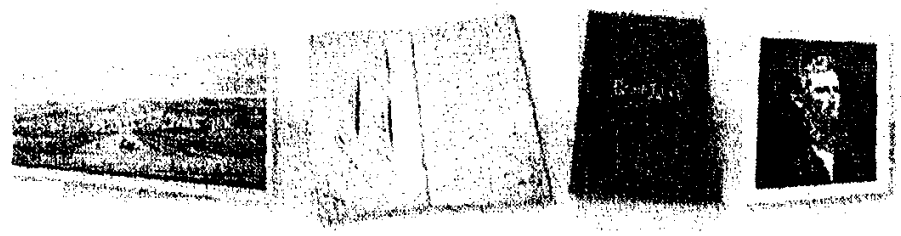

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Chapter 5

Public Enterprise in the United Kingdom

5.1 Introduction

Since the primary aim of this second section of the book is to evaluate the U.K. privatization program as it has developed since 1979, we do not intend to set forth a detailed analysis of the history and evolution of public enterprise in Britain. For the most part we will confine ourselves to brief remarks on this history only when it appears relevant to assessments of privatization in the case studies contained in chapters 8 through 11. Nevertheless, for purposes of comparison, some analysis of the general scope and character of publicly owned enterprises in the period before 1979 *is* required, and the current chapter is therefore devoted to this task.

The most important issue to be considered concerns the nature and performance of the control system for the nationalized industries that emerged in the postwar period. Public ownership is most frequently criticized on the ground that it typically fails to establish efficient incentive structures for decision makers in public sector firms. In chapter 2 we discussed some of the more abstract aspects of this agency problem; here we will focus upon specific features of the problem that have been encountered in the U.K. and upon policies designed to resolve the difficulties within an overall framework of public ownership.

The starting point for the analysis is an examination of the different organizational forms that have been adopted for publicly owned firms. For example, one type of public enterprise rests upon partial or complete state ownership of the shares of a standard joint-stock company. Although a number of such companies have existed in Britain, by far the most significant type of state ownership is based upon the concept of the public corporation. The characteristics of this institution will therefore be explained and discussed in section 5.2.

The general principle underlying the governance of state-owned industry in Britain has been a desire to combine public accountability with managerial autonomy in day-to-day decision making. This has led to the development of a quite elaborate control system for the nationalized industries, the principal features of which are as follows:

(i) statutory duties laid upon public corporations by Acts of Parliament;

(ii) the right of ministers to give directives of a general character to the chairmen of public corporations;

(iii) the ability of ministers to exert "unofficial" pressure on the public corporations;

(iv) investigations conducted by House of Commons committees;

(v) investigations by other official bodies such as the Monopolies and Mergers Commission (MMC);

(vi) guidelines set out in a series of White Papers on the nationalized industries;

(vii) the ability of ministers to impose certain financial constraints on the public enterprises.

We will examine these various dimensions of the control system in sections 5.3 and 5.4. Section 5.3 is concerned chiefly with the relationships between Government and the industries as they have have developed in practice, and covers the first five components of the above list. Section 5.4 deals with the more general questions connected with the framing of appropriate objectives for, and of financial constraints on, the public corporations (components (vi) and (vii) of the list).

The implications of the framework of control that has evolved in Britain are numerous, but in section 5.5 we use a simple economic model to illustrate one or two of the more important points. In particular, we stress the limitations of the prevailing forms of financial constraints when these are used as instruments to promote greater internal efficiency in monopolistic public enterprises. Not only may the financial constraints lead to some loss of allocative efficiency, but also, because of their vulnerability to strategic manipulation by the industries concerned, they may have undesirable effects on investment programs and cost efficiency.

The remaining sections of the chapter are intended to set the scene for our analysis of the British privatization program. Section 5.6 outlines the size and shape of the U.K. nationalized industries in 1979, the year in which the first Thatcher Government came to power, while section 5.7 presents data on the recent performance of the public corporations. Finally, in section 5.8, we draw together our main conclusions about the characteristics of the British approach to the control of public industry, and briefly assess some of the alternative policies that might have been implemented in the absence of privatization.

5.2 Types of Public Ownership

At the national level, three main forms of public ownership have been adopted in Britain. The first involves organization of the industry as a department of state under the direct control of a minister of the Crown. In this case the minister is responsible to Parliament for the day-to-day running of the industry, as well as for more general supervision of the industry's broader strategy. The only significant example of the use of this approach has occurred in the case of the Post Office. In 1969, however, the Post Office was turned into a public corporation, and the features of the "department of state" model are therefore of little relevance in the evaluation of recent U.K. economic policies.

The second type of public ownership involves a sole, or majority, state shareholding in an otherwise normal commercial company. The method has been popular in continental Europe, but less so in Britain. Nevertheless, there are a number of significant British examples, including the following: British Petroleum (BP), in which a controlling interest was acquired by the state before the First World War with the object of securing fuel oil products for the Navy; the British Sugar Corporation, created by the Government in 1936 to promote domestic production of beet sugar for reasons of national security; Cable and Wireless, acquired in two stages (1938 and 1946) with a view to extending state ownership in telecommunications activities; Short Brothers and Harland (aircraft and aircraft components), acquired during the Second World War because the company was not being operated efficiently and the Government was not prepared to see it collapse; Rolls-Royce and British Leyland (now the Rover Group), both taken into public ownership in the 1970s to mitigate the consequences of impending bankruptcy.

In addition, the Labour Government of 1974–1979 established the National Enterprise Board (renamed the British Technology Group in 1981) to provide finance for industrial investment and to act as a state holding company for shares either transferred to it by the Government (e.g. the shares of Rolls-Royce and British Leyland) or acquired on its own initiative. The National Enterprise Board subsequently built up investments in several tens of commercial companies, mostly small, but also including larger firms such as Ferranti (electronics), Herbert (machine tools), and International Computers.

Whether measured in terms of assets, employment, or output, however, publicly controlled commercial companies have accounted for only a small fraction of the state sector of U.K. industry, and by far the most important

type of state-owned enterprise has been the public corporation. The aim of this institutional innovation was to combine freedom for management from Government supervision of day-to-day operations with public control of the broader policies of the enterprises. In the words of Robson (1960):

"The public corporation is based on the theory that a full measure of accountability can be imposed on a public authority without requiring it to be subject to ministerial control in respect of its managerial decisions and multitudinous routine activities, or liable to comprehensive parliamentary scrutiny of its day-to-day working. The theory assumes that policy, in major matters at least, can be distinguished from management or administration; and that a successful combination of political control and managerial freedom can be achieved by reserving certain powers of decision in matters of major importance to Ministers answerable to Parliament and leaving everything else to the discretion of the public corporation acting within its legal competence. The Government are further endowed with residual powers of direction and appointment which mark their unquestionable authority."

Although there are case-to-case variations, the main distinguishing features of the typical public corporation are as follows.

(i) It is a corporate body, established by statute, with its own legal existence.

(ii) It is free to manage its own affairs without detailed control by Parliament.

(iii) The relevant minister of the Crown has powers to give directions (a) of a general character as to the exercise and performance of the functions of the corporation and (b) in regard to specified matters of special importance (e.g. major capital expenditure programs).

(iv) The relevant minister appoints the whole or majority of the board of management, and such appointments are generally for a fixed number of years.

(v) It is financially independent in the sense that it has powers to maintain its own reserves and, within limits laid down by Parliament, to borrow (unlike some other public bodies, trading surpluses do not automatically revert to the Exchequer).

