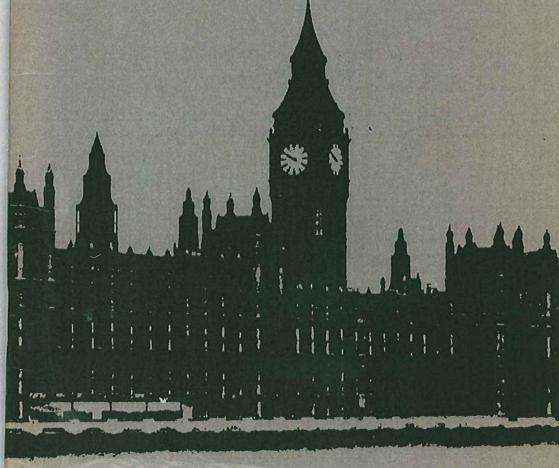


Policy Study No. 73

Put Pits into Profit

alternative plan for coal

Keith Boyfield



CENTRE FY POLICY STUDIES



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8 Wilfred Street, London SW1E 6PL 1985

The Author

This study was prepared for the Nationalised Industries Study Group of the Centre for Policy Studies by Keith Boyfield. Research for the study was undertaken by the Institute for Policy Research.

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Summary of Recommendations

Government policy towards the coal industry should have in sight the following four targets:

- 1 end to subsidy;
- 2 establishment of a variety of sources of supply;
- 3 creation of a competitive free market in production and distribution; and
- 4 restructuring of the industry to bring it in line with market conditions.

Short term measures

In the short term, measures should be taken to strengthen the competitive forces in the industry, create sensitivity to consumer demand, and reduce costs and prices by:

- 1 Removal of constraints on private operators. 150 small independent mines are at present operating privately. They produce a total of 3m tonnes of coal a year. Their activities are severely restricted by the licensing powers of the NCB. These restrictions should be lifted, in particular:
- the rule restricting the maximum number of underground workers which a private operator may employ
- the obligation to provide identical wages and conditions to the NCB
- 2 End to discouragement of imports. Both Labour and Conservative Governments have discouraged the importing of coal. The most conspicuous example is the obligation of the CEGB, confirmed under the joint understanding with the NCB, to purchase 95 per cent of its coal requirements from the NCB. This discouragement should be ended. Any increase in imports may be regarded as a welcome stimulus to domestic producers to keep down costs and improve efficiency.
- 3 Sale of NCB subsidiary operations. The NCB should put up for sale NCB (Coal Products) Ltd which manufactures coal briquettes and other secondary products. It should also be asked to examine and report upon the advantages and disadvantages of selling its workshops and transport business. The operations of NCB (Ancilliaries) Ltd which are concerned with fuel distribution, computer

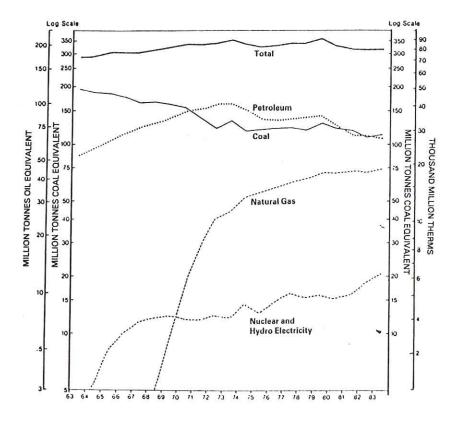
- services, engineering, and land development and disposal should also be examined with a view to privatisation.
- 4 Sale of the NCB's opencast division. This is a prime candidate for speedy privatisation. NCB report and accounts for the year ending 31 March 1984 show that contracted-out opencast operations generated a profit of £211m. Present output stands at 14m tonnes a year. Removal of artificial restrictions on ownership and production could increase this substantially.
- 5 Conversion of Areas into separate companies. Each deep-mining Area should be converted, in order to introduce tighter business discipline, into a body incorporated under the Companies Acts. It would be required to provide full reports and accounts which would include interest upon borrowings, and show the source and application of all funds. This is in line with the recommendations of the Monopolies and Mergers Commission.
- 6 Closure of uneconomic pits. It scarcely need be said that the sooner grossly uneconomic pits are closed, the better. But where it is impracticable, for social or other reasons, to close marginally uneconomic pits, a subsidy tailored to each pit should be brought into operation. This would include specific grants tapering over specific time-spans, to encourage employees to set up their own businesses in such forms as owner co-operatives. Such subsidised sale to the workforce or buy-out by management might often result in a return to profitability.

Long-term measures

1 Vesting of all British mineral rights in a new agency. This would provide a framework for the future restructuring of the coalmining industry. All mineral rights (including coal) should be vested in a new national agency. This would be entitled to sell by auction the right to exploit all fuels and minerals — oil, gas, copper, tin, gold, etc. It would be authorised to sell long leases to mining companies, collect royalties to cover its costs and charge rents reflecting the values inherent in the mining fields. Allocations of North Sea Oil licences, of motorway service-station franchises and of ITV companies are exemplars. There is even a precedent in coalmining itself: coal rights were vested in a Coal Commission by the Chamberlain Government in 1938. 1

- 2 Introduction of a programme of phased privatisation. A start could be made with the sale of the consistently profitable Nottinghamshire coal field. Shares should be made available at preferential rates to all existing employees. Elsewhere smaller groups of mines, not necessarily in geographical clusters, could be sold and sometimes individual collieries. This would provide guidance on the relative merits of the different methods of sale before full-scale privatisation.
- 3 Development of new Areas. Even if profitable pits are to be the only ones kept in production, the process is inevitable whereby pits fall out of profit into loss and need to be closed. The methods of developing new mining Areas, within a structure designed to make coalmining profitable, therefore deserve discussion now.

