CRUDE OIL PIPE LINES: A STUDY OF ECONOMIC CONTROL

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CRUDE OIL PIPE LINES: A STUDY OF

ECONOMIC CONTROL

THESIS

Presented to the Graduate Council of the North
Texas State Teachers College in Partial
Fulfillment of the Requirements

For the Degree of

MASTER OF ARTS

By

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Marshall, Texas
August, 1947
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th></th>
<th>iv</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td></td>
<td>v</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. HISTORICAL BACKGROUND</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>II. ADVANTAGES OF CRUDE OIL PIPE LINES AS A MODE OF TRANSPORTATION</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>III. OWNERSHIP AND CONTROL OF PIPE LINE TRANSPORTATION FACILITIES</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>IV. EARLY REGULATION OF CRUDE OIL PIPE LINES AS COMMON CARRIERS</td>
<td></td>
<td>48</td>
</tr>
<tr>
<td>V. LATER REGULATION OF CRUDE OIL PIPE LINES AS COMMON CARRIERS</td>
<td></td>
<td>65</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td></td>
<td>89</td>
</tr>
</tbody>
</table>

111
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Summary of Average Pipe Line Transportation Costs in Cents per Barrel Mile, 1939 and 1942</td>
<td>20</td>
</tr>
<tr>
<td>2. Estimate of the Cost of Transporting Crude Oil in Railroad Tank Cars, 1939</td>
<td>22</td>
</tr>
<tr>
<td>3. Estimate of Post-War Costs of Shipping Crude Oil by Tanker from Port Arthur, Texas, to New York City</td>
<td>24</td>
</tr>
<tr>
<td>4. Summary of Petroleum Transportation Costs per Ton-Mile by Pipe Line, Railway, Tanker and Barge</td>
<td>27</td>
</tr>
<tr>
<td>5. Alphabetical List of Pipe Line Companies with Corporate Affiliations</td>
<td>31</td>
</tr>
<tr>
<td>6. Classification of Companies and List of Pipe Line Subsidiaries</td>
<td>35</td>
</tr>
<tr>
<td>7. Comparative Size of Three Groups of Companies According to Mileage Owned</td>
<td>39</td>
</tr>
<tr>
<td>8. Pipe Line Mileage of Twenty Major Oil Companies and All Other Companies as of January 1, 1938</td>
<td>40</td>
</tr>
<tr>
<td>9. Comparison of Control of Crude Oil Pipe Lines by Twenty Major Companies for the Years 1932, 1938, 1938, and 1942</td>
<td>43</td>
</tr>
</tbody>
</table>
INRODUCTION

In any industry whoever controls the transportation of either the raw material or the finished product can speedily drive all competitors out of existence.


The present study does not represent a general investigation of all the various divisions of the transportation phase of the petroleum industry but a very small segment of the industry, i.e., crude oil pipe lines. Rather than being an examination of the technical operations of the industry the study is directed towards a consideration of the instrumentalities of control of interstate pipe line facilities exercised at the hands of major or integrated companies.

The task will be to show: (1) the history and importance of the battle for control of pipe lines as an early method of transporting crude petroleum; (2) the advantages which major or integrated companies derive from ownership and operation of crude transportation facilities; (3) a study of the concentration and control of pipe line facilities in the hands of the twenty major or integrated companies; (4) the necessity for and early attempts at regulation of crude petroleum pipe lines as common carriers; and (5) a discussion of present day devices of control utilized by major or integrated companies and efforts that have been made to regulate
the industry as a common carrier since the Supreme Court decision in the Pipe Line Cases of 1914.

Total mileage of crude petroleum and gasoline pipe lines in the United States is approaching the mileage of the country's railroad system. More than half of the pipe lines, nearly 125,000 miles, are used for the transporting of crude petroleum from the wells in the producing areas to refineries and for moving the refined petroleum product from the refineries to the large centers of distribution. Regulation of pipe lines by the Interstate Commerce Commission was provided for by the Hepburn Act of 1906. The provisions of the law seem plausible but regulation stemming from this source has not been of great importance either in its effect upon the petroleum industry or upon the Interstate Commerce Commission's activities, the latter agency having been required to give the matter comparatively little time and effort.