(vi) Most external finance is obtained from the Exchequer, via the National Loans Fund, at fixed rates of interest, and the relatively small levels of borrowings from the private sector are backed by Treasury guarantees.

Public corporations therefore constitute a category of institution that lies somewhere between direct government trading undertakings and private commercial enterprises. To a first approximation, they can be viewed as

trading bodies for which the Government is both the sole shareholder and the sole banker.

In addition to these three types of public enterprise, which each fall within the central-government sector of the economy, a wide range of goods and services are produced and/or supplied by local government authorities. Although of great importance for the economy, since our analysis of privatization policies will largely be restricted to enterprises operating at the national level, they will not be considered in any detail in what follows.

5.3 Accountability and Control

In the postwar period, a principal objective of the legislation that established public corporations was to create an "arm's length" relationship between government and management. Objectives for the various industries were set out in statute, but these were expressed only in the most general of terms. For example, the Central Electricity Generating Board (CEGB) was required to develop and maintain an efficient, coordinated, and economical system of supply of electricity in bulk for all parts of England and Wales. Given this type of vagueness in statutory duties, considerable weight was placed on the assumption that managers would pursue public interest objectives. In 1933, Herbert Morrison, the Labour Minister who had the greatest influence on the direction of the early postwar nationalization program, expressed this position as follows:

"The public corporation must be no mere capitalist business, the be-all and end-all of which is profits and dividends, even though it will, quite properly, be expected to pay its way. It must have a different atmosphere at its board table from that of a shareholders' meeting: its board and its officers must regard themselves as the high custodians of the public interest. In selecting the Board, these considerations must be in the minds of the Minister."

As noted earlier, however, the indirect ministerial influence on enterprise decision making, embodied in the power to make appointments to the boards of directors, was supplemented by powers to give directives of a general character. The chain of accountability was then completed by making ministers answerable to Parliament for such directives. In this way it was hoped that the minister, and ultimately Parliament, would be able to control the broad strategic decision making of the corporations, while leaving managements in full control of operational matters.

In practice, as might have been expected, this framework of control for the nationalized industries has not functioned in the way that its creators

had intended. Ministers were left free to adopt their own definition of the public interest, which came to resemble the interests of the political party in power, and there have been frequent political interventions to influence operational decision making. Parliamentary control has been weakened by the fact that, although ministers are answerable to Parliament for actions they have taken in relation to the public corporations (e.g. general directives), they are not so answerable for any informal pressures that they apply to the corporations' managements. In fact, very few formal directives have been given to the corporations; the mere threat of their use, coupled with the threats deriving from ministerial powers of appointment, have been sufficient to enable politicians to exert considerable "unofficial" control over all aspects of the corporations' decision making.

Following the extensive nationalization program of the 1945–1951 Labour Governments, it was not long before the breakdown of the arm's length principle became widely recognized. Partly in response to this new perception, a House of Commons Select Committee on Nationalized Industries (now the Departmental Industry and Trade Committee) was established in 1952 with the purpose of investigating the performance of the various public enterprises. Over time, the scope of the Committee's investigations has broadened, and it has examined a wide range of issues connected with the control of public enterprises.

The House of Commons Select Committee has few formal powers but has, nevertheless, been influential in stimulating debate and discussion about the reform of the structures of governance for nationalized industries. In 1968, for example, it reported that, whereas Parliament's original intention was that ministers should provide general guidance to managements concerning enterprise objectives and should abstain from detailed interventions in operational matters, in practice the opposite had occurred: general guidance was rarely offered, but specific interventions were common (House of Commons, 1968). Developing this line of criticism, the Committee later recommended that the framework of accountability and control should be completely re-examined, a recommendation that led to a major report on the nationalized industries by the National Economic Development Office (NEDO) in 1976.

The NEDO Report concluded that the arm's length principle should be underpinned by the creation of an additional management tier, labelled the Policy Council, interposed between a corporation's board and the sponsoring government department. It was recommended that the Policy Council should include the relevant ministers and the corporation chairman, together with representatives of other interests in the industry

(e.g. trade unions, consumers, suppliers, and members of the financial community). The Policy Council would be responsible for the development of long-term objectives and strategies, leaving the main board free to deal with implementation of those strategies and with operational matters. In this way, it was believed that a barrier to operational interventions by ministers could be created. However, in recognition of the ultimate authority of the Government with respect to the control of public enterprises, it was also recommended that, alongside powers to make appointments to the Policy Council, ministers should have the right to issue specific, as well as general, directives to the Council on matters of national importance.

Whilst accepting much of NEDO's analysis of the control problem, the (Labour) Government of the day rejected the Policy Council proposal. The chairmen of the nationalized industries were hostile to the recommendation, and it was generally felt that the creation of a further hierarchical level in the control system would, on balance, impede effective decision making by lengthening the line of communication between the Government and managers. The distinction between strategic and executive/operational decisions is not always clear cut, and there was a well-founded fear that, in practice, all three tiers of the hierarchy (corporation board, policy council, and department of state) would come to be involved in both types of decision.

Thus, despite the weaknesses of the established framework of accountability and control for the nationalized industries, the system remained unreformed. To the extent that there have been changes to it over the past decade, these have generally been in the direction of either increasing ministerial powers (see section 5.4) or strengthening existing procedures. For example, the provisions of the Competition Act 1980 authorize the Secretary of State for Industry to order the Monopolies and Mergers Commission to conduct investigations into the efficiency of the nationalized industries. The terms of reference for such investigations are set by the minister, who also has the authority to decide whether or not to implement any of the resulting recommendations for action.

The fact that, nearly 30 years after deficiencies in the framework of accountability and control were first widely recognized, little progress had been made in resolving substantive issues concerning the respective roles of the management boards, ministers, and Parliament became, in the late 1970s, a major source of dissatisfaction with Government policy towards the public corporations. The effect of the failure was to buttress the case for privatization: given that flaws in the the arrangements had proved so

difficult to correct, it could more easily be argued that progress in solving the underlying problems required a radical shift in the relationships between Government and the enterprises concerned, and that transfer of ownership to the private sector was the most direct method of achieving the desired adjustment.

5.4 Objectives and Financial Constraints

In part, the objectives of public corporations are set out in their statutes. As we have already noted, however, statutory duties are frequently couched only in the most general of terms, and the stipulated requirements—to run an efficient service, to break even taking one year with another, to avoid undue preference in the provision of supplies, and the like—offer very little in the way of explicit guidance to managements as to how they should conduct their businesses. Nor is it very satisfactory to exhort corporation managements to act, in Morrison's words, as "high custodians of the public interest." The imprecision here is an open invitation to managers and politicians to pursue their own objectives under the guise of acting in the national interest: wolfish self-interest is all too easily cloaked in the public interest sheepskin.

The policy response to this problem was a series of attempts to give the managements of public corporations objectives that were more specific than those contained in the relevant statutes. This was done in three successive White Papers: *Financial and Economic Obligations of the Nationalised Industries* (HM Treasury, 1961); *Nationalised Industries: A Review of Economic and Financial Objectives* (HM Treasury, 1967); and *The Nationalised Industries* (HM Treasury, 1978). We will comment on each of them in turn, but for more comprehensive evaluations see National Economic Development Office (1976) and Heald (1980).

The principal innovation of the 1961 White Paper was the introduction of financial targets for the public corporations. These were to be determined in the light of each industry's "circumstances and needs," and have typically been expressed in terms of a specified rate of return on capital assets employed. The target rates of return have therefore varied from industry to industry, depending upon factors such as demand and cost conditions and the extent to which the enterprises have been required to operate unprofitable "social" services (e.g. loss-making rural railway lines).

