive to strive as hard and the public enterprise system will be eventually loaded with overwhelming mediocrity.

The other objectives of BPE, mentioned above, cannot be achieved either under these circumstances. It cannot act as a "central point of reference and consultation" if it does not know what exactly should be pursued by the public enterprises. Nor will it have criteria to hire competent people and fire incompetent people, or, suggest ways of improving performance. In short, the inability to evaluate public enterprise performance is the cause and all other alleged problems of BPE are mere symptoms.

In fact the problem has a dynamics of its own. Since BPE does not have a convincing criterion or framework for performance evaluation it is not effective. And, because it is ineffective it does not attract very talented and highly trained professionals, which in turn leads to the perpetuation of its ineffectiveness. The validity of this argument is best illustrated with an analogy to the alleged reasons for the comparative efficiency of private enterprises. It is argued that the main reason for this is that private enterprises have a single, well-defined criterion for performance evaluation—profitability. This imposes a certain discipline and provides a sense of direction to a private enterprise. It enables it to move in the direction in which its owners (stockholders) want it to move.

In contrast, public enterprises have multiple objectives, which are often conflicting. Therefore, unless a way is found to merge these objectives into a composite criterion, the public enterprise managers will continue to be confused by such mixed signals (Jones, 1982). To be sure, BPE has proposed one such composite criterion. The remainder of this paper will examine the validity of this criterion and explore alternatives.²

THE VALIDITY OF BPE CRITERION

Pursuant to its charter, the Bureau of Public Enterprises presents an annual report on the working of all public enterprises under the Central government. It also periodically reports to the Finance Minister and the various committees of the Cabinet on the performance of these public enterprises. In addition, in recent years it has published another document entitled, "Performance Aims and Financial Targets of Central Government Enterprises".³ This document represents BPE's effort to define the perfor-

mance criterion for public enterprises. Therefore, we will concentrate on it to illustrate our argument.

The approach suggested by BPE consists of evaluating public enterprises on the basis of the following two criteria: (a) the rate of capacity utilisation; and (b) the rate of return on capital employed. This approach is

