

# THE CONTROL OF NATIONALISED INDUSTRIES

By  
LUCIEN FOLDES

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## CONTROL OF NATIONALISED INDUSTRIES

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### INTRODUCTION

THE main Nationalisation Statutes enacted since the war give very little guidance as to the commercial and financial aims which the Public Corporations should pursue. In particular, they lay down no rules for determining the "right" levels of investment, output, prices and costs which could take the place occupied in private undertakings by the criterion of profitability. It is the purpose of this essay to argue that there is a need for such rules, to suggest some principles upon which they might be based, and to show how they might form the basis of a scheme for improving parliamentary control of the nationalised industries while avoiding undue interference in the details of their commercial operations.

The scope of the present rules may be illustrated from the Coal Nationalisation Act. The main provisions which are relevant (it is not proposed to present a complete survey) are these: section 1 (1) charges the Coal Board with the duties of ". . . (b) securing the efficient development of the coal-mining industry; and (c) making supplies of coal available, of such qualities and sizes, in such quantities and at such prices, *as may seem to them best calculated to further the public interest in all respects*, including the avoidance of any undue or unreasonable preference or advantage." Section 1 (4) lays down the "break-even rule," that "the revenues of the Board shall not be less than sufficient for meeting all their out-goings properly chargeable to revenue account . . . on an average of good and bad years." In the case of coal this rule need only be fulfilled consistently with the earlier provisions. Without undertaking a detailed critique, it is obvious that these rules are so vague and general that a very wide range of policies could be brought within their terms.

The italicised words above raise the crucial issue: whether the board of a nationalised industry is a suitable body to judge "the public interest in all respects."<sup>1</sup> I shall argue that it is not suitable, that such

issues should be reserved to the Government (or to Parliament itself), and that the boards should be given standing orders of operation which, as far as possible, remove these issues from their discretion.

The main reasons why the boards are not suitable judges of the public interest are these: first, being engaged in one industry, they have special interests; thus an electricity board is not a suitable judge of the public interest in rural electrification. Secondly, their members are not primarily selected as judges of the public interest, but for their competence in managing particular industries. Thirdly, the boards may lack both the information and the power necessary to ensure that their policies are co-ordinated with those pursued in other sectors of the economy; though the Government does admittedly exercise either official control or unofficial influence in cases where co-ordination is considered important. Fourthly, the boards are not fully accountable to Parliament. This lack of accountability is perhaps most serious in cases where their policies bring about substantial redistributions of real wealth and income among members of the community. For example, if rural electrification is carried out at a loss which is financed from profits made in urban areas, the economic effect is indistinguishable from that of paying a subsidy to electrical development in the one place and levying a tax upon it in the other.

It is therefore suggested that the discretion of the boards should be restricted by the enactment of principles of operation, which they would be required to follow unless exceptions were specially authorised by statute or ministerial order. It is most consonant with the character of the nationalised industries, and the general nature of our economic system, that such rules should be of a "commercial" character. That is to say, the rules would require that the policy of any board should reflect as closely as possible the conditions of commercial demand and cost confronting its industry. In particular, the boards would be authorised to supply on their own initiative only services whose costs buyers were expected to pay. The formulation of more precise principles along these lines will be attempted below.

It would, of course, be possible for ministers to impose restrictions upon the boards by using their powers of direction, but it seems preferable that the broad principles at least should be written into statutes. One reason is the importance of the principles involved, and the need to avoid frequent changes. The chief reason is that the enactment of commercial rules would provide a powerful means of improving parliamentary control, both by regulating the industries' conduct of their commercial operations and by making ministers responsible for any deviations from the rules which they authorised. Some of the problems of ministerial intervention and parliamentary control will be briefly discussed.

\* Mr. Foldes is a Lecturer in Economics at the London School of Economics.

<sup>1</sup> The statutes for gas, transport and electricity do not contain this wording. However, they do not preclude consideration of the general public interest, and there is evidence that the boards take it into account. See the reports of the Herbert Committee on the Electricity Supply Industry (Cmd. 9672/1956), paras. 364-373 and 429-431, and of the Chambers Committee on London Transport (Ministry of Transport, 1955), Ch. VII, especially para. 72.