No attempt has been made to arrive at an infallible solution to the problem of how independent shippers and producers may secure free access to interstate pipe line facilities at just and reasonable rates nor how the industry may be made free of the economic controls imposed by major or integrated companies outside the published tariff picture.

Suggested ways by which the industry might be rid of the present controls have been made. However, these have not
been developed or explored to any great extent. Each of these offers a problem for a separate study.

Should the petroleum industry, as seems probable, be brought under more comprehensive government control the significance of regulation of pipe line transportation may receive greater recognition.
CHAPTER I

HISTORICAL BACKGROUND

Pipe lines constitute a highly specialized transportation system used for the movement of crude oil and its by-products, gasoline and natural gas. Like so many other advances of a technological nature, metal pipe lines for transporting crude oil were American born.¹ After the first oil well was discovered in Pennsylvania, near Titusville, in 1859, by "Colonel" Edwin L. Drake, the joint problems of storage and transportation, in relation to the question of reaching an outside market, presented themselves. Meeting the first one by constructing reservoirs excavated in the earth and by utilizing wooden storage tanks, the new producers turned towards the problem of transportation.

Running through the countryside near Titusville was Oil Creek, a stream coursing the length of the valley in which petroleum had been discovered. At what is now known as Oil City, the stream united with the Allegheny River. From this river junction-point, Pittsburgh, Pennsylvania, and a through railroad line stood 132 miles distant.² The producers saw

¹Charles Morrow Wilson, Oil Across the World: The American Saga of Pipelines, p. 40.
only one way to get the petroleum to either Oil Creek or the far-distant railroad, and that was to put it in barrels and haul it, using horses and wagons to perform the task. Utilizing the nearby stream, Oil Creek, the producers used flat barges on which were placed the barrels of crude oil transported from the storage area to the river's edge, for transporting crude stocks to Pittsburgh, Pennsylvania, and other river cities.\(^3\) Transportation of petroleum by this means proved unsatisfactory in many ways. At times the river was low, making boat or barge traffic impossible, and at other times the river was a rampaging torrent of flood waters from upstream. Besides the uncertainties of this type of transportation, the costs were prohibitive. For the journey from Oil City to Pittsburgh or other major river towns, boat pilots were paid from $100.00 to $200.00 per trip. Taking all costs into consideration, the cost of river haulage from the terminal point on Oil Creek to Pittsburgh was from $0.75 to $2.00 per barrel, depending upon the season of the year and other risks involved.\(^4\)

Railroads, the Philadelphia and Erie, the Buffalo and Erie, connecting with the Central, and the Atlantic and Great Western, connecting with the Erie, soon pressed the river for traffic. The Philadelphia and Erie railroad could be reached

\(^3\)Wilson, *op. cit.*, pp. 41-42.

\(^4\)Ibid., p. 42.
at Erie, forty miles from Titusville, from Union City, twenty-two miles, and from Corry, sixteen miles.\textsuperscript{5} Other distances to railroad connections ranged from sixteen to twenty-eight miles.

The strategic link between the producing area and the railroad points was early dominated by the teamsters. Tarbell depicts these indispensable agents of the early transportation phase of the petroleum industry in her treatise on the history of the Standard Oil Company, as "... tyrants of the region—working and brawling as suited them, a genius not unlike the flatboat-men who once gave colour to life on the Mississippi ..."\textsuperscript{6} Even with railroad connecting links constructed to Titusville in 1863, the teamsters still were in a position to dominate the transportation business, for the problem of transporting oil from the well to the shipping point still faced the producer.

The teamster's day was waning however. Before the end of 1861, a well-driller named Janes proposed to construct a four-inch wooden oil line, bored from logs, from Tarr Farm to Oil City, a distance of approximately four miles.\textsuperscript{7} Janes was forced to wait until the State Legislature of Pennsylvania felt disposed to consider enacting a statute defining pipeline rights, but once this was done, Janes' workmen

\textsuperscript{5}Tarbell, \textit{op. cit.}, p. 16.

\textsuperscript{6}Ibid., p. 14.

