The British Iron and Steel Industry Since 1945

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Introduction

It is necessary to point out a few illuminating factors that are applicable to the iron and steel industry world-wide. First, as nations develop, and incomes rise, the share of steel in total output, the so called 'steel intensity', tends to fall. Secondly, as incomes rise consumers' expenditures are increasingly devoted to goods that have a higher price and a lower steel content. Thirdly, technical progress has meant that less steel is needed, *i.e.* reducing the tonnage required, and other products have been substituted such as plastics and aluminium. Fourthly, developing countries have established their own steel-making facilities and, therefore, there is greater competition in a declining industry. Fifthly, steel manufacture involves (probably) the greatest capital expense of all manufacturing industries, and many of these costs are fixed. Thus, the outgoings of the principal steel producers are fixed. However, as there has been a tendency towards increased competition it has been evident that many of the iron and steel companies have not been operating at full capacity. This is an important issue due to the fact that the industry has a high degree of fixed costs which has meant that many of the complexes have been running at a loss - unless 70-75 percent of capacity is involved in steel-making losses rise rapidly. Sixthly, in an industry where competition is stiff it is important to adapt to technological changes as they become available. However, many iron and steel companies, especially the British Steel Corporation (BSC), have lagged behind in these changes and have subsequently encountered a drop in their share of the world iron and steel supply. Finally, as this paper will be primarily looking at BSC, a company that on formation was in all respects the second largest in the world and subsequently fell from that position very rapidly, it is worthwhile to state at the beginning that no company and, for that matter country, has any right to feel that its position of omnipotence is permanent. Maybe the problem for BSC was that its thoughts were along these very lines?

The Post-War Years

Following the Second World War the individual companies in the British iron and steel industry could only be persuaded to reform. In this post-bellum

period it was obvious that a diminution in competition would be necessary so as to make the industry more competitive. The industry had followed a patchwork growth pattern that needed to be knitted together so as to increase efficiency. The firms in the industry were generally small scale, had a scattered location, and were devoid of planned integration from both the technical and business angle. Capital investment was high relative to capacity and, as a general rule, economies of scale could not be achieved. However, prior to the first nationalisation of the iron and steel industry significant restructuring of the industry had not been achieved.

In 1946 the first Steel Development Plan was put into practice with the aim of increasing steel capacity progressively to 16 million tons a year. This was to be achieved through the establishment of a large, new, integrated works in South Wales and, by enlarging the more favourably located of the older works. The objective was then extended to 29 million tons in 1962. When the Steel Development Plan was put into effect plants were mostly small and, in many cases obsolete and uneconomically laid out. The plan, therefore, called for extensive modernisation of, and additions to plant that appeared to justify them and the eventual closing down of uneconomical works. It was intended at the time of these plans that plants would be as large as possible within the framework of specialised national demands. The plants should be, wherever possible, fully integrated, with all the departments from coking and sintering to steel-rolling closely placed for heat conservation and cheapness of transport between them.

Nationalisation and De-nationalisation

The Iron and Steel Act of 1949 was part of five major measures of nationalisation: the Coal Industry Act of 1946, the Electricity Act of 1947, the Transport Act of 1947 and, the Gas Act of 1948. So the nationalisation of the iron and steel industry was part of a broader aspect of government intervention in the economy, *i.e.* the Keynesian macroeconomic policy goals of the Labour government. In an attempt to grab the industry by the scruff of the neck the Labour government proposed the first nationalisation of the iron and steel industry in 1951. The argument for nationalisation was that the government felt that certain sectors of the economy - the 'commanding heights' - should be under governmental control as this was in the interests of government economic and social policy. Yet, the following Conservative government de-nationalised the industry and, it was not until 1967 that the industry - without the threat of subsequent de-nationalisation from a Conservative government - was finally nationalised.

Under the first nationalisation the firms were generally left intact (untouched and uncontrolled) and it was, therefore, easy for the Conservative government to de-nationalise the industry. The Ministry of Supply was given powers of suspension in the industry. The Iron and Steel Act of 1953 provided for the sale of the securities of the various steel companies held by

the state and, set up an Iron and Steel Board charged with the general supervision of the iron and steel industry "....with a view to promoting efficiently economic and adequate supply under competitive conditions of iron and steel products."[1] The new Board was given powers to refuse planning consent to any proposal that would prejudice the industry - power of consent and, the Board was determined to fix maximum price and determine profit margins.

