

COMMENTARY

Coal

Economics versus Emotions?

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On 13 October 1992 the British government sanctioned the closure by British Coal of 31 collieries by the end of the year. It completely miscalculated the scale of public response, especially from such unlikely quarters as the streets of Cheltenham and the pages of the *Sun* and *Express*. The outcry owed some of its strength to the feeling, shared by many Tories, that it must be crazy to throw tens of thousands on to the dole queue when they could be working a valuable resource to the country's benefit. But was this essentially an emotional – even nostalgic – response to the decline of a once great industry and the communities on which it was built? The government deployed a straightforward economic case to justify the closure programme. To see if this was really a confrontation between emotion and economic science, that case must be examined.

The government's first argument was that the coal industry had absorbed, and was currently absorbing, unsustainable amounts of public money. Agriculture Minister Gummer warned, on a Sunday morning religious affairs programme, that the continuation of such subsidies would require cuts in welfare spending. The Prime Minister himself claimed that £100 million of public money each month was going to subsidise the 31 collieries. Since this almost precisely equals their total production costs, it could only be true if the coal produced was worthless. In fact around 80 per cent of their coal was being sold at a price which covered its costs of production. Even were the rest (which was being stock-piled) valued somewhat lower (say, the world market price which, at the outside, was about £10 per tonne less than production costs), this would imply a loss of less than £ten million a month. The Department of Trade and Industry hastily claimed that the £100 million represented the impending situation in 1993/4, if the pits could not sell their coal to the electricity industry. But even then the exaggeration would be gross; coal could be sold on world markets, and with the decline in the pound the world market price is rising. And in any case, the figure was very explicitly applied to the present situation and used to justify the extreme haste of the closure programme.

Trade and Industry President Michael Heseltine repeatedly conjured up the picture of a government shovelling endless subsidies into the coal industry, claiming that public aid since 1979 amounted to more than £400,000 for each miner currently employed. But more than half of the £19 billion of transfers from the government were simply book-keeping transactions arising from the anomalous financing pattern of British Coal and its subsequent capital reconstruction. A further quarter represented social and restructuring grants for redundancy, redeployment and

early retirement; but this was explicitly aimed at *running down* the industry, not sustaining – let alone expanding – it. Much of the rest was finance for the investment which helped BC to double productivity since the 1984-85 strike; any waste comes not from the investment but from the abandonment of machinery in prematurely closed mines. By 1991-92 there was no deficit grant at all and even the 31 threatened mines were virtually breaking even.

The government's attempt to characterise miners' jobs as being dependent on enormous public handouts was based on grossly exaggerated figures. The second argument for closure was that *next year* the market for coal would shrink rapidly, as electricity producers switched to other fuel sources, and that this necessitated a sharp reduction in the size of the coal industry. Heseltine reiterated that the electricity producers would not be switching from UK coal unless the alternative was cheaper and he warned that any attempt to interfere with such commercial logic, out of sympathy with the miners, would threaten more jobs by burdening British industry with uncompetitive electricity. This argument about the benefits of shifting to cheaper electricity raises much wider questions, based as it is on a set of presumptions about the workings of a market economy. Showing how these presumptions are misleading builds up the *economic* case for retaining a substantial coal industry and illustrates arguments for government intervention which are much more broadly applicable.

Private Benefits, Public Vices

It is helpful to divide this question into conditions applying within the energy market (specifically, the choice of fuels for electricity generation) and conditions obtaining within the economy as a whole. Does the functioning of the energy market ensure the cheapest electricity, from the perspective of electricity producers and consumers? Is what appears to be the cheapest electricity the best option for the country when the ramifications of the decisions of electricity producers for the economy as a whole are taken into account?

Simple textbook economics, with its assumptions of a perfectly flexible and competitive economy, answers 'yes' to both these questions. The invisible hand of competition is supposed to ensure that what is best for the individual producers is optimal for the economy as a whole. Take the case of an individual electricity producer deciding to switch from UK coal to gas (the basic cause of British Coal's loss of markets over the next few years). Since the coal-fired power stations are in place, and the capital expen-

ditures have already been incurred, the producer has to weigh up their running costs against the total cost of producing electricity from a new gas-fired station (capital costs, including interest, plus fuel and other running costs). If gas won (and the older the coal-fired stations, the more likely this result), this would mean that resources should be shifted from producing coal to producing gas (and building the station). If gas is cheaper, then more resources (labour, in particular) are released from coal than will be absorbed in producing the same quantity (in energy terms) of gas. A fully flexible economy allows the extra resources to be employed elsewhere, representing a gain in Gross Domestic Product and in society's real incomes. The benefits of lower production costs would be passed on, through competition, to the electricity user. Miners would be redeployed to jobs which would be more productive than mining. After a relatively short transitional period nobody would suffer and everybody would benefit (ex-miners get cheaper electricity like everyone else). To interfere with this process – by giving a subsidy to mining to outweigh the cost advantage of gas for example – would simply freeze people into unproductive jobs.

