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APPENDIX I

Survey of Available Data Pertaining to the Bituminous Coal Industry

THE SECOND specific aim of the Committee was to ascertain what price and related data are being currently collected for the bituminous coal industry. Because of the industry's importance and distinctive characteristics, a large number of Federal, state, and private agencies collect and publish material on prices of coal and on costs, sales realizations, production, and distribution, which are related to prices.

Price data collected currently by the Wholesale and Retail Price Divisions of the Bureau of Labor Statistics and by trade journals, newspapers, and private organizations have received the major attention of the Committee. The survey of these data is presented in Section A.

Data on costs, sales realizations, margins, investments and profits, compiled by such agencies as the Federal Trade Commission, the United States Coal Commission of 1922, the Research and Planning Division of the NRA, and the National Bituminous Coal Commission, and the Bureau of the Census, are described in Section B.

Section C is devoted to a survey of production, distribution, and other related data published by the Bureau of Mines, various state departments of mines, the Federal Power Commission, the Interstate Commerce Commission, the Department of Commerce, and other Federal agencies.

A PRICE DATA COLLECTED CURRENTLY

1 PRICES COLLECTED BY THE BUREAU OF LABOR STATISTICS

Because of the importance of this industry and because of the multitude of prices arising out of differences in the grades and sizes of coal and the diverse areas in which they are produced and sold the Federal Government alone can assume the task of collecting an adequate sample of coal prices. This obligation has been assigned for many years to the Bureau of Labor Statistics. Since it is interested in both wholesale and retail prices and since the work is carried on by different divisions, the two types of price data from this source are described separately.

a Wholesale Prices¹

The wholesale price work of the Bureau of Labor Statistics dates from the Senate Resolution of March 3, 1891 (52d Congress, 1st Sess.) which instructed the Committee on Finance "to ascertain in every practicable way and to report from time to time to the Senate the effect of the tariff laws upon the imports and exports, the growth, development, production, and prices of agricultural and manufactured articles at home and abroad. . . ." The Honorable Carroll D. Wright, Commissioner of the Department of Labor (through changing titles to the present Bureau of Labor Statistics) was put in charge of collecting and tabulating this great mass of statistics. The results of the inquiry into the course of wholesale prices from 1840 to 1890 were submitted by Nelson W. Aldrich to the Senate Committee on Finance in March 1893 (52d Congress, 2d Sess., Senate Report 1394). The second report, continuing so far as practicable the previous investigation, was issued as Bulletin 27 of the Department of Labor in March 1900. This date marks the real beginning of the compilation of wholesale commodity prices by the Department of Labor (the Bureau of Labor Statistics).

Until 1917 price data were collected and compiled once a year. Reporting agencies were requested early in January to submit representative monthly prices for the preceding year. For commodities subject to frequent price changes the cooperat-

¹ Prepared by Jesse M. Cutts, Chief, Wholesale Price Division, U. S. Bureau of Labor Statistics.

ing agencies were requested to furnish changes in price together with the dates of change. Monthly average prices were calculated for computation of monthly indexes. The report issued in 1900 gives monthly indexes of wholesale prices by groups of commodities back to January 1890. The monthly collection of price statistics was begun by the Bureau in 1917.

Bituminous coal has been represented in the Bureau's wholesale price index since 1890. The data of the Department of Labor were tied in with the series compiled for the Senate Committee and submitted by Mr. Aldrich. This gives representation to bituminous coal in a general index since 1857. Available information warrants only this brief mention of wholesale price series for bituminous coal for the early period of compilation. The first general revision and expansion of the wholesale price series were made in 1920-21. Index numbers were revised back to 1913 to include additional series and to establish the computation of the index on a uniform basis.

Price reporting was monthly until 1932, when the calculation of weekly index numbers was begun by the Bureau. Since 1932 prices, including those for bituminous coal, have been requested as of one day during the week, wherever possible, Tuesday.

Classification

The Bureau uses three classifications of bituminous coal in its computations: mine run, prepared sizes, and screenings. 'Mine run' is, as its name signifies, the coal as it comes from the mines without any further preparation for the market. 'Prepared sizes' denotes coal that has been screened but does not necessarily mean that only one size is included in the Bureau's computations, as reports from one distributor may be on a 2-inch size, from another on a 1½-inch size, and still others may be on sizes with a varying range. Period after period each reporter furnishes price information on a comparable size. 'Screenings' denotes the slack or fine coal that is sifted through the screens in a screening process. It is used principally for industrial purposes.

Types of price

The Bureau of Labor Statistics defines 'wholesale prices' as those obtained in the first commercial transactions. Prior

to 1923 the Bureau used in its index the spot f.o.b. mine prices for designated markets. Since 1923 the prices include freight to destination but exclude brokers' commissions and other known handling costs. Some reporters show separately the f.o.b. mine price and the freight charge from the mine to the city, and the addition of the two factors determines the f.o.b. cars destination price. Other reports show the f.o.b. cars destination price alone. The prices are per ton of 2,000 pounds.

The price of mine-run coal used in the index is an un-weighted arithmetic average of quotations for the selected cities. The same process is followed in determining average prices for prepared sizes and screenings. These average prices are then weighted according to the percentage ratios outlined below for inclusion in the weighted index as a subgroup of the Fuel and Lighting Materials Group and a component part of the index of all commodities.

Weighting factors

In accordance with Bureau practices, representation in the index is based upon the relative importance of bituminous coal in domestic markets. Changes in quantity weighting factors are made periodically because of changes in the relative importance of coal. The value aggregates used in the construction of the weighted index numbers are calculated by applying average market prices to physical quantities marketed during Census years.

Proportionate representation is given to each of the three classifications of coal based on information obtained from the Bureau of Mines and *Coal Age* concerning the relative importance of each classification in domestic markets. At present this ratio approximates: mine run 50, prepared sizes 30, and screenings 20. The quantities marketed include coal sold locally and coal loaded at the mines for shipment by rail and water, long and short distance trucking. To these totals are added imports for consumption. Coal sold for export is not included. The average of quantities marketed for the years 1929-31 was estimated to be approximately 453 million net tons. This total apportioned according to the percentage ratios shown above results in the quantity weighting factors: Mine-run, 227 million net tons; prepared sizes, 133 million net tons; and screenings, 93 million net tons. The present quantity

weighting factors were introduced in the computations in January 1934 (See Table I-1 for quantity weighting factors and periods used).

TABLE I-1

Quantity Weighting Factors Used in Calculating Index Numbers for Bituminous Coal Prices

YEARS FOR WHICH QUANTITIES MARKETED WERE AVERAGED	YEARS FOR WHICH WEIGHTS WERE USED	QUANTITY WEIGHTING FACTORS TONS OF 2,000 POUNDS (000's omitted)		
		Mine run	Prepared sizes	Screenings
1909	1890 to 1912		461.240*	
1909 and 1914	1913 and 1914	186.872	130.810	56.062
1914 and 1919	1915 to 1919	204.862	143.404	61.459
1919 and 1921	1920 and 1921	206.354	144.448	61.907
1921 and 1923	1922 and 1923	231.433	162.004	69.430
1923 and 1925	1924 to 1929	248.122	173.685	74.437
1925 and 1927	1930 and 1931	250.461	175.323	75.138
1927 and 1929	1932 and 1933	253.290	147.837	103.435
1929 and 1931	1934 to 1937	227.354	132.699	92.844

* Total, no allocation by classifications.

Coverage

Prior to 1923 the index was constructed from quotations from recognized trade papers and a few coal brokers and producing companies. Since 1923 prices have been furnished by more mine operators, selling agents, or large distributors in the localities included in the reports. Except for minor adjustments due to bankruptcy, discontinuance of operation, and other causes, the present series have been continued uninterruptedly since 1923. The cities included in the present index, apportioned by kind and number of quotations, are shown in Table I-2. They were selected from the cities used in the Bureau's cost of living index. Representatives of the Bureau of Mines and of the bituminous coal industry were consulted before the cities were finally selected.

Publication

In accordance with the general custom and practice of the Bureau, weekly average prices for bituminous coal are not published in any form. For the last two years monthly average prices have been issued in mimeographed form about the 20th of the month following that to which the data relate. The June

TABLE I-2

**Number of Quotations from Each City for Bituminous
Coal Included in the Bureau of Labor Statistics
Wholesale Price Reporting Service**

(included in the present weighted index)

CITY	NUMBER OF QUOTATIONS		
	Mine run	Prepared sizes	Screenings
Atlanta, Ga.	2	3	1
Baltimore, Md.	3		
Birmingham, Ala.	2	2	1
Boston, Mass.	1		
Chicago, Ill.	1	1	1
Cincinnati, Ohio	2	1	1
Cleveland, Ohio	1	2	1
Detroit, Mich.	1	2	1
Indianapolis, Ind.	3	2	2
Kansas City, Mo.	1	1	1
Minneapolis, Minn.	3	3	3
New Orleans, La.		1	
New York, N. Y.	2		
Norfolk, Va.	1		
Pittsburgh, Pa.	1	1	
St. Louis, Mo.	2	3	3
(supplementary reports in the Bureau's files)			
Atlanta, Ga.			2
Birmingham, Ala.	3	2	3
Boston, Mass.	1		1
Chicago, Ill.	2	2	2
Cincinnati, Ohio		2	2
Cleveland, Ohio	1		1
Detroit, Mich.	2	1	2
Indianapolis, Ind.		1	
Minneapolis, Minn.		3	
New Orleans, La.		1	
St. Louis, Mo.	1	1	1

and December issues of the monthly pamphlet *Wholesale Prices* show monthly average prices for the six-month period ending with the respective month. Prior to July 1935 each issue of *Wholesale Prices* carried current monthly averages compared with the preceding month and the corresponding month of the preceding year. In addition to the actual average price the reports show index numbers based on the average for 1926 as 100.