Between 1953 and 1958 the Iron and Steel Board and the government were anxious to restrain steel prices. However, the British Iron and Steel Federation, who represented the industry in negotiations with the Board, pressed for higher prices. In an attempt to maintain their negotiating position the Federation's members agreed to quote less than the Board's prices. Therefore, it was the case that the statutory maximum prices became the actual prices at which steel was bought throughout the country. As maximum prices were set by the Iron and Steel Board for most categories of steel products the producers were unable to raise their prices above the maximum in boom periods and, thus their profitability suffered. With de-nationalisation, the Iron and Steel Holding and Realisation Agency was to dispose of the shares of the various companies that had been nationalised and, by 1957 had sold 86% of the shares; after 1963 only those of Richard Thomas and Baldwin were left and, were held by the state until the second nationalisation.

In the early 1950s it was felt that the capacity of British steelworks was adequate and that extra output could be obtained by the classic method of adding to existing plant rather than by building new kit. This complacency with existing equipment haunted the British steel industry in later years as it found itself in a technological gap with its rivals. In this decade British steel was relatively free from imports mainly because of gentlemen's agreements with foreign competitors. Furthermore, in this position of dominance in the home industry there was no attempt to expand capacity beyond what was immediately expected and there was no real attempt to get rid of obsolete plant. It was a sellers' market and countries such as Japan and West Germany presented no threat.

In the 1950s and, continuing through the 1960s, there was a trend increase in the percentage of unused capacity in the industry. In 1955 BSC's degree of utilisation was 98 percent but by 1966 this level had fallen to 78.8 percent.[2] This drop was primarily due to the failure of the forecasted increase in demand for steel products to materialise. BSC was not alone in having a chronic surplus of capacity at this time and, therefore, further helped to

[1] Forsyth, Alastair. *Steel Pricing Policies*, (London, PEP vol xxx, No.484, Planning Dec. 1964.) p.330.

[2] Cockerill, A. and Silberston, A. *The Steel Industry*, (Cambridge University Press, 1974.) p.54.

depress export prices. Moreover, as was said in the introduction to this paper, unless 70-75 percent of capacity is involved in steel making losses will rise rapidly and, while BSC was at 78.8 percent of capacity in 1966 and, therefore, above this band it was still the case that BSC's profits were not substantial and this added to investment problems, while in the long term profits would turn into deficits as BSC's capacity and that of other steel makers began to fall. De-nationalisation did not create any enthusiasm for investment at a time when other countries were grasping new techniques faster and developing them - like the basic oxygen steel-making process (BOS). So the 1950s can be said to have been a period when there was sluggish exports, low efficiency and small development.

Re-nationalisation

In 1961 Harold Wilson announced that when the Labour Party got back into power it would re-nationalise the steel industry. Legislation went into government in 1964, the year when the Labour Party was elected on a narrow majority, and was enacted on 27 July 1967 under the Iron and Steel Act and, therefore, created BSC, in this, the second term of the Labour government. This brought into public ownership the fourteen major steel companies in Great Britain and was therefore, a selective nationalisation in comparison with the first nationalisation which was all-embracing. The assets that were acquired were generally of poor quality as the independent steel makers had not built any new integrated works, such as those appearing in Japan and the United States and, many of the existing units were too small and badly located for modern steel-making. At vesting day BSC acquired the assets of fifty-eight iron and steel-producing and re-rolling works. These included thirty-nine crude steel-producing works of which twenty-one were fully integrated pig-iron to finished steel units. The 1967 Act dissolved the Iron and Steel Board and the British Iron and Steel Federation. BSC was divided into four groups taking into account three factors, namely geography, product links and economic factors. Four groups were, therefore, established. First, there was Scottish and North West which comprised Colvilles of Scotland, John Summers and Son Ltd, and others. Second, Northern and Tubes which comprised Stewarts and Lloyds, Dorman Long and others. Third, Midland which comprised the United Steel Companies, English Steel, and the Sheffield companies. Fourth, South Wales which comprised the Steel Company of South Wales, Richard Thomas and Baldwin and others.