But was Heseltine right to assume that if the electricity producers are switching to gas then it must be cheaper? Even if the market for electricity were perfectly competitive, this claim would have to be treated with scepticism. Markets are subject to fashion and managers' fears of being out of line often outweigh the benefits of being right but lonely. The capital costs of the new gas stations become irrelevant once they have been built, and they may knock out coal-fired stations (and the mines that supply them) even if the decision to build them was misjudged (just as the Channel Tunnel, once built, would knock out ferry operators even if it never provided an adequate return on its investment).

Even assuming that the 'dash for gas' is warranted by current cost advantages over coal, nobody knows if this will be true in ten years' time. (This issue is discussed in two excellent reports to Steven Fothergill and Nigel Guy of the Coalfields Communities Campaign (9 Regent Street, Barnsley, Yorkshire) called *The Case Against Gas* and *The End of Coal?*. See also *Consequences of Electricity Privatisation*, evidence to, and report of, the House of Commons Energy Committee, published in February 1992). Prudent producers will therefore hedge their bets, and indeed the two major generators, Powergen and National Power, have been responsible for a substantial number of the new gas-fired stations. But their diversification into gas may result in over-dependence on gas for the economy as a whole. Whilst coal currently dominates electricity generation, in terms of total energy supply gas is almost as important as coal. Indeed, until very recently it was regarded as a premium fuel reserved for domestic heating and some industrial uses. If gas assumes much of the base-load in electricity generation this will imply increasing dependence upon it and consequent vulnerability to 'energy shocks' (especially since the life of the UK gas fields is very limited, unlike that of coal reserves, and apart from Norway the other two major exporters into the European gas market are Russia and Algeria, hardly reliable sources of supply). Moreover, closing mines, some of which have long lives, will mean very heavy investment costs if their seams are to be accessed in the future (assuming there would be workers available with the appropriate skills). But both these effects – over-dependence on gas for the economy as a whole and undermining the future capacity of the coal industry – are irrelevant to the decisions of an individual electricity producer who

switches from coal to gas. They are 'externalities' affecting the economy as a whole, which are not expressed in the price system in terms of costs of a particular course of action faced by an individual producer.

These objections to trusting in market processes to achieve appropriate patterns of energy use would apply even if the electricity market really were highly competitive, which is obviously far from the case. Nuclear power, although uneconomic, has a secure place and the rest of the market is dominated by National Power and Powergen (the duopoly), albeit that their position is under threat from independent producers – especially from the Regional Electricity Companies (the RECs that used simply to distribute electricity), which have protected segments of the market. Under these circumstances 'strategic' actions, aimed at weakening rivals' positions, are widespread and there is no guarantee that this promotes cheap electricity.

As far as the RECs were concerned, speed in entering the generating business was of the essence, and gas stations are the quickest and cheapest to build as well as having, on most scenarios for the next few years, cheaper total costs of production than new coal-fired stations. The fact that their electricity will not be cheaper than that from the duopoly's old coal-fired stations, whose capital costs were bygones, is irrelevant if the RECs can guarantee the gas stations a profitable market. In effect, the duopoly's coal-fired stations would be forced out and their productive capacity wasted. Not surprisingly, the duopolists were well aware of this possibility and were therefore themselves amongst the first investors in gas-fired stations. They thereby secured the cheapest gas which, they hoped, would raise the costs of the new producers and limit their competitive threat, as well as diversifying their own – though not the country's – sources of energy. Their own actions in pushing up the price of electricity (by an estimated 20-25 per cent as compared with what would have happened if the industry had remained nationalised) had itself made entry by the independent producers profitable. But, given the duopoly's fears of investigation by the Monopolies Commission, the combination of high prices (and profits), together with some new competition, represented the best outcome.

The Report of the Select Committee on Trade and Industry, published in January 1993, made it clear that the gas-fired stations would not provide lower-cost electricity than most of the coal-fired stations they would displace. But over and above this, there are broad 'macroeconomic effects' of switching from UK coal which would support, under current circumstances, maintaining the coal industry.

UK coal being replaced by UK gas is the simplest case. The expansion of gas production would obviously increase employment in that sector. National output would be maintained, but unemployment would rise since gas extraction is a much less labour-intensive industry than coal mining. What is supposed to happen is that the economy is sufficiently flexible for prices to fall, demand to rise and workers to 'price themselves' into the newly created jobs by accepting lower wages. Essentially there would be a redistribution of income from ex-miners to newly employed gas workers and to owners of the gas industry.

This is not some academic quibble. The Thatcher years indisputably saw increased productivity in UK manufacturing. But this reflected fewer people producing roughly the same level of output, rather than the same number producing more. Many of those who lost jobs did not find new ones, or not for long. Thus,

instead of productivity growth bringing general prosperity, it largely represented a *redistribution* from those who lost jobs to those who gained or retained them, and above all to recipients of profits and dividends.