Revision

The Wholesale Price Division is engaged in a program of revision and expansion covering every phase of its wholesale price work. Bituminous coal data have not yet been revised partly because the Division has awaited the recommendations of the Committee on Prices in the Bituminous Coal Industry and partly because of more pressing demands for revision of other price series. In Appendix II, A, the Committee's recommendations are reviewed, and although no commitment can be made, it is hoped that wholesale prices of bituminous coal will be revised during the fiscal year 1937-38.

b Retail Prices collected prior to 1937²

The Retail Price Division of the United States Bureau of Labor Statistics collects, tabulates, and publishes retail prices of bituminous coal together with retail prices of many other commodities. The statistics compiled by the Division are used in the Bureau's retail price series and also to measure price changes for the cost of living index. In the following description of the data published by the Retail Price Division, the Committee has directed its attention solely to bituminous coal series. The discussion is also restricted to the scope of these data and the procedure used in assembling them prior to 1937. Changes during 1937 are described in Appendix II, B.

Scope of data

The number of cities included in the Bureau's retail coal price reports has varied from time to time. From 1923 to 1936

1907-1912	1913-1917	1918-1922	1923-1936
23-24	28-31	39-45	38

retail prices of bituminous coal were collected in the 38 cities listed below. In the 14 cities indicated by an (X), prices were given separately for high and low volatile coal. In the other cities the grade of coal was not designated.

In each of the 38 cities, the quotations on sized coal, ranging from stoker to block, were combined into simple averages under

² Data for this section were prepared under the direction of Stella Stewart, Chief of the Retail Price Division, Bureau of Labor Statistics.

TABLE 1-3
 Publication of Retail Prices of Coal and Periods Covered for Series, 1907-16 and 1913-36, inclusive

SERIES, 1907-1916 BULLETIN		SERIES, 1913-1936 Retail Prices (pamphlets) ¹ BULLETIN	
Number	Period covered	Date of issue	Period covered
105	1907-1911	October 1918 ²	Jan. 1913-July 1918
106	1907-June 1912	March 1919 ³	Jan. 1913-Jan. 1919
108	1907-July 1912		
110	1907-Oct. 1912	and	
115	1907-Jan. 1913	subsequent	
125	1907-April 1913	issues covering	
136	1907-July 1913	dates for which	
138	1907-Oct. 1913	prices were	1913-1936, inclusive
156	1907-July 1914	collected	
184	1907-Jan. 1915		
197	1907-July 1915		
228	1907-Dec. 1916		

¹ Published monthly beginning November 1917 (showing prices for September 1917).

² First publication of average prices by cities.

³ First publication of relative prices for bituminous coal for the United States (cities combined).

the designation 'Prepared Sizes'. In addition, in 7 cities average prices were also published for 'run of mine' coal: Chicago, Detroit, Indianapolis, Baltimore, Norfolk, Richmond, and Washington, D. C.

Middle Atlantic	South Atlantic
Pittsburgh	Atlanta
East North Central	Baltimore (X)
Chicago (X)	Charleston, S. C.
Cincinnati (X)	Jacksonville
Cleveland (X)	Norfolk (X)
Columbus, Ohio (X)	Richmond (X)
Detroit (X)	Savannah
Indianapolis (X)	Washington, D. C. (X)
Milwaukee (X)	East South Central
Peoria	Birmingham
Springfield, Ill.	Louisville (X)
West North Central	Memphis
Kansas City	Mobile
Minneapolis (X)	West South Central
Omaha	Dallas
St. Louis	Houston
St. Paul (X)	Little Rock
Mountain	New Orleans
Butte	Pacific
Denver	Los Angeles
Salt Lake City	Portland, Ore.
	San Francisco
	Seattle

*Method of compilation*³

Selected coal merchants who sold directly to household consumers mailed prices of bituminous coal to the Bureau. In April 1936 the number of reporting dealers in each city ranged from 2 to 7 and totaled 163; the number of quotations ranged from 4 to 49 in a city and totaled 752. The average price for bituminous coal in the 38 cities combined was obtained by taking a simple average of all quotations irrespective of grade or size. The majority of the quotations, however, were for lump or egg sizes. Each quotation was identified by a trade name which indicated either the originating mine district or selling company. A special effort was made to ensure the continuity of

³The first comprehensive statement of method was published by the Bureau of Labor Statistics in Bulletin 270; the latest statement in Bulletin 495.

the various component series with respect to both the reporting dealer and the grades and sizes entering into the average.

Each dealer was originally requested by the Bureau of Labor Statistics to identify the kinds, grades, and sizes of bituminous coal that were important in his sales to household consumers. At each price collection period thereafter, the list of indicated items was typed on the out-going schedules, addressed to the reporting dealer (Figure 1). Substitutes to meet changing consumer demands were made as follows: the price of each discontinued item was interpolated for one period on the basis of the amount of change from the preceding period reported by other dealers in the same city for similar coal. Prices of new items were included in the average only after two successive reports. These precautions were taken to ensure the comparability of the items used for measuring price changes from period to period.

Quotations from new reporters or for different kinds of coal stocked by old reporters were included in the city and United States averages without adjustment of the preceding pricing periods, after they had been received several times and had been checked for reliability and representativeness. Prices in cities that were added to the reporting service after 1913 were included in the averages for all cities combined without adjustment of the preceding pricing periods.

When quotations were omitted from the reports, interpolations were made until it was reasonably certain that the coal was no longer handled by the dealer or was not representative of family trade. If it seemed advisable, a substitute was secured. Reports from firms no longer in a position to furnish data to the Bureau were replaced by reports from other representative firms in the same city. No interpolations were made of quotations from firms that discontinued reporting. Prices quoted by substitute reporters were included in the average as soon as they had been reported a sufficient number of times to demonstrate their reliability.

Sales taxes were added to the prices reported by dealers in cities where such taxes were applicable to retail coal.

Frequency of collection and publication of prices

From 1907 to 1913 retail prices of coal were collected on the 15th of January, April, July, and October; from 1914 to 1920, on January and July 15th; and from June 1920 to July 1935.

monthly on the 15th. In October 1935 it was decided to shift back to a quarterly collection in order to provide the necessary time for studying ways and means of improving the retail coal price series. Average prices in each of the 38 cities were collected and average prices and index numbers for the cities combined were published as of the 15th of January, April, July, and September, and released in *Retail Prices*, the monthly publication of the Retail Price Division. In September 1936 the month used in each quarter was changed to March, June, September, and December. Quotations were secured as of the 15th of the month and published about six weeks later. It has been possible, however, to secure this information on request in about four weeks.

2 PRICES COLLECTED BY TRADE JOURNALS, NEWSPAPERS, AND PRIVATE ORGANIZATIONS

In addition to the Bureau of Labor Statistics, private organizations, many trade journals, and newspapers compile current prices of bituminous coal. It is significant that the work of many of these agencies antedates the original collection of wholesale prices by the Bureau of Labor Statistics. At present there are at least twelve such sources of information including three coal trade journals: the *Black Diamond*, *Coal and Coal Trade Journal*, and *Saward's Journal*; three trade journals in allied industries: *American Metal Market*, *Daily Metal Trade*, and the *Iron Age*; four business and financial journals: *The Annalist*, *The Commercial Bulletin*, *Chicago Journal of Commerce*, the *Journal of Commerce*, and two private bulletins: *The Guaranty Survey* and the *Conference Board Service Letter*. Although *Coal Age* has not published any prices of coal since its issue of October 1931, it is such an important source for data on prices in preceding years that it is also included in this survey. All the principal markets and nearly all the smaller ones were regularly listed in *Coal Age*. No other journal has ever duplicated its coverage or tabulated the prices in so convenient a form.

The data available from all these sources except the *Conference Board Service Letter* are described in Table I-4. The number of quotations of prices in each market usually represents a variety of sizes of coal from various producing fields. The qualities and sizes of coal of greatest significance in each market are usually listed by the journals.

As part of its study of the cost of living in the United States,

TABLE I-4

Sources of Current Prices of Bituminous Coal

NAME AND ADDRESS OF PERIODICAL	FREQUENCY OF QUOTATIONS	MARKETS FOR WHICH PRICES ARE QUOTED	TYPE OF PRICE QUOTED	NUMBER OF QUOTATIONS
<i>American Metal Market</i> , 111 John Street, New York, N. Y.	Several times each week	Boston, Mass.	Gross tons, on cars at Boston	3
	Several times each week	New England	Net tons, f.o.b. mine	6
	Several times each week	New York, N. Y.	Net tons, f.o.b. mine	11
<i>The Annalist</i> , 239 W. 43d St., New York, N. Y.	Weekly	New York, N. Y.	Net tons, f.o.b. mine	1*
<i>The Black Diamond</i> , Manhattan Bldg., Chicago, Ill.	Irregularly Bi-weekly Irregularly Bi-weekly Bi-weekly Bi-weekly Bi-weekly Irregularly Irregularly Irregularly	Birmingham, Ala. Bluefield, W. Va. Boston, Mass. Charleston, W. Va. Chicago & Central West Cincinnati, Ohio Cincinnati, Ohio Cleveland, Ohio Detroit, Mich. Louisville, Ky. Memphis, Tenn.	F.o.b. mines (f.o.b. mine) (Gross tons on cars at Boston) (f.o.b. mine) (f.o.b. mine) (f.o.b. mine) Retail Wholesale, f.o.b. mine Wholesale (f.o.b. mine) (f.o.b. mine) Wholesale (f.o.b. mine)	20-42 13 2 3-8 68 4-9 4 45 14-18 12-26 11-14

Bi-weekly	Minneapolis-St. Paul and Northwest	F.o.b. dock	36
Bi-weekly	Minneapolis-St. Paul and Northwest	F.o.b. mine	24
Irregularly	Nashville, Tenn.	Wholesale (f.o.b. mine)	24
Irregularly	Nashville, Tenn.	Retail	18
Bi-weekly	New York, N. Y.	(f.o.b. mine)	4-5
Irregularly	Oklahoma-Texas	(f.o.b. mine)	21
Bi-weekly	Philadelphia, Pa.	(f.o.b. mine)	4
Bi-weekly	Pittsburgh, Pa.	F.o.b. mine	14
Daily, except Sundays and holidays	Chicago, Ill.	F.o.b. mine	97
	Chicago, Ill.	Retail	51
Weekly prices, published monthly. No prices published since October 1931	Birmingham, Ala.	Net tons, f.o.b. mine	2
	Boston, Mass.	Net tons, f.o.b. mine	3
	Boston, Mass.	Gross tons, f.o.b. vessel, Hampton Roads	2
	Chicago, Ill.	Net tons, f.o.b. mine	36
	Cincinnati, Ohio	Net tons, f.o.b. mine	33
	Cleveland, Ohio	Net tons, f.o.b. mine	5
	Columbus, Ohio	Net tons, f.o.b. mine	4
	Fairmont, W. Va.	Net tons, f.o.b. mine	5
	Kansas City, Kan.	Net tons, f.o.b. mine	4
	Louisville, Ky.	Net tons, f.o.b. mine	17
	New York, N. Y.	Net tons, f.o.b. mine	6
	Philadelphia, Pa.	Net tons, f.o.b. mine	10
<i>Chicago Journal of Commerce,</i> 12 E. Grand Ave., Chicago, Ill.			
<i>Coal Age,</i> 330 W. 42d St., New York, N. Y.			