## SUGGESTED RULES OF OPERATION

In this part, an attempt will be made to formulate some "commercial" criteria for the determination of prices, costs, investment and output which could, at least in part, take the place which the criterion of profitability occupies in private business. The discussion will be confined to a few principles which can be set out without using complex methods of economic analysis. Some important questions will be omitted (*e.g.*, problems concerning quality of service) as well as a number of complications which arise in attempting to draw up rules which could be applied in practice. No attempt has therefore been made to state the principles in a form in which they could be actually enacted or made the subject of regulations. Nevertheless, I believe that they could be put into such a form, and that it would be possible to write into statutes at least some broad rules based on the principles which will be suggested.

*(a) Definitions*

It will be convenient to begin with some definitions:

The *Opportunity Cost* of employing resources in any use is the return which they could have earned in the best alternative use. In cases where resources have yet to be acquired by an industry, their purchase price can generally be regarded as giving the best indication of the cost to society of employing them in that industry.<sup>2</sup> Where resources are already owned by the industry, the cost of using them is usually quite different from the original cost of acquiring them, though it is the original cost that gives rise to financial charges in the accounts. For instance, the "original cost" of the £400 million of the Transport Commission's own funds which are to be used for railway modernisation is about 3 per cent., the rate paid on the Transport Stock issued in 1948; but the cost of using the money now is surely the same, pound for pound, as that of the £800 million which the Commission intends to raise in the market at about 5 per cent. (Incidentally, no additional charge is to be found in the Modernisation Plan.) In the case of specialised assets the measurement of

<sup>2</sup> For certain reasons which have often been stated, market demands and prices of resources do not provide entirely satisfactory indications of social requirements and costs. Indeed it is, strictly speaking, never possible to measure the social requirements or costs of one product, or to determine its optimum output, unless conditions throughout the economy are taken into account at the same time. For this reason it is impossible to prove theoretically that the principles suggested in this section are the best conceivable, or that they lead to desirable results in all cases. However, it is important that there should be *some* set of rules which lays down normal commercial procedure and separates the sphere of authority of the boards from that of ministers. The rules suggested in the text have some basis in economic theory and should be capable of practical application. I should defend them along the lines indicated by Dr. I. M. D. Little in the Introduction to "The Price of Fuel." Some of the adjustments required where the rules yield unsatisfactory results in particular cases are briefly discussed in connection with ministerial intervention.

opportunity cost is quite intricate, but in particular cases it is usually possible to devise satisfactory approximations.

*Discrimination* occurs where a product is sold at different prices (1) for different purposes, *e.g.*, power and light, or (2) to different buyers, *e.g.*, domestic and industrial, where costs of supply are the same, or (3) for different units taken by the same buyer. The two-part tariff for gas or electricity, which charges each customer a fixed sum per period plus a price per unit, may discriminate in the second or the third way. If the fixed charge paid by a customer is not just enough to cover the cost of installations needed in order to serve his premises, this can be regarded as a difference between the price of the first unit supplied and the price of later units. One might also say that such a tariff discriminates among customers where the difference between installation cost and fixed charge varies from one customer to another. *Perfect discrimination* would be achieved by a pricing system which managed to extract the absolute maximum which buyers were willing to pay for a given supply of a commodity rather than go without. The concept of discrimination among the consumers of different goods gives rise to difficulties, and we shall not use it.

*(b) Pricing of a Given Volume of Sales*

If the general approach suggested in the previous section is accepted, it follows that any *given* volume of output which is to be sold during a period should be sold at a price which will just clear the market, *i.e.*, at which demand just equals the given supply. If lower prices are fixed, there will be queueing or rationing, which involve allocation according to a rule of equity, rather than by commercial criteria, and ought therefore to be undertaken only if special instructions are received. Moreover, the rules which will be suggested for the regulation of production according to demand and cost are difficult to apply if prices are not allowed to reflect demand. On the other hand, it is not suggested that prices should constantly fluctuate as slight changes occur in the market. Some degree of price stability is clearly warranted by commercial considerations where frequent changes lead to loss of goodwill and are very inconvenient and costly to administer.

*(c) Investment and Output in the Case of a New Product*

The next problem is to decide how much of each product or service should be made available. It will be convenient to begin with the following simplifying assumptions: (1) Only one product of given quality is under consideration, and its costs and revenues are independent of those of other products of the same industry. (2) It is a new product, which is to be produced exclusively with newly acquired assets. When old assets exist the problem is complicated,

first by unexpected changes in conditions since they were acquired and, secondly, by the existence of financial charges due to the compensation paid when the assets were nationalised. (3) That conditions are expected to be constant during the life of the new assets, so that problems connected with price changes in short periods can be ignored.