These groups did not make the industry more integrated and, on the contrary, strengthened geographical jealousies. The decision to form the groups had been based on the assumption that they would promote technical efficiency and commercial rivalry.

On return to nationalisation there was a great gap in technological efficiency between Britain and its competitors. This can be attributed to the

rapid rate of technological growth in the international iron and steel industry between 1963 and 1967, such as the introduction of BOS which speeded up the process of conversion and, continuous casting which reduced heating costs. However, as the industry, apart from Richard Thomas and Baldwin had been in the private sector, there had existed a general unwillingness in the industry to adopt these new techniques which accounted for the backwardness. This can be attributed to the uncertainty of the individual company managers and owners as to whether their firm would be nationalised again. And with this feeling of uncertainty there was an unwillingness to adopt the new techniques as they rightly assumed that the industry would return to governmental control and that they would not be rewarded for their expenditure by the public purse - in effect they were not going to jeopardise their shareholders' money through costly projects that would probably give little or no compensation.

Government Intervention

In the immediate aftermath of nationalisation until 1972 the government used BSC as a participant in various counter-inflationary programmes as steel prices were subject to restraint by the Government, though it was the case that in the first two years after nationalisation BSC had relevant rates of return of 6.8 percent and 8.9 percent [3] Further, "it is significant that high rates of return in the first two years were achieved when the Corporation was relatively free from government intervention in its pricing behaviour."[4] The government of the day also intervened by postponing plant closures and delaying the commissioning of new plant. For example, in 1958 the government had a choice between two strip mills proposed respectively by Richard Thomas and Baldwin of South Wales and Colvilles of Scotland. The government, instead of just building one, succumbed to political pressure and, succeeded in reducing the initial capacity of one and had both constructed, meeting the companies' investment shortfall. This meant that the government did away with the prospect of having one 'super' plant and had two plants, with one, namely Ravenscraig, later on being subject to constant closure proposals.

government intervention was a major factor in setting the iron and steel industry on the wrong track in the late 1970s and early 1980s. The government intervened so as to manipulate the domestic economy and the market system. This policy of intervention was partly enforced by the Treasury which manipulated the pressure of demand in the light of economic forecasts, in particular those of short-term national income and balance of payments and, of course, unemployment. This was because the iron and steel

[3] National Economic Development Office. *A Study of UK Nationalised industries*, Background Paper 5: Pricing Behaviour, p.45.

[4] *Ibid.*

industry was, and is, a major employer and the government could, therefore, manipulate the industry and, for that matter other nationalised industries, so as to enforce its political, economic, and social objectives. Thus, the iron and steel industry was not able to operate freely in the market. This policy was synonymous with the 'stop-go' policies of the 1970s that were dysfunctional to industry by sharpening the cyclical movement of capital investment and undermining confidence in general.

While the period between 1967 and 1969 witnessed BSC following a policy of grouping on geographical lines with each region putting forward elaborate plans that did not really fit together, the period between 1967 and 1969 witnessed BSC creating divisions depending on products. At this time the US was seen as the model rather than Japan. The government followed a policy of doing away with the old companies, and the new companies consisted of General Steels, Strip Mills, Tubes, Chemicals and Constructional Engineering. The product division development was to aid the rationalisation process. Decision-making was done at central office away from the realities of the steel communities. However, even with this change of structure, distress and disorganisation continued. While BSC resulted in being the largest steel business in the free world outside of America, in terms of the value of both sales and assets, accounting for 91 percent (24.6 million tonnes) of all UK domestically-produced steel in 1969,[5] BSC failed to inspire any loyalty at all and labour relations rapidly deteriorated.

Political Pressure

The problem for BSC was that it was a major employer located in depressed regions and, therefore, BSC was under political pressure not to declare redundancies when they were needed to make the company more cost effective and this then increased costs per ton as output fell. While BSC had a record output of 28.3 million tonnes in 1970 (4.7 percent of World production) by 1977 this level had fallen to 20 million tonnes (3 percent of World production).[6] Moreover, BSC was refused permission to increase its selling prices so as to compensate for increased costs of inputs. The government argued that the prices of steel products should be held down as an anti-inflationary measure which would help to keep down input costs and those involved in exports. This would not have been so bad if BSC had been compensated by the government, but BSC was not and, therefore, it was carrying out a social role that was burdening the company. No steps were taken to compensate the corporation for the additional financial burden resulting from keeping outdated units in operation. By 1978 the additional direct operating costs were at least £100 million.[7]

[5] Cockerill, A and Silberston A, *op. cit.* p.51.