Rate-of-return targets were established in an attempt to correct what was perceived to be the poor financial performance of the nationalized

industries during the 1950s. While the targets did constrain managerial actions, it rapidly became clear that a large measure of discretion remained: the 1961 White Paper was silent on the question of how managements should assess the relative merits of alternative means of meeting the financial constraint. Corporations with market power, for example, could meet targets by raising prices, as well as by reducing costs, and there was no policy injunction against cross-subsidization, which was prevalent. Nor was any guidance given to managements on the important issue of investment expenditures. Subject to the financial constraint, corporations were implicitly expected to maximize something, but what that something was was not spelled out, and, until this prior question was settled, the problem of providing incentives for the attainment of social objectives could not even be tackled.

The 1967 White Paper was much clearer about what the underlying objectives of the public corporations should be. Its main points were as follows.

(i) Prices should be set so as to reflect long-run marginal costs, but with some adjustment towards short-run marginal costs when it was apparent that the existing level of capacity was substantially suboptimal.

(ii) As a consequence, where possible, cross-subsidization should be avoided.

(iii) Investment should only take place when the anticipated rate of return exceeded a prescribed test discount rate, intended to reflect yields on low-risk private sector projects and initially set at a real rate of 8 percent (later increased to 10 percent).

(iv) Noncommercial activities should be accounted for separately, with Government deciding whether or not to support such activities on cost–benefit criteria.

(v) Industries would continue to be required to meet a financial target, individually set for each in the light of market conditions and of the industry's pricing and investment objectives.

These guidelines follow fairly naturally from the notion that the objective of the industries should be the maximization of economic efficiency. Thus, the pricing rules were designed to maximize allocative efficiency for given demand and cost/capacity conditions, while the application of the test discount rate criterion was intended to ensure an efficient allocation of investment funds between the public and private sectors of the economy. Similarly, the financial target can be interpreted as a means of incorporating a variety of other efficiency considerations into

the decision-making process, including the promotion of cost efficiency and the inclusion of allowances for second-best factors (targets could differ from those implied by first-best pricing and investment rules to reflect, say, the nonzero resource costs of Government finance or externalities arising from deviations from first-best conditions in competing sectors).

The 1967 White Paper therefore rested upon an intellectually coherent approach, derived from welfare economics, to the problem of specifying objectives for public enterprises. It did, however, leave two quite fundamental issues untouched. First, there was no attempt to develop an adequate structure of incentives to encourage managers to act in the desired ways. That is, both aspects of the monitoring problem—measuring performance and allocating rewards and punishments—were largely ignored. As a result, to a first approximation many public corporations simply ignored the pricing and investment guidelines. In some cases (e.g. telecommunications) it was claimed that marginal cost pricing was too ambiguous and/or difficult a policy to apply in practice; in others (e.g. electricity) corporations made use of their considerable discretion in respect of cost definitions and cost allocations to devise tariff structures that could be defended on marginal cost grounds, but which in reality were designed to meet objectives other than allocative efficiency. Similarly, the test discount rate was ineffective either because industries claimed that, in integrated networks, it was impossible to assign a rate of return to individual projects, or because subjective estimates of future cash flows could easily be adjusted to obtain the result that best contributed to managerial objectives (there are very few examples of major projects having been abandoned as a result of failing the discount rate test).

The second unresolved issue concerned the control problem discussed in section 5.3: ministers could, at any stage, use their considerable formal and informal powers to override managerial decisions in respect of pricing and investment and, in the event, they frequently did just that. Thus, at different times, there were ministerial interventions to hold down prices as part of a prices and incomes policy, to force up prices when public sector borrowing became the significant macroeconomic policy objective, to speed up investment programs and slow down plant closures when unemployment was perceived as a major problem, and so on. As a result, even if the managements of the public corporations had seriously wanted to pursue the economic efficiency objectives implicit in the White Paper, their efforts would substantively have been undermined by politicians' behavior.

In summary, then, the 1967 White Paper was largely unsuccessful because, from the perspective of the nationalized industry managements, it

embodied an approach that can be described as *recommendation without regulation* in which, because of divergences between efficiency goals and short-run political objectives, the recommendation itself lacked credibility. Thus, the overall system of accountability and control left the way clear for the displacement of economic efficiency objectives by managerial and political goals, and, unsurprisingly, managers and politicians took full advantage of the discretion that was allowed them.

The 1978 White Paper went some way towards reducing *managerial* discretion by strengthening the financial controls exerted by Government on the public corporations. Pride of place was accorded to the financial target, and marginal cost pricing was relegated to a more subordinate role. With respect to investment, the test discount rate for individual projects was replaced by a required rate of return for investment programs as a whole, which was set at a level of 5 percent real (the reduction from the earlier test discount rate of 10 percent was a response to the falling yields on private sector investment in the mid-1970s). In addition, each industry was required to publish a series of performance indicators that could be used by sponsoring departments to assess its internal efficiency. Examples of such measures include a variety of productivity and unit cost indices. Finally, although not an innovation of the White Paper itself, the post-1978 framework of control has relied heavily upon *external financing limits*, otherwise known as cash limits.

External financing limits (EFLs) place constraints upon the annual change in the net indebtedness of public corporations to the Government, and can therefore be regarded as establishing maximum levels for the difference between revenues and the sum of current and capital expenditures. They were originally intended to be instruments for increasing the accountability of managements with respect to their short-term financial management, but have subsequently come to play a much more central role in policy towards the public corporations, largely because they can be used to control the consequences of the activities of the nationalized industries for the aggregate public sector borrowing requirement (PSBR), which fiscal measure has been a key target variable in recent short- and medium-term macroeconomic policy. Thus, for example, the PSBR can be reduced by tightening public corporations' EFLs, thus forcing the enterprises to increase revenues and/or cut current and capital expenditures. Since 1979, preoccupation with PSBR targets has sometimes led to situations where the EFLs have become the only binding constraint on the nationalized industries, displacing both the financial target (usually

set for a three- to five-year period) and the required rate of return on new investment.

In part, the 1978 White Paper was motivated by a desire to set goals for public corporations in a way that would facilitate *ex post* metering of their performance. Evaluation of the corporations' use of the test discount rate criterion, for example, had proved extremely difficult, and it was hoped that, since it could be undertaken with less detailed information, assessment of investment performance as a whole would be easier. This explains the introduction of the required rate of return. Similarly, the adoption of performance targets was seen as a way of keeping a closer eye on internal efficiency, and of supplementing the relatively clumsy instrument of financial targets in providing pressures for productivity improvements and reductions in unit costs.

A second important factor explaining the change of emphasis in policy towards the nationalized industries was the increasing emphasis accorded to financial flows in Government macroeconomic objectives. The emergence of large fiscal deficits in the U.K. economy during the 1970s effectively led to the attachment of a greater priority to reducing the "costs" of Exchequer finance to the public corporations. Thus, whereas in the 1967 White Paper, it was implied that financial targets should be set so as to be consistent with "first-best" pricing and investment policies, the later approach can be characterized as giving a much higher weight to second-best considerations associated with the provision of Government finance. Indeed, rather than being *derived* from pricing and investment policies, there has been a tendency for financial targets and EFLs to be accorded the status of independent goals which might, for example, justify substantial deviations from marginal cost pricing.