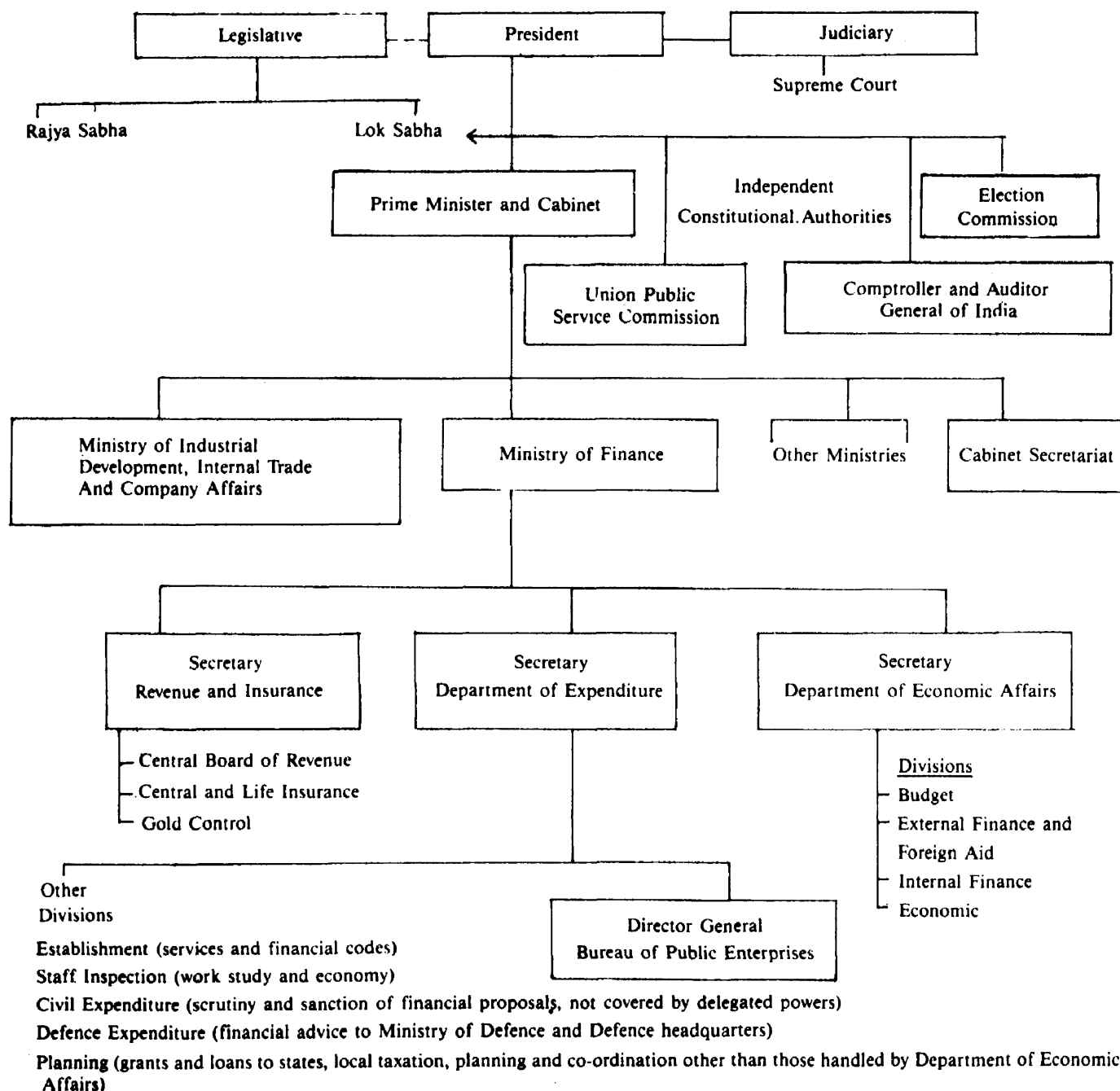
bedevilled with so many conceptual problems that it is a complete non-starter. It violates every principle of public enterprise performance evaluation. The major problems with this criterion are as follows:

1) The criterion does not indicate the relative weights of these two criteria. Are they equally important or is there a trade

off? It is quite possible that capacity utilisation may increase while profitability may go down. In this situation no judgment on the performance is possible. The absence of relative weights is likely to confuse the managers more than providing a useful guideline.

Elementary economics tells us that increases in output are not always correlated

Bureau of Public Enterprises
A Partial Organisation Chart as of October, 1968



Note: There are various cabinet sub-committees for important subjects such as Food and Public Enterprises. Correspondingly there are secretaries' committees chaired by the Cabinet Secretary.

Source: Secretariat Training School, Government of India, Organisational Set-up and Functions of the Ministries/Departments of the Government of India.

with increases in profits. Consider Figure 1 in which a typical set of marginal cost and marginal revenue curves are presented. The marginal revenue curve depicts a price taker's situation since that is exactly what most public enterprises are. The price of their outputs is usually regulated by the government.

Clearly, increases in capacity utilisation are likely to be positively correlated with profits if the public enterprise is operating to the left of Q' . If it is operating to the right of Q' then the two criteria will be negatively correlated. The BPE seems to be assuming that all public enterprises are to the left. This is clearly a strong assumption.

