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# Privatisation: Saving the British Coal Industry?

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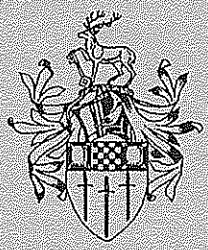

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# Privatisation: Saving the British Coal Industry?

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## PRIVATISATION: SAVING THE BRITISH COAL INDUSTRY?

Britain's coal industry was privatised at the end of 1994, after about forty eight years of state ownership. This paper begins with a very brief sketch of the history of coalmining in Britain, including the events which led up to privatisation. It then explains the privatisation scheme and assesses its implications.

### 1 Coal in the eighteenth and nineteenth centuries

Britain's industrial 'revolution', from the middle of the eighteenth century onwards, was fuelled by plentiful reserves of easily accessible, low cost indigenous coal. Production and consumption rose rapidly and, in the nineteenth century, exports of British coal supplied fuel for the industrial development of other countries.

In 1865, in the heyday of the industry, William Stanley Jevons published one of the most important nineteenth century texts in natural resource economics, *The Coal Question* (**Jevons, 1865**), and a number of other papers in which he discussed the state of the contemporary British coal industry (**Black, 1981**). Jevons, one of the leading economic theorists of his day, wrote at a time when the industry was expanding fast - annual output averaged about 70 million tonnes in the 1850s but over 100 million tonnes in the 1860s. So fast indeed was the expansion that a number of scientists, foreshadowing the anxiety about energy 'crises' a hundred years later, expressed fears that Britain's mines would be exhausted in the foreseeable future. In *The Coal Question*, Jevons put such fears in their proper place, deriding the views of those who:

> '...entertain a vague notion that some day our coal seams will be found emptied to the bottom, and swept clean like a coal-cellar.' (p.v)

Instead, he argued perceptively, the real problem would be one of increasing cost as mines had to go deeper: thus,

> '...the cost of fuel must rise, perhaps within a lifetime, to a rate injurious to our commercial and manufacturing supremacy...'(Chapter XII)

Jevons was in no doubt about the significance of coal to the British economy of his day.

> 'It may be called the real Philosopher's Stone, which supplies us cheaply and plentifully with everything that can conduce to the service of man.
>
> '...We used to think that all the wealth came from India; it comes rather from the "black diamond", as coal has been appropriately named. The coal mines are our Indies.' **(Black, 1981, Paper III)**

## 2 Up to the Second World War

Expansion continued until the time of the First World War to meet the increasing demand associated with industrialisation in Britain and abroad. In 1913, British coal production reached its peak of 292 million tonnes (Figure 1) of which nearly 96 million tonnes was exported or used as bunkers for ships engaged in foreign trade. Coal was still a key industry in the British economy, as it had been in Jevons's day. It supplied virtually all Britain's energy consumption, it was a major exporter and, because it was highly labour-intensive, it was one of the country's biggest employers (Figure 2) with about 1.1 million miners **(Ministry of Fuel and Power, 1950)**.

In the inter-war years, however, decline began. As Jevons had predicted, British mines went deeper and costs increased relative to those in newer mining areas. Home consumption of coal, though fluctuating from year to year, on balance remained about constant between the wars. Coal was still by far the dominant energy source in Britain, though transport use of oil was beginning to grow. But, in common with other old-established British industries, coal suffered from falling export sales. The trend of output was downwards (Figure 1) and employment fell more quickly than output (Figure 2) in an industry where early forms of mechanisation were appearing: the percentage of output mechanically cut rose from 8 per cent in 1913 to about 60 per cent in 1938. By 1938 the number of miners was down to three quarters of a million **(Ministry of Fuel and Power, 1950)**.

## 3 The postwar decline

During the Second World War the industry was starved of resources: consequently production dropped from 231 million tonnes in 1938 to 178 million tonnes in 1945. Coal was nationalised in 1946 in a move which provoked relatively little party political controversy because of the widespread perception that the industry had been in poor shape between the wars. The National Coal Board (NCB) which was then established had a monopoly of

> '...working and getting the coal in Great Britain to the exclusion (save as in this Act provided) of any other person' (**Coal Industry Nationalisation Act, 1946**)

This monopoly made it virtually the sole supplier of British-mined coal, though about 480 small mines (employing less than 30 men underground) were not nationalised and the NCB, which also became the licensing authority, allowed some other small mines to operate under licence (**Robinson, 1991**).

The general expectation in the early postwar years was that coal production would have to be increased considerably to meet the anticipated growth in demand for energy (**PEP, 1966**). At a time when economic planning was still in vogue, the assumption was that government should take whatever steps were necessary to ensure 'adequate' coal supplies, so as to avoid an 'energy gap'. For a few years, the industry did expand. A short-lived revival had by 1952 lifted output to what proved to be its postwar peak of 230 million tonnes (Figure 1).