CHART 1. UK Energy Consumption 1963-83



Source: Digest of UK Energy Statistics, 1984. Department of Energy

Introduction

THE FUTURE OF THE BRITISH ECONOMY DEPENDS TO A LARGE EXTENT UPON INEXPENSIVE ENERGY. Untapped resources of fossil fuel underneath our island and the seas around it are enormous. Yet many predict that our oil reserves will fast run down; and many others argue that the cost of mining our coal is too high and likely to rise higher still. So doubt and disquiet are growing.

Recently, the pattern of British energy consumption has been changing. Chart 1 shows how total consumption grew to peaks in 1973 and 1979 but has fallen away since. And Table 1, on page 10, illustrates how the consumption of coal has plummeted, absolutely and relatively, since 1963.

Most forecasts of future energy requirements (for what they are worth) predict a gradual rise, slightly lower than that of the GDP because of continually improved efficiency in the usage of fuel. Even the upper limit of the Department of Energy's estimate for primary energy demand in 1990 (given to the Sizewell Inquiry) was only 396m tonnes coal equivalent – against 326.5m in 1983; and the lower limit was 339m tonnes, a growth rate of under 1 per cent a year.

It is the principle aim of this study to consider how best to develop a profitable coalmining industry within this context. We first examine the objectives set out in the original 'Plan for Coal' published by the NCB in 1974 – and compare them with subsequent performance.

We then explore the prospects of demand for coal, paying particular attention to the way in which sales of deep-mined coal may be affected by imports and opencast mining.

Chapter 3 discusses the reasons for the NCB's failure to meet the targets set in 'Plan for Coal'. On the evidence the chief villain of the piece is the Board's inability to control ever-mounting costs of production. It shows how a fairly small proportion of the Board's colliery output – about 25 per cent – was responsible for almost 80 per cent of aggregate losses from colliery operations during 1983. If coalmining is ever to show a profit, there is no escaping a programme of industrial restructuring, such as has been carried out by other Western European countries.

The next chapter addresses itself to the consequences for employment, given the necessary restructuring. If the industry concentrates on the development of high-technology and low-cost pits, the pattern of employment will of course change; but further decline in the numbers employed might be arrested.

Finally, we propose an alternative plan for coal which would remove the present near-monopoly enjoyed by the NCB, introduce diverse ownership and promote competition. We answer the objections to denationalisation put forward by the National Union of Mineworkers, and argue that denationalisation could offer to mineworkers the opportunity to enjoy a stake in their own industry. We deal with both the short and long-term measures necessary to implement a strategy which could hold out a real hope of creating an industry at once efficient, responsive to the market – and profitable.

TABLE 1. UK Energy Consumption (tonnes of coal equivalent)

	1963	%	1973	%	1983	%
Coal	196.9	68.1	133.0	37.6	111.5	35.6
Petroleum	87.9	30.4	164.2	46.5	106.1	33.9
Natural gas	0.2	0.1	44.2	12.5	74.8	23.9
Nuclear	2.5	0.8	10.1	2.9	18.1	5.8
Hydro	1.8	0.6	1.8	0.5	2.4	0.8
	289.3		353.3		312.9	

Source: Digest of UK Energy Statistics, 1984. Department of Energy.

1 Plan for Coal

Plan for Coal, the tripartite agreement signed in 1974 between the Government, the NCB and the NUM has dominated the development of the coal industry over the last decade. Following the trebling of oil prices by OPEC in that year, and the strike by the NUM, it set targets for investment, capacity, and productivity for the ten-year period 1975-85. In practice these targets have not been met. They underestimated the ability of both industrial and domestic users to improve efficiency and conserve energy. Further measures in support of such improvements were introduced in 1979 after the next big jump in the price of oil.

Chart 2, on page 14, compares the NCB's performance as of 1983 with the objectives of Plan for Coal.

Observe:

The large gap between the estimate of 400m tonnes p.a. of coal equivalent for total demand in 1983, and the actual out-turn of 330m tonnes. The assumption was that NCB's deep mines would supply 120m tonnes of coal towards this: they provided only 100m.

The gross under-estimate of investment in new capacity. Although real expenditure on investment in 1975-83 exceeded the figure set down in the Plan by almost 50 per cent the goal for expansion in capacity was not achieved. Nevertheless by the beginning of 1984 21m tonnes of extra capacity had been opened, with a further 21m tonnes under construction and scheduled to be in operation by 1986.²

The slow rate of closures. If the NCB's expenditure on investment has overshot the original target, the closure of uneconomic capacity has fallen far short. Plan for Coal reckoned on an annual withdrawal of three to four million tonnes. But on average a mere 1.7m tonnes had been withdrawn annually up to 1983.³

The poor improvement in productivity. Productivity (as measured by output per man shift) improved very slowly up to 1983 – by an annual average of only 2 per cent compared with the target of 4 per cent p.a. set down in Plan for Coal. Thus, despite its large investment in new capacity, the NCB has utterly failed to achieve the objectives which it agreed to try for in 1974. Disruptions to production have been frequent. Customers have faced constant threats to continuity of supply.