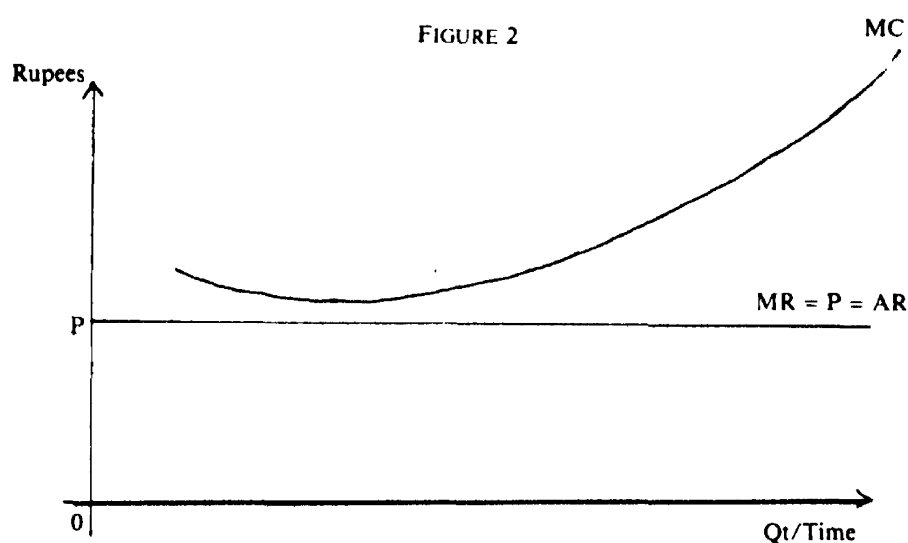
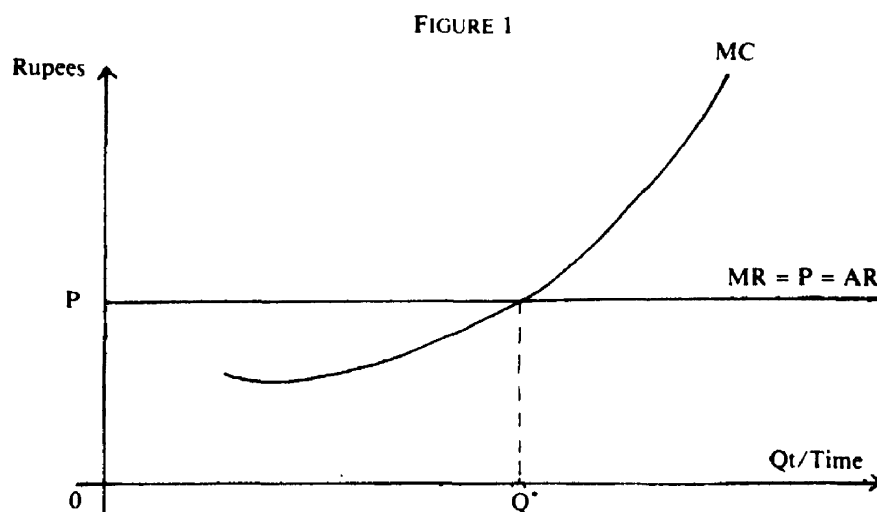
More often than not the situation facing most public enterprises is likely to be as shown in Figure 2. Due to the government's objective of maintaining "reasonable prices" the price of output is often "too" low. Whereas, the input prices, usually beyond the government's control, are high. Under these circumstances any increase in capacity utilisation will be negatively correlated with financial returns.

2) The heart of the problem with BPE's criterion consists of a very typical conceptual mistake with all such multiple indicators.⁴ The motivation for using multiple indicators comes from the realisation that partial indicators do not capture all aspects of performance. For instance, labour productivity and capital productivity tell us how these two inputs are being used by the public enterprise but they do not tell us anything about whether the operation of the public enterprise is increasing or decreasing the overall welfare of the society. In their attempt to overcome this problem evaluators often combine several partial indicators hoping that they will be able to capture the total picture.

In doing so they violate one of the fundamental principles of public enterprise performance evaluation. They include some benefits and costs more than once. That is, the various partial indicators that form part of the multiple indicator are "duplicative". To illustrate this point let us examine this problem in the context of BPE's criterion.