Roughly speaking, since 1978, public corporations have been exhorted to maximize economic efficiency subject to a generally tighter set of constraints on financial and productivity/cost performance. We will analyze and assess some implications of this shift in more detail in sections 5.5 and 5.7. At this point, however, we simply note that, whereas the 1978 White Paper led to a strengthening of Government control over the behavior of the nationalized industries and therefore went some way to attenuating managerial discretion, the shift of emphasis served to highlight the other unresolved aspect of the control problem which had arisen from the use of ministerial powers to promote sectional political objectives. If anything, the introduction of tighter financial constraints in general, and of short-run (annual) external financing limits in particular, served only further to undermine the arm's length principle.

5.5* Financial Constraints: Theoretical Analysis

Some of the potential effects of ministerial use of financial targets to influence the behavior of nationalized industries can be explored by extending the simple public enterprise model developed in section 2.4. For this purpose we will modify the model in two ways. First, the noncapital costs of the firm will be assumed to be equal to $C(q,k,x)$, where k is the level of capital input, x is the level of cost-reducing expenditure, $C_q > 0$, $C_k < 0$, and $C_x < 0$. Second, it will be assumed that the firm is required to achieve a given rate of return on capital assets (the financial target), denoted $\theta(k)$, where $\theta_k < 0$. The negative relationship between θ and k captures the dependence of the financial target on the capacity position of the firm in question. Thus, if the firm has excess capacity relative to the long-run equilibrium, it is assumed that the value of the financial target will be reduced to allow some movement in the direction of short-run marginal cost pricing (a principle that is explicitly set out in the 1967 White Paper). By similar reasoning, deficient capacity is taken to lead to a higher financial target. If the first-best long-run equilibrium level of capital input is k^*, it might also be assumed that $\theta(k^*) = r$, where r is the test discount rate or required rate of return (the cost of capital), although the main points we want to make are not dependent upon this condition.

Given these amendments to the model, managers will seek to maximize

$$V(q) - C(q,k,x) - bx - rk$$

subject to

$$p(q)q - C(q,k,x) - x - \theta(k)k \geqslant 0.$$

If λ denotes the value of the multiplier on the constraint, the first-order conditions for a maximum are as follows:

$$\frac{p - C_q}{p} = \frac{\varepsilon\lambda}{1+\lambda}, \tag{5.1}$$

$$-C_x = \frac{b}{1+\lambda} + \frac{\lambda}{1+\lambda}, \tag{5.2}$$

and

$$-C_k = \frac{r}{1+\lambda} + \frac{\lambda\theta[1+\mu(k)]}{1+\lambda}, \tag{5.3}$$

where $\mu(k)$ (<0) is the elasticity of the financial target with respect to capital employed.

When the financial constraint is not binding ($\lambda = 0$), first-best conditions

are satisfied in respect of pricing and investment policies: price equals marginal cost, and capital is employed up to the point where its marginal return is equal to its marginal cost. As in section 2.4, however, for given output and given capital input, the level of cost-reducing expenditure is suboptimally low (efficiency requires that $-C_x = 1 < b$). This is a consequence of managerial preferences for reduced effort coupled with imperfect monitoring.

Tightening (increasing) the financial target causes λ to rise, leading to price being set at a level in excess of marginal cost. As intended by the White Papers, however, it also leads to some increased pressure in the direction of cost reduction. The right-hand side of equation (5.2) is a weighted average of b and 1, with the relative weight on b *falling* as λ increases. Since, by assumption, $b > 1$, this implies that, for given q and k, costs fall as the financial constraint is tightened. It should also be noted, however, that a stricter financial target will tend to reduce the equilibrium output level and hence diminish the marginal payoff from increased effort ($-C_x$) if, as is likely to be the case, $-C_{xq} > 0$. Hence, the net effect on unit costs of increasing λ will generally be ambiguous.

Equation (5.3) implies that capital will be employed up to the point where its marginal yield is a weighted average of the cost of capital and $\theta(k)[1 + \mu(k)]$. Thus if, at equilibrium, the financial target $\theta(k)$ is equal to or "close" to the cost of capital, the firm will be overcapitalized, for, given q and x, the marginal return on investment is less than the cost of capital. The intuition here is that managers will invest more heavily than is warranted by the investment criterion (the test discount rate or required rate of return) because, by so doing, the resulting excess capacity will induce a reduction in the value of the financial target; as in some of the models of regulation examined in section 4.2, managements can use investment as a *strategic* instrument to influence the behavior of government.

The model therefore serves to illustrate some of the weaknesses inherent in the 1967 White Paper. As a matter of observation, it can be noted that, typically, the financial targets for nationalized industries *were* sensitive to the capacity position ($\mu < 0$) and were set at levels below the test discount rate ($\theta < r$). In these circumstances, it is not surprising that there was concern in policy-making circles about the conduct of investment programs.

In terms of the above framework, policy developments since 1978 can be interpreted as seeking, amongst other things, to achieve two important adjustments. The first was to raise the *level* of the financial target (i.e. to raise θ), thereby increasing the pressures for cost reduction (see equation (5.2)) and reducing the bias towards overinvestment (see equation (5.3)).

For firms with market power, however, such an increase could be expected to lead to increased prices and lower output (see equation (5.1)), which, as well as reducing allocative efficiency, would have indirect (adverse) effects on cost-reduction expenditures. On the other hand, for public corporations operating in competitive environments the option of increasing prices is not available to management and hence the financial target is likely to be a more powerful instrument for the promotion of internal efficiency.

Second, by increasing the status of financial targets and making them *independent* instruments of policy, the 1978 White Paper can be interpreted as seeking to weaken the perceived link between the value of the target and capacity levels in the industries (i.e. to reduce the absolute value of the elasticity μ). Assuming that this is feasible (but see the discussion of credibility problems below), it has the advantage of attenuating the incentives for managements to use investment programs as strategic instruments. Hence, any bias towards overinvestment can be mitigated without forcing the financial targets to levels where the allocative losses from higher prices may become severe. In other words, the trade-off between efficiency in investment and short-run allocative efficiency is improved.

The "cost" of breaking the link between financial targets and the public corporations' capacity position is that, when excess or deficient capacity results from exogenous unanticipated changes in the marketplace, avoidable short-run allocative inefficiencies will emerge. Suppose, for example, that demand growth for an industry's output turns out to be less buoyant than could reasonably have been expected at earlier dates, so that capital employed is higher than its long-run equilibrium level. A financial target that was set on the basis of the earlier demand projections would then lead to allocative inefficiency, in the sense that the deviation of prices from short-run marginal costs would be greater than was desirable *ex post*. Since it is deterministic, our model does not capture this particular trade-off, but it should be clear enough how the analysis can be extended to incorporate the effect.

Another problem with attempts to reduce the sensitivity of financial targets to the level of capital employed is that, given ministerial objectives, they may lack credibility. Thus, for example, applying arguments set forth in section 4.2.3, once capacity imbalances have occurred short-run political goals may be better achieved by making the necessary adjustments to the financial constraint; in particular, when capacity is suboptimally high, there will be a strong temptation to allow public corporations to charge lower prices.

The credibility problem may, in part, provide one justification for the increasing role that has been assigned to external financing limits in recent years. Although it is likely that the enhancement of the role of EFLs has had much more to do with controlling the impact of nationalized industries' activities on the PSBR, they do provide Government with an additional means of influencing the efficiency of the industries' investment programs. Moreover, they allow the Government to exert this influence at the time that capital expenditures are being incurred. Thus, unlike in the case of financial targets, public corporations are not easily able to manipulate later EFLs by earlier overinvestment.