Table 1 showed a decrease in coal consumption from 1973 to 1983. But coal very slightly increased its *share* of the energy market (measured on a coal-equivalent basis) between 1974 and 1983, from 34.9 per cent to 35.6 per cent. We might well ask why coal production has not fallen still faster than it has. Four principle reasons may be adduced:

- 1 NUM's political weight. In the wake of the 1973/4 industrial dispute, the NUM exercised great political influence upon Governments of both parties. In its evidence to the Monopolies and Mergers Commission (MMC) the NCB confessed that 'the necessity of maintaining good industrial relations precluded faster progress' [with the closure of high cost pits]. The strong arm of the NUM was exercised again in February 1981 when the Board was forced to withdraw its accelerated programme for pit closures.
- 2 NCB's monopoly of supply. Had independents been allowed to expand, NCB's colliery production would have fallen faster. But under Section 1 of the 1946 Coal Nationalisation Act the Board enjoys 'the right to mine coal in Great Britain, to the exclusion (save as in this Act provided) of any other person'. The onerous restrictions which were placed on private operators at the time of nationalisation have never been relaxed. Thus, the maximum number of underground workers which they are allowed to employ is fixed at 30, and employees are obliged to be given the same wages and conditions as their counterparts in the NCB.
- 3 CEGB's purchases of NCB coal. In its 1983 inquiry into the coal industry, the Monopolies and Mergers Commission observed that although 'there is no statutory restriction on importing coal, the Government has exerted pressure on the CEGB to restrict imports, most recently since February 1981, and has helped the NCB to meet foreign competition in coking coal'. Under the revised joint understanding which runs for the four year period from 1 November 1983, the CEGB undertakes to purchase at least 95 per cent of its estimated coal requirements from the NCB. A two-tier pricing structure has been devised, whereby the CEGB purchases 65m tonnes at a price level which moves in accordance with an *undisclosed index* (our italics) based upon an amalgam of the retail price index and international coal prices. Purchases over that quantity are paid for at a price more closely linked to the prevailing market rate quoted in major European trading centres.

In February 1985 the NCB renewed its contract to supply coal to the CEGB. Under this, the power stations agreed to purchase their committed 65m tonnes from the NCB at £44 a tonne, retrospective to the previous November. The contract further stipulated that the CEGB was at liberty to buy a limit of 8 per cent of its total solid fuel requirements from the NCB at a tariff which reflected world prices. In the event this meant that the NCB delivered coal at £43 a tonne to power stations in the Thames estuary.9

But given the CEGB's great buying power its requirements on the world market could have been met direct from producers at a very much lower price. The agreement, encouraged by the Government, between the NCB and Britain's main domestic consumer of coal effectively shielded the NCB from the winds of competition, and guaranteed it a market for a product which, though heavily subsidised, is still over-priced.

4 Subsidies and grants. In accordance with Section 3 of the Coal Industry Act 1980, the Government funds the Board's losses through so-called 'deficit' grants. In 1983/4, according to NCB's report and accounts, these amounted to £875m. In addition the Government makes substantial 'social' grants to the NCB. These help to pay for the costs incurred in closing uneconomic capacity, redeploying miners to other pits, and increasing pension benefits to employees who accept voluntary redundancies. In 1983/4 the grants amounted to £459m, bringing the total subsidy to £1,334m.

The year-long NUM strike has caused much larger losses and a staggering deficit of £2,225m. In view of mounting losses the Government on 25 April 1985 published the Coal Industry Bill, subsequently enacted in June 1985, which:

- allows the Government to fund the NCB's losses up to a total of £2 billion
- extends the scheme for compensating redundant miners a further 12 months to March 1987. (The funds available under this scheme, which is the most generous in British industry, amount to £600m, sufficient to cover the costs of 40,000 redundancies.)
- permits Government grants against the cost of pit closures to rise from £400m to £450m.

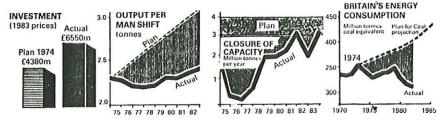
The Board's future policy

The NCB's Chairman, Ian MacGregor, has said that the Board's aim is

'to keep product prices competitive – the competition being not only from oil and gas but also from foreign imported coal. We will never forget that the size of the industry will be determined by the size of our market with our customers telling us what they are prepared to buy and at what price'.¹⁰

After the upheaval of the strike, the NCB's management is evidently determined to proceed with the restructuring of the industry in an effort to make it more competitive and to bring capacity into line with market demand. Those pits which reach the end of their useful lives will be phased out and investment concentrated in long-life and low-cost collieries. In support of this strategy, Mr Ken Moses, the Board's technical director, is supervising the preparation of a revised Plan for Coal. The official objective is to break even in 1988.

CHART 2 - PLAN FOR COAL: Forecasts and Results



Source: NCB 1983. Reprinted from Sunday Times, 24 June 1984.

2 The Market for Coal

Exports and imports

Among the consequences of the recent miners' strike is the loss of a significant proportion of the domestic market to overseas competitors who are able to supply products at a considerably lower price than that charged by the NCB. (A similar loss was sustained by the steel industry after their strike in 1980.) Thus over the few years prior to 1984 imports fluctuated around 4m tonnes, a figure which, as more and more domestic consumers turned to the 'ARA'* market, doubled during the year of the strike. Nor is it easy to see how the Government can continue to resist pleas from the main domestic consumer for coal – the Central Electricity Generating Board – to be allowed freedom to purchase coal on the best world market it can find. At present, discouragement of imports adds to the burden of State support, since the Government is obliged to subsidise the price of NCB coal to make it fictitiously competitive with overseas sources.

Further clouds darken the horizon. For example, suppose UK purchasers begin to import coal in bulk carriers direct from the US, Australia and South Africa? Steam coal in November 1984 was on sale in Western Europe for £37.84 a tonne compared with a pithead price at £43.90 a tonne from the NCB's most efficient pits in the North Midlands. (See Chart 3 on page 18 for similar unfavourable comparisons from 1979-85.)

Over-production and competitive pricing in the international market is of course likely not only to stimulate imports and eat into the NCB's sales in domestic markets, but also reduce scope for exports. These amount on average to about 7m tonnes a year. The Board hopes to improve this. But accumulated coal stocks have lately been exported at prices which do little more than cover the short-run 'avoidable' costst of production; and in the present circumstances there can be little hope of increased exports at realistic prices.