TABLE I-4 (cont.)
Sources of Current Prices of Bituminous Coal

NAME AND ADDRESS OF PERIODICAL Coal Age (cont.)	FREQUENCY OF QUOTATIONS	MARKETS FOR WHICH PRICES ARE QUOTED	TYPE OF PRICE QUOTED	NUMBER OF QUOTATIONS
<i>Coal and Coal Trade Journal</i> , 21 West Street, New York, N. Y.	Weekly, magazine published bi-weekly	Pittsburgh, Pa. St. Louis, Mo.	Net tons, f.o.b. mine Net tons, f.o.b. mine	8 8
<i>The Commercial Bulletin</i> , 144 High Street, Boston, Mass.	Weekly Weekly Weekly	Not specified Hampton Roads, Va. New York, N. Y.	Net tons, f.o.b. mine Gross tons, f.o.b. pier Gross tons, f.o.b. pier	58 2 5
<i>Daily Metal Trade</i> , Peaton Publishing Co., Cleveland, Ohio	Weekly Daily, except Mondays, Sundays, and holidays	Boston, Mass. Boston, Mass. Boston, Mass.	Net tons, f.o.b. mine Gross tons on cars, Boston Retail	13 5 5
<i>The Guaranty Survey</i> , Guaranty Trust Co. of New York New York, N. Y.	Monthly	Providence, R. I. Chicago, Ill. Pennsylvania	Gross tons on cars, Providence Net tons, f.o.b. mine Net tons, f.o.b. mine	9 5 18 6
<i>The Iron Age</i> , 239 West 99th Street, New York, N. Y.	Weekly	N. Y., Pa., Ohio, Ind., and Mich. combined	Net tons, f.o.b. mine	2
<i>Journal of Commerce</i> , 63 Park Row, New York, N. Y.	Complete list weekly, some prices daily	Pittsburgh, Pa. Baltimore, Md. Charleston, S. C. Chicago, Ill.	F.o.b. mine Gross tons, f.o.b. pier Gross tons, f.o.b. pier Net tons, f.o.b. mine	6 1 1 5

Galveston, Texas	Gross tons, f.o.b. pier	1
Gulfport, Miss.	Gross tons, f.o.b. pier	1
Hampton Roads, Va.	Gross tons, f.o.b. pier	1
Hampton Roads, Va.	Net tons, f.o.b. mine	3
Mobile, Ala.	Gross tons, f.o.b. pier	1
New Orleans, La.	Gross tons, f.o.b. pier	1
New York, N. Y.	Gross tons, f.a.s.	1
New York, N. Y.	Net tons, f.o.b. mine	4
New York, N. Y.	Retail	1
Pensacola, Fla.	Gross tons, f.o.b. pier	1
Philadelphia, Pa.	Gross tons, f.o.b. pier	1
Pittsburgh, Pa.	Net tons, f.o.b. mine	5
Savannah, Ga.	Gross tons, f.o.b. pier	1
Boston, Mass.	(on cars at Boston)	4-6
Boston, Mass.	(f.o.b. mine)	1-4
Hampton Roads, Va.	F.o.b. pier	1
New York, N. Y.	(f.o.b. mine)	10
Norfolk, Va.	(f.o.b. mine)	23-30
Philadelphia, Pa.	(f.o.b. mine)	9
Pittsburgh, Pa.	F.o.b. mine	18
Providence, R. I.	(on cars at Providence)	4
Irregularly		

Saward's Journal,
15 Park Row,
New York, N. Y.

NOTE: When the type of price quoted was not mentioned in the journal, the Committee has stated in parentheses its interpretation of the type of price quoted.

* In July 1937 *The Annalist* discontinued its collection of one quotation for bituminous coal and substituted "a composite of nineteen price series, covering the more important fields, . . . based on quotations published in *The New York Journal of Commerce and Saward's Journal*" (Winthrop W. Case, *The Annalist Index of Wholesale Commodity Prices Revised and Improved*, *The Annalist*, July 9, 1937, p. 45).

the National Industrial Conference Board collects retail prices of bituminous coal sold for household use. In the *Conference Board Service Letter*, issued monthly, an index of coal prices including both anthracite and bituminous is published. More detail is given in the studies of the Board such as *The Cost of Living in the United States in 1914-30* and in *1914-36*. These volumes contain a monthly index of the retail prices of bituminous coal in the United States beginning in December 1925, for March, July, and November of each year 1919-25, inclusive, and for July 1914. In addition, indexes of retail prices of bituminous coal for selected cities are shown for one month of each year. For some localities the data begin in 1919.

a Types of Price

Most of the prices quoted in these journals consist of two types of wholesale price. Most of the wholesale prices are f.o.b. the mines, but for certain sections of the country prices at destination are frequently given, especially for coal that is delivered by a combination of rail and water to New England and to Minneapolis-St. Paul and certain other northwestern markets where coal is frequently sold f.o.b. docks, as well as for bunker coal, which is usually quoted f.o.b. piers.

A few journals publish retail prices. *The Chicago Journal of Commerce* covers intensively the retail market in Chicago. *The Commercial Bulletin* quotes 9 prices at retail in Boston. *The Journal of Commerce* has a retail price in New York, and the *Black Diamond* occasionally quotes retail prices in Cincinnati and Nashville.

b Availability of Price Data

These many data on current prices of bituminous coal are, unfortunately, not readily available. In general the journals that collect prices of bituminous coal do not publish summaries or even maintain any file of prices in their offices. As a result, it is usually necessary to consult each issue in order to secure a continuous series of prices. The chief exception is *The Annalist*, which has the prices from 1928 to date summarized in its office; the data from 1923 to 1928 are not so readily available. In addition, its files contain prices for two series of coal that are not published currently. A few of the series published by *Saward's Journal* are summarized in *Saward's Annual*. The annual edi-

tion of the *Chicago Journal of Commerce* carries a monthly tabulation of coal prices during the year. *Coal Age* formerly followed a similar practice for some of its series.

c Method of collecting Quotations for Bituminous Coal

The method generally used to secure quotations on various grades and sizes of coal is for the reporter or correspondent to call or visit a few outstanding coal companies and ask what the prevailing prices are. Sydney Hale, editor of *Coal Age*, emphasized the fact that the reliability of the reported prices of bituminous coal depends upon the reporter. The accuracy of his quotations is largely dependent upon his judgment, the number of his contacts, and his ability to find persons who will quote reliable prices. H. A. Lindenberg of *The Commercial Bulletin* commented:

"Our information is secured in the only way possible where a commodity is not sold over an exchange, that is by daily contacts with friends among coal buyers and sellers, including wholesalers, retailers, and mine representatives. It is only possible to do this at all well after one has built up friendships, using tact, intelligence, and a willingness to swap information to obtain satisfactory information. No matter how clever a daily newspaper reporter, or how serious a statistical expert, he will flounder in securing accurate coal prices unless he knows on whom he can rely for trustworthy facts. The only way we know is by experience, over a space of years. Our friendships in all trades are our 'stock in trade'."

The various quotations received by a reporter may be summarized by giving a range of prices. The late E. I. Koontz of the *Journal of Commerce* pointed out that a range in price may indicate also slight differences in grading and specifications.

Opinion seems general that little if any coal is sold for as much as the quotations published by the journals. First, the quotations are of spot rather than contract prices. Second, a distinction must be made between 'asking prices', which are given to the reporters, and 'selling prices', which may differ slightly for each sale. Finally, it is necessary to discount a bias for high prices. At least one reporter has a definite policy of quoting above the market in order to aid in maintaining the price level. That two journals quote identical prices for the same grade of coal in a market does not necessarily prove the

accuracy of the quotations, for the same reporter is sometimes used by non-competing papers.

B COST, SALES REALIZATION, MARGIN, AND INVESTMENT DATA

There are no continuous series of data pertaining to costs of production, sales realization, margins, and investment. Information has been collected only at irregular intervals and almost entirely by Federal agencies or by agencies provided for by Federal legislation, as under the Bituminous Coal Code. An important exception are the cost and sales realization data compiled by the National Coal Association for 1919 and 1920.

1 COST, SALES REALIZATION, AND MARGIN DATA

The important studies of production costs, sales realizations, and margins were made by the Federal Trade Commission, the National Coal Association, the United States Coal Commission of 1922, and the Research and Planning Division of the NRA. Additional cost and sales realization data were compiled by the National Bituminous Coal Commission established under the Bituminous Coal Conservation Act of 1935, from figures submitted to it by district boards, but this information has not been made available for public use.

a Federal Trade Commission

Pursuant to directions from Congress, the Federal Trade Commission collected and published costs and sales realizations by districts, states, and general competitive regions for 1916, 1917, and 1918. It began to collect comparable data in 1920 but stopped in July when the number of returns fell off because an injunction prohibiting the requiring of cost reports was obtained by the Maynard Coal Company against the Commission. The data for the first six months of 1920 were published in monthly reports of the Commission.

The nature of the information collected, the timing, and the coverage are shown in Table I-5. Prior to August 1917 the data are based on sworn reports submitted by operators in support of applications for revision of official selling prices or were obtained directly from the operators' books by the Commission's agents. The information from August 1917 to December 1918, inclusive, was obtained from monthly reports by the operators

on the detailed schedules prescribed by the Commission. The information is of two kinds: 'Claimed costs' and 'Revised costs'. The basis of the revision as described by the Commission follows:

"The 'claimed costs' are compiled from the original figures which appear on the operators' reports. The 'revised costs' are compiled from such reports, after the 'claimed costs' were revised by the accounting staff of the commission in order to readjust monthly costs and to eliminate inflated costs. As example of the first kind of revision may be mentioned the prorating, over several months, of payments for supplies, insurance, taxes, etc., made in some one month, but which apply to several months' operations. There were also a few instances of obviously inflated costs. The obvious inflations on the monthly cost reports were detected through the comparison of the costs of such operators, either with their own previously reported costs, or with costs of the other operators operating under similar conditions. In each case the operator was given opportunity to furnish a supplementary statement showing the principal items making up the cost item which was questioned, and on the basis of such detailed information the revision was made by the commission's accountants.