[6] Cockerill, A. *The UK Steel Industry*, p.1. Salford Papers in Economics, 1 June 1979.

[7] *Ibid.*, p.16.

This meant that BSC could not modernise through its own finances. In an attempt to modernise, BSC borrowed money which added to the corporation's fixed interest-bearing debt. Total capital expenditure between 1972/1973 and 1977/1978 totalled £3 billion. However, only 2 percent of this was met from internal sources, the remainder either coming from domestic or foreign borrowing, or from issues of public dividend capital.[8] BSC was also confronted by a depressed demand situation. The huge loss in 1975/76 was primarily due to a world-wide trade recession, severe import competition and increased costs. Increased costs could not be offset by increased prices as depressed international and domestic demand conditions would not support large price increases. It is therefore possible to say that BSC failed because it was not allowed to follow roles that create efficiency.

In 1972 BSC implemented a ten-year development strategy that was designed to modernise and expand the corporation's production capacity. The major feature of this strategy was the replacement of the open-hearth steel-making process by basic oxygen steel-making which is best suited for large-scale production of steel for rolling into a wide range of finished forms, particularly sheet and strip. The electric arc furnace process was also expanded which, by making crude steel from scrap, is best suited to the small-scale production both of high quality special steels and of common grades for rolling as bars and rods. The plan called for the expansion of output from the 1972 level of 27 million tonnes to 33-35 million tonnes by the late 1970s, and to 36-38 million tonnes during the first half of the 1980s. The bulk of this expansion was to come from five centres using the BOS method. The centres were to be Port Talbot and Llanwern in Wales, Ravenscraig in Scotland, and Scunthorpe and Teeside in England. The idea was to move away from having a fragmented output spread over fourteen plants to having a concentrated output in five plants.

Outside Pressure

In the 1970s the international shock of the hiking of oil prices first in 1973/1974 and later in 1979 accelerated the decline of the steel industry in Great Britain as well as in the wider world. The 1973/1974 oil price increase did, of course, take place at the same time as the Yom Kippur War which indirectly affected the demand for steel. Again in 1974, there arose the miners' strike and the three-day week.[9] These events dealt an additional blow to the iron and steel industry by denying it key raw materials and resources at a time when overseas demand and moreover domestic demand was high. These events led to a crude steel output of 17.2 million tonnes in 1975, the lowest

[8] *Ibid.*, p.30.

[9] Government White Paper, March 1978. *British Steel Corporation: The Road to Viability*, section 4. London, HMSO, Cmnd 7149, 1978.

[10] Cockerill, A. *op cit.*, pp.16-17.

output since BSC's formation.[10] There was a modest recovery in 1976, but output fell back again in 1977. By 1978 the UK steel industry was operating at about two-thirds capacity which meant that losses were inevitable.[11] BSC had also been hurt by the collapse of the domestic motor vehicle and shipbuilding industries. BSC in the 1970s, in comparison with its competitors, had grown more slowly during the years of expansion, and suffered more severely in the recessions. Further, BSC had been unable to hold onto its own market share and had been similarly unable to penetrate the export markets that were increasingly being dominated by Far Eastern competitors, especially Japan and South Korea. These countries were also making inroads in industries such as shipbuilding and motor vehicles. So BSC's perilous state in the 1970s can be partly attributed to the decline in Britain of industries that were major consumers of steel.

Private Sector Success

In contrast to BSC, where pressure from the government had resulted in too much production being carried out in the less efficient plants which had ensured that performance in the more efficient plants had been reduced, the independent producers in the British iron and steel industry had found themselves in a far healthier position by the late 1970s. They had not been hurt so much by over-manning, which automatically creates low productivity, and in the intense rigidity in the deployment of labour which the trade unions had so effectively put into practice in BSC's operations. The independent producers had greater flexibility, lower overheads, more specialised product ranges, and, in many cases, were able to draw on the financial resources of the diversified groups of which they were a part. The private sector grew from 3 million tons in 1967 to between 5.5 and 6 million tons in 1979.[12] By 1981 BSC had some 14.4 million tons of raw-steel capacity, while the private sector had approximately 4. 5 million tons, or 76 percent versus 24 percent.[13]

Far East Success

The East Asian iron and steel industries took full advantage of their relative factor endowments, that being their relative abundance of cheap labour, in an effort to make dramatic inroads into the world iron and steel market. This subsequently pushed Britain down the league-table of principal iron and steel producers. By producing for export they could continue to specialise in the industries in which they were most competitive, that is those with greater labour intensity. As far as Japan is concerned, ever since Perry opened up that country by gunboat diplomacy there has been economic co-

[11] Government White Paper, March 1978, *op. cit.* , section 5.