Domestic markets

There is little foreseeable growth in the domestic market for coal. Most forecasts suggest that total British demand for coal in 1990 will not

^{*} Antwerp – Rotterdam – Amsterdam

[†] See page 26

exceed 100m tonnes. The electricity industry expects only very gradual growth in consumption, largely because of increased efficiency and measures taken to conserve energy. No new coal-fired stations are planned in the next decade. Nor is there any serious prospect of an early climb out of recession for the steel industry: production in the first three months of 1985 averaged 293,800 tonnes a week, down 6.1 per cent on the corresponding period of 1984. This has hit those areas which have produced coking coal such as South Wales and the North East especially hard. The only sector, apart from opencast mining, which appears to offer some potential for expansion is the general industrial market. With substantial support from the Government, which increased the funds available under the Coal Firing Grant Scheme from £50m to £125m the NCB showed a 700,000 tonne gain in 1983/4 in this one section of the market. But it must be remembered that manufacturing industry consumes only 7 per cent of the total UK output of coal.

Opencast mining

The NCB may well be called upon to face growing competition not only from increased imports but from opencast mining too. At present 60 opencast sites are licensed by the Board to private operators whose workforce do not belong to the NUM but either to the TGWU or to no union at all. Opencast mining, producing prime coking coal and anthracite, is profitable; even although operating costs include full restoration of the land and agricultural rehabilitation spread over a period of five years. Current output stands at about 14m tonnes p.a. and NCB accounts show an operating profit in this sector of £211m in 1983/4.

It seems, however, that the NCB policy is to restrict opencast operations – despite the fact that strip-mining costs are so much lower than those of deep-cast mining. For example, in the year ending March 1984 the operating costs in the NCB's opencast regions were £27.15 per tonne when the average cost for deep-mined production was £46.31. ¹¹ This topsy-turvy policy has arisen because, in accordance with the over-optimistic forecasts in Plan for Coal, the NCB committed itself to maintain production at so many uneconomic pits. Attempts to accelerate their closures have only too often been headed-off by the 'necessity of maintaining good industrial relations' (*sic*). ¹² So, in order to reduce overall supply and decrease total expenditure, the Board has found itself forced to cut back in the one area where it would have been

profitable to act – i.e. by restricting the number of licences it grants to opencast operators.

Many factors, however, are combining to end this absurdity. The enormousness of the NCB's losses is compelling it to prune uneconomic mines more severely. Availability of low-priced imports is bringing pressure on the Board to produce the cheaper domestic coal which opencast mines can supply. The collapse of the strike may make the Board readier to license more sites, despite the traditional hostility with which the NUM has regarded opencast mining – 'a threat to miners' jobs'.

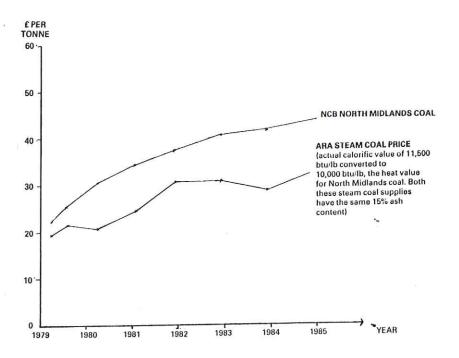
No fewer than 90m tonnes of opencast coal reserves are fully proved by the NCB and an additional 200m tonnes are partly proved. Many private companies have experience of mining both in Britain and overseas. If the NCB persists in its reluctance to develop profitable opencast mining, it can scarcely justify maintaining a monopoly of the rights.

Market summary

We have suggested, in accordance with most forecasts, that coal consumption in Britain will be about 100m tonnes in 1990. Even on the most optimistic estimate it is difficult to envisage the CEGB consuming again in this decade the 81m tonnes it burned in 1981. Assuming, then, some such aggregate domestic demand how will it be satisfied? Our forecast is that some 10m tonnes will be from competitively priced overseas sources. A further 15 to 20m tonnes may be provided by opencast operators. This leaves a probable domestic market for British deep-mined coal of about 70 to 75m tonnes. This must be compared with the NCB's present deep-mined output of 100m tonnes. After allowing for exports on the one hand and domestic coal supplied by Britain's 150 independent mining operators on the other, it suggests that the Board's own deep-mined production may need to be reduced by 25 to 30 per cent.

It is against this harsh background that any strategy for the coal industry must be formulated.

CHART 3 – Comparison between ARA coal price and NCB list price for North Midlands coal



Source: Coal Week International and NCB

3 NCB's Costs of Production

Table 2 on page 21 gives a detailed summary of NCB's operating results for the financial year 1982/3. (The dislocation caused by the NUM's work-to-rule and the subsequent strike makes later years' results a poor guide to normal performance.) Notice that in these figures, only two of the Board's 12 deep-mining areas returned an operating profit – i.e. North Derbyshire and North Nottinghamshire, which together accounted for one-fifth of total deep-mined production. The prominent loss-makers are three: Scotland, South Wales and, to a lesser extent, the North-East. These accounted for a quarter of the NCB's total deep-mined output.

In fact the figures understate the true size of colliery losses. The cost of servicing capital to fund the Board's investment programme is not included in operating costs. Provision is made neither for the costs incurred in pit closures, nor for redundancy settlements which are the subject of special 'social' grants from the Government (see page 13). Table 3 shows how if these additional costs *are* allowed for, the Board's loss for the year 1982/83 is more than twice as great. Expressed another way, the NCB's average selling price covered only 83 per cent of average total costs.

The opencast division, on the other hand, did extremely well. The operating profit of £13.08 per tonne which it earned is in sharp contrast to the losses on deep-mining operations.

Information summarised in the MMC's report is a useful starting point for an analysis of the Board's cost-structure. Table 4 summarises the NCB's results in terms of surplus or loss per tonne in 1981/2, together with the respective manpower statistics for each band of loss-making collieries. (Once again these figures are based on *operating* results only and exclude interest costs and social subsidies.)