\textsuperscript{7}Wilson, \textit{op. cit.}, p. 45.
set themselves about the task of laying the pipe. Teamsters, seeing their control of the indispensable transportation link threatened, resorted to such tactics as breaking apart and burning the line under construction. Janes, faced with the problem of the control of the teamsters, gave up before the project was completed.

In 1862 the teamsters again moved into action against those who threatened their control. A New Jersey engineer named Hutchings arrived on the scene to exhibit and demonstrate his invention of a patented rotary pump, reported capable of forcing oil through pipe lines. A two-inch iron pipe was laid from a producing well to a refinery located nearby. The demonstration, being the first venture in pumping oil under pressure, failed because Hutchings had sealed the pipe joints with lead. Oil moving through the pipes under pressure caused the joints to leak. Although Hutchings realized that the way to correction lay in threading and screwing the joints together he did not have the chance to make such a correction. The troublesome teamsters, in their staunch fight for continued control of one small link in the transportation of petroleum, destroyed the lines as well as wrecked the pump.

One man, Samuel Van Syckel, was to wrest from the

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8Ibid., p. 45.
9Ibid., p. 46.
10Ibid., p. 46.
teamsters the control they held over early transportation. Coming to Oil Creek in 1864, Van Syckel handled quantities of oil produced at Pithole, located several miles distant from a shipping point, but saw his profits eaten up by teamsters. Determined to rid himself of the control exercised by them, Van Syckel constructed a pipe line four miles long from Pithole to Miller's Farm.\footnote{John T. Flynn, God's Gold, The Story of Rockefeller and His Times, p. 122.} By October 1, 1865, oil was moving through the lines at a rate of eighty barrels an hour to the refinery located four miles away. By working only ten hours per day the line could do the work of three hundred teams bossed by recalcitrant teamsters.\footnote{Wilson, op. cit., p. 47.} Besides this, the pipe line could work twenty-four hours per day every day of the year. The teamsters ripped up the lines, destroyed the pump stations, burned the tanks in which the oil was stored, and threatened violence to employees and destruction of the oil wells themselves. Finally, in April, 1866, for protection of pipe line property as well as the lives of the employees of the pipe line company, the governor of the state was called upon to send a detachment of guards.\footnote{Flynn, op. cit., p. 191.} Van Syckel's new line proved the feasibility of transporting crude oil by pipe line and opened a new era for the
infant petroleum industry. Control of the teamsters was broken and the way lay open for the building of a net-work of pipe lines about the Pennsylvania field.

After the success of the Van Syckel project had been demonstrated, other pipe line companies began to make their appearance. Henry Harley, through the pipes of his Pennsylvania Transportation Company, began to move oil seven miles from Pithole Creek to the Island well, shortly after Van Syckel's line was put into use. Joseph Potts and J. J. Vandergrift entered into the area of pipe line development with a company of their own--the Empire Transportation Company. Numerous other smaller lines made their appearance in the area also. By 1872, the Pennsylvania Transportation Company of Henry Harley and the Empire Transportation Company of Joseph Potts and J. J. Vandergrift began taking over the smaller lines.

By this time pipe lines were the one great gatherer of the producing regions. Railroad companies, looking at the expansion and development of pipe lines as a means of

14Morrow Wilson explains in his book, Oil Across the World: The American Saga of Pipelines, page 47, that the first successful pipe line was constructed by a six-man partnership called the Oil Transportation Association, of which Van Syckel was a partner. Wilson points out that the partners opened the common carrier line at "bargain rates" of one dollar per barrel for the six miles of pipeage, thus giving to the Oil Transportation Association a temporary monopoly with daily earning power of about half the entire cost of the pipe line.

15Flynn, op. cit., p. 191.

16Ibid., p. 191.
transporting petroleum, sought to gain control of them. Jay Gould, of the Erie Railroad Company, managed to purchase a controlling interest in the Pennsylvania Transportation Company. The Pennsylvania Railroad Company, on the other hand, purchased Van Syckel's pipe line to Pithole as well as the Empire Transportation Company owned by Potts and Vandergrift. Vandergrift constructed other lines until they became so numerous that they were combined under the name of the United Pipe Lines. Thus we see that in 1872, Harley, Potts, Vandergrift and the Erie and Pennsylvania Railroads dominated the field of pipe line transportation of petroleum.