However, after a few years of relatively stable output, decline again set in - and at a rate more rapid than in the interwar years. This time the problem was falling home consumption. Exports were already very small by the late 1950s; at home, first a drop in the relative price of competing oil products and then, from the late 1960s onwards, competition from low-priced North Sea natural gas, caused a drastic reduction in coal output (Figure 1) and employment (Figure 2). Even the oil 'crises' of the 1970s did little to help the industry (**Robinson and Marshall, 1985**). For a time in the 1970s, output stabilised at around 120 to 130 million tonnes a year and the National Coal Board (NCB) produced some grandiose plans to

expand production to 170 million tonnes a year by the end of the century (**Robinson and Marshall, 1981**). But decline soon resumed, especially after the year-long miners' strike of 1984-85. By 1990 coal production was only 93 million tonnes, compared with 219 million tonnes in 1950.

## 4 Coal protection and its effects

The postwar decline up to 1990 occurred despite considerable protection for the industry, provided by governments of both major political parties (**Robinson, 1985**). Coal imports were restricted from the late 1950s until the late 1980s; a tax on fuel and heating oils was imposed in 1961; the industry's debts were written down on several occasions; grants were provided to cover the industry's losses; and assistance was given to displaced miners.

Most important of all, the nationalised coal industry was given a protected position in electricity generation. Governments persuaded the nationalised electricity supply industry that it should generate primarily from coal produced by the nationalised coal industry: the extra costs were passed on to consumers and taxpayers.

From 1979 onwards these arrangements were formalised in a series of 'Joint Understandings' between the Central Electricity Generating Board (CEGB) and the National Coal Board (later renamed British Coal) (**Robinson and Marshall, 1985**). The other principal energy source for electricity generation was nuclear power: just as governments supported coal, they were instrumental in persuading the electricity supply industry that it should build British-designed nuclear stations. Oil use in generation was restricted and there was a *de facto* ban on the use of gas in power stations from the late-1960s when gas production from the North Sea began. To a large extent, fuel use in generation was dictated by government.

Given coal's favoured position, British Coal had little incentive to sell into markets other than power generation. Consequently, it let those other markets slip. Figure 3 illustrates the steady and substantial rise in the proportion of coal sales to power generation, especially from the late 1950s onwards. By the late 1980s, well over 80 per cent of British Coal's sales were to that market (**British Coal, 1995**). When electricity was

privatised in 1990, British Coal was dangerously exposed to any change in the market for generation fuels.

## 5 More drastic decline, 1990-94

In the early stages of privatised electricity, the two major generators, National Power and PowerGen, formed from their predecessor (the CEGB) were keen to diversify the fuel mix - mainly coal and nuclear power - which that predecessor had bequeathed. They were, however, still constrained in their use of fuels.

The government insisted as part of the privatisation settlement that, over the first three years to March 1993, the generators should contract with British Coal for much more coal than they would have chosen. In effect the Joint Understandings were continued beyond privatisation: the contracts were for minimum quantities of 70 million tonnes a year, falling to 65 million tonnes. New contracts for the five years from April 1993 onwards, were considerably smaller - a minimum of 40 million tonnes in 1994-95 and 30 million tonnes a year for the remaining four years. Not only were the new contracts smaller; during the term of the first contracts, the generators had burned less than the contracted quantities so that a huge overhang of stocks had accumulated at power stations, limiting the demand for newly-produced coal. Production fell much more than consumption as these excess stocks were used in 1994 and first half 1995.

As soon as they were able, the privatised generators began to move away from coal and the size of the pent-up demand for gas became apparent: the generators wished to diversify a plant mix which, because of past government action, was dominated by coal and nuclear power and which was unduly polluting. Building gas-fired power stations was one means of meeting European Community environmental standards. Soon after privatisation, both National Power and PowerGen began to place contracts for Combined Cycle Gas Turbine (CCGT) plant and new entrants to generation all came into the market with gas-fired stations. Thus, with the end of the government ban on gas use for power generation, a 'dash for gas' began (**Robinson, 1993**). By the first quarter of 1995, about 14 per cent of the fuel used in electricity generation was gas and the percentage was increasing as more CCGT plants were commissioned (**Department of Trade and Industry, 1995a**). At the same time, coal's

share of generation fuels (including imported coal) was down from about two thirds in 1990 to just over one half and was due to decline further.

As the scale of the likely decline in coal sales for electricity generation became clear in the early years of privatisation, British Coal announced in October 1992 a plan to close about two thirds of its (then) fifty one pits. The government called a moratorium on pit closures while British Coal's plans were investigated. But the closures eventually went ahead (**Department of Trade and Industry, 1993**) and a very substantial decline in coal output and consumption occurred in 1993 and 1994. As sales to generation dropped sharply so did total production which almost halved from 1990 to 1994, falling to only 48 million tonnes in 1994 (Figure 1) - even lower than in the strike year of 1984.