Consider the following example: A public enterprise increases its output by Rs 100 and increases its consumption of intermediate inputs by Rs 100. Clearly, the society is neither better nor worse off as a result of the public enterprise operation. *Ceteris paribus*, the financial performance will not be affected. However, the rate of capacity utilisation will go up. And if we were judging the performance of the public enterprises on the basis of BPE's criterion, we would be forced to conclude that the enterprise performance has improved, which is not true from the society's point of view.⁵

3) Another problem with this criterion is that it is a "single period" indicator. That is, it looks at costs and benefits in one given



period. It ignores the future effects of present actions and also consequences in the present or past actions. Therefore, a public enterprise could raise the rate of capacity utilisation as well as financial returns on the capital employed by postponing the necessary maintenance. In other words, a public manager may be rewarded for doing those things that are not in the national interest. Ultimately, the society has to bear the consequence of deferred costs at some later date.

Similarly, this criterion is unfair to the present management who may be paying the penalty for mismanagement in the past. Machines may be breaking down more often, because proper maintenance schedules were not adhered to in the past.

4) A serious problem with BPE criterion relates to the measurement of cost and benefits in current prices as opposed to constant prices. In the context of public enterprises, where prices are often regulated, use of current prices is close to meaningless. It is quite likely that a public enterprise may appear to have improved its performance in terms of BPE criterion, if the only thing that happened, from one year to another, was an increase in its output price.

Besides being a misleading indicator of performance the use of current price indicators may induce a wide variety of perfunctory behaviour. For example, managers may be encouraged to try to get the price of their output increased rather than strive to increase real productivity. Those who have the right political alignments are likely to succeed in getting higher prices for the output and lower prices for inputs. Once again, perceived improvement in the performance of these public enterprises may have no systematic relationship with the social welfare.

We could continue to point out some more problems, but suffice it to say that BPE's approach, at best, is not very useful for measuring public enterprise performance. At worst it provides signals which could induce serious misallocation of the nation's scarce resources. The preference for "outcomes over procedures" in the public enterprises expressed by the Prime Minister is a step in the right direction. However, in the absence of the government's ability to measure "outcomes", India may end up in a situation which has neither the discipline of the "rules and procedures" nor the pressure to perform.

GUIDELINES FOR AN ALTERNATIVE CRITERION

Public enterprise performance evaluation is a difficult task but not an impossible one. It is not enough to collect a mass of information on public enterprises and publish them. It has already been tried in India and elsewhere with no success. What is required is a conceptual framework which is easily understood and can be defended.

What must be avoided are the two extremes of either a very simple indicator for all public enterprises or a very complex system, custom designed for each enterprise. The key to successful performance evaluation is "judiciousness". While the diversity must be recognised there should be some unifying principles underlying the performance criterion for various public enterprises. The purpose of this section is to outline those principles.⁶

Any public enterprise performance criterion which meets the following principles is likely to capture the true performance of the public managers.⁷ These principles are the *meta-criteria*, that is, the criteria to judge a criterion.

However, before stating this set of *meta-criteria* it may be useful to recapitulate the purpose of public enterprises. In a mixed economy public enterprises are an instrument of public policy. Therefore, as with any other public policy instrument, the operation of public enterprises ought to enhance the social welfare. If we accept the validity of this perspective then the following principles follow logically from it:

Principle 1: Any public enterprise performance evaluation criterion must count each benefit and each cost at least once and at most once.

It is obvious that if some costs and benefits are ignored by the performance criterion, then it can never capture the "true" impact of public enterprise operations on the social welfare. These costs and benefits can be divided into two broad categories: *Pecuniary* and *Non-Pecuniary*. The former refers to those costs and benefits which can be measured in monetary units such as the cost of the raw materials, labour, and working capital. The latter refers to those costs and benefits that cannot be valued in monetary units. Examples usually include benefits from research and development (R and D), corporate planning, and plant maintenance.

Notice that all of these examples represent the benefit side. This is indeed the usual case. Public enterprises are blamed for comparatively poor performance in these areas *vis-a-vis* private enterprises. The reason is not difficult to see. These activities impose a cost in the current year but pay dividends in some future year. A public manager, who has a comparatively short tenure at a public enterprise, is likely to avoid such activities in order to appear as successful as possible in the current year. A private owner, on the other

hand, cannot afford to do this because any postponed maintenance will eventually catch up with him.