In 1872, Rockefeller and Standard interests, through Bostwick and Tilford, an oil purchasing firm owned by Standard, commissioned Daniel O'Day to build a pipe line, called the American Pipe Line. By 1875 this line was eighty miles long. In 1874 Rockefeller purchased a third interest in the United Pipe Line Company and by 1876 the Standard Company owned forty per cent of the pipe lines in the region.

Instead of a struggle between teamsters and pipe line promoters for control of transport facilities, the scene shifted to one of a struggle between the Standard Company

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17 Ibid., p. 191.
18 Ibid., p. 191.
19 Ibid., p. 192.
and the railroads. Rockefeller saw that if he could succeed in getting all refineries, particularly those in the Cleveland, Pittsburgh and New York areas under his control, the railroad companies would be at his mercy in that he could dictate rates and withhold oil from their pipe line affiliates through one means or another. The Pennsylvania Railroad Company detected the possibility of such a move and openly discussed going into the refining business. Secretly the Pennsylvania Railroad Company, through an agent acting for its subsidiary, the Empire Transportation Company, purchased two refineries, one in New York and one in Philadelphia. Rockefeller brought into his fold the New York Central and the Erie railways by informing them to stand by for a coming battle.

Rockefeller cut the price of kerosene in every area where the refineries owned and operated by the Empire Transportation Company were in business. At the same time, the Erie and New York Central Railroad companies cut rates on petroleum products transported by them. Thus Rockefeller hoped to make a double play—hit the transportation company, the Pennsylvania Railroad, and its subsidiary, the Empire Transportation Company, at the same time. 20

20 For a complete discussion of the battle between Rockefeller and the railroads see Ida M. Tarbell, History of the Standard Oil Company, pp. 186-194.
A stroke of luck favored the Rockefeller interests. Embroiled in costly labor troubles and strikes, the Pennsylvania Railroad was forced to bow to Rockefeller's demands. Rockefeller not only was able to purchase the refineries owned by the Pennsylvania Company but the pipe line properties as well. Thus, by 1878 Rockefeller had the entire pipe line business of the United States in his hands. In fact, we might say that the control of the petroleum industry of America; i.e., refining and gathering, was under his dominance. 21

The struggle for control of pipe lines has been one of long duration, extending from the time the teamsters realized that the introduction of pipe lines would wrest from their hands the control they enjoyed, to the present day. Intervening years have seen the passing of control exercised by teamsters, the short lived monopolistic position enjoyed by the early pipe line companies, the rise and eventual control of small pipe line companies by railroad interests, and finally, the dominance of the pipe line transportation industry by the Standard Oil interests.

Since the emergence of Standard Oil in 1878 as the dominant company in this monopoly picture, the pattern of control has changed somewhat. As noted in succeeding chapters, both State and Federal governmental authorities have had to

21 Flynn, op. cit., p. 198.
intervene in the situation. Legislation has been enacted with the purpose in mind of correcting monopolistic practices and guaranteeing to the smaller company, the independent, a chance of survival. This interference, on the part of these authorities, generally has resulted in nothing more than a realignment of the factors contained in the pattern of control.

As new producing areas have developed, new companies have entered the industry alongside the Standard Company and its affiliates or subsidiaries. These new members of the industry, as shown by the record, evidently have realized, like their predecessors, the advantages inherent in the effective control of the instruments of petroleum transportation, particularly the pipe line medium.
CHAPTER II

ADVANTAGES OF CRUDE OIL PIPE LINES AS A MODE
OF TRANSPORTATION

Since the pipe line is capable of transporting only one product, or at best a few related ones, this means that the pipe line does not make as wide a contact with the public as do other carriers. Pipe lines, located underground away from the public eye, go quietly about their business of transporting oil from one section of the country to another. Occasionally the lines emerge from under the surface of the earth to enter pump stations, tank farms or refineries. Only in these instances is the general public conscious of this medium of transportation. Yet, in total mileage, pipe lines equal almost half the combined length of all our railroads.\(^1\)

The specialized nature of the facility has tended to make it one where control is vested in the hands of the industry whose products the line transports.