It will be seen from these statistics that, as one would expect, the performance of the Board's 198 collieries differed very widely. 57 mines, producing 42 per cent of total output, showed an operating surplus; while a further 71, accounting for 40 per cent of output, recorded a loss of under £10. The remaining 70 collieries, with operating losses ranging between £10 and £100 per tonne, contributed 18 per cent of total output and employed approximately 58,000 people. It was this relatively small proportion of total output which was

principally responsible for the Board's mounting deficit, and provided – still provides – the severest headaches for the NCB.

Another telling example. Table 2 showed that the average cost of mining coal in the South Wales coalfield is 75 per cent higher than in North Nottinghamshire. The moral is easy to draw.

Another guide to the cost structure of the industry is the Board's (unpublished) analysis of colliery financial results for 1982/3. Table 5 surveys these results, which are based on a sample of every twelfth mine ranked in order of profitability. Operating costs at eleven out of fifteen of these exceeded net proceeds. In fact, Table 6 shows that North Nottinghamshire was the only consistently profitable deep-mining Area between 1976/7 and 1978/83, although it is true that two other Areas, South Yorkshire and North Derbyshire, achieved an overall operating surplus for the period. The largest losses were in South Wales, the North East and Scotland.

What is most distressing about the figures in Table 6 is that they confirm the steady increase in the NCB's losses on deep-mining year by year. This is not helped by the fact that coal's terms of trade have steadily deteriorated – costs have been rising faster than prices. 'Avoidable costs' per tonne rose from £39.50 in 1981 to £48.60 in 1984, while the average selling price per tonne rose only from £35.60 to £41.70 in the same period. ¹³

Action was urgently called for to correct this worsening trend. In March 1984 the NCB announced a programme of measures designed to reduce chronic loss-making capacity, and to bring output more closely in line with demand. These measures aimed to cut deep-mined output by 4m tonnes to 97.4m tonnes in 1984/5.

This proposal, as is well known, led the National Executive of the NUM to instigate a national strike, the history of which does not concern us here. The NUM has still not agreed with the NCB an acceptable system for regulating the closure of uneconomic mines. Faced with their stubborn refusal to recognise the economic facts of life, the NCB announced that it would introduce a revised Pit Review Procedure to take effect from 1 July 1985.

Table 2: Operating results 1982-3 Saleable
)
tonnes in tonnes
6.6
8.4 3.01
7.3 2.35
8.1 3.30
12.4 3.25
10.8 2.53
6.9 1.47
104.3 2.44
Í
2.8
3.1
1.0
2.5
3.2
2.1
14.7
119.0

Table 3: NCB Total Income and Expenditure 1982-3

-	Amount £m	$\begin{array}{c} \text{Per tonne} \\ \text{sold} \\ \mathcal{L} \end{array}$	Percentage of total cost
Turnover	£3,954		1
(Decrease) in stocks of finished goods	(10)		- 24
Other operating income	12		5.65
Value of production	3,956	37.95	i i ii r
Operating grants	4	0.03	
Total income	3,960	37.98	uly.
Operating costs	18		
Wages, including allowances in kind	1,436	13.77	30.07
Wages charges	489	4.68	10.24
Materials and repairs	909	8.72	19.04
Mining contract work	11	0.11	0.23
Power, heat and light	199	1.91	4.17
Salaries and related expenses	125	1.20	2.62
Other operating expenses	503	4.83	10.54
Overheads and services	319	3.06	6.68
Depreciation	286	2.75	5.99
Total operating costs	4,277	41.03	i la
Interest payments	364		7.62
'Social' costs reimbursed by Government	134		2.81
Total cost	£4,775m	45.78	100.0%

Source: extracted from NCB report and accounts

Manpower (cumulative) Manpower in thousands 50.4 34.2 17.9 18.1 13.3 4.9 1.3 2.6 142.7 4.1 Output (cumulative) 71.7 87.5 94.9 101.3 106.2 106.5 106.5 45.0 Output in m tonnes 45.0 26.7 15.8 7.4 6.4 6.4 3.8 1.1 0.3 61.9 Collieries (cumulative) 100 128 149 169 186 192 194 198 Number of collieries Table 4: Colliery results 1981-2 with losses (£ tonne) Collieries Collieries with surpluses Totals for all loss making collieries Surplus/Loss Under £5 Over £50 £5-10 £10-15 £15-20 £20-30 £30-40 £40-50

114.5 148.7 166.6 184.7 198.0 202.9 204.2 206.8

Note: The data excludes collieries which ceased production during the year. Source: MMC from NCB information

Table 5: Selected Colliery Financial Results 1982/3

Saleable output per output per output per manshiff (7000 tonnes) Overall (£ftonne) (£ftonne) Net cost (£ftonne) (£ftonne) Operating (£ftonne) (£ftonne) Proceeds (£ftonne) Operating (£ftonne) (£ftonne) Proceeds (£ftonne) (£ftonne) (£ftonne) Proceeds (£ftonne) (£ftonne) (£ftonne) Proceeds (£ftonne) (£ftonne) (£ftonne) (£ftonne) Proceeds (£ftonne) (£ftonne) (£ftonne) (£ftonne) (£ftonne) Proceeds (£ftonne) (£f	(8.3) (11.2) (14.4) (17.4) (21.6) (30.1) (13.1)
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Saleable output per coutput Overall manshift (Eftonne) Net conceds (Eftonne) 1078 3.31 46.3 779 3.28 38.4 745 3.21 35.9 408 2.49 40.9 965 2.44 38.3 436 2.47 37.0 364 2.81 35.1 377 2.67 27.4 599 2.47 32.6 472 1.57 39.1 472 1.45 46.1	4 9 0 2 2 6
Saleable output per output output (1000 tonnes) (tonnes) (tonnes) (fromes) (fromes) (2.31) (2.45) (2	43.4 47.0 47.0 56.5 67.7 76.0
Saleable ou output 1078 1078 779 779 595 408 965 370 435 364 377 599 472	
000,)	2.81 2.67 2.47 1.57 1.19 0.79
	364 377 599 472 91 114
Colliery Silverwood (South Yorkshire) Manton (South Yorkshire) Barnburgh (South Yorkshire) Gedling (South Nottinghamshire) North Gawker (Barnsley) Littleton (Western) Nostell (North Yorkshire) Wheldale (West Yorkshire) Wheldale (West Yorkshire) Hucknall (South Nottinghamshire) Hucknall (South Nottinghamshire) Hatfield (Doncaster) Emley Moor (Barnsley)	Ferrymoor Ridings (Barnsley) Westthorpe (North Derbyshire) Hucknall (South Nottinghamshire) Hatfield (Doncaster) Emley Moor (Barnsley) Celynen South (South Wales) Abertillery (South Wales)