TO meet the requirements set forth in Principle I, the evaluators will have to take the following steps:

a) First, they must make a complete list of all possible costs and benefits associated with the operation of a particular public enterprise. These costs and benefits in question are "true" or "economic" costs and benefits as opposed to the "accounting" ones. Accountants look at costs and benefits from a private stockholder's point of view whereas public enterprise evaluators ought to view them from the society's vantage point. For example, taxes are a legitimate cost for private enterprises, and owners ought to reward their managers for bringing down the tax liability through "tax planning", but they are a mere transfer payment from the government's point of view. It does not really matter who keeps the taxes, the enterprise or the government.

b) Second, evaluators must take the pecuniary costs and benefits and find out the surplus (i.e., benefits minus costs.) This concept of surplus has the same structure as the "profit" used by accountants except that it measures the publicly relevant costs and benefits. Hence, we may call it "Public Profit".

c) Third, one has to take the remaining benefits and costs, that cannot be measured in monetary terms and add them up with "public profit" using a suitable normalising procedure.⁸ We can call "public profit" the "primary indicator" because it captures the bulk of operational benefits and costs. It is a measure of the "true surplus" generated by public enterprises in the current period. The other indicators, such as the effectiveness of a corporate plan and the quality of the maintenance programme⁹ may be referred to as the "supplementary indicators". Together they give us our desired "composite indicator".

The key to meeting the requirements of Principle I is that the primary and the secondary indicators must be mutually exclusive or non-duplicative.

Principle 2: A public enterprise performance evaluation criterion must be monotonically related to social welfare. That is, an increase or decrease in the value of the criterion should reflect an increase or decrease in the society's welfare. In other words, it must be "fair" to the nation.

The first principle implied that one must have the right categories of costs and benefits, those that reflect the society's perspective. This principle carries that process one step further. It implies that not only should one have the right categories of costs and benefits but they must be valued appropriately. That is, one must use shadow prices which reflect the true opportunity costs, rather than market prices.

It is at this point that most policy-makers throw up their hands in despair. Many consider shadow prices to be a subterfuge or a rhetorical ruse used by the economists to confound the non-economists. They argue that any performance evaluation system involving shadow prices is likely to be difficult to implement. For example, it would be very difficult to fire the chairman of a large public enterprise in any country because the shadow multiplier for labour is 0.3 and not 0.5. Often, the result is to adopt a nihilistic attitude and drop the whole scheme.

This paper contends that there is a practical way out of these two extreme positions. The trick again is to be judicious in one's approach to policy-making.

a) First, evaluators should only try to use shadow prices where the distortions are severe and a shadow price is easily obtainable. For instance, if a country imports oil and sells it at a controlled price, below the c.i.f. price, then one should use the latter price if indeed the difference between the two prices is significant.

A shadow price obtained, after manipulating complex matrices, with great precision to the fourth decimal place is likely to lead to a more precise failure.

b) Second, a public enterprise performance evaluation system is likely to be concerned more with the trend than the level of performance. That is, what is more important is that compared to the previous year the enterprise should continue to improve. Fortunately, it turns out that some studies (Jones, 1979) have found that the trend in market prices and shadow prices are usually similar. Therefore, even though shadow prices are the conceptually right prices to use, on practical grounds the trend in market prices can be used as a proxy in the initial stages of implementing an evaluation system.

Principle 3: A public enterprise performance evaluation criterion must be monotonically related to management's performance.¹⁰ That is, increases and decreases in the value of the criterion should be related *only* to factors within the control of the public enterprise manager. In other words, it must be "fair" to the public enterprise management.

The purpose of a performance evaluation system is to induce desirable behaviour among public managers. In a mixed economy, such as India, where there is a general regard for "fairness", a criterion that appears to be "unfair" is likely to lead to undesirable behaviour.