Pipe lines operate both as a mobile and as a stationary means of transportation of crude oil. Gathering lines, which transport the crude oil from wells in the producing area to

\(^1\)Temporary National Economic Committee, Investigation of Concentration of Economic Power, Petroleum Industry, Part 14, Section 1, p. 7454.
storage tanks and storage centers, serve as the mobile type. These lines, usually from two to four inches in diameter, may be laid on the surface of the ground or in ditches, thus enabling the producer to move the product of a newly discovered well to a storage area as rapidly as possible. Lines of this type may be seen scattered widely over any producing area. These lines may be taken up and moved to a new area of production as soon as a given producing area is depleted.

Trunk lines, on the other hand, move the petroleum from the first storage area directly to refineries, or to railroad and pipe line junction points, or to coastal or inland waterway shipping points. Pipes used for trunk line movement of petroleum are usually from eight inches to twenty-four inches in diameter. Pumps, with operating pressure of seven hundred to nine hundred pounds per square inch, are so located as to move the oil through the pipes at speeds up to five miles per hour. In order to meet the maximum possible strain upon them, the pipes are constructed to withstand an internal pressure of two thousand pounds per square inch. An eight inch trunk line is capable of transporting about thirty thousand barrels of oil per day whereas the large twenty-four inch, "The Big Inch," has a capacity of transporting ten times that number of barrels in twenty-four hours.² It is interesting

to note that trunk mileage increased thirty-two per cent from 1929 to 1938 while gathering lines decreased eight per cent.\(^3\)

There are approximately 127,351 miles of oil pipe lines in the United States today, of which 65,180 are classed as trunk lines, 53,170 as gathering lines and 9,001 as refined oil trunk lines.\(^4\)

I propose to show in the following paragraphs that majority ownership and control of both the gathering and trunk line systems of the country by integrated companies hold out distinct advantages for their owners, whereas the lack of ownership and control of these facilities by independent or non-integrated companies presents formidable barriers in the path of their growth and development.\(^5\) This type of ownership enables major companies to operate a completely integrated system from the oil well in the producing area to the gasoline pump at any gasoline station on Main


\(^4\) Interstate Commerce Commission, Bureau of Transport Economics and Statistics, War-Built Pipe Lines and the Post-War Transportation of Petroleum, Statement No. 4432, File No. 86-6-6, p. 6 (Mimeographed).

\(^5\) Much of the material used in succeeding pages comes from petroleum industry cases before the Eighth Regional War Labor Board, Dallas, Texas, for the years 1943-1945. During this time, the writer served as a staff member of both the Wage Stabilization and Disputes Division where he had the opportunity to prepare written analyses of seventy-one petroleum industry cases pending before the Regional Board.
Street, U. S. A. If the major company occupies a dominant position in the producing area in which he operates, he is able to control the price of crude oil. By and through action on his part, the crude oil price can be made to move up and down at will. Another advantage through this type of arrangement is that the integrated company is assured of a constant flow of product at whatever speed or flow he desires it to move. This enables him to operate his refineries, even though located a thousand miles away, on an "around-the-clock" basis, stopping only long enough to shut down operations for the cleaning out of stills and other essential pieces of refinery equipment.

The independent has to rely on gathering lines also, but instead of serving him as they do the major companies, i.e., increasing scope of operations or making possible greater integration, the opposite is the result. By having to use gathering lines solely for the purpose of moving petroleum to refineries, of necessity, the independent refineries must be located in or near the producing area. This sometimes means that the independent has to make use of inferior grades of petroleum, the use of which shortens the life of his expensive refining equipment due to the fact