Before making any suggestions it is worth while to describe briefly the policy which will be adopted by a (theoretical) private monopolist who seeks to maximise profit, but who has no power to discriminate. He will only produce at all if there is some output for which his revenue is expected to exceed his cost. Now each time he extends his output, his revenue will not rise by the full amount of the price of the additional quantity for, in order to sell more, he must lower the price of his *whole* output. On the other hand, if he is a large buyer of productive resources, the increase in his demand may raise the price he must pay for *all* his purchases, so that the addition to his cost will exceed the price of the resources needed to produce his additional output.<sup>3</sup> He will clearly extend production as long as the additions to revenue exceed the additions to cost. Now it is generally agreed that, although the resulting output gives him his greatest profit, it is likely to be smaller than is desirable. The loss to the monopolist due to the reduction in price represents no fall in consumers' satisfaction, but is due only to his inability to charge different prices for different units of output. Similarly, the rise in the price of resources which he was using already represents no rise in their alternative earnings. Therefore these factors ought not to be counted in the assessment of optimum output. This suggests that additional output should be produced so long as the price for which it can be sold exceeds the cost of the resources needed to produce the extra output. To put it in jargon, production should be extended as long as price exceeds marginal cost (the cost of one more unit of output), and should stop at the point where they are equal. This conclusion will have to be modified later on. The main difficulty is that the equation of price with the cost of an additional unit of output will lead to losses where the average cost of the whole output exceeds the additional cost.

Leaving aside for the moment the question of the size of output, the first problem is to determine the circumstances in which a nationalised industry should instal capacity for making a new product. A well-known suggestion is that capacity should be installed whenever the capital and running costs of the resulting output do not exceed the maximum revenue which consumers would be willing to pay rather than go without it, *i.e.*, the revenue which could be raised with perfect discrimination. However, it is not usually possible in

<sup>3</sup> In the rest of this part it will be assumed that the market prices of productive resources are given.

practice to extract the maximum from buyers, so that this suggestion, if followed, would allow the production of some products at a loss.

I shall argue, for two reasons, that capacity should not in general be provided unless *actual* revenue accruing during the life of the assets is expected to cover all costs. In the first place, it is difficult to check whether there is in fact enough demand for a service unless one insists on collection of the revenue. In an industry which is not run mainly for profit, there is a particularly great incentive to expand, and thereby to increase the power of those who run the industry and to increase the speed of promotion of staff. It is therefore essential to insist that each activity should pay its way, in order to ensure that it is not being run simply because it is some administrator's "pet project," or because a strong pressure group is "pushing" it. Secondly, if losses are made, they have generally to be financed by taxes on other products or activities, either within or outside the industry, or by inflationary borrowing. Both methods involve disadvantages in other sectors of the economy, at any rate in present conditions.

In some cases it is quite possible to collect enough revenue to cover costs, but some law or convention stands in the way of the adoption of the kind of tariff which would raise the necessary sum. For instance, a board may consider it inequitable to discriminate among users of a service, or to charge different rates for services which are superficially similar. A good example is the insistence on making a uniform charge per passenger mile in the London area. There must be many services which could pay their way if special charges were made, but are unprofitable with uniform charging, so that they either operate at a loss or are not provided at all. In the latter case the apparently equitable rule actually damages the people it is supposed to protect, since it prevents the supply of a service whose costs they would be willing to pay. As for the former possibility, reasons have already been given why the boards should not provide services at a loss unless they are specially directed to do so. Apart from such directions, the restrictions on charging should be removed and customers permitted to pay for the services which they require.

This discussion suggests that a rule should be laid down to the effect that capacity should be provided only if it is expected that enough revenue can *actually* be collected to cover all costs. This rule should apply, not only to the whole of the planned capacity, but also to any part of it. No project or part of a project should be included in the plan if the resulting increase in output adds more to cost than to revenue. The revenue which is relevant is, of course, that which is obtained by selling the output of the additional capacity, without making any deduction for the fall in the price of the remaining output.

When a part of the revenue is not raised by a direct charge per unit of output, but (say) by a fixed annual charge to consumers, it is not always easy to attribute the revenue to particular units of output. Now it is desirable to avoid extensions of capacity which consumers are not willing to pay for separately, but which could be subsidised from the proceeds of fixed charges representing part of the benefit which consumers get from other parts of the output. In the case of relatively small extensions to capacity, which are unlikely to add much to the amount which could be extracted from consumers by way of fixed charges, it is therefore best to insist that extensions should not be undertaken unless they can be paid for out of direct charges. In other words, the price (variable charge per unit) must cover the average cost of the output from the additional capacity.