For example, if the price of oil shoots up due to a crisis in the Middle East and an oil consuming public enterprise shows a deficit in terms of our primary indicator then it is extremely unlikely that the manager will be fired. No one will consider it "fair" to fire him for a situation over which he had no control. Now if the evaluators did nothing

else to adjust for this exogenous change, then it is conceivable that this public enterprise manager may indulge in other undesirable behaviour and get away by blaming the whole thing on an adverse change in prices.

Principle 2 requires action to prevent this from happening. For instance, this requirement could be met by measuring public enterprise performance at constant prices rather than current prices.¹¹

This completes our review of the three fundamental principles of public enterprise performance evaluation. These are the universal axioms from which particular corollaries applicable to different contexts should follow. It is the job of evaluating agencies such as BPE to use these as guidelines and devise criteria for various public enterprises. Unfortunately, BPE's present efforts are not even close to being acceptable.¹²

However, to be fair, we have to temper our judgment regarding BPE's effectiveness by examining the position of BPE in the government's institutional hierarchy and its effect on BPE's performance.

BPE AND THE INSTITUTIONAL HIERARCHY

Even if BPE was able to come up with a set of criteria which meet the fundamental principles of performance evaluation outlined above there is no guarantee that it will cease to be ineffective. Without being facetious, the real question is, "Who cares about what the BPE does?" Unfortunately the answer may be, "No one".

The problem lies in the multiplicity of principals. It is one of the paradoxes of performance evaluation that the effectiveness of performance evaluation of an agent decreases with the increase in the number of principals. Different principals evaluate performance from different perspectives and hence overwhelm the agent (public enterprise in our case) with a huge list of requirements which are often inconsistent with one another. This can have two possible consequences. By reducing the feasibility set to a minimum it can stifle the initiative and lead to poor performance. Alternatively, it can provide the public enterprise manager the opportunity to pursue his preferred objectives by playing one principal against another.¹³

In India there are too many controlling agencies yet there is very little control. First, there is the Planning Commission, which decides on the overall priorities in the public and private sectors and monitors the performance of certain core industries. Second, the Parliament, as a trustee of the public interest, also monitors the performance of public enterprises. This is achieved by vesting the legal authority for supervision and control of public enterprise in the Cabinet Ministers, who are the nominees of the Parliament. The control over the Ministers is exercised *via* questions and debates in the Parliament and the Committee on Public Undertakings. Third, the Auditor General

of India puts forth an audit report for each enterprise every year. Fourth, the Bureau of Public Enterprises publishes its Annual Reports on the performance of the public enterprises. Finally, each public enterprise is required to publish its financial statements annually under the Indian Companies Act, which is enforced by the Registrar of Company Affairs.

Each of the above monitoring agencies has a slightly different concern. Therefore, while the Planning Commission may be concerned with the overall social welfare, the Auditor General emphasises propriety and the Annual Report looks at conventional financial measures of performance. Given this chaotic state of control structure there is no hope for salvation no matter how sophisticated India gets in devising appropriate performance evaluation criteria.

There are several alternatives and each has its strengths and weaknesses.¹⁴ The arrangement which appears to be best suited for India may be described as follows:

- (i) The Bureau of Public Enterprises should be detached from the Finance Ministry and brought under the Prime Minister's Secretariat. The Director-General of BPE should be directly responsible to the Prime Minister.
- (ii) BPE should then develop an appropriate set of criteria and criteria values for the various public enterprises and monitor their performance.
- (iii) The Ministry and its Minister, under whom a public enterprise falls, should be equally responsible for the enterprise performance. In other words, the Minister of the concerned Ministry should have to do all the explaining to the Prime Minister.

This system would appear to have many advantages. First, contrary to the present, the concerned Ministers will no longer have merely an adversarial relationship with the public enterprises under them but will have to act as their partners. For instance, public enterprises producing cement fall under the Minister of Industries. If these enterprises are having difficulty procuring coal and are in the danger of performing poorly because of it then the Minister of Industries will have to take up this matter with his counterpart in the Ministry of Energy.