"It is with full appreciation of the patient cooperation of the great majority of operators, the honesty and the accuracy of whose cost reports are not open to question, that the commission is able to point out that the cost of from 90 to 95 per cent of the tonnage reported could be accepted as substantially correct. Certain revisions were found necessary, however. Sometimes they operated to reduce costs, and at other times they increased them.

As will be seen from an examination of the tables and charts appearing in this report, showing a comparison of 'claimed' and 'revised' costs, the revision made by the commission had little appreciable effect on the costs shown. Most of the revision occurs under 'General expense', where most of the inflation was found to have taken place."⁴

The cost data do not include any of the following items: "Reserves for uninsurable hazards, such as mine fires, floods, cave-

⁴ *Report of the United States Coal Commission* (Washington, Government Printing Office, 1925), Part IV, p. 2,028.

TABLE 1-5
 Cost, Sales Realization, and Margin Data for the Bituminous
 Coal Industry available in Published Reports

PERIOD	COMPILER	TIMING	No. of mines or operators	No. of districts or fields	COVERAGE		NATURE OF DATA
					Approximate production (in thousands)	Percentage of total output	
1916, 1917, and 1918	Federal Trade Commission	1916, annual; 1 1917 and 1918 by month and year	291 operators	30 out of 74 districts	119,755	20.7 per cent of 1918 output	Per ton labor, supplies, general expense, and total f.o.b. mine costs, sales realizations, and margins
Aug. 1917 to Dec. 1918, incl.	Federal Trade Commission	Varying monthly combinations	632 to 801 operators	43 out of 74 districts	122,715 in 1918	21.2 per cent of 1918 output	Total f.o.b. mine costs, sales realizations, and margins
1918	Federal Trade Commission	By quarters and for year	4410 mines	74 (all districts)	497,316	86	Per ton labor, supplies, general expense, and total f.o.b. mine costs, sales realizations, and margins
1916, 1917, 1918, 1921, and 1922	U. S. Coal Commission	By year; 1922 by quarters also	217 operators	31 out of 92 fields	89,632 in 1918 57,885 in 1922	14 in 1918 15.8 in 1922	Per ton labor, supplies, general expense, and total f.o.b. mine costs, sales realizations, and margins

SURVEY OF AVAILABLE DATA

1918, 1921, and 1922	U. S. Coal Commission	1918, for year; 1921 and 1922, by quarters and for year	1,180 operators	83 out of 92 fields	372,152 in 1918 262,795 in 1921 237,786 in 1922	65.7 in 1918 64.7 in 1921 57.4 in 1922	Per ton labor, supplies, general expense, and total f.o.b. mine costs, sales realizations, and margins
1919, and 1st 9 months of 1920	U. S. Coal Commission ²	1919 for year; 1920, Jan. to Mar. and Apr. to Sept.	264 operators	45 out of 92 fields	86,554 in 1918	15 per cent of 1918 output	Per ton labor, supplies, general expense, and total f.o.b. mine costs, sales realizations, and margins
1921 and 1922	U. S. Coal Commission	By month and for year	1,747 operators	86 out of 92 fields	321,677 in 1921 295,089 in 1922	77.3 in 1921 69.9 in 1922	Per ton labor, supplies, general expense, and total f.o.b. mine costs, sales realizations, and margins
Nov. 1933 to Jan. 1935, incl.; for some fields data available for 1 to 5 months only	Research and Planning Division, NRA	By month and combinations of months	No. varies for different periods	No. varies for different periods	Production varies for different periods	71.2 for Nov.-Dec. 1933; 65.8 for Jan.-Mar. 1934, and 61.2 for April 1934-Jan. 1935	See text, Ap. I, B. 1, c

¹ For six districts data for 1916 are not complete for the year.

² Data were originally obtained by a Senate committee (Calder Committee) from the files of the National Coal Association.

ins, squeezes, strikes, or other similar causes contributing to destruction of property, and idleness at the mines; extra cost development work done during the war, and involving an increased risk in the amortization of the capital under a normal regime of prices of coal; selling expenses, where a selling organization, other than the mine office force, is maintained in order to market the product; interest on the investment; allowances for income and excess-profits taxes, gross and net profit on the investment." ⁵

Table I-5 shows that the data for 1918 on costs, sales realizations, and margins represented substantially the entire industry, but covered in 1916 and 1917 only about one-fifth of the 1918 production. The Commission "believed that a sufficient proportion of the companies was covered in 1916-17 to be representative at least of the particular districts in which the companies then covered are located." ⁶

b United States Coal Commission

The United States Coal Commission collected cost and sales realization data from 2,399 operators who operated mines in 86 fields and produced approximately 77.3 per cent of the total bituminous coal output in 1921 and 69.9 per cent in 1922. In addition to the information collected by its staff, the Commission made use of the data collected by the Federal Trade Commission and those obtained from the files of the National Coal Association, by the Select Committee on Reconstruction and Production of the United States Senate (66th Cong., 3d Sess.), often known as the Calder Committee.

From these data the Commission was able to compile the costs, sales realizations, and margins for 217 identical operators in 11 states for 1916, 1917, 1918, 1921, and 1922, and for 83 of these operators for 1919 and the first three quarters of 1920. It also published similar information for 1,180 operators in 23 states for 1918, 1921, and 1922, and for 264 of these operators for 1919 and the first nine months of 1920. The type of data, the timing, and coverage are shown in Table I-5.

⁵ *Cost Reports of the Federal Trade Commission, Coal, No. 1* (Government Printing Office, Washington, 1919), p. 5.

⁶ *Investment and Profits in Soft-Coal Mining* (Government Printing Office, Washington, 1922), p. 22.

The data for 1921 and 1922 were obtained from reports by the operators on schedules prescribed by the Commission. The information was certified by a responsible official of the company. For 1919 and 1920 the information was taken chiefly from the work sheets of the Calder Committee which had originally been computed by the National Coal Association from uncertified reports submitted by the operators. The Commission regarded this information as "substantially reliable". The data, which were not revised, did not show separate costs for labor, supplies, and other expenses. The Commission, however, was able to allocate these items of cost by making use of the information collected by the Federal Trade Commission for the first six months of 1920 (see preceding section, a).

The statistics from all sources on costs of labor and of supplies are strictly comparable, but not those on general expenses and total f.o.b. mine costs. The Coal Commission data for these items do not agree with those of the Federal Trade Commission because different bases were used in reporting depletion and depreciation charges. "Under the Federal Trade Commission's rules, when any operator was found to have returned depletion and depreciation charges based on values in excess of his original investment, such charges were 'revised' or cut down to his 'original costs', or to the general average of the field, if 'original costs' could not be secured. In the case of the United States Coal Commission reports the operator was asked to report the depletion and depreciation charges actually carried on his books. These were usually based on the Treasury ruling governing such charges, and were tabulated by the Coal Commission as reported." ⁷ A test tabulation made by the Coal Commission disclosed that its total per ton f.o.b. mine costs, owing to differences in the bases used in determining depletion and depreciation charges, were four cents higher on the average than similar costs computed under the Federal Trade Commission's ruling. The total f.o.b. mine costs did not include "allowance for the use of capital invested, whether owned by the operator or in the form of borrowed funds".

Sales realizations published by the Coal Commission, except the data of the Calder Committee, were "obtained by dividing the tonnage of coal sold into the total amount received for its sale, less selling expenses reported by the operator. This applies

⁷ *Report of the United States Coal Commission, Part IV, p. 2,029.*

to all statistics of sales realizations, whether derived from Federal Trade Commission or United States Coal Commission sources. This method differs from that used in arriving at the sales realizations shown in the published Federal Trade Commission reports in which there was no deduction of selling expenses." ⁸ Sales realization obtained by the Calder Committee was "gross sales realization before deducting selling commission", while the figures published by the Coal Commission are 'net' after deducting selling expense.

The 'margin', which is the difference between the sales realization per ton and the f.o.b. mine cost per ton, "is practically equivalent to net operating income before the payment of interest or Federal taxes". The margins shown by the Coal Commission for 1919 and subsequent years are strictly comparable. Because different methods were used in reporting depletion and depreciation charges, the Coal Commission's original data are not comparable with those of the Federal Trade Commission or even with data derived by the Coal Commission from the Federal Trade Commission's files.

c Research and Planning Division, NRA

Pursuant to the provisions of the Bituminous Coal Code, the Bituminous Coal Section of the Research and Planning Division of the NRA collected among other data detailed information pertaining to costs and sales realizations. Most of it is available on a monthly basis from November 1933 through January 1935 for 55 fields or seam groups producing approximately 61 per cent of total output. For 25 additional fields, most of which are west of the Mississippi River, the data are shown for varying periods, usually from three to five months, November 1933 to March 1934. The total coverage for all districts as a percentage of total production, was 71.2 for November-December 1933, 65.8 for January-February-March 1934, and 61.2 for April 1934 to January 1935. The original data were collected on monthly schedules from mines, other than captive mines, producing 150 tons or more per month.

Those responsible for the collection and compilation of the information made every effort to ensure its reliability. The forms and the general instructions were prepared by statisticians, accountants, engineers, and executives, several of whom

⁸ *Ibid.*, p. 2,031.

had had long experience in the industry. These forms and instructions were reviewed and criticized by a large number of mine accountants and operating executives. To avoid misunderstandings and misinterpretations, training classes were held at accessible cities for those who were to fill in the forms for the individual mines and companies. Detailed instructions were drawn up to supplement the general instructions as questions arose in connection with the preparation of the data at the mines. All figures were certified by a responsible official of the company submitting them. When filled in the forms were forwarded to the offices of the Divisional and Sub-divisional Code Authorities and, when necessary, referred back to the mine for correction. The data contained on these forms were transferred at the offices of the Code Authorities to standard work-sheets prepared by the statisticians of the Bituminous Coal Code Section. When the basic data were received by the Bituminous Coal Code Section, they were edited again with the utmost care and in many instances items were referred back to the Code Authorities for verification and correction. In certain instances, the Washington office sent an expert accountant to spot-check the information reported. The data on forms that met the tests laid down by the Bituminous Coal Code Section were then compiled by seam group, subdivisions, and divisions.