Source: based on NCB figures

Area operating results – operating surplus/(loss) in £ per tonne 1976-77 to 1981-82

		1976-77	1976-77 to 1981-82		•			
Area	1976-77	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84*
North Nottinghamshire	2.7	4.1	2.7	4.5	r.,		2	5 6
North Derbyshire	0.7	8.0	(0.3)	0.1	3.2	0.1	, C	().E)
South Yorkshire	2.6	5.6	1.3	0.7	(1.3)	(0.8)	(1.5)	(2.6)
Ramelan	(0.9)	(1.7)	(2.2)	(1.3)	(1.8)	(1.4)	(0.8)	(4.1)
South Nottinghamehine	0.1	(0.1)	(2.3)	(2.7)	(1.3)	(1.8)	(1.9)	(12.2)
South Midland	0.4	(0.0)	(1.4)	(1.5)	0.1	(2.6)	(2.4)	(7.8)
North Vortehing	1.0	0.7	0.7	(0.8)	(1.3)	(2.7)	(3.3)	(7.7)
Dongster	(0.3)	(0.6)	(1.7)	(4.3)	(5.0)	(2.7)	(5.0)	(3.9)
North-Fast	4.0	(0.6)	(2.5)	(2.2)	(3.0)	(2.9)	(2.1)	(4.3)
Scottish	(0.7)	(I.I)	(1.5)	(0.7)	(2.4)	(3.8)	(5.4)	(5.1)
South Wales	(o.t.)	(1.y)	(1.5)	(2.5)	(3.7)	(5.5)	(10.3)	(14.0)
	(7.7)	(4.3)	(2.4)	(7.8)	(9.4)	(13.2)	(16.4)	(14.4)

Source: Monopoly and Mergers Commission and NCB report and accounts * Note: 1983/84 results affected by NUM industrial action

4 Implications for Employment

At first sight, the implications for employment if the industry is restructured as it should be, are large. It was estimated that in 1981/2 some 50,000 miners would have needed to leave their jobs before the industry broke even. Chart 4 on page 28 illustrates this. The London Business School's *Economic Outlook* showed how in that year the surplus earned by 70,000 miners in profitable pits just covered the losses resulting from the *modestly* unprofitable employment of some 90,000 miners. This, however, still left an unprofitable rump of pits which between them employed some 50,000 men; and it was these jobs which needed to go if the industry was not to remain in loss.

Chart 5 presents a similar analysis of employment and subsidies per man in 1984/5 based on estimates of more recent performance. It shows that, as a result of pit closures, early retirement and natural wastage, the total number of people employed in the industry was expected to fall from 220,000 to 180,000 in the space of three years.

The fall certainly helped to shorten the industry's uneconomic rump. But as was shown on page 20 coal's terms of trade have steadily worsened over the last few years. *Economic Outlook* showed how the industry's profit-demarcation lines were expected to shift to the left, which would mean that the number of miners employed at collieries enjoying an operating surplus would be down to 60,000. The surplus they earned would cover the losses attributable to a further 75-80,000 men. But the rump of over 40,000 miners would still be working in collieries with losses of over £6000 p.a. per man.

Now the NCB have last month (August 1985) confirmed that, largely due to the generosity of their redundancy terms, the colliery workforce has been reduced from 183,000 men in July 1984 to 160,000. And it is true that this figure is practically identical with the London Business School's estimate of December 1984 of a sustainable level of employment.

Such a figure (larger than Chart 5 might seem to suggest) takes into account the concept of 'avoidable costs' which is generally agreed to be useful in any discussion of employment and pit closures. *Unavoidably*, many costs continue after the life of a pit is ended; for example, pensions must be paid. Other costs are more hypothetical, less easy to calculate, more 'avoidable'. For example, subsidence may

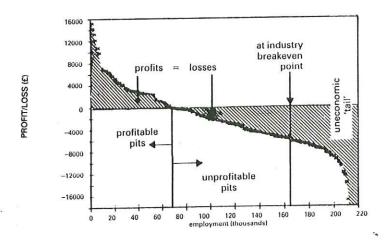
or may not occur, but certainly provision must be made for it; on the other hand, continuing to work the pit serves to increase the risk of subsidence both during and after the end of the pit's life. But even if we consider that *all* costs other than pensions are avoidable it is possible to argue that 160,000 miners could be employed in pits which are either actually, or potentially, profitable.