[12] Hogan, William T. *World Steel in the 1980's: A Case of Survival,* (Lexington Books, 1983.) p.25.

[13] *Ibid.*, p.45.

operation between it and the West. The Bretton Woods Agreement made possible closer economic ties in the early post-bellum years. This, coupled with General Agreement on Tariffs and Trade (GATT), based on the notion that free trade is the best way to enhance a country's well-being and, the International Monetary Fund (IMF), a fixed exchange rate system that fosters freer international transactions, helped to foster industrial growth in Japan. By 1972 Japan had become the world's third largest producer of steel.[14] While in 1970 steel accounted for about 15 percent of Japanese total exports by 1983 its share had declined to less than 9 percent.[15] This was partly due to the fact that after the 1973 oil crisis, steel, which uses a lot of energy in production, declined in importance,[16] while activities such as the motor vehicle industry increased from supplying 7 percent of total exports in 1970 to 18 percent of total exports in 1983.[17] There was also a simultaneous move away from Japan to South Korea as a principal producer of iron and steel.

The Thatcher Years

With BSC in an ever-worsening position, Ian MacGregor was appointed Chairman in 1981 by Mrs Thatcher to eradicate the losses. In the fiscal year 1978-1979 BSC lost £309 million and in the fiscal year 1979-1980 losses had spiralled to £545 million. Jonathan Aylen notes that the Corporation won a place in the Guinness Book of Records due to its loss of £1 billion in the fiscal year 1980/1981 on a turnover of just under £3 billion.[18] MacGregor was given a relatively free hand in transforming BSC, while previous Chairmen such as Lord Melchett, Monty Finniston and Charles Villiers had been put in shackles by the government. The 1981 Iron and Steel Act abolished the Corporation's statutory duties. BSC was suffering from chronic over-manning and rigidity in the deployment of labour which was causing demarcation disputes. Essentially, the politicians and the trade unionists had shackled BSC's ability to respond to commercial opportunities. MacGregor, therefore, had to introduce draconian measures to remedy three decades of neglect and in the end it was the workers who suffered the most. MacGregor was helped in his efforts by the government which wrote off £3.5 billion in loans and capital.[19] The divisions were regrouped into General Steels (comprising the business of BSC Special Steels, BSC Sections and Commercial Steels, and BSC Plates), Strip Products,

[14] Kunio, Yoshihara. *Japanese Economic Development,* 2nd Edition, (Tokyo, Oxford University Press, 1986.) pp.25-26.

[15] *Ibid.*, p.29.

[16] *Ibid.*, p.64.

[17] *Ibid.*, p.29.

[18] Aylen, Jonathan. *Privatisation of the British Steel Corporation.* Fiscal Studies; 9 (3), August 1988, p.1.

[19] *The Economist,* 17 July 1982. *British Steel: MacGregor's Mettle,* p.26.

[20] Abromeit, Heidrun. *British Steel: An Industry Between the State and the Private Sector,* (Warwickshire, Berg Publishers, 1986.) p.127.

Tubes, and BSC Holdings (comprising BSC Stainless, BSC Forges, Foundries and Engineering, BSC Cumbria, and BSC Light Products).[20] These operating groups acted as separate profit centres responsible for manufacturing the concerned products and being commercially responsible for them.