This point brings us back to the suggestion mentioned earlier, that planned output should be extended until price equals the cost of an addition to output. The first problem which arises is whether the relevant increase in output is a single unit (a kilo-watt hour, or an extra passenger on a train), or the whole output of an addition to capacity (an extra power station, or a train). This rather technical question is discussed in the footnote, which some readers may prefer to omit.<sup>4</sup>

Subject to the explanations given in the footnote, the rule that planned output should be extended until price equals marginal cost

<sup>4</sup> The problem arises because capacity must normally be extended in "lumps," whereas output can rise by a unit at a time. The result is that the cost of extra output fluctuates a good deal according to the extent to which capacity is used. The capital cost of a new "lump" of capacity may be high; the cost of producing successive units from it generally falls at first, and then rises until no further output can be obtained.

The additional cost of a single unit of output is not, in general, a very suitable standard by which to adjust output and prices. First, it varies greatly with quite small variations in output, and is therefore not a satisfactory basis for reasonably stable pricing. Secondly, the cost of a single unit of output—an extra passenger—may be very low when capacity is not fully used. The extension of output until price fell to this low level might leave the price well below the average cost of output from the last "lump" of capacity—the carriage, or the train—which is contrary to the rule stated above. It is therefore generally best to spread the cost of a suitable marginal "lump" of capacity over the whole output which is produced from it, and use this adjusted measure of marginal cost as the basis for fixing price and output.

An exception should probably be made in some cases. When capacity is fairly fully used, the cost of an additional unit of output may be consistently higher than the average cost of the whole last "lump" of output. In such a case it is, strictly speaking, better to stop expanding production where price equals the cost of an additional unit, since the extension of output until price falls to the level of this average cost involves the production of some units whose cost exceeds their price. This point becomes important where demand is consistently so great that production must be pushed to the limits of capacity, though not so great that capacity can be extended. (Alternatively, extension may be prevented by some external restraint.) In this case the cost of additional output from available capacity rises without limit, so that the requirement that price should equal marginal cost simply means that it should be fixed at a level which is just high enough to restrict demand to the available capacity.

can be accepted, as long as it does not conflict with the overriding rule that revenue must be expected to cover all costs. Now losses may occur, since the whole trend of costs may be downward as the investment programme expands, so that the cost of additional output, and hence price, is below the average cost of the whole output. This may happen where the investment programme includes some indivisible items with large capacities, such as an electricity grid, or the permanent way of a railway which, once installed, can be used at relatively low cost. Other economies of large scale may also contribute.

In the case of the gas and electricity industries, it is usually possible to make up any deficiency of revenue which results from marginal cost pricing by levying a fixed annual charge on each consumer (in excess of the cost of special installations), or by some similar device. This solution is not perfect, since in practice the fixed charge is likely to cause the loss of some customers who would be willing to pay the cost of supplying them; nevertheless, it enables output to be extended until price equals marginal cost, and is probably the most satisfactory method of discrimination which is practically feasible. If the necessary revenue cannot be collected by this or some similar method, output must be restricted until price rises enough for costs to be covered.

In the case of railways, the application of our rules is rather more complex, because there is a "pyramid" of units of capacity, and marginal units can be added at each level of the pyramid: a marginal truck on each train, a marginal train in each service, a marginal service on each line. Our principles require that (up to a technical maximum) further trucks be added to a train as long as receipts from the extra freight (not counting any losses due to the need to reduce charges for other truckloads) exceeds the additional costs, provided that the train as a whole pays its way. A similar rule applies to the addition of a further train to a service, and so forth. Where capacity is fully used, it may be possible to extend activity at each level until price equals additional cost, without incurring any losses. Where capacity is not fully used, the cost of (say) an additional train may be well below the average cost per train of running a service. Now if reductions of charges which are required in order to obtain additional traffic have to be granted also to traffic which would pay higher charges, it will not be possible to extend the service until the revenue from the freight on an additional train just equals its cost, because this would lead to a loss on the service as a whole. This restriction of service can be avoided if it is possible to adopt discriminatory charges, which enable the lower rates to be confined to the additional traffic.