Employment in the industry fell very rapidly in the 1990s (Figure 2). As competitive pressure on the industry increased, improvements in production and information technologies reduced its labour intensity. Output per manshift worked rose at the remarkable average annual compound rate of 27 per cent from 1990 to 1994. The consequent reduction in costs was, however, insufficient to price coal back into a market where distributed coal stocks were so large, where nuclear power was still subsidised and where large amounts of gas-fired capacity were being commissioned. As deep-mined production fell from 1992 to 1994, the workforce declined to very small numbers. At the end of 1990, there had still been 59,000 miners. But by the end of 1994, when coal privatisation took place, there were only about 7000 - less than 1 per cent of the postwar peak in the 1950s of about three quarters of a million (**Department of Trade and Industry, 1995a**).

The coal mines which were 'our Indies' in Jevons's day are now a relatively minor component of Britain's energy supply and demand. Other fuels have overtaken coal which for many years had been a foundation stone for Britain's economic expansion. Whereas in 1950 coal constituted virtually the whole of Britain's fuel production, in 1994 it was only 12 per cent: 80 per cent of fuel production is now oil and gas from the North Sea and the other 8 per cent is mainly nuclear power (Table 1). Coal consumption (including imports) is now just over 20 per cent of Britain's fuel consumption, compared with about 70 per cent for oil and natural gas.

## 6 Coal Privatisation and the 'Politically Possible'

Coal privatisation thus occurred at a time when the industry had already shrunk dramatically. It came also after almost ten years discussion of the principle of coal privatisation and how privatisation might be accomplished.

Up to the late 1980s, coal privatisation was widely regarded as 'politically impossible'. British governments were extremely sensitive to the lobbying of the coal industry in the days when it was a very large employer and the major source of fuel for electricity generation. As explained in 4 above, a wall of protection was erected around British Coal. Even though the industry declined, one consequence of protection was that its monopoly power and its political influence were temporarily enhanced compared with what they would otherwise have been.

For many years, the twin monopolies in the industry - of mining and of mining labour - deterred Ministers from pursuing more imaginative policies towards the industry than simply pouring money into misguided attempts to support production. In particular, governments feared the might of the National Union of Mineworkers (NUM) and its evident ability to disrupt production of both coal and electricity (**Robinson, 1991**). In 1981 the government backed away from a confrontation with the NUM (**Robinson and Marshall, 1981**). Paradoxically, it was the government's own policy of favouring coal in power generation which ensured that the effects of disputes (actual and threatened) in coal were magnified by their effects on electricity supplies. But the policy of coal protection contained the seeds of its own destruction: fuel costs were raised and consumers were deterred from burning coal because of feared disruption. Hence they turned away from coal and protective policies were rendered ineffective: coal production and consumption continued to decline despite the government's efforts.

A very significant reduction in the economic and political influence of the NUM occurred during and after the coal strike of 1984-85 as output and employment in the industry fell sharply. The strike and its after-effects can now be seen as a genuine watershed in the postwar history of British coalmining. It was clearly one of the events which eventually brought

about privatisation. Coal became much less important in the energy market so any disruptions became of correspondingly less consequence. Moreover, the lobbying power of the industry diminished with its ability to deliver large numbers of votes. The government gradually came to the conclusion that it need no longer placate the NUM. Although in the immediate aftermath of the strike Ministers were still unwilling to contemplate privatisation, in 1988 came the first announcement by the then Secretary of State for Energy, Cecil (now Lord) Parkinson, that the 'ultimate privatisation' was on the political agenda (***The Financial Times*, 1988**).

## 7 Six years of uncertainty - and the privatisation of electricity

Following that announcement came six years in which coal industry employees were left in great uncertainty about their future. Privatisation was evidently on the agenda but the form it would take and when it would occur were left unclear. Morale in the industry suffered severely.

Meanwhile, in a serious development for the coal industry, the government proceeded to privatise electricity supply. It established two large new generating companies, National Power and PowerGen, which between them constituted the great bulk of the market for British coal. The two generators thus had very substantial market power relative to British Coal and, as explained in 5 above, they had powerful incentives to diversify away from coal. Although the imposition by government of transitional coal contracts (5. above) sheltered the coal industry for a few years after electricity privatisation, it only delayed for a short time the severe impact on coal of opening this long-protected market to competition from other fuels and from imported coal. Not only did the government reverse its long-standing protectionist policy, but there are grounds for believing that the new electricity market contains a degree of bias against coal (**Robinson, 1993**).