The published volumes contain an invaluable body of data.⁹ In addition to sales realization and margin data, per ton costs are available for the following items:

- 1) Total labor cost
 - a) Daymen (paid by hour, day or month)
 - b) Mining (piece- and day-workers)
 - c) Yardage and deadwork
 - d) Mine supervisory and clerical workers
- 2) Total mine supplies
 - a) All supplies (except power and fuel)
 - b) Power purchased
 - c) Mine fuel at preceding month's cost
- 3) Total mine labor and supplies

⁹ The basic data were published in four folios by the Research and Planning Division of the NRA. The information was partly summarized in *Economic Survey of the Bituminous Coal Industry under Free Competition and Code Regulation*, by Berquist and Associates (National Recovery Administration, Division of Review, March 1936).

- 4) Other mine expenses
 - a) Salaries and expenses of other employees distributed to this mine
 - b) Mine office expense (not elsewhere reported)
- 5) Charges usually on a fixed lump-sum basis
 - a) Taxes on mine property and equipment and other taxes in lieu thereof (except on unassigned acreage)
 - b) Insurance (all classes except compensation)
 - c) Company house expense including fixed charges thereon, less income
 - d) Depreciation (as per calculation for income tax return)
- 6) Total mine expenses and charges usually on a fixed lump-sum basis
- 7) Charges usually on a per ton basis
 - a) Royalties paid or accrued
 - b) Operators' association dues and assessments
 - c) Compensation insurance paid or accrued
 - d) Code authority expense
 - e) Depletion (as per calculation for income tax return)
- 8) Total producing cost
- 9) Total selling expenses
- 10) Total administrative expenses
- 11) Total cost per ton

Additional data pertaining to labor and supply costs for working days, idle days, and Sundays and holidays "provided a basis for projecting costs as reported for the number of days actually worked in any month to an estimated or approximate cost if the mines in the group had worked different numbers of days during the month".¹⁰

The cost information is available by seam groups, subdivisions, and divisions. For each classification the tables show the number of mines, the number of days the tippie started, the number of working days the tippie was idle, the number of holidays and Sundays, and the total net tons produced.

The cost data do not include capital charges (interest on bonds, mortgages, etc.), costs of activities not directly related or pertinent to coal mining operations, carrying charges and taxes for unassigned acreage (reserve acreage not a part of

¹⁰ Berquist and Associates, *op. cit.*, p. 553.

operating reserves of active mines), and taxes on income or sales taxes not paid by the producer.

To obtain an average sales realization per ton of coal the Bituminous Coal Section collected detailed income and production figures for: (a) orders and contracts, (b) shipments to storage, (c) coal forwarded to beehive ovens and briquetting plants, (d) sales at mine to dealers and retail customers (including house coal), (e) net change in inventory (coal used at the mine for power or heat). The total sales realization for these items was divided by the total production involved.

In order to show separately the tonnage and the realization pertaining to contracts made prior to the Code, and those pertaining to orders received after the Code became effective, the Bituminous Coal Code Section collected also for November and December 1933 detailed monthly information on the tons shipped to, and income received by sizes from, each different price zone.

d National Bituminous Coal Commission

The National Bituminous Coal Commission was established under the Bituminous Coal Conservation Act of 1935. This Act required code members to report all spot orders to the district boards, and upon the request of the Commission to file with it all copies of contracts, invoices, credit memoranda, and other information concerning the preparation, cost, sale, and distribution of coal. District boards were empowered to set up statistical bureaus under their own jurisdiction. Individual mines reporting to these district boards or their statistical bureaus were protected by provision for confidential treatment of their data. It was not intended that the Commission should take possession of the individual mine reports. The Commission, however, was to be furnished summary figures compiled from the mine reports by the several district boards. Under the circumstances, the data that had been received and were under study at the time of the Supreme Court decision which terminated all price provisions are not available for public use. The short time before the Supreme Court decision precluded steps by the Coal Commission to audit cost statements or other statistical data.

It is not known whether the cost, price, and distribution data resting in the already disorganized statistical bureaus set up

under the old law will ever become available for study or whether the district summaries of these reports as submitted to the Coal Commission will be opened for public use.

The Bituminous Coal Act of 1937 created a new National Bituminous Coal Commission which is authorized to require code members to report all spot orders and to file with its statistical bureau "copies of contracts for the sale of coal, copies of all invoices, copies of all credit memoranda, and such other information concerning the preparation, cost, sale, and distribution of coal as the Commission may authorize or require".¹¹ Since the life of the Commission is four years, it is conceivable that for these years a continuous series of cost, sales realization, and margin data may be made available for the use of the industry, economists, and students of coal.

e United States Bureau of the Census

The Bureau of the Census in its decennial reports for mines and quarries publishes data on salaries, wages, supplies, fuel, purchased electric energy, contract work, and expenditures for development, as well as the value of all products and coal produced. Prior to 1929 this information was compiled for the industry as a whole, by states, and by major geographic provinces and regions. The data for 1929 are available for the industry, by states, and by coal producing counties.

In 1935 the Bureau of Mines in cooperation with the Bureau of the Census gathered information on the cost of supplies and materials, fuel, and purchased electric current and the total compensation of: (a) proprietors and firm members, (b) salaried officers of corporations, (c) supervisory and technical employees, (d) other salaried employees, (e) wage earners.

These data, notwithstanding certain differences in the scope and form of presentation from census to census, are essentially similar and may be used to show changes and trends in the industry. They are not, however, comparable with the more elaborate studies referred to above.

¹¹ *National Bituminous Coal Act of 1937*, Public No. 48, 75th Cong. (Ch. 127, 1st Sess.) HR 4985, p. 6.

f United States Bureau of Mines

The Bureau of Mines compiles annually the total mine value of bituminous coal produced and the average value per ton at the mines f.o.b. cars, for the industry as a whole and for important coal producing states and counties. From time to time it gives this information also for major producing fields and areas. It publishes these data in its annual reports or in its weekly coal reports. The average value per ton are available for the industry as a whole as far back as 1880.

The following paragraphs give the methods used in compiling and preparing the data and state the limitations of the published figures:

"The value given is the amount received at the mines f.o.b. cars minus the selling expense, and the average value per ton is the average amount received, obtained by dividing the total value by the number of tons sold or produced. Coal used at the mines, coal coked by the producing company, and coal used in some other industry by that company—in all, forming a considerable part of the total output—is not sold, and the value placed upon it is either an estimate or the amount at which it is carried on the company's books. Either value is presumably the amount the coal would have brought if it had been sold or the amount other fuel for the purpose stated would have cost if it had been purchased. In other words, the values given represent returns to the operators for coal sold plus the estimated value of that not sold. The value thus fixed is more or less arbitrary and does not necessarily represent the current prices for coal sold commercially. Many mines are owned by consumers who take all or a great part of their output at nominal prices. The output of such 'captive' mines was 22.7 per cent of the entire production in 1926. In 1929, for example, the average value reported by 'captive' companies was \$1.99 a ton, or considerably more than that reported by the commercial companies, which was \$1.72. Even where the coal is actually sold large quantities may be moved on 'cost plus' contracts that provide for prices below the average spot prices in the field or the average prices received for coal delivered under ordinary contracts. The figures . . . , therefore, do not necessarily show prices on the commercial market or even an average of the prices at the mines. Taken

over a period of years, however, they do furnish a faithful index to the rise and fall in the value of coal.

The computed 'average value per ton' is thus affected by the value placed by the operator upon coal used at the mine but not shipped. In order to ascertain how large an influence the inclusion of this noncommercial coal might have upon the average, the operators were requested for several years to give separate statements of value for coal loaded at the mines for shipment, for sales to local trade, and for mine fuel and coal made into beehive coke. It was found, however, that for practical purposes the average value of all the coal produced may be accepted as a measure of the average value of the coal shipped. The values placed by operators on mine fuel and upon the coal coked were generally somewhat less than the average amounts received for the coal shipped, but the quantities to which these lower values applied were so much smaller than the quantity shipped that their effect upon the average for all coal was negligible."¹²

g State Departments or Bureaus of Mines

When data by mines are needed the yearly figures of average value per ton published by various state departments of mines are especially useful. But the data published in many of these reports must be carefully scrutinized. Some of the reports have been carelessly assembled. In many instances the methods by which the data were prepared are not stated, and unweighted averages are not uncommon. Many of the data made available by these agencies are published in more usable form in United States Bureau of Mines reports.

2 INVESTMENT AND PROFIT DATA

Investment and profit information was compiled and published by the Federal Trade Commission for 1916-21 and by the United States Coal Commission for the decade 1913-22. Investment data were also collected by the National Coal Association for 1919 and 1920. The Association's figures were based on incomplete schedules and the invested capital included capital invested by the company in outside businesses not connected with the coal industry.¹³

¹² Tryon, Mann, and Rogers. *Coal in 1930*, pp. 645 and 646.

¹³ *Investment and Profits in Soft-Coal Mining*, pp. 34-37.

a Federal Trade Commission

The Federal Trade Commission collected and published investment data as of December 31, 1919 for 1,126 companies (producing approximately 32 per cent of the country's average annual output) in 70 of the 74 mining districts of the country as classified by the Fuel Administration. The Commission excluded outside investments in securities and in properties not related to the coal mining business but included undeveloped reserves of coal lands. The investment data include: "Capital stock; bonded indebtedness, mortgages and secured loans; long and short term notes payable; amounts due affiliated companies for current accounts, notes or loans payable; surplus;—less outside investments in Liberty bonds or other securities, and less securities of affiliated companies including current accounts, notes, or loans receivable from affiliated companies." ¹⁴ 'Net margin' as defined by the Commission is the difference between cost of production and sales realization, less the actual selling expense. It is equivalent to net operating revenue before payment of interest or Federal taxes. These net margin data differ from the 'margin' figures published in the Coal Cost Reports of the Commission in that the latter included actual selling expenses.