In the case of the coal industry, costs rise continually as poorer

and poorer seams are mined, so that (apart from financial charges, which are discussed below), the costs of additional output are above average costs and the extension of output until price equals marginal costs should yield handsome surpluses on the continued working of the richer deposits. In such cases it would clearly be wasteful to extend production further until price was equal to average cost, for the cost of the additional output would exceed its value. Profits, unlike losses, are welcome enough, and it would seem better to tax them than to dissipate them by wasteful investment.

#### *Conclusions*

The main conclusions reached so far can be briefly summarised as follows:

- (1) A given volume of output should be sold at a price just high enough to clear the market, subject to the need for such short-run stability of prices as can be justified by ordinary commercial considerations. (Section (b).)
- (2) An investment programme should be undertaken only if sales proceeds are expected to cover all costs. Buyers should not be deprived of services whose costs they are willing to meet, simply because the revenue cannot be raised without the use of discriminatory or other apparently inequitable methods of charging.
- (3) The same applies to any part of a programme for extending investment and output. Thus planned output should be extended until the price of additional output is equal to the additional cost, as long as the whole programme, and each major part of it, is expected to pay its way. Where the cost of additional output is below the average cost of the whole output, a single "flat rate" price equal to the former would lead to a loss. If discrimination is impossible, output must then be curtailed until price covers average cost. However, it is possible in some cases to avoid such contraction without incurring financial loss, either by levying a "fixed" annual charge on buyers or by granting price reductions on a part of the output which are not extended to the whole.

The discussion of this section has proceeded upon certain simplifying assumptions, which in a full treatment would all have to be relaxed. The next two sections deal with the problems raised by (1) unexpected change, and (2) the existence of financial charges due to the compensation paid to former owners, which have received little theoretical discussion. The other assumptions will, however, be retained, partly for lack of space to discuss them, partly for the sake of simplicity.

The fact that an industry produces several products does not by itself make any difference. The rules apply to each product individually. Complications are introduced where the costs or revenues of different products are closely interdependent, but they do not affect our main principles. Charging schemes which are broadly consistent with these principles have been proposed by some authors.<sup>5</sup> The whole problem of joint production will therefore be left on one side. The questions which arise when conditions are *expected* to fluctuate from period to period during the life of an asset—*e.g.*, from peak to off-peak periods—are in essence problems of joint production, and will likewise be ignored. The problem of the quality of service will also be left out, though little work has been published on the application of economic theory to this question. Finally it must be confessed that economic theory in its present state has hardly any guidance to offer as to the optimum expenditure on such items as research and advertising.

#### *(d) Unexpected Change*

The discussion of the previous section dealt mainly with *planned* capacity, output and prices, and it was assumed that conditions were expected to be constant over the life of the new assets. If expectations turn out to be correct, actual prices and output should clearly be fixed according to plan. This section deals with the adjustments to be made when conditions change unexpectedly and permanently after capacity has been installed. The case of a change in demand will be taken first.

The case of a rise in demand is simple. If price and output were previously fixed on the basis of marginal cost, the same basis can still be used. If demand has risen greatly, this may simply mean that in the short run prices have to be put up to a level which will just ration out available capacity. Where price and output were previously fixed on the basis of average cost, it may become possible to switch over to marginal cost. If the increase in demand is large enough to justify installing new capacity, it can be put in hand, and any profits which accrue in the meanwhile can be used to help finance the expansion.

The case of a fall in demand presents greater difficulty. If the fall in demand for a product is small, it may be possible to meet it by foregoing any profits previously earned on that product. Such profits may be due, first, to an excess of marginal cost (which would determine price) over average cost, secondly, to the inclusion of a provision for uncertainty in the original calculations of average cost.

<sup>5</sup> See, for instance, I. M. D. Little, "The Price of Fuel," and G. J. Ponsonby, "Towards a New Railway Charges Policy," *Journal of the Institute of Transport*, Vol. 25, No. 12, September, 1954.

Now suppose that a fall in demand occurs which is too great to be dealt with in this way, though not so great that operating costs cannot be covered. There are now two main possibilities. First, it may be decided to "write off" a part of the book value of assets, in order to reduce the total charges which must be covered by revenue. The determination of the amount to be written off is to some extent arbitrary, though it is possible to state rules for determining the maximum write-off.<sup>6</sup> A write-off might be financed from reserves, or the transfer of debt charges to another part of the enterprise or to the Exchequer. Secondly, efforts might be made to recover additional revenue from the remaining buyers of the commodity whose demand has fallen, either by increasing the degree of discrimination in charging, or by raising prices towards the point of maximum monopoly profit. Now some rise in price may in any case be justified if running costs are higher at reduced levels of output, but beyond this point a rise in price could cause a large waste of available capacity. Its effect would be like that of imposing a tax on the product.