## 8 A more appropriate policy?

The ending of coal protection and the privatisation of electricity were both good news for British energy consumers who had suffered unnecessarily high fuel prices and poor supply security during the years of fuel protection. But the timing and manner of the policy changes left a great deal to be desired. A more appropriate policy, which would have ended coal protection but would have given better opportunities to the British coal industry, would have been to privatise coal and electricity in parallel in the late 1980s - say, by selling packages of pits and power stations to private owners (**Robinson and Marshall, 1985**). Electricity generators would then not have been placed in such a powerful position vis-a-vis British Coal. The two industries were so closely interdependent and coal protection had been concentrated so much on the generating industry, that it was most unwise to privatise electricity nearly five years before coal.

The policy of neglect which the government actually pursued may, of course, have been deliberate. For many years coal had been a troublesome industry as far as politicians were concerned: the government may have been glad to see its output and its influence shrink. But a government which genuinely believed that coal would perform better in private hands would have acted much earlier to reap the rewards of private ownership.

It is most unlikely that, under private ownership from the late 1980s onwards, British coalmining would have run down at the rate it did under state ownership. Much of the uncertainty and loss of morale would have been avoided, private owners would most likely have been more innovative both in production and marketing and some of the peculiar characteristics of electricity supply, as privatised, would not have resulted (**Robinson, 1993**). It is significant that, as late as 1993/94, when the government belatedly insisted that British Coal offer to the private sector any pits which it was contemplating closing, of the 28 pits offered 9 were saved from closure by being licensed to private owners (**British Coal, 1995**).

## 9 The Privatisation Scheme

By late 1994, there was not a great deal left to privatise. In December of that year, a total of nineteen deep mines (including three on a 'care-and-maintenance' basis) were transferred to private owners, under the Coal Industry Act 1994, along with British Coal's opencast (strip mining) operations. The mines were grouped in five regions, the new owners of which inherit the contracts with electricity generators up to 1998.

The transfer took place after an intensive period in which prospective purchasers were provided with information on the technical and financial characteristics of British Coal's assets and liabilities. Even though the government was the vendor, most of the relevant information was, of course, in the hands of British Coal which played a key part in providing detailed descriptions of the mining operations which it would transfer (**British Coal, 1995**). Mining consultants, lawyers, environmental consultants and City institutions were also involved in the complex process of defining the sale of assets which for nearly 50 years had been in the hands of a state corporation. At the same time, British Coal began to dispose of its extensive non-mining activities, such as fuel distribution, coal products, technical services, research, mining consultancy, a computer bureau, a very extensive non-mining property portfolio and British Coal Enterprise (a job creation and training organisation which operates in areas where mines have been closed).

At one time, the conventional wisdom was that British Coal was unsaleable. That proved incorrect: the sale raised the substantial sum of about £960 million for the government. One company, R.J.B. Mining, bought the great part of the industry - the three English regions (North, Midlands and North East), containing fifteen operating deep mines, two 'care-and-maintenance' collieries and fourteen opencast sites. Mining (Scotland) bought the Scottish regional company, with Scotland's one remaining deep mine and nine opencast sites. A Welsh regional company, with no deep mines but nine opencast sites, was purchased by Celtic Energy (**Department of Trade and Industry, 1995b**).

Several pits which British Coal had intended to close but which were still on a 'care-and-maintenance' basis were included in the offer for sale. Two

of them, in addition to the two bought by R.J.B. Mining (see above), were sold as separate units. One in South Wales (Tower) was bought by former employees. The Annesley-Bentinck colliery was sold to Coal Investments (an unsuccessful bidder for several regions, though part of the Mining (Scotland) consortium and present operator of four mines under licence) in April 1995, after most of the other pits had been transferred to private owners.

In addition to these privatised operations, another nine pits are operating under license (three of them licensed to R.J.B. Mining). As a consequence of the 1993 Coal Review (**Department of Trade and Industry, 1993**), British Coal made a commitment to offer the private sector any pits which it was considering closing: the nine are those which were licensed to private operators (see 8. above).

The total number of deep mines now in existence, following privatisation, is twenty-nine - eighteen privately-owned in England, one in Scotland and one in Wales plus the nine leased mines. In the first four months of privatisation (January-April 1995), deep-mined output was about 4 per cent higher than in the corresponding months of 1994 whereas opencast production was about 1 per cent down. In total, output was some 2 1/2 per cent higher than in January-April 1994 (**Department of Trade and Industry, 1995a**). It is, of course, far too early to draw any firm conclusions from these early statistics about likely production levels under privatisation.

## 10 The Coal Authority

Since British Coal had previously been the owner of Britain's coal reserves, it was necessary on privatisation to establish a new owner. Following proposals made many years' earlier (**Robinson and Marshall, 1985**), a Coal Authority was constituted under the 1994 Coal Industry Act to hold Britain's unworked coal reserves and to licence operators to exploit those reserves.

