Coal Monopoly (The Limitation of the Vend) in North East England, during the Period of Formation of British Industrial Capitalism

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Preface

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This summary paper was based upon a lengthy series of articles entitled "Studies in the Limitation of the Vend : Parts 1-5", amounting to a total of 345 pages, which appeared in "The Ritsumeikan Economic Review" between 1976 and 1978. The summary effectively forms a part of the series. (Note. The coalfield of North-East England is usually called the Great Northern Coalfield. From earliest times it was one of the country's major coalfields ; until the Second World War it produced the biggest coal output of all the British coalfields.).

1. The Theme and the Main Points at Issue

A. The principal theme

The historical nature of the Limitation of the Vend is described ; this was the largest cartel which continued during the period of formation of British industrial capitalism, existing from 1771 to 1844 or 1845.

B. Main points at issue

The coal monopoly known as the Limitation of the Vend represents a certain type of economic monopoly. Therefore in order to understand its significance there must be some discussion of the various forms which such monopolies can take. These include early monopolies by patent, mercantilist monopolies (which have been delineated by Professor Uchida), primitive-transitional monopolies, and finally the so-called newest monopoly form based on the concentration of production. In order to evaluate any specific monopoly in historical terms, it is necessary to re-examine the problems involved in defining the various forms of monopoly which have existed in the past.

2. Preliminary Considerations

A. Types of Monopoly in History

1. Early monopolies, involving monopoly price-fixing and monopoly profit-taking, came into existence through trading privileges (which could include both production and selling) conferred by a charter or patent of monopoly granted and enforced by the royal prerogative during the

period of monarchical power.

2. Mercantilist monopoly. Monopoly profit derived from an effective monopoly of trade and commerce in world markets including a monopoly of trade with the colonies. This form was characteristic of the period of early British capitalism from the Civil War of the 17th century until the Industrial Revolution (This form of monopoly organization has been discussed by Professor Yoshihiko Uchida, of Senshu University.).

3. Primitive and transitional monopoly or "monopoly proper to the period of the industrial revolution", arising from the immature nature of the national market. (This form of monopoly organization has been discussed by Professor Akihiko Yoshioka, of Tohoku University.).

4. The newest, or modern form of monopoly, based on concentration of production. This is a well-known type which remains as the normal basis of present-day monopoly situations.

5. With these definitions borne in mind, the problem of definition of the Limitation of the Vend becomes clearer. Was that cartel an example of the primitive-transitional monopolies or was it a peculiar variant of the newest or modern form ? This will depend in great measure on whether or not the so-called "concentration of production" is an absolute requirement for inclusion in the newest-modern category, and whether monopolies in the period of the industrial revolution necessarily belong to the primitive-transitional category.

B. The problem of 'the principle of landownership'

There was an important difference between Britain and other European countries in the legal ownership of underground minerals.

1. Historical definition of the British concept of mineral ownership.

(a) An important judgement in the Court of Exchequer in 1566 laid down the principle that the ownership of all deposits of minerals other than gold and silver was vested in the owner of the surface area concerned. The judgement still left some uncertainty as to the ownership of gold and silver deposits, and did not definitively settle the ownership of deposits of the base metals copper, tin, iron and lead.

(b) The Royal Mines Acts of 1689 (1 Wm. & Mary, c. 30) and 1693 (5 Wm. & Mary, c. 6) cleared up the remaining uncertainties. Certain royal privileges remained in the case of gold and silver, but the rights of the surface owner over other minerals were clearly established.

2. The principle of landownership carrying with it mineral rights had a number of important effects, and contrasted with the situation in other European states. In Germany for instance, the different legal view of mineral rights facilitated the buying up of those rights as separate entities and provided the legal framework for the establishment of the Rhine-Westphalia Coal Syndicate at the end of the 19th century. The different concept prevailing in Britain had a number of other important effects.

(a) The intimate connection between land ownership and the control of minerals often adversely affected technological matters. The pattern of coal mining, for instance, might be limited by royalty agreements rather than the best technical approach to mining a given coal seam.