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6See Chapter V, Later Regulation of Crude Oil Pipe Lines as Common Carriers, p. 65, for a discussion of control of crude oil prices by major companies.
that certain corrosive elements are present. 7 Another dis-
tinct disadvantage facing the independent is that his market-
ing area is limited. Unable to move his refined product to a distant market by utilizing trunk pipe lines, he is faced with having to dispose of it in a limited market area. This in turn limits the size of his refining unit. As a given producing field is depleted the independent has either to let his refining unit stand idly by, or is faced with dis-
mantling it and moving it to another producing area. His stay in the new area is limited to the life-expectancy of production in the new field. If the independent is fortunate enough to have more than one refinery unit, one located dis-
tant from the other, he is faced with the unfortunate problem of transporting his crude product from one to the other.
Before him stand three alternatives: 1) to build a trunk line connecting the one or more units, 2) to use railroad transportation to move his product, or 3) to resort to truck transportation. The use of any one of the three alternatives named above presents the question of increased and prohibitive costs. Access to a common carrier trunk line for shipment of his product means the difference between his economic survival or defeat.

7See Eighth Regional War Labor Board Case No. 8-D-448, (111-15071-D), Consumers Cooperative Refinery, Levelland, Texas, and Oil Workers International Union, CIO, Local No. 504. Company contended that the use of oil produced in the limited area in which it operated resulted in frequent costly replacement of pieces of refinery equipment because of the presence of certain highly corrosive elements.
Pipe lines have largely acted as determining factors in the location of refineries of the integrated companies. The great refining centers in the United States are located on the Atlantic seaboard, the Gulf Coast, the West Coast and in the Illinois, Indiana and Ohio areas. Crude petroleum is brought to refineries located on the Atlantic seaboard, particularly the port areas of New York City and Philadelphia, by pipe lines extending from the interior of the United States across the Alleghenies to New York and Pennsylvania.9 Tankers bring crude supplies to these refineries from Caribbean sources as well as from pipe line terminals on the Gulf Coast.

A group of integrated refineries around the cities of Beaumont, Port Arthur and Houston, Texas, located at the terminus of pipe lines from the Mid-Continent area, likewise depend on this medium of transportation as their life artery. Located about the mouth of the Mississippi River and between New Orleans and Baton Rouge, Louisiana, a group of refineries depend upon both water and pipe line transportation for crude oil supplies.10 Refineries located in the interior of the country, particularly those in the Illinois, Indiana and Ohio area, depend on both water and pipe lines as a means of transportation to fill their needs for crude petroleum. On the

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West Coast we find somewhat of a different situation. Separated from the rest of the country by mountainous and desert terrain, the refineries located in this area are forced to depend on short trunk lines for their needed supplies of crude oil. Most of the raw product comes from the immediate California area. However, a part of it finds its way to these far-distant installations by the tanker medium of transportation.\textsuperscript{11}

Being able to "cluster" their refinery units in such strategic locations as named above makes certain advantages available to the integrated companies. Pipe lines, by moving the producing areas to the refiner's door, have made this "clustering" process possible. Integrated companies have been able to take advantage of the situation by constructing gigantic refinery units in the various sections of the country enumerated above. By placing their refining units in these locations, the integrated companies have found it possible to construct plants capable of utilizing to the fullest extent the incoming crude oil supplies. Wax, asphalt, roofing materials, and component parts of synthetic rubber compounds, butane gas and other by-products emanate from the high pressure cracking stills of these integrated companies. Adjacent to refining facilities some integrated companies

\textsuperscript{11}Ibid., p. 342.
have even erected plants for the purpose of manufacturing tin containers for the products of the industry.

Another advantage to the integrated refiner brought about through the use of the pipe line medium of transportation is that of being able to construct terminal facilities for the purpose of connecting the pipe line medium of transportation with that of the low cost, ocean-going tanker type of transportation.\textsuperscript{12} Pipe lines also make it possible for the integrated refiner to move his crude oil supplies from inland producing areas to river barge terminals located at river points. Here the pipe line empties its product into specially constructed barges for movement to refineries located up or down river, e.g., from the Baton Rouge-New Orleans, Louisiana, areas to Indiana, Illinois, and Ohio installations.