Nevertheless is a workforce of 160,000 really needed to produce the 70-75m tonnes which we have argued on page 17 is the limit of sales likely to be achieved by deep-mined collieries? If resources are successfully directed away from collieries where machinery is outdated, working conditions poor and seams thin and faulty towards modern, high-technology ones, it is inevitable that there will be some need for further reduction in the total workforce. The hope however must be that the consequent lowering of costs and prices, together with the stimulus of competition from imported and opencast coal, will soon lead to a rise in coal's share of the energy market, and an arrest to the decline in employment. Indeed the more vigorously such a policy is pursued, the likelier it will become that the workforce might, in the longer term, even start to grow - profit and employment going hand in hand. (Conversely the longer that uneconomic labour is retained, the bleaker the prospects for employment - except at the cost of evermounting subsidy from the taxpayer.)

If Britain is to grasp this nettle, it will not be alone in Western Europe. Munificent state support has long been the tradition in the coal industry. But governments are beginning to act to reduce both subsidies and output. Belgium has contracted its industry to a present annual production of only 6m tonnes from 8.8m tonnes in 1974. In France, the Mitterand Government on taking office announced plans to *increase* annual coal production from 20 to 30m tonnes; but the heavy losses sustained by Charbonnage de France (owned by the State) soon led to a sharp cut-back in the plans, and in 1984 production was down to 18.2m tonnes. The corporate plan now adopted by Charbonnage de France for the years 1984 to 1988 envisages this fall continuing – down to 10 to 13m tonnes – with a concomitant reduction of no less than 33 per cent in the total workforce.

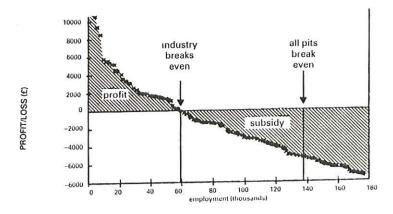
Efforts to restructure the British industry are thus in line with the general European acknowledgement that high-cost capacity must be closed down, and production brought into better balance with market demand.

Chart 4: Mining Employment and Subsidy per man 1981/2



Source: London Busines School, Economic Outlook December 1984

Chart 5: Estimated Mining Employment and Subsidy per man 1984/5



Source: London Busines School, Economic Outlook December 1984

5 Put Pits into Profit

Britain is fortunate to have coal reserves which should last for another 300 years or more. But recent exploitation of these resources has been all awry. One need look no further than the failure of Plan for Coal. Targets have been regularly established, regularly missed. As a business, the National Coal Board is technically bankrupt: its debts surpass its total assets. This condition is intolerable, bad for the state of the nation and must not be allowed to continue.

The NCB is at present at work on a new corporate plan to deal with its host of problems. Already it has reorganised the 12 deepmining divisions into 8 new Areas. This change has been accompanied by moves towards decentralisation of authority, with more discretion for management at the local level and a reduced role for the London headquarters. Profit incentives are to be introduced for both Area and local management, together with much higher output bonuses for face-workers.

The new plan, so it is reported, will take a far more realistic attitude towards future demand. Recognising that traditional markets are dwindling, the Board will concentrate efforts upon development of new ways to use coal. To save the plan from the snare of immobilism into which its predecessor fell, it will incorporate its own criteria for constant updating.

The Board also recognises that much of its management is far too inward-looking. Until now it has recruited almost all its technical and managerial staff direct from school, college and university. At the level of middle management, entries and exits have been few. More middle and top management will now be recruited from outside.

Such initiatives are welcome. But three important reservations are in order:

It seems that the Board has shied away from the proposal, implied in the Monopolies and Mergers Commission report, to establish each deepmine Area as a separate incorporated company.

History does not afford us much confidence in the NCB's ability to forecast future coal demand. Since 1950, it has published no fewer than six major plans and forecasts, every one of which has over-estimated demand – on average by nearly one-fifth. 14

Forecasts of enterprises subsidised by the State must invariably be treated with the utmost caution.

It should not be too difficult now to face the fact that nationalisation has failed to transform industrial relations in coalmining, as its advocates had fondly hoped. It has merely led to continual involvement of government in disputes over pay and conditions. For the Board's employees neither rewards for success nor penalties for failure are adequate. The NCB's statutory monopoly of coal production and distribution has led to carelessness creeping in over costs and capacity. Control over investment, too, is lax.

The conclusion must be that unless action is taken to break up this state-owned monopoly radical improvement cannot be expected. Clearly, one brave option would be to open the industry to private ownership and investment. What prospects would then emerge? Three advantages suggest themselves:

- The customer would benefit from competition. The scrapping of the NCB's monopoly and the breaking-up of the industry into a number of competing entities could be expected to lead to lower costs, a greater choice and better service for customers. The NCB's current policy of devolving more powers to the Areas will not create the same urgent competitive pressures as would denationalisation.
- The management would enjoy greater flexibility and room to manoeuvre. Competing, privatised companies would no longer be inhibited by interference from Whitehall. They would be free to borrow on the world's capital markets.
- The employees could be given more financial and other incentives. Miners could be offered the chance to take a stake in their own industry through employee share-ownership schemes. British Telecom and the National Freight Corporation have pointed the way. Widespread share ownership, much of it in institutional hands, should also exert pressure on management to achieve results.

But would the adoption of this policy and the introduction of the profit motive inevitably bring in its wake more early retirement and more redundancies? We maintain that, on the contrary, many pits would be given a chance to recover economic viability and thereby offer more jobs.

In the United States the coal industry comprises some 3000 companies, all privately owned. American face-workers have a very much higher productivity than their British counterparts – working on comparable faces and using comparable machinery. As a result earnings of \$40,000 a year are common.

It is worth recalling that in this country there was an improvement of 13.7 per cent in output per man-shift when the Board reintroduced, against NUM opposition, a productivity bonus scheme in 1978. ¹⁵ Just how important gains in productivity can be is illustrated in the London Business School model of the industry. ¹⁶ It was estimated there that some 60,000 miners are at present employed at profitable pits. But if there was a 10 per cent gain in productivity, then all other things being equal 92,000 miners would be working in collieries which were consistently making profits! On the basis of these figures, a strong argument can be made that denationalisation and the consequent search for profits and productivity would increase coal's share of the energy market and *ameliorate* prospects of employment in the industry – certainly in comparison with allowing recent trends in costs and capacity to continue.