This will also help the Prime Minister keep a better tab on the performance of his Cabinet. At present, the Prime Minister has to rely on what the Cabinet members tell him about the performance of public enterprises under them. Obviously, it is in the interest of the Cabinet members to downplay poor performance (unless it has already generated too much outcry). With a professionally staffed BPE the Prime Minister can truly begin to emphasise "outcomes" over "procedures", his professed policy.

Finally, the importance of having a uniform accounting system for all public

enterprises under BPE should not be minimised. At present, public enterprises present their financial accounts just like their counterparts in the private sector. The wide variety of formats make the comparison and monitoring of public enterprise performance difficult.¹⁵

CONCLUDING COMMENTS

The objective of this paper was to analyse the performance of BPE. It argues that the ineffectiveness of BPE should be viewed as a problem of vicious cycle whose source lies at the inability of BPE to measure the performance of public enterprises in a way that is both fair to the managers and to the nation. Further, it finds that the institutional set up of BPE significantly contributes to its ineffectiveness.

This paper examines the present system of performance evaluation used by BPE and finds it severely lacking. It then goes on to suggest three axioms of public enterprise performance evaluation against which all future efforts of BPE are to be judged. Given the stakes one can only hope for a quick re-evaluation of the present system.

Notes

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1 For a wide range of comments on BPE's performance, see Murthy (1976).

2 I appreciate the full range of ideas involved see: Cabral (1981); Ahroni (1983); Chatterjee, N (1978); Chatterjee, P (1979); Chattopadhyaya (1978, 1981); Dholakia and Khurana (1976); Om Prakash (1981); Morarka (1981); Fernandes (1981); Finsinger and Vogelsang (1982); Gupta, M (1981); Jenkins (1979); Nove (1973); Sastry (1980). No attempt will be made to review these approaches as it has been done elsewhere (Trivedi, 1984, 1985a).

3 Bureau of Public Enterprises, "Performance Aims and Financial Targets of Central Government Public Enterprises: 1982-83 and 1983-84", Ministry of Finance, New Delhi, April 1982.

4 See Trivedi (1985a) for a detailed discussion of this point with respect to the performance criterion used by the Korean Development Bank.

5 Note that the only changes are in the output and the intermediate inputs. Labour is assumed to remain constant. If employment had increased we might have some justifica-

tion for saying that the performance has improved.

- 6 No attempt will be made to set out the details of a complete performance evaluation system. Interested readers can refer to Jones (1981), Jones and Trivedi (1983), Thvedi (1985a; 1985b) and Nawab (1984) for a precise and detailed application of this conceptual framework.
- 7 At this juncture it may be worth noting the important difference between "management's" performance and the "enterprise" performance. Management's performance is obtained by adjusting "enterprise" performance for all factors beyond the control of public enterprise management.
- 8 See Jones and Trivedi (1983) for an example of one such procedure.
- 9 For details of an attempt in Korea to do this at a practical level, see Trivedi (1985b).
- 10 See the difference between management's performance and the enterprise performance noted earlier.
- 11 It should be noted that this may not always be the correct response. It is appropriate when a public manager is stuck with a given technology and there is little or no room for substitution. If, on the other hand, there were a large number of substitution opportunities then one would want to continue using current prices. This is essential to induce the manager to find cheaper substitutes and utilise them. This will improve allocative efficiency, which is precisely what one wants.
- 12 Pakistan is in the process of implementing a system based on these principles. For details of this attempt see Nawab (1985) and Mehdi (1984).
- 13 For a general discussion of issues involved see: Pelicon (1982) and Boneo (1981). For a discussion regarding these issues in a particular country see: Bell (1979) and Abtan (1979).
- 14 For a discussion of some of these alternatives, see; Ramanadham, V V, (1984).
- 15 See: Petrovic (1978), Tang and Lin (1985) and Ministry of Economic Affairs, Republic of China (1971) for an analysis of the merits of uniform accounting in public enterprises. See: Riise (1982) for an example of this system in a more developed nation.

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