The Coal Authority takes over broad regulatory functions previously exercised by British Coal, including licensing unworked reserves. Curiously, under the nationalisation legislation, British Coal had been responsible for licensing (see 3. above): obviously it had no incentive to

licence competitors though some private mines had managed to operate under nationalisation. In the last few years of nationalisation, the output of 'licensed mines' was between 2 and 4 million tonnes a year (**British Coal, 1995**).

In addition, the Authority will take over responsibility for events such as mine shaft collapses, water discharges and gas emissions from underground workings which have not been transferred to private owners. It will provide geological data, information on mine plans and subsidence (except where bound by confidentiality) and details of licence applications and licences granted. It will also deal with subsidence damage claims - which have, in Britain, been considerable in some years - outside areas of current mining (**Department of Trade and Industry, 1995c**).

## 11 An assessment of the privatisation scheme

The principal fault of coal privatisation is that it came much too late to an industry which was a mere shadow of its former self and which had suffered severely from the effects of electricity privatisation. Nevertheless, the effects are likely to be beneficial, principally because further efficiency improvements in the industry should be stimulated and passed on to consumers.

Presumably, the government intended to introduce some coal-to-coal competition by dividing the industry into five regions for the purpose of privatisation rather than selling it as one lump. However, the result is not far from 'one lump' privatisation because R.J.B. Mining purchased almost the whole of the industry.

British Coal used to claim that introducing coal-to-coal competition was unimportant because British coal mines already existed in a very competitive market in which they were subject to competition from other fuels (and, in recent years from imported coal). It is true there has been increasing competition among fuels in recent years as the government has allowed markets to operate more freely than in the past. Nevertheless, there are additional benefits to be obtained if consumers can choose from a number of coal suppliers. Competition among those suppliers is likely to reduce prices and improve service standards. Moreover, coal supplies should be more secure when there are several sources to which consumers

can turn rather than a sole supplier (which, in British Coal's case, was for many years faced by a single powerful union).

Apart from any short run advantages, there are likely to be significant long run gains in moving from monopoly to a market with several suppliers because a competitive discovery process should be stimulated (**Kirzner 1985; Robinson 1993**). If there are several British coal companies, rivals in the production and marketing of coal, those companies will compete to discover new ways of carrying out those activities: consequently, innovation and rapid technological advance are more likely than if there is only one such company competing with the suppliers of other fuels.

British coal privatisation may appear simply to have replaced one dominant (state-owned) coal company by another (private-owned) company. Instead of a state monopoly of mining there is a private near-monopoly. That view, however, ignores at least three differences which distinguish the new regime from the old.

First and most obvious is that the companies on the periphery (that is, other than R.J.B. Mining) are potentially much stronger than the small private mining companies which existed under tolerance from British Coal. It is, for example, reported (***The Financial Times*, 1995**; ***The Times*, 1995**) that Coal Investments, one of R.J.B. Mining's smaller competitors (see 9. above), in mid-1995 won a five-year contract to supply coal to National Power and PowerGen. As a consequence of these and other contracts, Coal Investments plans to increase its production very substantially - from 1½ to 5½ million tonnes a year. Then there are two fundamental (and related) differences. One is that entry to the industry is now possible and the second is that the mining companies are now in the market for corporate control.

Under nationalisation, because of British Coal's monopoly of 'working and getting' coal (see 3. above), entry was extremely difficult. British Coal was the licensing authority and, naturally enough, it was never willing to tolerate more than a small periphery of private miners. Now the licensing authority is the Coal Authority (10. above) to which entrants or existing members of the industry can apply for licenses to exploit unworked reserves. So the previous conflict of interest has been removed.

The threat of entry is likely to be a significant constraint on incumbent companies which face potential competition as well as the comparatively small amount of existing coal-to-coal competition. Companies will be able to enter the industry by exploiting new reserves licensed by the Coal Authority or by purchasing assets from existing mining companies. Moreover, because all the mining companies - unlike British Coal before them - are now in the market for corporate control, entry might be by takeover. Each company's management therefore has a powerful incentive to perform well; otherwise it faces the prospect of being replaced by another team of managers, either from within the existing industry or from outside.

The present structure of the industry is therefore relatively unimportant. Potential entry will make the companies behave as though they were subject to more competitors than exist at present. The threat of entry and the threat of takeover should be enough to stimulate a competitive discovery process.

## 12 Prospects for British coal mining

When an industry is privatised and liberalised, there is inevitably uncertainty about its prospects, particularly how its output will change. There was a different kind of uncertainty under nationalisation because of the difficulty of predicting the behaviour of governments. Nevertheless, in the nationalised coal industry the direction in which output was heading was always clear, except for a short time during the 'oil crisis' years of the 1970s and in years when output was recovering from strikes. In twenty eight out of thirty seven years (from when decline began in 1957 up to privatisation in 1994), a simple prediction that coal production would fall 'next year' would have been correct.