However, the effective use of EFLs may imply that financial targets become redundant (i.e. the EFLs are set at levels such that financial targets are no longer binding constraints), in which case the number of financial instruments available to the Government will have been reduced to one. Even allowing for the introduction of a performance target, which can be represented in the model by a constraint on the firm's unit cost level, the Government will be attempting to control three decision variables (q, x, and k) with two instruments. This may not matter very much in cases where the public corporation operates in a competitive product market—since competition serves to supplement the Government controls—but in cases of monopoly the trade-off between allocative and internal efficiency is less favorable.

In the model that has been developed it is assumed that the managers of public corporations maximize a linear combination of consumers' plus producers' surpluses and cost-reducing expenditures (used as a proxy for effort), but it can be argued that this does not accurately reflect the managerial goals that are pursued in practice. Unfortunately, there is no generally accepted specification of managerial objectives in public corporations. Building upon arguments in the literature on managerial theories of the firm, which stress the importance of goals such as size, status, and prestige, Rees (1984b) has suggested that the level of output is likely to be an important argument in managerial utility functions. Possible implications of this line of reasoning can briefly be examined by assuming that managers maximize some function of output and effort subject to a given financial target.

Suppose, in particular, that the managerial objective function is simply $q - (b-1)x$, where $b > 1$. Then the first-order conditions become

$$\frac{p - C_q}{p} = \varepsilon - \frac{1}{\lambda p}, \tag{5.4}$$

$$-C_x = \frac{b-1}{\lambda} + 1, \tag{5.5}$$

and

$$-C_k = \theta(k)[1 + \mu(k)]. \tag{5.6}$$

As before, a tightening of the financial constraint leads to increases in the multiplier λ. From equation (5.5), this leads to improved incentives for cost-reducing expenditures at *given* levels of output and capital employed. In this case, however, the trade-off with allocative efficiency is potentially more favorable. As can be seen from (5.4), the pursuit of output objectives generates an incentive for managers to underprice: when λ is low, equilibrium price is below marginal cost. Up to a certain point, therefore, tightening the financial constraint may improve *both* cost and allocative efficiency. With respect to investment/capital, for given q and x, there may again be either overinvestment or underinvestment, depending upon whether $\theta(1 + \mu)$ is less than or greater than the cost of capital, and if $\theta(1 + \mu) = r$ we have the first-best condition for the level of capital employed.

To summarize, if the aim of public policy is to promote economic efficiency, it appears that the post-1978 enhancement of the role of financial constraints is likely to make a more substantial contribution to this goal when the managers of public corporations have output, rather than economic welfare, objectives and when the public corporations are operating in competitive product markets. Putting matters in this way, however, serves only to draw attention to questions surrounding the nature of political objectives. While recent developments in the framework of control for the nationalized industries may have gone some way to reducing managerial discretion, the problem of political discretion remains.

5.6 The U.K. Nationalized Industries in 1979

The year 1979 is a decisive breakpoint in the history of public enterprise in Britain. Until that year there was a clear, if erratic, trend in the direction of bringing greater numbers of enterprises under public ownership; since 1979, the privatization program has produced a sharp movement in the opposite direction. In the postwar years, the expansion of the nationalized sector of the economy was most rapid under the Labour administrations that held power between 1945 and 1951, during which period most of the larger public corporations were first created. However, both Labour and Conservative Governments were responsible for further significant

nationalizations in the subsequent quarter century, including the steel industry, British Leyland, Rolls-Royce, the shipbuilding industry, and British Aerospace.

A broad indication of the relative importance of the nationalized industries in the U.K. economy in 1979 can be obtained from the figures shown in table 5.1. These relate only to the activities of public corporations, and therefore tend to understate the significance of public sector production as a whole; they do not, for example, include the publicly owned water industry in Scotland (see chapter 11), the multitudinous other activities carried out by local government authorities throughout the country, or the National Health Service. Particularly in respect of net capital stock, the figures are also subject to the usual caveats about measurement errors. Apart from indicating the size of the public corporation sector, they do, however, underline the point that, on average, public enterprises have been more capital intensive than other sectors of the economy; capital assets and investment have accounted for larger fractions of the national totals than has output, whereas the employment share has been lower than the output share. Hence, the average productivity of labor in public corporations has been higher than the national average, while the average productivity of capital has been lower.

Table 5.2 shows a list of the major public corporations in 1979, while table 5.3 gives financial performance and employment statistics for some of the more important enterprises to provide an indication of their relative sizes. The industrial sectors in which public ownership has predominated are fuel and power, transport, communications, water and sewerage, and iron and steel. With the exception of the last of these sectors, this pattern of concentration motivates our organization of the analysis of privatization contained in chapters 8 through 11. Whereas large parts of fuel and power, transport, communications, and the water industry exhibit "network" characteristics and/or lack of effective competition, the iron and steel industry has neither of these features. The possible privatization of British

Table 5.1 The public corporations in 1979

		Percentage of U.K. total
Gross domestic product	£18.043 billion	10.5
Numbers employed	2.065 million	8.1
Net capital stock	£104.100 billion	17.2
Gross domestic capital formation	£5.621 billion	15.2

Source: *National Income and Expenditure* (1984 edn).

Table 5.2 Public corporations in existence as at 31 December 1979

Bank of England	National Freight Corporation
British Aerospace	National Ports Council
British Airports Authority	National Research Development Corporation
British Airways Board	National Water Council
British Broadcasting Authority	New Town Development Corporations and Commission
British Gas Corporation	Northern Ireland Development Agency
British National Oil Corporation	Northern Ireland Housing Executive
British Railways Board	Northern Ireland Transport Holding Company
British Shipbuilders	Northern Ireland Electricity Service
British Steel Corporation	North of Scotland Hydro-Electric Board
British Transport Docks Board	Passenger Transport Executives and London Transport Executive
British Waterways Board	Post Office
Cable and Wireless Ltd.[a]	Property Services Agency
Civil Aviation Authority	Regional and National (Welsh) Authorities
Commonwealth Development Corporation	Royal Mint
Covent Garden Market Authority	Royal Ordnance Factories
Development Board for Rural Wales	Scottish Transport Group
Electricity Council	South of Scotland Electricity Board
Highlands and Islands Development Board	Trust Ports
Housing Corporation	Welsh Development Agency
Independent Broadcasting Authority	
Land Authority for Wales	
National Bus Corporation	
National Coal Board	
National Dock Labour Board	
National Enterprise Board	
National Film Finance Corporation	

Source: *National Income and Expenditure* (1980 edn).
a. Classed as a public corporation in the national accounts.

Steel will therefore be discussed alongside the sale of other, generally smaller, public enterprises that operate in competitive markets.

5.7 The Performance Record

In sections 5.3 to 5.6, we have drawn attention to some of the weaknesses in the framework of accountability and control that was established for the nationalized industries in the postwar period. However, no control system is perfect, and what is ultimately of importance is the performance of the enterprises concerned. With respect to their past records, the public corporations have certainly been subject to a great deal of hostile criticism and, as already noted, this dissatisfaction has acted as a spur to the development of privatization policies. In this section, therefore, we will examine some of the salient features of the recent performance of the public

Table 5.3 The major public enterprises: financial and employment statistics, 1978–1979

	Turnover (£ million)	Net profit before interest and tax (£ million)	Employment (thousands)
Electricity Council	5,445	862	160
Post Office	4,619	1,281	411
National Enterprise Board	4,158	119	279
British Steel	3,288	-77	190
National Coal Board	2,989	96	300
British Gas	2,972	618	102
British Rail	1,979	58	243
British Airways	1,640	115	58
British Aerospace	894	68	72
British Shipbuilders	731	-102	87
South of Scotland Electricity Board	463	88	14
National Bus	437	28	64
British National Oil Corporation	432	12	1
National Freight	394	16	40
North of Scotland Hydro-Electric Board	173	54	4
British Airports Authority	162	35	7

Source: *The Times 1000* (1979).
All figures are rounded to the nearest integer.

corporations. As well as throwing light on the question of whether or not the criticisms directed at nationalized industries have been well founded, this material also helps to establish a benchmark against which the performance of newly privatized firms can be judged.