In fact, the problem is whether to make up the loss by taxing consumers of the commodity whose demand has fallen, or by taxing some other group, or by using reserves. In principle, this is a problem which should be put up to the Minister for decision and, if necessary, for legislative action. There are no set rules, but in general the best method would seem to be to write off asset values against accumulated profits or, failing that, to transfer a part of the industry's debt to the Exchequer. The other methods suffer from two disadvantages: they place the burden due to the error of judgment on particular groups, and they are inconsistent with the principles of operation which the industries would be using normally.

Of course nationalised industries should not be encouraged to make a habit of transferring their liabilities to the Exchequer, or even to seek continual ministerial intervention. For this reason it is important that the boards should have some power to write off asset values against reserves, at any rate to the extent of unused provisions for obsolescence from previous projects which have accumulated in their books. On the other hand, it is generally better to deal with a major fall in demand affecting a large section of an industry by reducing its capitalisation, than to allow continuing financial deficits to act as a drag on production which succeeds in covering its operating costs.

<sup>6</sup> After the write-off, price must not be below (a) marginal operating cost; (b) a level which permits total revenue (including any fixed charges) to cover the avoidable cost of operating (including the part of depreciation due to the use of assets, but not the part due to the mere passage of time); (c) the level at which price would be if demand had been correctly foreseen and capacity determined accordingly. The maximum write-off is that which reduces price to the highest of these levels.

Finally, suppose that the fall in the demand for a product is so great that there is no output at which operating costs can be covered. In this case production must normally cease, and any unrealisable asset values must be written off. (There may be cases where ordinary commercial considerations justify the temporary continuation of production. For instance, it may be considered cheaper to employ miners in unremunerative pits for a while than to dismiss them and incur losses due to the resulting discontent among the remaining workers.)

The remaining categories of unexpected change can be disposed of briefly. A change in operating costs can be analysed in precisely the same way as a change in demand. An unexpected advance in technology may lead to financial losses, if new capacity is extended up to the limits indicated in section (c), because the price at which the new equipment can produce may be too low to allow the amortisation of capital charges on old equipment. If this occurs, it is even more important than in the case of a fall in demand that capital charges should be written off, and that the adoption of the new methods should not be curtailed or delayed.

Changes in the value of money bring about fortuitous changes in the real value of the burden of debt and depreciation charges which an industry has to bear. It is now widely recognised that, in a period when the value of money is falling, the sums set aside for depreciation should be augmented to the extent necessary to offset the fall in the value of money, and the increase placed in a special reserve. If the value of money began to rise, this reserve could be run down, and if the reserve were insufficient the Minister could authorise a further write-off, and, if necessary, introduce legislation to transfer a corresponding amount of the industry's debts to the Exchequer.

#### *(e) Compensation and Financial Charges*

It has been argued that nationalised industries should cover the full cost of assets which they instal, subject to certain modifications in cases where conditions change unexpectedly. Clearly, a corresponding sum should be covered in the case of assets taken over on nationalisation. The assessment of this sum presents difficult problems, but in any case there are objections, in general, to the method adopted in the Nationalising Statutes, which made the capitalisation of the new boards equal to the compensation paid to the former owners.

To take an extreme case, suppose an industry were nationalised which was formerly in the hands of an uncontrolled monopolist, who was making the greatest profit he could, and that he was fairly compensated for the prospective value of his monopoly profit. If the new board now had to pay interest and redemption instalments

on this value, it would clearly be unable to raise the necessary revenue unless it charged the same prices and produced the same output as the monopolist would have produced. Such a result would be widely regarded as defeating one of the main purposes of nationalisation.

It is true that matters have not turned out like this, for several reasons. First, the charges of the former public utility undertakings were subject to restrictions which have now largely been dropped. Secondly, interest charges were kept down because the bonds issued as compensation were guaranteed by the Treasury. Thirdly, the burden of debt has been reduced by the fall in the value of money. Fourthly, some assets were acquired cheaply. Local authorities were compensated only for outstanding debts (plus compensation for severance), and not for the value of the assets acquired. Coal owners were compensated on the basis of earnings between the wars.

The capitalisation of the boards has thus been fixed in a quite haphazard fashion. A better procedure would be to assess the appropriate sum according to a definite principle; if it fell short of the compensation paid, consideration should be given to the possibility of adding the difference to the National Debt and, if it were greater, that Debt might be reduced.