The move to a situation in which coal companies face potential competition in the product market and are also in the market for corporate control is a big step. In the old politicised market, management was constantly second-guessed by politicians and there was heavy (if eventually ineffective) protection. That is a long way from the new market in which the future of the industry depends principally on the entrepreneurial flair of its owners.

R.J.B. Mining, the new owner of most of the deep mines, appears optimistic about the future of the industry, expecting stable output and reasonable profitability over the next few years after the long years of decline and state subsidy. Its pathfinder prospectus assumed sales of between 34 and 36 million tonnes in each year from 1995 to 1999, including sales to generation (on a 'conservative' basis) of nearly 28 million tonnes. The average selling price to generators was assumed to fall gradually from about £1.43 per gigajoule (Gj) to around £1.32 per Gj in 1998 and £1.25 thereafter. In the near term, output prospects do indeed seem quite bright as the industry, though no longer subsidised by that state, enjoys the benefit of the coal contracts with National Power and PowerGen, lasting to March 1998, which the new coal companies (and principally R.J.B. Mining) inherited.

The longer term outlook is more cloudy. If mining efficiency increases and the price of British-mined coal falls relative to other fuels, as seem quite likely, coal use for power generation in Britain could remain steady or even increase early next century as the lives of coal-fired plant are increased to cope with increasing electricity demand. Furthermore, the coal companies have an incentive to develop new markets - or, more likely, revive old ones which declined under the protective regime which made British Coal concentrate most of its efforts on power generation sales. However, a serious uncertainty overhanging the market is how coal's impact on the environment will be perceived. Even though scientific and statistical evidence for an 'enhanced greenhouse effect' is flimsy (**Bate and Morris, 1994**), it may be perceived as a serious issue which will hamper coal industries all over the world.

But the future trend of British coal production is not really the issue. The point of privatisation is to put the British coal industry, which had become used to heavy protection over many years, into a genuine market so that the size of industry desired by consumers - not by the state - can be discovered. Whether output increases, stays constant or declines, it is likely that the efficiency of coal mining in Britain will increase.

Certainly, the precedent of other British privatisations suggests efficiency improvements will be made. The financial markets are at present sceptical whether British coal mining companies can achieve significant further efficiency gains - beyond the considerable amount achieved by British Coal

in its last few years. But financial analysts have invariably under-estimated the scope for cost-cutting in other industries at the times when they were privatised.

There is considerable scope also for consumers to benefit. In some of the privatised network utilities, such as electricity and gas, a major failure of the British government was to introduce insufficient competition at the time of privatisation, leaving too much to regulation (**Robinson, 1992**). Consequently, rivalry among companies has not been strong enough to ensure that a large part of the cost reductions would be passed on to consumers, and regulation has proved (as it invariably does) a poor substitute for competition. A common complaint has been that too large a share of the gains from privatisation has gone to shareholders and senior managers. That is unlikely to be the case in coal. There are no network elements which require regulation and the degree of competition - both actual and potential - in the industry and the coal companies' entry into the market for corporate control should ensure that cost reductions are passed on to consumers in lower prices.

A few months into privatisation, British coalmining has entered a world quite different from anything it experienced in the earlier postwar period. It would be foolish to pretend the outcome can be forecast. It is unpredictable in detail, as by definition the outcome of competitive markets always is since a characteristic of those markets is that entrepreneurs will seek out and pursue *presently unknown* opportunities. But one prediction can be ventured: it will be a better world for fuel consumers.