In reality, the macroeconomic effect of the switch from UK coal is even worse than this since it has involved a substantial shift towards energy produced overseas. Imports of coal are now some 20 million tonnes (up from 3 million before the 1984 strike). The likely increase in imports of gas is not yet clear. Eventually they will grow, as UK gas reserves are run down quicker. But even in the short term some of the gas will be imported (and much 'UK' gas is extracted by overseas companies whose profits go abroad).

What would a basic economics textbook say about the replacement of UK coal by an imported energy source? No problem. As people lost their jobs in UK coal, and demand switched overseas, UK wages and prices would decline (or, alternatively, the value of sterling would fall further). The result would be booming demand for exports which would allow resources released from UK coal to move into export industries. And if the imported energy is cheaper than UK coal, there would still be some spare resources to be redeployed to other industries, allowing GDP to rise.

In the real economy, of course, wages and prices respond stickily to rising unemployment, and exports respond but slightly to exchange rate changes. The loss of jobs in one industry does not rapidly lead to additional jobs elsewhere. Indeed, the loss of incomes of those who stay unemployed has 'multiplier' effects on industries supplying them with goods and services. Thus, without the textbook's ideal of full flexibility and a perfectly functioning market system, the result would be persistent unemployment, a fall in GDP, a deterioration of the balance of payments, and a worsening government deficit through loss of tax revenue from, and more unemployment benefit paid to, ex-miners. Some simple calculations (see Andrew Glyn, *The Economic Effects of the Pit Closure Programme*, report for the NUM, October 1992) suggest that the closure of the 31 pits would lead to nearly 80,000 people losing their jobs (including those in industries supplying the coal industry and in local economies affected by the reduction in incomes) and that offsetting increases in employment in the gas sector might reduce this figure to around 65,000. In the absence of automatic mechanisms within the economy to create substitute jobs, the impact on unemployment would be a continuing one. Even if individual miners found work, this would be at the expense of somebody else. The length of the dole queue would fall only if pit closures actually led to additional jobs being created.

The unemployment would increase the government's deficit by some £1.2 billion in the first year (when redundancy payments would be made) and £0.5 billion thereafter (as the government lost tax revenue from, and paid benefit to, those who lost their jobs). This is important, since it measures costs to the rest of society and shows that it is not only those losing their jobs who lose out economically from the pit closures. The deficit increases would lead to higher taxation, or – more likely – further cuts in public spending programmes (contrary to Mr Gummer's homily) and thus additional unemployment.

The degeneration of electricity privatisation into such a sham is of great significance. It was widely claimed that the splitting up of the industry, so as to introduce competition, represented a major step forward from earlier privatisations like telecoms, where a monopoly position was much more nearly

preserved. There was to be no energy policy other than the promotion of a competitive market as the best means of minimising fuel costs. But the release of market forces, from the safety of the economics textbook into the complex reality of a far from perfectly functioning economy, has been exposed as highly destructive and wasteful.

Coal not Dole

There are many possible changes in the energy market which could help to preserve the market for UK deep-mined coal. These include running gas-powered generations on peak-load rather than base-load and cancelling further gas generators, eliminating electricity imports from France's nuclear plants, accelerated closure of old nuclear reactors, reduction of UK opencast coal, and reduced imports of coal into the UK. All of them require significant government intervention in the energy market (though very little by way of subsidies, as the decline in the value of sterling, and the continuing fall in costs of UK coal, have closed the price gap between UK coal and alternative energy sources such as imported coal). The Select Committee on Trade and Industry suggested a mix of these measures (except for closure of nuclear stations), which was reported as restoring about one-half of the imminent cut in British Coal's market. In reality, if implemented in full, the Committee's recommendations would have preserved the market for deep-mined coal virtually intact.

The government is clearly quite uninterested in a proper appraisal of the economic implications of pit closure, resting its case on the presumption of a rapid creation of substitute jobs. Thus the Department of Employment asserted, in evidence to the House of Commons Employment Committee, that 'very broadly employment and unemployment should return to previous levels'. Heseltine claimed that 'the cost of unemployment is a temporary process as people find their way into market sustainable jobs' – a truly incredible proposition as unemployment climbs above three million. Inevitably, the repeatedly postponed White Paper – the government's response to the furore after 13 October – will be entirely an exercise in political, not economic, cost-benefit analysis.

It is quite obvious that there should be some agency responsible for organising the whole energy sector (there used to be a separate Department of Energy with a cabinet minister responsible for just that task). The present electricity 'regulator', Professor Littlechild, a significant contributor to the academic literature on privatisation, is charged merely with promoting competition and protecting the consumer. Having some body responsible for the development of the fuel sector (the mix of fuels, imports versus home production, and so forth) would, he said (in answer to a question at the House of Commons Select Committee on Trade and Industry), go 'quite a long way in quite a different direction toward central planning'.

However much exaggeration is involved in associating an energy policy with Gosplan, there is a serious underlying point. As I have tried to show here, 'Coal not Dole' is supported by economic logic as well as emotion. But it is an economic logic which starts from a realistic appraisal of the functioning of the economy, rather than the presumption that, with the appropriate dose of competition, the individualistic decisions of economic agents will ensure the best outcome for all.