(b) Questions of negotiations of royalties, and the competing interests of individual landowners and mine-owners, imposed additional costs on mining operations and could often frustrate the most economical and efficient approach in mining schemes.

C. Early attempts at coal monopolies in the North East

1. Monopoly exercised by the Company of Hostmen of Newcastle upon Tyne, under privileges derived from royal charters. This was an example of early monopoly practices, and lasted from 1600 until the ear-

ly 18th century.

(a) The development of this system began in 1582, when the Bishop of Durham, by the Grand Lease, assigned important coalmining privileges to Queen Elizabeth I.

(b) In March 1600 Queen Elizabeth granted a charter (the so-called Great Charter) to the Guild or Fraternity called Hostmen, which established them as a privileged corporation. Thereafter the Company of Hostmen possessed the chartered privilege of a monopoly in the shipping and selling of coal in the River Tyne.

(c) The Hostmen recognised and established in this way had originally formed one section of the Merchant Adventurers guild of Newcastle, but their specialized concentration on the coal trade had led to their emergence as a distinct body.

2. The next stage was represented by the emergence of the Grand Allies in the second quarter of the 18th century. This phase can be seen as an example of the so-called transitional monopoly.

(a) The properties covered by the original Grand Lease of 1582 still formed the basis of the system.

(b) The Allies worked by buying up and leasing coal royalties, wayleaves for wagonways and land needed for ancillary purposes. Their operation of the system included both the working of collieries and the shipment of coal, and also sometimes the deliberate abstention from working some resources when the most profitable exploitation of the system seemed to require this.

(c) Despite the apparent sophistication of some of these arrangements, the context for fully-fledged modern monopoly did not yet exist. Most coal-mining was still carried on in a multiplicity of small-scale enterprises, with colliery working spaces seldom extending beyond a radius of about 200 yards from the bottom of the shaft. Collieries as yet remained for the most part relatively shallow workings.

3. In the third quarter of the 18th century the situation changed, partly because of technological developments. The spread of steam pumping engines, and the adoption of more sophisticated methods of ventilation, brought an increase in the size, the depth and the costs of the more advanced collieries. These developments were accompanied by the emergence of the first period of free competition among the coal owners of the region.

The final stage in development came with the transformation of the ownership patterns and organization within the coalfield. Pre-capitalastic merchant entrepreneurs and aristocratic landowners gave way to the investment of substantial sums of industrial capital in coal-mining, increasingly operated as industrial enterprises, often by companies. In mining, this was not accomplished by the dissolution of the so-called middle stratum of producers, as happened often in the general course of formation of British industrial capitalism.

3. Structural Analysis of the Limitation of the Vend.

A. The stages of productive power, managerial organization and capital-labour relationships in the Great Northern Coalfield, 1771-1845.

1. The principal changes in productive power comprised the transitional period from the period of developed manufacture to the period of partial machine-installation ; the latter could be seen as the reflection of the factory system in the mining sector.

2. Managerial organization changes saw a highly developed managerial organization in colliery firms, with a salaried hierarchical management

structure.

3. Principal elements in the capital-labour relationship included individual direct employment of miners by coal-owners, the continuance of the yearly bond (which guaranteed a minimum wage to the miner but legally bound him to the owner concerned for a year), and the effects in mining of the national code of Master and Servant Acts which regulated the employer-worker relationship in ways favourable to the employer.

B. The extent of the coal monopoly.

1. 1771–1832 - sea-coal owners on Tyneside and Wearside.

2. 1833–1845 - as above, with the addition of sea-coal owners in South Durham and in the Hartley and Blyth districts of South-East Northumberland.

C. The structure of the coal monopoly

The coal monopoly was basically a firm agreement, or cartel, generally called 'the Agreement on the Limitation of the Vend'; the terms of the agreement were based on quotas of household coal, the coal which earned the highest prices in comparison with other kinds of coal until the 1840s.

1. The form of agreement used f. o. b. prices according to the quality and type of coal, with Wallsend agreed as the brand which carried the highest prices. More detailed stipulations included.