By pipe lines making it possible for integrated companies to construct large refinery units in selected locations, we can then say that pipe lines are indirectly responsible for the integrated concerns being able to make the great technological advances that have been made in past years. Finally, the pipe line medium of transportation has made it possible for the integrated companies to locate refineries in congested population areas where the greatest consumers' market exists.\textsuperscript{13}


\textsuperscript{13} Ibid., pp. 53-54.
Perhaps the chief advantage gained through the use of pipe lines is the low shipping costs of this type of transportation. The record reflects that petroleum has moved in greatest volume in the past by the cheapest means of transportation possible. It is likely, therefore, that it will continue to move by the cheapest method in future years. As will be seen in tables in succeeding pages, costs of transporting petroleum through the use of pipe lines, railroads, tankers and barge agencies of transport vary widely.

In Table I is shown a summary of average pipe line transportation costs per barrel-mile for the years 1939 and 1942, as compiled by the Interstate Commerce Commission.

From this table it will be observed that the total cost of transporting crude petroleum of the forty-three crude oil carriers reporting to the Commission was $0.03663 per barrel-mile for the 1939 period. For the other period covered, 1942, the cost of transporting crude by the same reporting carriers was $0.03079 per barrel-mile, representing a decrease in the transportation cost for the period covered of $0.00584 per barrel-mile or a percentage decrease of 15.94 per cent. This decrease can be accounted for by the fact that fixed costs have been spread over a larger volume of business. Examination of other data yields similar results except for crude and refined carriers. By way of comparison, the office of the Federal Coordinator of Transportation found that the
TABLE 1
SUMMARY OF AVERAGE PIPE LINE TRANSPORTATION COSTS IN CENTS PER BARREL-MILE, 1939 AND 1942

<table>
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<tr>
<th>Carrier Group</th>
<th>No. Companies</th>
<th>Operating Expenses*</th>
<th>Taxes*</th>
<th>Return on Investment*</th>
<th>Total*</th>
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<td></td>
<td></td>
<td>1939</td>
<td></td>
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<tr>
<td>Crude Oil Carriers</td>
<td>43</td>
<td>0.02240</td>
<td>0.00608</td>
<td>0.00814</td>
<td>0.03663</td>
</tr>
<tr>
<td>Refined Oil Carriers</td>
<td>8</td>
<td>0.03931</td>
<td>0.01038</td>
<td>0.01833</td>
<td>0.06803</td>
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<td>Crude and Refined Oil Carriers</td>
<td>8</td>
<td>0.02936</td>
<td>0.00726</td>
<td>0.00947</td>
<td>0.04610</td>
</tr>
<tr>
<td>All Carriers Combined</td>
<td>59</td>
<td>0.02472</td>
<td>0.00657</td>
<td>0.00905</td>
<td>0.04035</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1942</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Crude Oil Carriers</td>
<td>43</td>
<td>0.02029</td>
<td>0.00491</td>
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<td>Refined Oil Carriers</td>
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<td>0.03707</td>
<td>0.00693</td>
<td>0.01682</td>
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<td>0.03090</td>
<td>0.00674</td>
<td>0.01082</td>
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<tr>
<td>All Carriers Combined</td>
<td>65</td>
<td>0.02400</td>
<td>0.00547</td>
<td>0.00769</td>
<td>0.03717</td>
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</table>

*For the purpose of convenience these figures have been carried out only five places.

cost of transportation in 1932, for the pipe line industry as a whole, was 3.2 mills per ton-mile, not including a return on capital.15

15 D. Philip Locklin, Economics of Transportation, p. 684.
Railroad traffic of crude oil shipments is principally from new producing areas to which pipe line facilities have not been laid, or from fields where the production is so small that construction of pipe line facilities cannot be justified economically, and from some shipments of crude oil to small refineries. For example, in the Atlantic seaboard area, at the beginning of 1941, tankers and barges were transporting ninety-seven per cent of the total volume of crude oil and refined products; the pipe lines only 2.7 per cent and the railroads only .3 of one per cent. With the change of events brought about by World War II, tanker and barge traffic in the same area was reduced to fifteen per cent and pipe lines were handling about fifteen per cent, while the railroads had the task of transporting seventy per cent of the total. 16 Thus we see that the volume of petroleum traffic transported by railroads fluctuates widely according to the time, place and character of events involved.