In attempting to assess performance, we immediately face a difficult question: what criteria should be used in the evaluations? The original legislation intended that public corporations should act in the public interest, but such an objective is extremely nebulous. Indeed, as argued earlier, the vagueness of this goal, and hence of the operational decision criteria that might flow from it, has been one of the central problems of the control framework. Even if pursuit of the public interest is equated with the maximization of economic efficiency (an equation implicit in the 1967 White Paper), the difficulty is far from having been resolved. Statistics measuring consumers' surplus, for example, are not things that can readily be found in official publications.

In these circumstances, the best that can be done is to examine dimensions of performance that are of relevance to a more general evaluation, whilst recognizing that no single measure is likely to be of decisive importance. Thus, for example, although profitability may be the key measure of success for a firm operating in a competitive market that is free of externalities, it cannot be so regarded in cases where the firm has significant market power: if high profits result from monopolistic abuses, they signal economic *inefficiencies*, not efficiencies.

5.7.1 Financial Performance

Compared with private industry, there is little doubt that the profitability of U.K. nationalized industries has been relatively low. Table 5.4, for example, shows the records of the two sectors between 1970 and 1985, and it can be seen that, on average, the ratio of gross trading profit (before allowance for stock appreciation and depreciation) to net capital stock for privately owned companies has been about three times higher than the nearest equivalent measure for public corporations (the ratio of gross trading surplus to net capital stock). The performance gap would be reduced if depreciation was netted out—capital consumption rates are slightly higher in the private sector, where assets are less durable—and if the highly profitable (in pretax terms) oil extraction business was excluded from the calculations. However, when trading surpluses are adjusted to take account of the substantial subsidies provided to some public

Table 5.4 Profitability of public corporations and of industrial and commercial companies (percentages)

Year	Public corporations		Industrial and commercial companies[a]
	A[b]	B[c]	
1985	5.1	2.6	21.3
1984	6.3	3.4	20.6
1983	6.8	4.8	19.4
1982	6.6	4.8	16.7
1981	5.6	4.0	16.0
1980	4.7	3.4	16.1
1979	5.0	3.6	18.3
1978	5.7	4.4	17.1
1977	6.2	4.9	17.8
1976	6.2	4.8	15.6
1975	4.9	3.1	14.6
1974	4.9	2.4	17.2
1973	6.2	4.3	18.7
1972	6.2	4.6	18.5
1971	6.0	5.3	16.8
1970	6.4	5.6	16.8

Source: *National Income and Expenditure* (various editions).
a. Gross trading profit as a percentage of net capital stock at replacement cost.
b. Gross trading surplus as a percentage of net capital stock at replacement cost.
c. Gross trading surplus, net of subsidies, as a percentage of net capital stock at replacement cost.

corporations, which are treated in the accounts as an additional source of revenue, the comparison becomes less flattering to the public sector.

In table 5.4, the public corporation figures for 1984 and 1985 should be interpreted with some caution. The year-long coal miners' strike of 1984–1985 had a substantial depressing effect on financial performance during this period, particularly in the coal, electricity, and steel industries. In addition, the privatization of British Telecom (BT) in 1984 led to a significant discontinuity in the figures. Taking these factors into account, the effects of the tighter financial constraints imposed on the nationalized industries since the late 1970s are visible in the upward trend in profitability from 1979–1980 to 1983.

The impact of this tighter financial regime on the public corporations becomes more apparent in the figures for the financial deficit of the sector that are shown in table 5.5. From the mid-1970s onwards, the implications of the nationalized industries' performance for the PSBR have been a highly significant factor in the formulation of macroeconomic policy. Thus, since nationalized industry borrowings contribute towards an increased PSBR, attempts to control the latter have frequently involved measures to reduce the financial deficit of public corporations, most usually by a tightening of Government-imposed constraints designed to raise prices, lower investment, and improve internal efficiency.

As can be seen from table 5.5, judged in their own terms, these measures

Table 5.5 The financial deficit of the public corporations as a percentage of the corporations' contribution to gross domestic product

Year	A[a]	B[b]
1985	0.4	14.3
1984	2.5	17.8
1983	0.7	11.3
1982	3.5	13.1
1981	4.9	14.1
1980	12.2	20.2
1979	12.2	20.9
1978	6.3	13.7
1977	9.6	16.7
1976	17.6	25.4
1975	26.7	37.5
1974	19.5	36.2
1973	12.5	22.7
1972	13.2	21.1
1971	22.0	25.6
1970	18.5	22.4

Source: *National Income and Expenditure* (various editions).
a. Financial deficit as a percentage of contribution to GDP.
b. Financial deficit plus subsidies as a percentage of contribution to GDP.

Table 5.6 Public corporations' investment expenditures as a percentage of their contribution to gross domestic product

1985	24.4	1977	32.9
1984	29.1	1976	36.1
1983	28.2	1975	37.1
1982	26.4	1974	35.8
1981	27.8	1973	32.6
1980	30.9	1972	31.6
1979	31.3	1971	37.8
1978	30.0	1970	37.4

Source: *National Income and Expenditure* (various editions).

have met with some success. Despite the effects of the miners' strike, the public corporations showed a financial surplus for the first time in 1985, although, as can be seen from column B, the outcome was largely the result of an increase in subsidies, much of which was specifically induced by the strike. Compared with the period up to 1976, over the last decade financial deficits, whether measured gross or net of subsidies, have been substantially reduced relative to the output of the nationalized industries. Given that the movements in profitability have been less sharp, the data suggest that a significant part of the change has been due to reductions in investment programs, an inference that is supported by an examination of the investment record (see table 5.6).

5.7.2 Allocative efficiency

Interpretation of the financial indicators presented in tables 5.4 and 5.5 is a far from easy exercise. One view of the matter is that the figures simply reflect the pursuit of allocatively efficient pricing and investment policies. Thus, if the nationalized industries set prices to reflect marginal social costs, then, given the importance of factors such as scale economies (e.g. in telecommunications, gas, electricity, and water) and externalities (e.g. in rail transport), this perspective suggests that profitability comparisons with private industry are misleading and irrelevant.

With respect to the financial performance of a number of parts of the public sector, we believe that this argument has some merit. Nevertheless, viewed as a general statement about the performance of the public corporations as a whole, there are at least two reasons for skepticism about its relatively optimistic conclusion. The first concerns the magnitude of the difference between private and public sector profitability. Public sector rates of return have been *substantially* below their private sector counterparts, so that, to justify the discrepancy, it would be necessary to show that efficient pricing and investment policies had very large financial

implications. In 1985, for example, a one percentage point increase in the public corporations' rate of return would have led to an increase in gross trading surplus of around £1.4 billion. Taking account of the facts that (a) the utility industries can use multipart tariffs to improve the trade-off between efficient pricing and external financial constraints and (b) Government finance has real resource costs, it is difficult to believe that the lower rates of return in the public sector have resulted solely from the adoption of allocative efficiency objectives.

More important, detailed analysis of the pricing behavior of individual nationalized industries indicates that the policies that have been implemented in practice are often far removed from those that would be suggested by efficiency objectives. Thus, a whole series of empirical studies has uncovered evidence of significant suboptimalities in the price levels and/or price structures of public corporations. We will consider some of these suboptimalities at various points in chapters 8 through 11, and simply note here that the conclusions of recent studies include the following.