A possible principle of valuation, which is thrown out only as a suggestion, is based on the reflection that the total charge on an asset which has been nationalised should be the same as the charge on a similar asset acquired after nationalisation. This suggests that assets might be valued on the basis of the current costs of replacing them with identical assets, or assets of similar capacity (in the case of obsolete assets), less depreciation for the years of life already past. Special valuations, which would have to be rather arbitrary, would be required in the case of assets which had been acquired on the basis of expectations which had later been disappointed.

In industries where marginal cost is well above average cost, such a valuation would leave a substantial profit. In such cases there would be no harm in imposing a capital charge whose service was expected just to absorb the profit. It is fortunate that this alternative method of valuation exists in these cases, for the excess of marginal over average cost is typical of such industries as mining and agriculture, whose assets might be awkward to value at replacement cost.

#### *Conclusions*

The preceding sections have sketched some of the main principles which, after modification to take account of various practical complications, could form the basis of "commercial" rules to be followed by the boards in the absence of special directions to the

contrary. Three conclusions have already been set out above (page 130); two more can now be added to the list:

- (4) The prices calculated by rules 1-3 should be the prices actually charged, unless expectations prove to be incorrect. The boards should be given limited powers to write off asset values, but large-scale disappointments must be dealt with by the Government. In general, there is a strong case against making up losses by taxing the products of the industry which has experienced a fall in demand or unexpected obsolescence.
- (5) Where assets are taken over from private owners, the financial charges to be borne by the nationalised industry should not generally be equal to the compensation paid to former owners. The assets should be revalued on the basis of current replacement costs of equivalent assets, except perhaps where an excess of marginal over average cost makes it possible to impose a higher charge without causing restriction of output.

#### PARLIAMENTARY CONTROL

The enactment of rules of commercial operation based upon the economic principles outlined in the last section would not only provide criteria for the fixing of prices and the allocation of resources, but should go far to solve the problem of parliamentary control of the nationalised industries. In the first place, the mere provision of rules would increase control of their ordinary commercial operations; moreover, although it would not be possible for an outside authority to enforce precise adherence to the rules, each industry could be required to present its estimates, accounts and reports in a form which indicated, however roughly, whether the rules were being obeyed in each of its activities. Secondly, since the boards would be permitted to deviate from these rules only if explicitly ordered to do so by the Government, the responsibility for such departures could be firmly placed on ministers who would be answerable for them in the usual way. In this way Parliament could gain control, both over the broad outlines of commercial policy and over the details of those matters which are of legitimate political interest. It should then be possible to give up the project for a Select Committee on Nationalised Industries, which has been widely criticised as likely to undermine the commercial independence of the corporations.<sup>7</sup>

<sup>7</sup> The objections are well known, and need not be restated here. See the evidence of Mr. H. Morrison, Lord Reith and Lord Heyworth to the Second Select Committee (H.C. 235/1953), and the Report of the Fourth Select Committee (H.C.



At present, ministers have considerable powers to intervene in the affairs of the nationalised industries in order to use them as instruments of general government policy. We shall not discuss whether these powers should be curtailed (or extended), nor ask in what circumstances such intervention is desirable. Some possible purposes of ministerial intervention will, however, be enumerated, and some suggestions will be made as to the procedure which might be adopted when the industries are required to depart from their normal rules.

To begin with, two categories of intervention may be mentioned which would affect the framework within which the rules operate, but would not involve departures from them. First, a single nationalised industry cannot draw up its plans unless it is provided with information about the plans of other nationalised industries and of private industries, particularly those controlled by the Government. There is therefore a need for "co-ordination" and review of programmes by the Government. Secondly, it might be desirable in some cases to give ministers powers to lay down rules amplifying the general principles of commercial operation set out in the statutes; but it would probably be best to restrict the use of this technique as closely as possible, for fear of undermining the commercial freedom of the boards.

Next, there are the cases where it is believed that some special adjustment of the figures of demand, prices, and costs is required before the commercial rules will yield satisfactory results. First, the operation of an industry may confer benefits, or throw costs on other sections of society, which are not adequately reflected in the industry's accounts. In this category fall such problems as smoke pollution and rural amenities which are dealt with by special methods and fall outside the scope of this paper. Secondly, some "imperfection of the market" may prevent the preferences of consumers and of suppliers of productive resources from being accurately reflected in the demands and costs confronting the industry. In theory, there are numerous features of the economy necessitating such adjustments, but the cases which are of practical importance are mostly due to government intervention in the industry concerned, in industries with which it is closely related, and in the capital market.