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**TABLE 1**

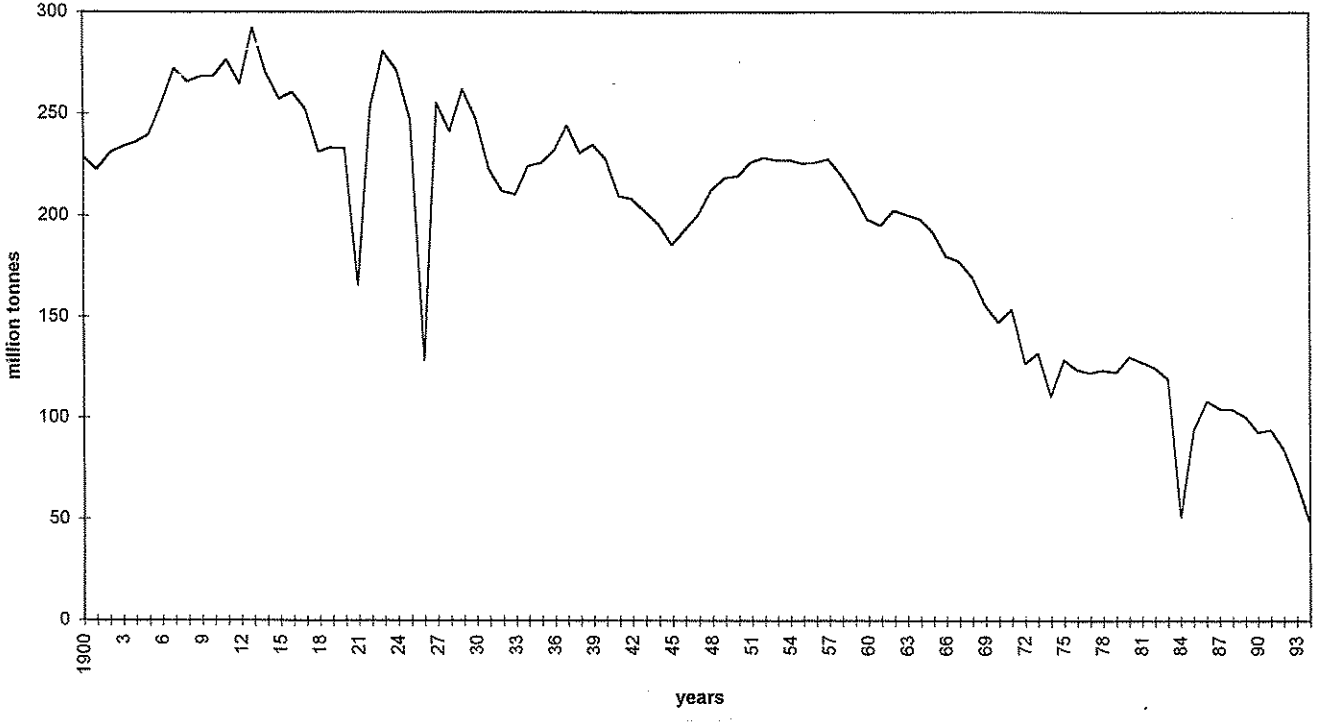
**UK Fuel Production and Consumption, 1950 and 1994**

| | 1950 | | 1994 | |
|---|---|---|---|---|
| | mtoe | % of total | mtoe | % of total |
| **Production** | | | | |
| Coal | 138 | 100 | 30 | 12 |
| Oil | - | - | 140 | 55 |
| Hydro | - | - | - | - |
| Nuclear | - | - | 21 | 8 |
| Natural Gas | - | - | 65 | 25 |
| Total | 138 | 100 | 256 | 100 |
| **Consumption** | | | | |
| Coal | 131 | 87 | 52 | 22 |
| Oil[1] | 20 | 13 | 92 | 40 |
| Hydro | - | - | - | - |
| Nuclear | - | - | 21 | 9 |
| Natural Gas[2] | - | - | 68 | 29 |
| Imported Electricity[3] | - | - | 1 | - |
| Total | 151 | 100 | 234 | 100 |

1 including non-energy uses and international bunkers
2 including non-energy uses
3 from France