(a) Fixing the price levels at figures calculated to provide the greatest profit without providing incentives to competition from other coalfields, such as the Scottish fields and South Wales, in the key markets of the Great Northern Coalfield, especially the crucial London market. The price scales were listed as f. o. b. prices at Newcastle or Sunderland, calculated to take into account average freight charges.

(b) Because of the varying capacity of colliery enterprises, special care was taken to ensure that the inferior collieries could be worked at a reasonable profit to their owners in the context of the Limitation of the Vend.

2. The geographical limit of the Limitation's sphere. Generally the Limitation sought to control the markets of the East coast coal trade and the important market offered by London and the rest of South-East England. The opportunities offered to different coalfields for the control of markets were largely determined by such factors as the distribution of the seven main coalfields of Britain and the cost of transporting coal elsewhere. The Great Northern Coalfield's ready access to East coast shipping routes enabled that major coalfield to control markets which were much more than merely local or even regional in scale.

3. The nature of the allotment of quotas under the Limitation system.

(a) The allotment procedure centred around the negotiation of agreed quantities as between the major districts of the coalfield, and then the various colliery enterprises within each district. This was known as the 'Basis' of the Limitation.

The major districts, Wearside for example, would first agree on the desirable total production level from that area. Then that total would be apportioned between the different colliery enterprises within the district, the criteria employed being productive capacity and quality of coal of each colliery. It was agreed that the Limitation should not include any clauses which restricted the ability of the colliery owners to embark upon further investment and additional productive capacity in any colliery.

(b) Agreement on the operation of the Limitation of the Vend. This provided for the regular adjustment of total shipments, taking account of the existing market prices in the London coal market so as to distribute the agreed quantity of production in the most profitable manner. A standing Utited Committee and district committees authorized the shipment of a stipulated proportion of the agreed quota calculated in thousandths of the quotas. Until the 1820s this regulation was carried out at monthly intervals, thereafter fortnightly. The quantities authorized by the committees were usually called the indicated 'Issue'.

4. Form of agreement. This laid down the composition and the functions of the various standing committees, the duties and rights under the agreement of the individual coal owners (including their representatives on the committees). The agreement also stipulated a code of procedures and penalties against parties to the agreement who broke its rules, and made provision for mediation in the case of disputes between members. Such stipulations were especially necessary because of the problems which could be involved in working the Limitation system in volatile market conditions and shifting opportunities for voyages because of weather or other factors affecting shipping.

After 1829 the machinery for the settlement of disputes became more sophisticated, with the introduction of a formal system of referees and umpires, a change associated with the transition from an operation based primarily on the districts to one with tighter regional control.

D. The coal market and the distributive system for coal, together with the legislation aimed at preventing restrictive operations in the coal trade (not discussed here).

E. Chronological development of the coal monopoly.

1. The continuance of the Limitation was threatened between 1828 and the spring of 1834 because of shifts in balance within the coalfield.

(a) The relevant interests were increased by the emergence of the South Durham colliery interests as serious competitors in the sea-sale trade, and by an increase in the production for sea-sale in the Hartley and Blyth districts of South East Northumberland.

(b) The predominance of Tyneside interests was threatened by major developments on Wearside. The sinking of big new collieries and a significant expansion in the production of high quality coal by the Wearside interests brought about a shift in leadership within the coalfield from Tyneside to Wearside.

2. This crisis was met by a reorganization of the Limitation, and a revision of the pricing system. June 1834 saw the introduction of the new scales whereby prices and quantities shipped were regulated by sliding scales based on the prevailing prices on the London Coal Exchange.

(a) An important feature of the revised system was the inclusion of the London coal factors among the parties to the agreement.

(b) From 1834 the Limitation's operation was not simply an agreement between coal producers, but depended upon an evolving arrangement for market control operated by both producers and factors.

F. Profitability of the Limitation of the Vend.

1. It is very difficult to calculate with any precision the profitability of any colliery included in the Limitation because of both quantitative and qualitative weaknesses in the available evidence.