(i) The Post Office has limited information on consumer valuation of quality changes, and no information on marginal costs (Monopolies and Mergers Commission, 1984a).

(ii) Prior to privatization, BT significantly overpriced its trunk call and international services, and underpriced its local services (Deutsches Institut für Wirtschaftsforschung, 1984).

(iii) Domestic coal prices have been substantially above marginal opportunity costs, as measured by world coal prices (Monopolies and Mergers Commission, 1983b).

(iv) Gas prices have been below long-run marginal costs and, since British Gas has adopted a uniform tariff structure, do not reflect the relative costs of supplying gas at different times of the year and to different parts of the country (Hammond *et al.*, 1985).

(v) The peak/off-peak differentials charged by National Bus have not always been efficiently related to relative costs, and there has been significant cross-subsidization between routes (Monopolies and Mergers Commission, 1982a).

Similar conclusions have also emerged from studies of investment programs. Cases of overinvestment during the 1970s include British Steel (Pryke, 1981), the National Coal Board (Molyneux and Thompson, 1987), and the Central Electricity Generating Board (Monopolies and Mergers Commission, 1981a).

Hence, on balance, the view that the pursuit of public interest objectives can account for the relatively poor financial performance of the public corporations does not appear to be well supported by the evidence. In their examination of the issue, Molyneux and Thompson (1987) conclude rather that inefficient pricing structures have arisen from policies of offering uniform prices and/or service quality in markets where costs differ substantially, and that, in some cases, these inefficiencies derive from a failure of public corporations to respond to changing technologies or patterns of demand. Moreover, Molyneux and Thompson argue that, where improvements in pricing policy have been observed over the past few years, they tend to be associated with the introduction of greater competition into the marketplace (e.g. in telecommunications and in buses).

As a corollary, therefore, it is likely that the low rates of return and large financial deficits which have been a characteristic of the nationalized industries in the postwar period can, in large part, be attributed to some combination of overinvestment and internal inefficiency, phenomena which have resulted from deficiencies in the overall framework of control.

5.7.3 Productivity Performance

Most attempts to assess the internal efficiency of the U.K. nationalized industries have been based upon the analysis of one or more of a variety of productivity indices. Three principal approaches have been adopted, based respectively on international comparisons with similar industries overseas, on comparisons with other U.K. industries, and on efficiency audits (typified by Monopolies and Mergers Commission studies that attempt to identify opportunities for improved performance that have been missed by the relevant management).

In general, it is the international comparisons that have produced results that are the least favorable to the nationalized industries. Examples of the findings of this type of work include the conclusions of Pryke (1981) that the Post Office's output per man in telecommunications was significantly below that of overseas telecommunications companies, of Aylen (1980) that, in the 1970s, the British Steel Corporation's labor productivity was only one-third to one-half of that achieved in comparable plants in Western Europe, of Findlay and Forsyth (1984) that the productivity of British Airways was lower than that of many other international airlines, and of Henney (1987) that labor productivity on new vintages of plant in electricity generation was significantly lower than in most other countries.

The major problem with these international comparisons, however, is that it is not clear to what extent the observed productivity variations can

be attributed to the effects of different types of ownership. Over the relevant periods, most studies of international productivity differentials have shown the U.K. lagging behind its principal competitors *irrespective of whether the industry concerned was privately or publicly owned.* The question of interest is whether or not the U.K.'s relative performance is worse when the British industry is nationalized, and most investigators have simply failed to address this more fundamental issue. One exception is the Findlay and Forsyth paper, which argues that the performance of British Airways was bettered by (the privately owned) British Caledonian, as well as by international competitors. For the most part, however, the available evidence is extremely limited and uninformative.

With respect to comparisons with privately owned domestic industries, because of variations in markets and technologies it is clearly difficult to make efficiency judgments on the basis of observed productivity *levels.* Attention has therefore been focused on the more limited objective of assessing *changes* in productivity over time, and table 5.7, derived from figures presented by Pryke (1981) and by Molyneux and Thompson (1987), typifies the sorts of results that have been obtained. As can be seen from the statistics, there are considerable variations among the productivity records of the industries quoted. From 1968 to 1978, four of the nine corporations exhibited declines in labor productivity and/or total factor productivity (the rate of growth of output minus a weighted average of input growth rates), while others showed productivity improvements well in excess of those of the U.K. manufacturing sector as a whole.

The most striking feature of table 5.7 is the improvement in labor productivity growth from 1978 onwards for those public corporations that

Table 5.7 Productivity trends in selected nationalized industries, 1968–1985

	Output per head (percent per annum)		Total factor productivity (percent per annum)	
	1968–1978	1978–1985	1968–1978	1978–1985
British Rail	0.8	3.9	n.a.	2.8
British Steel	-0.2	12.6	-2.5	2.9
Post Office	1.3	2.3	n.a.	1.9
British Telecom	8.2	5.8	5.2	0.5
British Coal	-0.7	4.4	-1.4	0.0
Electricity	5.3	3.9	0.7	1.4
British Gas	8.5	3.8	n.a.	1.2
National Bus	-0.5	2.1	-1.4	0.1
British Airways	6.4	6.6	5.5	4.8
U.K. manufacturing	2.7	3.0	1.7	n.a.

Source: Molyneux and Thompson (1987).

did relatively badly in the earlier period, with British Steel being the outstanding example. In these cases, there is evidence that the tighter financial disciplines imposed on public corporations over the past decade have had a material effect on internal efficiency. It is worth noting, however, that the productivity performances of industries such as telecommunications, gas, and electricity either deteriorated or showed little sign of change. While many factors could have contributed to this outcome, one obvious common feature of these sectors is the monopoly power of their public corporations. Thus, where the corporations can easily meet more stringent financial targets by raising prices to customers, the evidence is at least consistent with the view that tighter financial controls are a weak instrument for promoting improvements in internal efficiency (cf. the models in section 5.5).

Table 5.8 Summary of the efficiency findings of the Monopolies and Mergers Commission

Case	Management structure	Financial control	Use of manpower	Use of performance indicators
British Rail	2	4	2	3
Severn Trent Water Authority	1	2	2	2
Central Electricity Generating Board	-	4	3	4
Anglian Water Authority + North West Water Authority	-	2	4	3
National Coal Board	2	2	-	2
Yorkshire Electricity Board	2	3	3	3
Various bus companies	2	3	2	3
Civil Aviation Authority	2	2	2	2
London Transport Executive	3	2	1	3
South Wales Electricity Board	2	3	3	3
Average score	2.0	2.7	2.4	2.8

Source: Collins and Wharton (1984).
1 Severe criticisms.
2 Critical comments.
3 Suggestions for improvement.
4 Generally satisfactory.
- Inconclusive or not covered.

Turning to the "efficiency audit" method of evaluating the internal efficiency of nationalized industries, since the passing of the 1980 Competition Act the Monopolies and Mergers Commission has been asked to conduct a sizeable number of investigations into the performance of public corporations. These have covered a wide range of questions, including costs, productivity, service quality, pricing, and investment policies. Findings from some of these investigations have been quoted in section 5.7.2 above, and table 5.8 sets out a more systematic judgmental summary, due to Collins and Wharton (1984), of the conclusions of a number of the Commission's reports that appeared between 1980 and 1984.