The Commission's investment data were derived from detailed balance sheets which it secured from the operators on its own forms. From these data the Commission published the investment per ton, net margin, and the approximate rate of net income by regions, states, districts, and the country as a whole. The rate of net income for all years reported is based on the net investment as of December 31, 1919. For 1916–20 the data cover 787 companies in 30 districts and for 1918–21, 1,126 companies in 70 districts. The cost and margin information used in this report was collected in part by the Commission and in part by the National Coal Association. The Commission gathered data for 1916, 1917, 1918, and for six months of 1920, and the National Coal Association for 1919, 1920 (January to September, inclusive), and 1921. The Association's figures were unrevised. Both the investment and the cost and margin data of the Commission were revised.

¹⁴ *Ibid.*, p. 23.

In discussing the validity of the data in its report, the Commission wrote:

"The Commission believes its investment group is representative. Its margin group for 1918 is unquestionably so, covering practically all important concerns; its margin group for 1916-17 has been found representative by test, with certain local exceptions that are noted. As for the margin groups for which the National Coal Association collected reports (1919, 1920, and 1921), the officials of the association, by use of the figures as showing results of the 'bituminous coal industry' and by testimony or published statement, have expressed their belief in the representativeness, broadly at least, of their data.

The data, while incomplete and only partially verified, may be taken as probably showing an understatement of the rate of net income in the soft coal mining industry for this period. The unrevised costs and margins collected by the National Coal Association and the rates derived therefrom are not vouched for by the commission in any way, and they must be considered merely as the best available under the circumstances. The inquiry has not covered profits of selling companies, though in some instances it is known that these are owned by or affiliated with the same interests that mine the coal." ¹⁵

b United States Coal Commission

The United States Coal Commission collected information for investment and profits on prepared schedules which were filled out and sworn to by bituminous coal operators. Data for 88 operators who produced about 15 per cent of the country's output were published for the decade 1913-22. Similar information was published for 175 operators, mining approximately 30 per cent of total output, for 1918-22, and for 215 operators, producing from 31 to 38 per cent of total output for 1920, 1921, and 1922. Only operators whose average annual production was 250,000 net tons or over were included.

The investment figures per ton were obtained "by dividing the production tonnage into the total amount of money involved in the coal-production operations, whether invested by the stockholders or borrowed on notes or bonds from outside sources".¹⁶ The figures of 'net income' are those derived solely

¹⁵ *Ibid.*, p. 3.

¹⁶ *Report of the United States Coal Commission, Part IV, p. 2,519.*

from coal operation before any deductions for Federal taxes.

The data were compiled directly from the information supplied by the operators on the prescribed forms. While the Commission carefully edited the schedules for inaccuracies and omissions, it made no revisions "in the figures reported by the operators as 'book values' with a view to altering in any way the effect produced either by appreciated or decreased values of assets thus represented", nor were the net income figures "adjusted to modify what various advocates might consider either excessive or insufficient charges for depletion, depreciation, or amortization of property accounts".¹⁷

The information, which includes total assets, net income, stockholders' equity and net income, total investment in coal operations and net income, outside investment and income, borrowed funds and interest paid, surplus arising from revaluation of property assets, depletion and depreciation reserves, Federal income and excess profit taxes, and capital stock and dividends, is given for 16 field groups and for 5 geographic regions. It was impracticable to give separate figures for each mining field.

C OTHER RELATED DATA COLLECTED CURRENTLY OR PERIODICALLY

In surveying the data that have a bearing on the prices of bituminous coal, one is confronted with a mass of statistics compiled by many Federal and state agencies. Their publication in numerous bulletins makes it impossible at this time to give for each series its description, timing, period covered, and compiler. For this reason only the important statistics that are published as continuous series by certain of the outstanding sources of information are described. Of the sources considered in this Section, the Bureau of Mines¹⁸ is of inestimable value.

¹⁷ *Ibid.*, p. 2,517.

¹⁸ Prior to 1924 the service was rendered by the Geological Survey, Department of the Interior. On July 10, 1937 the statistical service for bituminous coal was transferred to the National Bituminous Coal Commission. The service to be rendered by the Commission includes "rapid-fire measurement of trends of all the factors of the market—production, consumption, stocks on hand, distribution, exports, imports and price movements. To give a background for current changes, the long-time trends will also be developed to show demand, capacity, mechanical equipment, operating practice, employment and running time" (National Bituminous Coal Commission, Release No. 30, July 10, 1937).

A second important source, because of its completeness, is the Census of Mines and Quarries. Other Federal sources are the Interstate Commerce Commission, the Federal Power Commission, the Bureaus of Foreign and Domestic Commerce, of Internal Revenue, and of Labor Statistics, which in addition to retail and wholesale prices compiles data on employment, payrolls, employee hours, earnings, and wages.

I UNITED STATES BUREAU OF MINES

For many years the Bureau of Mines has collected data on the quantity and value of production, labor, consumption, distribution, stocks of coal held by consumers, and equipment and methods of mining and preparation. The production figures published by the Bureau are summarized in Table I-6. The data on total value of production and average value per ton at the mines f.o.b. cars were described under Section B. The following paragraphs discuss briefly the other important continuous series made available by the Bureau.

a Labor Statistics

The basic statistics on labor deal with number of employees, length of working day, strikes, suspensions, and lockouts, accidents, average days worked by bituminous mines, and average output per man per day. The data on the total number of employees go back to 1890 and those for important occupational groups to 1920. The number of employees at mines engaged in stripping operations are available since 1914 and data for certain occupational groups at strip mines since 1923. The estimated number of working days per week have been published since 1919 and the length of the working day measured in terms of mine time and not the hours actually worked by the men since 1903 except for 1908 and 1909. The statistics on strikes, suspensions, and lockouts and the average number of days lost on account of strikes are available since 1899. The number of fatal accidents for certain states go back to 1839 and more detailed data on causes of accidents, including also non-fatal accidents, have been published for later years. The average days worked each year by bituminous mines are available for the country as a whole since 1880, by states since 1890, and by counties since 1899. Similar information for mines engaged in

TABLE 1-6

**Data on Production Compiled by the United States
Bureau of Mines**

ANNUAL PRODUCTION

DESCRIPTION	TOTAL		
	UNITED STATES	BY STATES	BY COUNTIES
Total ¹	1822-	1822-	1895-
Loaded at mines for shipment	1889-	1889-	1899-
Sold to local trade and used by employees	1889-1931	1889-1931	1899-1931
Trucked to distant points	1932	1932	1932
Sold to local trade, used by employees, and nearby trucking	1932	1932	1932
Commercial sales by truck or wagon	1933-	1933-	1933-
Other sales to local trade, or used by employees, or taken by locomotives at tippie	1933-	1933-	1933-
Used at mines for power and heat	1889-	1889-	1899-
Made into coke at mines	1889-	1889-	1899-
Stripping operations ²			
Total strip pits, all types	1914-	1914-	1923-
Total from mines combining stripping and underground methods	1914-	1914-	1923-
Per man per day from mines combining stripping and underground methods	1914-	1914-	1923-
Average per shovel from strip pits	1914-	1914-	1923-
Total from power strip pits proper	1914-	1914-	1923-
Average per man per day at mines combining power stripping and underground methods	1914-	1914-	1923-
Total from horse stripping operations	1922-		
Average per man per day from mines combining horse stripping and underground methods	1922-		
Underground mining			
Total underground	1928-	1928-	
Per man per year underground	1928-	1928-	
Per man per day underground	1911-	1911-	

ANNUAL PRODUCTION (Cont.)

DESCRIPTION	TOTAL		BY COUNTIES
	UNITED STATES	BY STATES	
Type of equipment			
Total mined by undercutting machine underground	1891, 1896-	1891, 1896-	
Average per undercutting machine underground	1891, 1896-	1913, 1922-	
Total loaded by machine	1923-1925	1923-1925	
Total loaded mechanically underground	1926, 1928-	1926, 1928-	
Loaded mechanically underground, by method	1926, 1928-		
Loaded by machine, by type of machine	1928-		
Handled by conveyors, by type of conveyor	1928-	1928-	
Total of mechanized mines (mines using loading machines only, including scrapers, duckbills, etc.)	1926, 1928-	1926, 1928-	
Total of mines using conveyors only (pit car loaders and other loading conveyors)	1928-	1928-	
Total of mines using both loading machines and conveyors	1928-	1928-	
Size classes of mines			
Total	1905, 1910-1914, 1917-	1910-1914, 1917, 1919-	
Average per mine	1910-1914, 1917, 1919-	1910-1914, 1917, 1919-	
Size of producing company ³	1895, 1905, 1920, 1929	1895, 1905, 1920, 1929	
Consumer owned mines	1913-1926	1913-1926	
Commercial mines	1913-1926		
Cleaning of coal			
Total mechanically cleaned by wet methods at the mine	1906-	1906-	
Total mechanically cleaned by wet methods at central washeries operated by consumers	1927-		
Total mechanically cleaned by wet methods	1927-		
Total mechanically cleaned by pneumatic methods	1927-		
Total by wet and pneumatic methods	1927-	1927-	

ANNUAL PRODUCTION (Cont.)

DESCRIPTION	TOTAL		
	UNITED STATES	BY STATES	BY COUNTIES
Cleaning of coal (<i>cont.</i>)			
Total by wet methods classified by type of equip- ment used	1927-		
Total washed coal charged in by-product ovens	1914-1929		
Total washed coal charged in beehive ovens	1890-1892 1914-1929		
Total washed coal charged in all ovens	1890-1929		

MONTHLY PRODUCTION

Total (estimated)	1905-	1917-
Average per working day per month	1905-1930	1923-1925, 1927-1930
Bituminous coal less coal equivalent of coke made in the same months	1912-1930	

WEEKLY PRODUCTION

Total (estimated)	1917-	1917
Average per working day per week	1919-	

¹ Also available for U. S. Coal Commission fields since 1920 and for Coal Conservation Act districts since 1925.

² See also O. E. Kiessling, F. G. Tryon, and L. Mann, *The Economics of Strip Coal Mining*, Economic Paper 11 (Government Printing Office, Washington, 1931).