Two examples will illustrate the problems which are involved:

(1) The rate of interest paid on the boards' stock issues is well below the "risk rate" which would apply to privately owned concerns undertaking ventures of a similar degree of uncertainty, because they are backed by a Treasury guarantee. Indeed, even in

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the absence of such a guarantee they would still pay less than the risk rate, as long as it was known that in the last resort the interest payments would be met from the Exchequer. In these circumstances a strong case can be made for imposing a Treasury Surcharge—a sort of underwriter's premium—on all borrowing by the boards, in order to remove the artificial incentive for the nationalised industries to grow more rapidly than other industries.

(2) For several years the Government has intervened to keep coal prices below the level which would equate supply and demand. Its intention has not, of course, been to discourage the supply of coal, but the automatic application of the rules of the last section would have this effect. Therefore, if the rule about pricing is modified by outside intervention, the output rule must be appropriately modified at the same time; and more generally if one of the rules stated in the second part of this article is not followed it may be necessary to modify other rules. There is, for instance, the complex question whether the gas and electricity industries ought to charge coal in their accounts at the market price or at some higher price, bearing in mind that some of their customers can substitute coal bought at market prices for gas and electricity.

Finally, and most important, the Government may intervene in the nationalised industries in order to use them as instruments of its general policy. Such intervention may have a variety of objectives; for instance: the provision of unremunerative activities required for public services such as defence; the redistribution (or maintenance of the existing distribution) of real wealth and income among members of the community; the control of employment and price levels; the regulation of foreign trade; and the control of the capital market. In the following discussion I shall assume—without advocating—that the Government would continue to have wide powers of intervention even if "commercial" rules of operation were enacted. To the extent that the Government loses its powers, the problem of controlling its interventions simply disappears.

In order to maintain the independence of the boards in their ordinary commercial operations, and to secure parliamentary control over interventions, it is necessary that the boards should not be asked to undertake activities, or charge prices, which conflict with their commercial criteria, except by an explicit, published directive. For the same reasons, and especially in view of the economic and financial effects of such orders, it would probably be most appropriate that they should be framed as Statutory Orders requiring an affirmative vote in both Houses. Admittedly it would, in some cases, be necessary that they should come into effect immediately on

publication, *e.g.*, in the case of an order announcing price changes, where delay might lead to undesirable speculation in stocks.

It is an essential part of the scheme that the directive should set out the estimated financial effect of the intervention on the nationalised industry, and indicate how it is proposed to deal with it. Take, for instance, a directive whose purpose was to prevent the price of coal from being raised to the level at which supply would equal demand: after setting out the provisions relating to prices, it would have to state whether, and how, the order was intended to affect the rules by which the output of coal was settled, and then estimate what the financial loss to the Coal Board would be. It would then state whether the loss was to be borne by reducing the board's annual profit (if any), by temporary accumulation of losses on the books (*i.e.*, by borrowing), or whether provision for a subsidy was to be included in the next Supply Estimates. Conversely, an order raising coal prices might lead to an increased profit, after allowing for any resulting fall in sales, which could either be retained by the board or become the object of taxation.

The method of finance would, of course, vary greatly from one kind of directive to another. For instance, the temporary regulation of coal prices would probably not require the introduction of special taxes or subsidies. On the other hand, unprofitable branch lines and rural electrification projects might more appropriately be subsidised from national funds than from the revenues paid by other customers of the railway and electricity industries. It would be important that definite principles should be evolved and adhered to even if they were inconvenient in particular instances.

Finally, it is suggested that every effort should be made to isolate, in the estimates, accounts and reports of the boards, the financial effects of Government intervention from the results of the operation of the ordinary commercial criteria.

Since the argument of this essay has been summarised already, it will be sufficient to conclude by restating its main contention. I have advocated the adoption of "commercial" rules for the operation of nationalised industry which would tend to allocate resources according to market forces in cases where special instructions are given by Parliament or Ministers, and have outlined the economic principles on which they could be based. It has been maintained that the enactment of some general rules would help to allocate responsibility for decisions as between ministers and boards, and provide a framework of principle which would permit methodical parliamentary control and reduce the danger of unprincipled *ad hoc* intervention by both Ministers and parliamentary committees.