2. Some evidence is available in the shape of statements made to a Parliamentary Select Committee in 1836.

(a) Statement by Matthias Dunn (a partner and manager in the large Hetton Coal Company and also a partner in the Tyneside St. Lawrence Colliery). Dunn calculated that the profit on the income from sales (at f. o. b. prices) was 22.6–24.5 %. He calculated that the return on fixed capital (in effect the total capital employed by the coalowners) was 12–13 %. (These calculations included in their assessment of "working costs" some uncertain risk elements. For example, there was some provision envisaged for accidents, which could entail "a very serious amount" of loss. Since such elements were clearly variable, the real profits might be in practice much higher.).

(b) Statement by Thomas Wood (partner in Thornley Colliery, and formerly for 15 years a principal mining agent for the Marquis of Londonderry and the Hetton Coal Company). Wood calculated the costs of producing best coal, if collieries were working fully, at 16s. 11d. per Newcastle chaldron. He claimed that a selling price of 24s. 6d. would provide an adequate return on investment. Since the actual prevailing price in 1836 was about 28s. 6d., coal owners were receiving 4s. per chaldron on top of a remunerative price. This increment might be attributed to the working of the Limitation system.

4. Peculiar characteristics of the Limitation of the Vend.

A. The nature of ownership of coal royalties in the hands of landowners, and the increasing concentration of production and capital in large colliery concerns.

1. A group of aristocratic landowners emerged as principal coal owners. The Vane Tempests (Marquis of Londonderry), Lambtons (Earl of Durham) and Liddells (Lord Ravensworth), are examples of aristocrats combining ownership of royalties and collieries. On the other hand, some royalty owners, such as the Dukes of Northumberland, withdrew from active colliery ownership, choosing instead to lease their royalties to entrepreneurs. Similarly, the great ecclesiastical landowners, especially the Bishop of Durham and the Dean and Chapter of Durham, leased their royalties rather than managing their mineral properties directly.

2. Concentration of capital. In the early 1840s the total capital em-

ployed in the coalfield was around £ 9.5–10 millions. Of this the four largest colliery firms deployed about £ 2 millions, or 20–21 % of the total; the eight largest colliery enterprises employed between them about £ 2.8 millions, or 28–29.5 %.

3. Concentration of production. It is estimated that in the early Victorian years the productive capacity of each of the four largest colliery enterprises amounted to about half a million tons annually. It is interesting to note that this figure is comparable with that of the average size of the collieries in the northern and central parts of the Ruhr coalfield which joined the Rhine-Westphalia Coal Syndicate in 1893.

Other statistics provide a similar pattern of early concentration on the Great Northern Coalfield. In 1842–3 the four largest collieries were given 18.2 % of the total Basis of the Limitation, used 27.5 % (5,310 h. p.) of the steam power and employed 22.4 % (5,761) of all the miners employed in sea-sale collieries.

B. Special Characteristics of the Limitation of the Vend.

1. This monopoly was based upon economic circumstances in the Great Northern Coalfield, which were very unusual at that time. There existed a situation, in the concentration of both capital and production, which was normally necessary for the establishment of a monopoly structure in a more developed industrial economy, usually at a later date.

2. The basis for this precocious situation lay in the British legal concept of property rights in underground minerals, which were in principle assigned to the surface landowner.

(a) This principle acted as a barrier to free entry of entrepreneurs into the coalfield. In addition to the powerful control thus vested in landowners, it encouraged the existence of large scale mining activity by royalty-owning aristocrats, whose profits could be expanded because, unlike competitors, they were not saddled with heavy royalty payments as a burden on their enterprises.

(b) There is a clear contrast between the British royalty concept and, for examples, the German concept of "principle of the mining right".

Under the British system, royalty payments remained a serious burden on many colliery enterprises, even when the leasing of royalties had been successfully negotiated ; royalty agreements normally specified increased payments to the royalty owner as coal production grew.

The practical union of royalty ownership and the operation of collieries by a group of substantial landowners produced a situation in which an agreement such as the Limitation of the Vend could be created and operated, even though the success of the monopoly was limited. The colliery interests which joined in the monopoly did not possess a total identity of interests ; nor were they able to prevent the investment of outside capital in mining developments which resulted in the arrival on the market of serious competitors. Although for some time it was possible for the system to survive by recruiting the most important newcomers to the monopoly interests, the inherent diversity between the interests involved in the Limitation, and the continued arrival of new colliery enterprises, meant that by 1844–5 the strains within the Limitation brought about the breakdown of the monopoly.