The National Freight Consortium can be adduced as an example of the catalytic effect which denationalisation can have on a company's performance. For many years a very lacklustre company, the NFC was transformed by a staff buy-out in 1981 into a highly successful and profitable enterprise. About 55 per cent of the 23,000 strong workforce now own 83 per cent of the shares. Post-tax profits have doubled since denationalisation.

Our belief is that denationalisation would be an equally attractive option for the coal industry. It can indeed be argued that it might be the only way to provide the stimulus necessary to achieve new high levels of efficiency and low levels of costs, which would in turn lead to better pay and conditions for its workers.

The NUM's Executive has been predictably hostile towards suggestions of denationalisation. In its briefing booklet, *Hands off the Pits – no privatisation of coal*, the Union contends that 'privatisation would allow uncontrollable market forces to govern an energy policy that is already fragmented'; that it would threaten health, safety, jobs – and the very existence of the NUM itself. Let us consider these assertions.

On the first point, cannot the Union recognise that market forces are merely the expression of customer choices? Demand for coal is,

above all, governed by its price and quality compared with that of other fuels. Delivery and reliability of supply also play a part in determining customer choice. If the coal mining industry improves its performance on these counts, its future should be bright – far brighter than if it merely places its faith in forecasts which, on past showing, may well be very over-optimistic.

On the Union's second point, denationalisation of the industry should in no way adversely affect health and safety in the mines. Proper standards would be enforced by a Government inspectorate, just as they are at present.

On the Union's last point it is not privatisation which threatens the NUM and its members' jobs, but rather the behaviour of the Union's Executive itself. If it continues to offer the same purblind resistance to the closure of uneconomic pits, it may well undermine the viability of the whole industry; but it is hard to see how that could benefit anybody – apart from foreign competitors in the rest of the world.

Appendix

OFFICIAL DESCRIPTION OF GOVERNMENT GRANTS

Social	grants
Social	costs grants

Contribution towards increased pensions (Mineworkers' Pension Scheme) The Secretary of State may with the consent of the Treasury make grants to the NCB with the objectives of accelerating the redeployment of employees of the NCB and the elimination of uneconomic capacity and of meeting the extra cost of pension benefits to mineworkers made redundant and those who retired before 6 April 1975.

Operating grants Stocking aid

Coal Coke Payment in respect of excess stocks, ie exceeding 1/12th of the annual production of the undertaking concerned.

Promotion of sales of coal to electricity generating boards Payments to promote the sale of coal to the South of Scotland Electricity Board and the Central Electricity Generating Board.

Coking coal subsidy

Payment of grant for Coking Coal Production Aid – taking account of average cost of production and the higher of either the average indicative price (ie related to third country prices) or the NCB list price.

Regional grants

To enable the NCB to pay due regard to the needs of assisted areas under the Industry Act 1972 when planning or carrying out colliery activities (power to make grant repealed by Coal Industry Act 1980).

Deficit grant

Grant to reduce or eliminate any group deficit of the NCB. (Introduced by Coal Industry Act 1980.)

Source: NCB, quoted in Monopoly and Mergers Commission Report Cmnd. 8920 vol 2, page 24.

References

- 1 Robson, W. Nationalised Industries & Public Ownership, p.30.
- 2 NCB Briefing Note, 31 October 1984.
- 3 ibid.
- 4 Sunday Times, 24 June 1984.
- 5 Digest of UK Energy Statistics, 1984.
- 6 Monopolies & Mergers Commission Report, Cmnd 9820, 1983 p.175.

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- 7 ibid, p.74.
- 8 Joint NCB/CEGB press release, 1 September 1983.
- 9 Financial Times, 25 February 1985.
- 10 NCB Report and Accounts, 1984/5.
- 11 NCB Report and Accounts, 1983/4.
- 12 Monopolies and Mergers Commission Report, op cit.
- 13 NCB Annual Report and Accounts, 1983/4 and London Business School Estimates, Economic Outlook, December 1984.
- 14 Economist, 26 January 1985.
- 15 Financial Times 17 April 1984.
- 16 Economic Outlook, op cit.

Select Bibliography

Berkovitch, I. Coal on the Switchback. George Allen & Unwin, 1977.

Beenstock, M. & Lewington, P. Macro – economic Simulation of Coal Pit Closures. Economic Review, vol 3, no. 1. City University Business School, 1985.

Berry, A.J. et al. Management Control in an Area of the NCB: Rationales of Accounting Practices in a Public Enterprise. Accounting Organisations and Society, vol 10, no. 1. Pergamon Press, 1985.

Davies, G. & Metcalf, Prof. D. Pit Closures - Some Economics. Simon Coates/ Weekend World, 1984.

Coal for the Future. Department of Energy, 1978.

Ezra, D. Coal and Energy. Ernest Benn, 1978.

Glyn, A. Economic Aspects of the Coal Industry Dispute. A paper prepared for the NUM, October 1984.

James, P. The Future of Coal. Macmillan 2nd edition, 1984.

Minford, A.P.L. & Kung, P. The Costs and Benefits of Coal Pit Closures. Public Service Research Centre, Watford, 1984.

A report on the efficiency and costs in the development production and supply of coal by the NCB. Monopolies & Mergers Commission, Cmnd. 8920, 2 vols. HMSO, 1983.

Plan for Coal. NCB, 1974.

Report and Accounts. NCB, 1983/4 and 1984/5.

Robinson, P.W. How Large a Coal Industry? Economic Outlook, vol 9, no. 3. London Business School, December 1984.

Robson, W. Nationalised Industry & Public Ownership. George Allen & Unwin, second ed., 1961.