mtoe = million tonnes oil equivalent
- = less than 0.5 mtoe or less than 0.5%

**FIG 1: UK COAL PRODUCTION**
**deep mined and opencast 1900-1994**



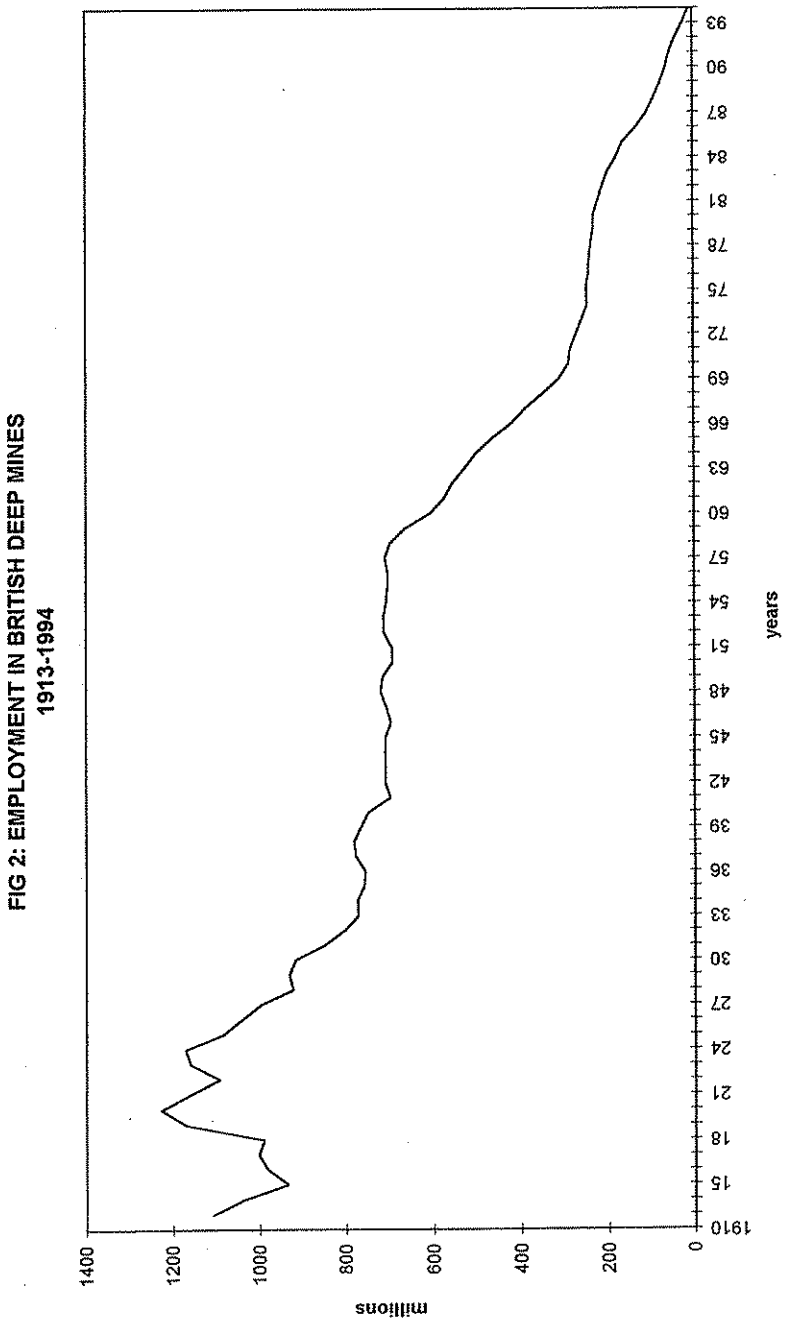
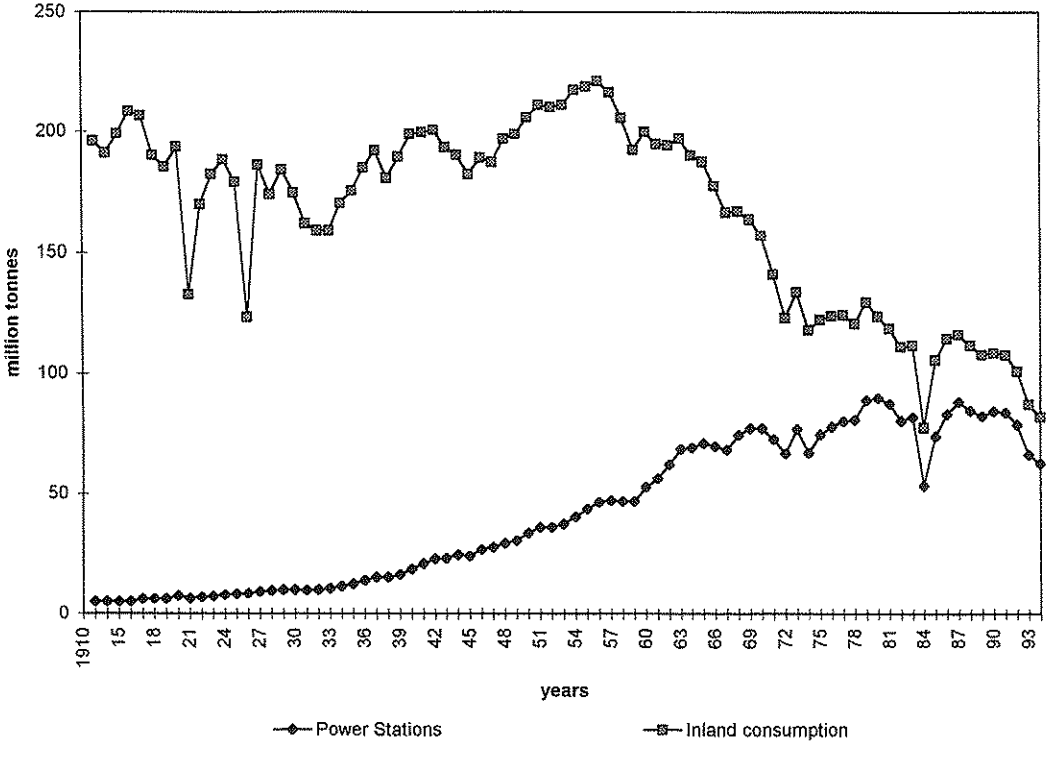



FIG 2: EMPLOYMENT IN BRITISH DEEP MINES
1913-1994

FIG 3: UK COAL CONSUMPTION 1913-1994
total versus power stations



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