³ Also available for U. S. Coal Commission fields for 1929.

stripping go back to 1914 for states and the country as a whole, and to 1923 for counties.

The average output per man per day and per year for all bituminous mines has been compiled since 1890, and are available by states and counties. Similar data for states and for the country as a whole since 1914, and for counties since 1923, have been published for mines engaged in stripping operations. The statistics per man per day employed underground go back to 1911. Additional labor data are available for selected years.

b Consumption

For selected years since 1899 figures on the consumption of bituminous coal for the principal classes of consumers have been compiled by the Bureau of Mines. In this group are included colliery fuel, local sales at mines, locomotive fuel for all steam railways, coal loaded in bunkers of vessels in foreign trade, coal used at beehive and by-product coke ovens, gas and steam coal used at iron and steel works, as well as coal consumed by coal and water gas plants, electric public utilities, general manufacturing industries, and all other users. Statistics on the total consumption of bituminous coal in the United States are available by years since 1918. These were estimated by means of the following formula: total production plus imports minus exports, plus or minus changes in consumers' stocks. In addition the Bureau has collected the total bituminous coal consumed annually by coke beehive ovens and by coke by-product ovens since 1917. Data on the consumption of coal at coal mines are available for counties and for the country as a whole for many years. The Bureau also publishes the total annual consumption of coal by electric public utilities (compiled by the Federal Power Commission), and by locomotives of Class I steam railways (compiled by the Interstate Commerce Commission), as well as the coal delivered to bunkers of vessels engaged in foreign trade (compiled by the Bureau of Foreign and Domestic Commerce). Information for several other classes of consumers has been compiled by the Bureau for more recent years: steel works and rolling mills, coal-gas retorts, and cement mills.

The Bureau has also compiled data showing the effect of fuel economy on consumption of coal per unit of performance in certain industries and services. This series is described in Part II, B, 6 and 7. Closely related to consumption are the data on the annual supply of energy from mineral fuels and water power. This series for census years is available for many decades, and is continuous since 1918.

c Distribution

For 1917, 1918, and 1929, the Bureau of Mines made studies of the total movement of bituminous coal from each major producing field to each consuming state. The distribution of coke

was surveyed in 1916 and 1929. The information on the flow of bituminous coal published by the Bureau of Mines is "based upon reports received from the originating railroads, supplemented by returns from coal traffic associations and other trade sources". The data on the movement of coal to several important market areas have been made available by the Bureau by months and by years beginning about 1920. Compiled by railroad coal traffic organizations, they include lake cargo, the movement to Tidewater, the all-rail westward movement from the Appalachians, and the all-rail movements from Illinois, Indiana, and western Kentucky.

d Stocks of Coal held by Consumers

The stocks held by consumers have been compiled by the Bureau and are available for selected months for 1916-32 and by months for subsequent years. The consuming groups for which separate data are shown are by-product coke plants, steel plants, other industries, coal gas plants, electric public utilities, bituminous coal dealers, and railroads. Detailed statistics by localities are published in mimeographed form.

e Equipment and Methods of Mining and Preparation

For several years the Bureau has collected data on equipment and methods of mining and preparation. The information relating to methods of recovery, that is, mined by hand, shot off the solid, cut by machines, and from strip pits, goes back to 1911. The statistics on loading machines and conveyors were first compiled for 1923-25. The data for 1925 were revised and a comparable series developed for subsequent years. This series makes available for states and for the country as a whole the number of mines using mechanical loading, the number of machines in use, and the net tons mechanically mined. It gives also the net tons produced by different types of loader and conveyor.

The Bureau made a special study of underground haulage equipment in 1925 and of screening and sizing in 1927. Data relating to coal mechanically cleaned by wet and pneumatic methods have been compiled since 1927. During 1929 coal stripping, loading machinery, and mechanical cleaning were studied intensively.

2 CENSUS OF MINES AND QUARRIES¹⁹

The Census of Mines and Quarries contains several items of information not usually collected by the Bureau of Mines in its annual canvass of the bituminous coal industry. Questions were added to the regular schedules of the Bureau of Mines for 1935 which made the coverage more nearly like that of the Census.

The additional information secured for 1935, gathered by the Bureau of Mines in cooperation with the Bureau of the Census, included data on certain items of mine expenditures: cost of

- a) Supplies and materials
- b) Fuel for all purposes
- c) Purchased electric current

It included also data on the number of employees other than wage earners and their total compensation. These employees are classified as:

- a) Proprietors and firm members
- b) Salaried officers of corporations
- c) Supervisory and technical employees
- d) Other salaried employees

In addition to the data collected annually by the Bureau of Mines on the number of wage earners, the 1935 schedule called for the total amount of wages paid and for the amount of compensation received for work or services performed for other establishments.

The additional information obtained for 1935 is in general comparable to information obtained in the 1929 Census of Mines and Quarries, although there are some minor differences in classification. The 1935 schedule omits several groups of questions contained on the census schedule for 1929, the most important being those relating to: (a) the number of units of power equipment and their total horsepower, (b) the amounts and kinds of fuel consumed and the amount of electric current generated or purchased, (c) the distribution of sales by type of sales agency.

For purposes of price analysis the data collected by the Census of Mines and Quarries are of relatively little use. The data on total selling value of the product f.o.b. the mines may be used

¹⁹ Prepared by W. G. Fritz and T. A. Veenstra, Bureau of Business Research, University of Pittsburgh.

with the figures on quantity produced to compute average mine prices. Annual data collected by the Bureau of Mines will serve as well, however, and will in addition have the advantage of more frequent collection. A partial approach may be made to an analysis of costs through certain items of information obtained by the Census: (a) cost of supplies, fuel, and electric current, (b) total salaries and wages paid. These are items of direct costs. The schedule calls for the cost of development work and the cost of equipment purchased in the census year; but the irregularity of these items of expenditure makes the data of virtually no use for the estimation of indirect costs.

The classification of coal sales by distributing agency, in the 1929 Census, is important in price research. The number of tons and the total value are given for:

- a) Deliveries direct to consumers who own or control the mine through direct ownership, and sales to affiliated consumers
- b) Sales direct to other consumers (including retailers) invoiced by the main office of the mining company
- c) Sales arranged and invoiced by separate or branch sales offices of the mining company
- d) Sales through a separately incorporated selling company owned by the same interests as the mining company
- e) Sales to independent wholesalers or jobbers, and sales through non-affiliated agents on commission
- f) Other sales

This classification was not used in 1935. Replies to the questions on the 1929 Census schedule were required by Act of Congress, whereas the Bureau of Mines depends on voluntary cooperation. The latter's coverage is, however, quite complete, the exception being small 'wagon' mines.

The Bureau of the Census conducted a Census of Wholesale Business and of Retail Business for 1929, 1933, and 1935. The schedules contained questions on the sales of coal. The wholesale schedule called for a report on the number of tons sold and the dollar amount of net sales for bituminous and for anthracite coal. The retail schedule covered the number of tons of all kinds of coal sold and the dollar amount of net sales. Publication of the data collected, however, has not been in a form to secure maximum usefulness. Statistics for retail business are by type of business rather than by commodity. For example, data on sales, employees, wages, etc., are for coal and ice dealers.

TABLE I-7
 Supplementary Data on the Bituminous Coal Industry
 Compiled by Federal Agencies

DESCRIPTION	TIMING	PERIOD COVERED	COMPILER
<i>Consumption</i>			
Receipts, stocks, consumption, and costs of anthracite and bituminous coal for Class I steam railways	Annually	1917-	Interstate Commerce Commission
Same	Monthly	1921-	Interstate Commerce Commission
Consumption of coal by states for electric public utility power plants	Monthly	1919-	Federal Power Commission
	and Annually		
	(Data for January 1919 to June 1936, incl., compiled by U. S. Geological Survey)		
<i>Distribution</i>			
Tonnage of revenue coal hauled by Class I steam railways	Quarterly	1928-	Interstate Commerce Commission
Total revenue collected on coal by Class I steam railways	Quarterly	1928-	Interstate Commerce Commission
<i>Employment and Pay Rolls</i>			
Index of employment	Monthly	1929-	Interstate Commerce Commission
Index of pay rolls	Monthly	1929-	Bureau of Labor Statistics.
Average weekly earnings	Monthly	1929-	Division of Employment Statistics
Average hours worked per week	Monthly	Nov. 1932-	"
Average hourly earnings	Monthly	Nov. 1932-	"
			"
			"

Surveys of wages and hours of labor in bituminous coal mining	At 2- or 3-year intervals*	1919-	Division of Wages, Hours, and Working Conditions
<i>Imports and Exports</i>			
Source of imports and destination of exports by countries	Annually	1880-	Department of Commerce, Bureau of Foreign and Domestic Commerce
Total (source of imports and destination of exports by countries are shown only in preliminary reports subject to revision)	Monthly	1865-	" " "
<i>Income</i>			
Profit and loss for coal companies reporting to Bureau of Internal Revenue	Annually	1917-1921, 1925, 1928-	Bureau of Internal Revenue

* For publication of these data see Table I-8.

One table gives for each type of store the proportion of business done in each commodity sold. For wholesale businesses the dollar amount of net sales is shown for each major commodity. Coal and coke sales are combined, and one figure is shown for each type of wholesaler in each state.

3 SUPPLEMENTARY DATA ON THE BITUMINOUS COAL INDUSTRY COMPILED BY OTHER FEDERAL AGENCIES

In addition to the statistics published by the Bureaus of Mines and of the Census, other Federal agencies, including the Interstate Commerce Commission, the Federal Power Commission, the Bureaus of Foreign and Domestic Commerce, of Internal Revenue, and of Labor Statistics, compile data on bituminous coal, some of which are useful to those interested in price research (Table I-7). The hours and earnings data published by the Bureau of Labor Statistics are shown separately in Table I-8.

4 FEDERAL INVESTIGATION AND REGULATION OF THE BITUMINOUS COAL INDUSTRY

Much valuable information on bituminous coal has been brought together by Federal commissions and Congressional investigations. The published reports of the United States Coal Commission of 1922 should be mentioned especially. A chronological account of the hearings and investigations by the Federal government through various agencies and of laws dealing with the regulation of the industry since 1917 is given in Section D.