In 1980 BSC made a significant inroad in getting the company back on its feet again when it agreed with the National Coal Board (NCB) that the NCB would supply BSC with coking coal as cheaply as BSC could import it. This was a significant agreement because the government had previously allowed BSC only to purchase coking coal from the NCB which was not always the lowest price. In 1980 prices, it was estimated that this measure alone would save BSC £30 million a year.[21]

However, BSC in the 1980s, no matter what it did to reform its internal structure, was hampered by a number of external measures. The United States (US) market was put out of reach of BSC when, in the early 1980s, tariff barriers priced about half of BSC's exports out of the market.[22] BSC's exports to the US were, therefore, subject to countervailing duties levied at 40 percent of the export price. Furthermore, ASLEF disputes hurt BSC particularly badly as in the early 1980s two-thirds of BSC's coal and almost all of its iron-ore was transported by rail. The worst hit plants were those that made the finished products - large awkward products too big to put on the road.[23]

Restructuring

BSC did manage to restructure its operations. The industry became concentrated on five major sites, namely, Teeside, Scunthorpe, Port Talbot, Llanwern, and Ravenscraig. In the fiscal year 1986/1987 BSC made a pre-tax profit of £177 million on sales of £3.5 billion. Moreover, in the year 1986/1987 BSC needed just 6.2 man hours to produce each tonne of liquid steel and employed 55,000 workers while ten years earlier BSC employed 200,000 workers who took over 15 man-hours to produce each tonne of liquid steel.[24] In the fiscal year 1987/1988 BSC made a profit of £410 million on a turnover of £4.1 billion which made it the world's most profitable steel company[25] (after, of course, having had much of its capital written down).

In July 1988 the EC steel cartel, which had been formed in 1980 under the auspices of the Davignon Plan (Viscount Davignon, the EC Commissioner at the time, giving his name to the plan), was finally buried. The plan, which had a twofold objective, was established in 1977 due to worsening iron and steel conditions. First, it proposed to raise steel prices in the Community as soon as possible. Second, it planned over a longer period of time to

[21] *The Economist*, 6 September 1980. *British Steel: Shrinking Hurts*, p.52.
[22] *The Economist*, 19 June 1982. *BS: Blame the Yanks*, p.57.
[23] *The Economist*, 3 July 1982. *Late Freight*, p.22.
[24] *The Economist*, 20 February 1988. *British Steel: Going Out into the World*, p.31.
[25] *The Economist*, 6 August 1988. *Nationalised Industries: Morrison's Dinosaurs*, p.21.

restructure the steel industry and improve its competitive position. In practice the cartel allowed the continuation in the differentiation of costs between major producers, whereas a market situation would have eliminated the less efficient steel makers, at least in the absence of subsidies.[26]

This brings the record up to date. BSC has been privatised and its name has changed to British Steel (BS). The former basket-case company is now the most profitable integrated steel company in the world. Its work-force has shrunk to 55,000.[27] BS fervently argued that if Ravenscaig could only be run at a loss then it should closed. In April 1991 the hot strip mill at Ravenscraig was closed. In effect, Scotland is now insignificant to BS, and it is possible to say that the death of the Scottish steel industry arose when, in 1929, the industry did not adopt a deep - water site - going against the advice of Brasserts.

Conclusion

BSC at vesting day in 1967 was saddled with a large debt due to generous compensation paid to former shareholders. The company was devoid of new equipment and was not integrated due to the unwillingness of the private companies in the period between the two nationalisations to introduce the new technology due to the political climate at the time. BSC's financial problems were exacerbated by government policies of price restraint, which were intended to support the private manufacturing industries. The Corporation was constrained by political considerations, such as the maintenance of low unemployment and the desire to hold back on radical modernisation, as it was felt it would cause social upheaval. BSC was not responsive to market conditions in the 1970s especially and, lost out to the East Asian dynamos. However, after radical rationalisation British Steel is well placed to further its growth. BS has cut its workforce, shut plants and improved quality, delivery times, and marketing. BS now finds itself in a position where it knows what to produce for its customers and knows what its competitors are producing, so it is ahead of the rest in the industry.

In the future there will be a steady reduction in the consumption of steel. This is because consumers are always finding better ways of using steel, while producers are continually making available stronger - and therefore lighter-steels, and also using less steel. Furthermore, steel can be replaced by other products. Finally, the impact of developing countries means that the developed countries' share of world steel consumption will continue to fall and, in particular the third-world has, unlike the industrialised countries, embarked on an ambitious expansion programme.

[26] Aylen, Jonathen. *op cit.*, pp.5-6.

[27] *The Economist*, 2 July, 1988. *British Steel: Showing its Mettle*, p.73.