Although the reports of the Monopolies and Mergers Commission have consistently identified weaknesses in the conduct and performance of public corporations, particularly with respect to management structures and the use of manpower, there are no immediate benchmarks against which the significance of these findings can be assessed. In the course of its wider activities the Commission has frequently uncovered performance deficiencies in the private sector, but investigations are made on a case-by-case basis and are not designed for purposes of interindustry comparison. Thus, the findings of the Commission can make only a limited contribution to a more general evaluation of the relative performance of publicly owned industry. Nevertheless, the very fact that the investigations have taken place can be interpreted as a positive sign that, since 1980, the Government has placed a greater emphasis on the desirability of closer monitoring of the public corporations.

5.8 Assessment and Conclusions

The development of the framework of accountability and control for the nationalized industries in postwar Britain can be viewed as an attempt to implement the public interest model of state-owned enterprise that we outlined in section 2.3.1. In this exercise, the key roles were allocated to the managements of the corporations and to the relevant departmental ministers: managers and ministers alike were to be the custodians of the public interest. However, too little attention was devoted to the obvious question: *quis custodiet ipsos custodes*?

In general terms, the answer to this question that was implicit in the evolution of public policy was that ministers, assisted by their permanent civil servants, would monitor managements, Parliament would monitor ministers and civil servants, and, ultimately, voters would monitor Parliament. That there were likely to be substantial imperfections in this

chain of principal–agent relationships could hardly be doubted by even the strongest supporters of public ownership. For many of the latter, however, including Morrison, these defects were considered to be of second-order importance, largely as a result of an underlying belief that managers and ministers could be relied upon to promote the public interest. That is, if the agents lower down the monitoring hierarchy had objectives that differed little from those of the ultimate principals (the general public), it would not matter very much that the actions of such agents were only loosely constrained by the political system.

The history of the nationalized industries has shown that this optimistic view of managerial and ministerial behavior was seriously flawed, and that, in the British context at least, a system of control that relies heavily upon agents' internalization of public interest objectives is unlikely to produce good performance. In the event, as we have described above, the results of the policy failure have included widespread goal displacement, lack of clarity in corporate objectives, overlapping responsibilities, and excessive ministerial intervention in operational decisions. These, in turn, have had detrimental effects on the pricing, investment, and internal efficiency performance of the nationalized industries.

The crucial question, however, is whether or not significant improvements in performance could feasibly have been obtained whilst preserving public ownership of the industries concerned. As we have argued, the tighter financial controls that were developed in the late 1970s and 1980s do appear to have had some beneficial effects on certain aspects of performance and are indicative of the fact that ownership is far from being the sole determinant of behavior. However, while the reforms of the last decade have tended to strengthen the hand of Governments in their dealings with managements, they have done little to alter the relationships between ministers, Parliament, and the general public. Fundamental issues of accountability and control have therefore remained unresolved.

Our own view of the matter is that substantial improvements in the control system were (and still are) feasible, including reforms designed (a) to establish arrangements capable of sustaining an arm's length relationship between ministers and managements and (b) to improve the incentives for internal efficiency. In particular, four developments in public policy could have contributed to enhanced performance:

(i) the introduction of greater competitive pressures on those public corporations that have enjoyed protected market positions;

(ii) the creation of specialized regulatory agencies entrusted by Government

with duties in respect of price controls and the promotion of competition similar to, but stronger than, those afforded to the regulatory bodies that were later established as part of the privatization program (see chapters 8 and 9);

(iii) the creation of a specialized agency (Audit Office) for the sole purpose of conducting efficiency audits on the nationalized industries and responsible directly to Parliament rather than to the Government;

(iv) the more widespread use of performance-related incentive schemes for the managements of public corporations.

The type of monitoring hierarchy that would have resulted from these changes is shown schematically in figure 5.1.

With respect to the potential impact of such reforms, the beneficial effects of increased competition have been analyzed in chapter 3, and it is sufficient here to refer back to those earlier discussions. The introduction of regulatory bodies that are independent of existing government departments permits greater specialization at the regulatory stage of the monitoring hierarchy (stewardship of public corporations is but one of the many responsibilities of departmental ministers), facilitates Parliamentary control, and, assuming fixed-term appointments, tends to impede

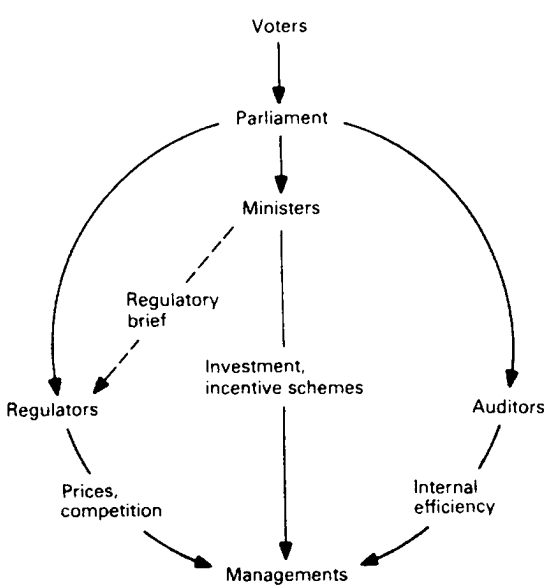

Figure 5.1 A possible public sector monitoring hierarchy

intervention in operational decisions by governments seeking short-term political advantages (government attention would be focused instead on laying down the broad principles of policy within which regulators would be required to work). Similarly, potential benefits from specialization and increased Parliamentary control are also associated with the creation of an independent Audit Office. Auditing functions are currently carried out by the Monopolies and Mergers Commission but, as Curwen (1986) notes, the Commission's role is limited by (a) its inability to investigate other than when instructed by the Government, (b) its lack of unrestricted access to persons, papers, and premises, and (c) its inability to advise all-party Parliamentary Select Committees. Thus there exists scope for introducing greater pressures toward internal efficiency by strengthening the powers of independent investigators. Finally, the more explicit use of formal performance-related incentive structures helps to attenuate managerial and (by forcing the revelation of objectives) ministerial goal displacement.

In fact, none of proposals (i)–(iv) is novel. In telecommunications, energy, and transport, a number of measures to increase competitive pressures on public corporations were implemented by the Government prior to privatization, and we will describe some of these developments in the chapters that follow. Proposals to create a specialized regulatory body for the electricity supply industry were considered in the mid-1950s (see section 9.3.1). In 1982, a Private Member's Bill was introduced in Parliament which proposed that the Comptroller and Auditor General should have access to the accounts of the nationalized industries and, in carrying out his monitoring duties, should be made responsible to the House of Commons. Also, the 1979–1983 Conservative Government experimented with performance-related incentive schemes, most notably in the case of British Steel where the salary of the chairman was linked directly to changes in the Corporation's trading deficit.

In each case, however, either the initial proposals were rejected—with respect to the creation of independent regulators and auditors, for example—or the policies were not pursued with great vigor; some of the measures to increase competition have had little practical effect, and only extremely limited use has been made of performance-related incentive schemes. This leaves us with a major difficulty when evaluating the impact of privatization on economic performance. For comparative purposes, the simplest benchmarks to use in the evaluations are those based on actual behavior in the state sector during the period immediately preceding the transfer of ownership. However, since privatization, coupled with its associated measures (e.g. regulatory reforms), was only one of the possible

policy responses to the perceived performance deficiencies of the public corporations, the more appropriate way to proceed is to compare the Government's policies with other feasible options. As well as alternative methods of privatization, the latter include options consistent with the retention of either complete or partial public ownership. Therefore, although it necessarily complicates the analysis, this is the approach that we will adopt in the chapters that follow.