5 STATE DEPARTMENTS OF MINES

Departments or bureaus of mines have been established in twenty odd states. The large number of these agencies and the publication of the statistics compiled by them in numerous annual reports make it impossible at this time to present a careful survey of the data. The kind of statistics collected varies from state to state and frequently from year to year in a given state. The published data cover a wide variety of information, including statistics on production, value, consumption by uses, equipment and methods of recovery and preparation, number of employees engaged at the mines and in occupational groups or occupations, nationality, days worked by mines, thickness of

TABLE 1-8

**Publication of Surveys of Wages and Hours of Labor in
Bituminous Coal Mining, United States Bureau
of Labor Statistics**

YEAR	BULLETIN	TITLE
1919	279	Hours and Earnings in Anthracite Coal Mining in 1919 and 1920, and in Bituminous Coal Mining in 1919
1922	316	Hours and Earnings in Anthracite and Bituminous Coal Mining (Anthracite, January 1922; Bituminous, Winter of 1921-22).
1924	416	Hours and Earnings in Anthracite and Bituminous Coal Mining, 1922 and 1924
1926	454	Hours and Earnings in Bituminous Coal Mining, 1922, 1924, and 1926
1929	516	Hours and Earnings in Bituminous Coal Mining, 1929
1933	601	Wages and Hours of Labor in Bituminous Coal Mining, 1933
1936	(in preparation)	

seams, depth of mining, wages paid, analyses of coal, explosives used, number of new mines and of abandoned mines, and number and causes of accidents.

The caution with which these reports must be used was mentioned under Section B, l, g.

D CHRONOLOGY OF FEDERAL INVESTIGATION AND REGULATION OF THE BITUMINOUS COAL INDUSTRY²⁰

1917-1919: War-Time Control

UNITED STATES FUEL ADMINISTRATION

Report of the Distribution Division, 1918-1919. Parts I and II review the salient features of the coal situation, and the oper-

²⁰ Based upon a chronology prepared by Charles E. Persons.

ation of governmental regulation and control in the distribution of coal and coke. Part III contains detailed statistics which were collected, compiled, and tabulated by the Bureau of Statistics of the Fuel Administration during the War.

FEDERAL TRADE COMMISSION

Cost Reports of the Federal Trade Commission: Coal. Numbers 1, 3, 4, 5, 6, and 7 (June 30, 1919)

Preliminary Report of the Federal Trade Commission on Investment and Profit in Soft-Coal Mining: Part I (May 31, 1922); Part II (July 6, 1922)

1920-1924: Commission Reports, Congressional Hearings, and Legislative Proposals and Enactments

COMMISSION REPORTS

Majority and Minority Reports of the United States Bituminous Coal Commission to the President, 1920

Report of the United States Coal Commission Transmitted Pursuant to the Act Approved September 22, 1922 (Public-No. 347, in five parts, 1925)

CONGRESSIONAL HEARINGS

Increased Price of Coal: Hearings before subcommittee of the Interstate Commerce Committee, United States Senate, pursuant to S. Res. 126, directing Committee on Interstate Commerce to hold hearings in order to take inquiry into causes which have brought about enormous increase in market price of coal and to report its findings and recommendations with view to Congressional or Executive action (in four parts, 1919-20, 66th Cong., 2d Sess.)

Hearings before Select Committee on Reconstruction and Production, United States Senate, pursuant to S. Res. 350, authorizing appointment of committee to inquire into general building situation and to report to Senate, before December 1, 1920, such measures as may be deemed necessary to stimulate and foster development of construction work in all its forms; Coal and transportation (1921, 66th Cong., 2d Sess.)

Hearings before the Manufactures Committee, United States Senate, on S. 4828, to promote general welfare by gathering information respecting ownership, production, distribution, costs, sales, and profits in coal industry and by publication of same,

and to recognize and declare coal and its production and distribution charged with public interest and use (3 vol., 1921, 66th Cong., 3d Sess.)

Hearings before the Education and Labor Committee, United States Senate, pursuant to S. Res. 80 directing the Committee on Education and Labor to investigate recent acts of violence in coal fields of West Virginia and adjacent territory and causes which led to conditions which now exist in said territory (1921-22)

United States Coal Commission, report to the Interstate and Foreign Commerce Committee, House of Representatives, to accompany HR 12377. H. Rp. 1181 (1922, 67th Cong., 2d Sess.) Investigation of wages and working conditions in coal mining industry, hearings before the Labor Committee, House of Representatives, on HR 11022, to establish commission to inquire into labor conditions in coal industry (1922, 66th Cong., 2d Sess.)

PRINCIPAL BILLS INTRODUCED

S 4087, Seasonal freight rates (1920)

S 4287, Seasonal freight rates (1920)

S 1806, Seasonal rates for transportation of coal (1921)

S 1807, Coal industry stabilization (1921)

S 41, Amendment to Interstate Commerce Act to provide seasonal rates for transportation of coal (1921, 67th Cong., 1st Sess.)

S 42, To provide for appointment of Federal Coal Commissioner, to define his powers and duties, and for other purposes (1921, 67th Cong., 1st Sess.)

S 824, To provide for appointment of Federal Coal Commissioner, to define powers and duties of such Commissioner, and directing director of Geological Survey to act as such Commissioner, and for other purposes (1921, 67th Cong., 1st Sess.)

S 2557, Provision for investigation and publicity, brokerage tax, and emergency control of prices (1921)

S 2558, Defining and punishing profiteering in coal (1921)

S 3805—HR 12377, To establish commission to be known as Coal Commission for purpose of securing information in connection with questions relative to interstate commerce in coal (1922, 67th Cong., 2d Sess.)

S 3940—HR 12472, To declare national emergency to exist

in production, transportation, and distribution of coal and other fuel, granting additional powers to the Interstate Commerce Commission, providing for appointment of Federal Fuel Distributor, providing for declaration of car service priorities during present emergency, and to prevent sale of fuel at unjust and unreasonably high prices (1922, Public-No. 348, 67th Cong., 2d Sess.)

PRESIDENTIAL ACTION

Address of the President to representatives of coal operators and miners, July 1, 1922

Address of the President to Congress, August 18, 1922

Address of the President on coal problems, delivered at Cheyenne, Wyoming, June 25, 1923

LEGISLATION ENACTED

S 3805—HR 12377, establishing the Coal Commission, September 22, 1922

S 3940—HR 12472, establishing the Federal Fuel Administration, September 22, 1922

1925-1933: Proposals for Federal Control

CONGRESSIONAL HEARINGS

Hearings on coal legislation before the Interstate and Foreign Commerce Committee, House of Representatives (1926, 69th Cong., 1st Sess.)

Hearings before the Committee on Interstate Commerce, United States Senate, 70th Cong. 1st Sess., pursuant to S. Res. 105, a resolution to investigate conditions in the coal fields of Pennsylvania, West Virginia, and Ohio (in two volumes, Government Printing Office, Washington, 1928)

Hearing before the Committee on Interstate Commerce, United States Senate, on S 4490 (1929, 70th Cong., 2d Sess.)

Hearing before a subcommittee of the Committee on Mines and Mining, United States Senate, 72d Cong., 1st Sess. on S 2935 . . . (Government Printing Office, Washington, 1932)

Hearings before a subcommittee of the Manufacturers Committee, United States Senate, on S. Res. 178, for investigations of conditions in coal fields of Harlan and Bell counties, Ky. (1932)

BILLS PROPOSED

HR 3980. Emergency control

S 4177, to regulate interstate and foreign commerce in coal and to promote general welfare dependent on use of coal. Submitted by Mr. Copeland, 1926

S 4490, to regulate interstate and foreign commerce in bituminous coal, provide for consolidations, mergers, and cooperative marketing, regulate fuel supply of interstate carriers, require licensing of corporations producing and shipping coal in interstate commerce, and to create Bituminous Coal Commission. Submitted by Mr. Watson, 1928

S 4490 reintroduced as S 2888, 1930

S 2935, a bill to regulate interstate and foreign commerce in bituminous coal; provide for consolidations, mergers, and cooperative marketing; require the licensing of corporations producing and shipping coal in interstate commerce; and to create a Bituminous Coal Commission; and for other purposes (1932) (S 2935—HR 7536, Davis-Kelly Bill)

HR 9924—Control by Commission, with allocation of tonnage and price fixing. Hayden amendment. Introduced excise tax idea.

S 1875—HR 6040. A combination of the bills of Messrs. Lewis and Hayden

October 1933—May 1935: Control under the National Industrial Recovery Act

National Recovery Administration: Code of Fair Competition for the Bituminous Coal Industry. As approved by President Roosevelt in executive orders of September 18, 1933 and September 29, 1933, incorporating so far as possible the conditions of the executive orders in the text of the Code . . . (Government Printing Office, Washington, 1933) Registry No. 702-45

1935: Introduction and Passage of the Guffey-Snyder Bill

CONGRESSIONAL HEARINGS

Hearings before a Subcommittee of the Committee on Interstate Commerce, United States Senate, 74th Cong. 1st Sess., on S 1417 . . . (Government Printing Office, Washington, 1935)

Committee on Interstate Commerce, United States Senate, report to accompany S 2481

Hearings before a subcommittee of the Committee on Ways and Means, House of Representatives, 74th Cong., 1st Sess., on HR 8479 . . . (Government Printing Office, Washington, 1935)

BILLS INTRODUCED

S 1417, 74th Cong., 1st Sess., "A bill to stabilize the bituminous coal mining industry and promote its interstate commerce; to provide for cooperative marketing of bituminous coal; to levy a tax on bituminous coal and provide for a drawback under certain conditions; to declare the production, distribution, and use of bituminous coal to be affected with a national public interest; to conserve the bituminous coal resources of the United States and to establish a national bituminous coal reserve, to provide for the general welfare, and for other purposes"

HR 8479, Snyder Bill

HR 8479—S 2481, Guffey-Snyder Coal Bill

Passage and Approval of Guffey-Snyder Act. HR 9100. Public-No. 402, 74th Cong. Same title as S 1417. Approved August 30, 1935

1937: Guffey-Vinson Act

Public-No. 48, 75th Cong.—Chapter 127—1st Sess. HR 4985. An act to regulate interstate commerce in bituminous coal, and for other purposes . . . Approved April 26, 1937