(c) The basic requirement for successful monopoly on the coalfield had always been that the parties involved could in one way or another control the royalties governing sea-sale coal production, a condition which could not be permanently maintained.

3. Geographical Factors.

(a) Another peculiar feature of the situation which facilitated the creation of the Limitation was the market control throughout the key East Coast sea-sale market, including London, which the geographical factors allowed. The crucial importance of sea-borne coal in the early 19th century was to diminish somewhat with other transport developments of the Victorian period, but during the life-time of the Limitation of the Vend the geographical siting of the North-East collieries near the principal navigable rivers was an important factor in ensuring their supremacy in the relevant markets. Compared with all of the other coalfields, cheap sea-borne carriage along the East Coast gave the Great Northern Coalfield an unbeatable cost advantage. Similarly, the concentration of royalty ownership, often in the hands of great coal owners, provided another locational advantage. Even under the changed transport technology of later Victorian times, the iron steam collier enabled the North East to maintain its advantages in freight charges.

(b) There is some overall similarity between the Limitation of the Vend and the later Rhine-Westphalia Coal Syndicate as far as anti-competition practices are concerned, despite the major differences between the two contexts.

4. Conclusions.

The preceding discussion allows a decision as to which class of monopoly the Limitation of the Vend belongs to.

(a) Essentially the Limitation should be considered an example of the modern monopolies usually attributed to the developed stage of British capitalism, despite the early date and the relatively low level of concentration of production. These factors are counter-balanced by the relatively high level of concentration of ownership and the high level of market control facilitated by geographical factors.

Despite some significant differences, there are sufficient correlations with the later Rhine-Westphalia Coal Syndicate to make a comparison between the two coal monopolies a fruitful one.

(b) The Limitation of the Vend was a monopoly combination freely entered into by the coal owners who perceived it to be in their best interests, within a context of freedom of contract. Coal owners could in practice decide whether or not they wished to join the monopoly or withdraw from it.

The core of the monopoly grouping was provided by a group of substantial coal magnates (landowners possessing royalties who were also colliery owners) together with some substantial coal companies which leased royalties. The principal coal owners of the Limitation of the Vend period on the Great Northern Coalfield were in social terms markedly different from the principal coal owners of the later German monopoly.

(c) This definition of the type of monopoly to which the Limitation more properly belongs demonstrates that it is too limiting to suggest that a very high degree of concentration of production is an essential prerequisite for a monopoly of modern type.

Postscript

This summary itself was prepared for academic exchange at an early stage of my stay at the University of Newcastle upon Tyne, North East of England, during the period of August 1986 to February 1988. And I should thank my valued friend, Norman McCord, Professor of Social History, Department of History, the University, who was very kind to paraphrase an original text of the summary into typically English literary language, through repeated exchanges of views and discussions. It goes without saying, however, that I should take any responsibility for the contents of the summary. Professor McCord is author of "The Anti-Corn Law League" (1958), "Free Trade" (1970), "Durham History from the Air" (1971), "Northumberland History from the Air" (1972) and "The North East England: The Region's Development 1760–1960" (1979).

And I also would show my gratitude to Dr. D. J. Rowe, Senior Lectur-

er in Economics, Department of Economics, the University, who carefully read this summary and gave valuable commentaries to me. The only difference in reviews between both of us was around a shift in leadership of the Vend within the coalfield from Tyneside to Wearside after the early 1830s. Although he agreed with me concerning the shift in price leadership from Tyneside to Wearside, but he did not agree to the shift in leadership of the Vend as a whole because the shares in allocation of shipments between Tyneside and Wearside still were 3 to 2 though it itself was true. Dr. Rowe is author of "Lead Manufacturing in Britain : a History" (1983), who won the Wadsworth Prize of Business History 1983, awarded by the Business Archives Council.

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