Railway transportation of crude oil is carried on through utilization of railroad tank cars holding about two hundred barrels each. As may be expected, transportation costs for shipment of petroleum by rail run considerably higher than shipment of petroleum by means of pipe lines, tankers, or barges. 17 In Table 2 is shown an estimate of costs of transporting crude oil in railroad tank cars for the year 1939, as prepared by the Cost Section of the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission.

16 Johnson, op. cit., p. 171.
**TABLE 2**

Estimate of the Cost of Transporting Crude Oil in Railroad Tank Cars, 1939

<table>
<thead>
<tr>
<th>Item</th>
<th>J. S. Average Costs</th>
<th>Average Length of Haul, 1939</th>
<th>Weighted Average Cost per Ton-Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Terminal (Cents)</td>
<td>Line-Haul (Cents per cwt., per cwt. per cwt., per Mile)</td>
<td>(Miles)</td>
</tr>
<tr>
<td>Crude Oil, 36 tons per car</td>
<td>2.434</td>
<td>.02686</td>
<td>225</td>
</tr>
<tr>
<td>Operating expenses, rents, taxes and constant costs (Excluding return)</td>
<td>.944</td>
<td>.01120</td>
<td>225</td>
</tr>
<tr>
<td>5-3/4 per cent return on rate-making value (road and equipment)</td>
<td>.944</td>
<td>.01120</td>
<td>225</td>
</tr>
<tr>
<td>Total</td>
<td>3.378</td>
<td>.03806</td>
<td>225</td>
</tr>
</tbody>
</table>

For the 1939 period covered by the above table, transportation costs were 1.06154 cents per ton-mile for shipment of petroleum by rail. The Commission points out that the figures for operating expenses, rents, taxes, and constant costs exclude L.C.L. (less than car-load lots) deficit and the out-of-pocket portion of passenger deficit. Further, the

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Commission indicates that the calculated return on rate-making value is based on the total value of railway property, including property used for passenger service. The Commission calls attention to the fact that if passenger and L.C.L. deficits are included in the computation, the total weighted average cost per ton-mile is 1.15079 cents for crude oil. In the matter of rate-making value, the Commission points out that if an eight per cent return is used, the total weighted average cost per ton-mile, excluding passenger and L.C.L. deficits, becomes 1.182027 cents for crude oil. Excluding capital costs, the Federal Coordinator of Transportation found that railroad operating costs per ton-mile were $.83000 mills for the 1935 period. Using the $.75355 mill figure shown in the table above, representing the weighted average cost per ton-mile exclusive of capital costs, we find that between the 1935 and 1939 periods, a reduction in rail costs of $.07645 mills has been effected, a decrease of 9.2 per cent.

At the request of the Interstate Commerce Commission, the War Shipping Administration prepared an estimate of the post-war costs of operating tankers in the service of shipping crude oil from Port Arthur, Texas, to New York, New York. In Table 3 the estimated costs of shipments of crude oil between these two points are presented.

18 Harold D. Koontz, Government Control of Business, p. 238.
TABLE 3

ESTIMATE OF POST-WAR COSTS OF SHIPPING CRUDE OIL BY TANKER FROM PORT ARTHUR, TEXAS, TO NEW YORK CITY

<table>
<thead>
<tr>
<th>Item</th>
<th>Annual Cost of Operating Tanker</th>
<th>Unit Transportation Costs of Crude Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Valuation of Ship - $2,070,000</td>
<td>Gents per Nautical Ton-Mile*</td>
</tr>
<tr>
<td>Cost of Operation</td>
<td>$330,623</td>
<td>11.4</td>
</tr>
<tr>
<td>Depreciation (5%)</td>
<td>103,500</td>
<td>3.6</td>
</tr>
<tr>
<td>Provision for Federal income tax (50% of operating income after depreciation)</td>
<td>86,940</td>
<td>3.0</td>
</tr>
<tr>
<td>8% return on depreciated investment averaged over 20 years</td>
<td>86,940</td>
<td>3.0</td>
</tr>
<tr>
<td>Total cost</td>
<td>$608,003</td>
<td>21.0</td>
</tr>
</tbody>
</table>

*Distances in nautical miles may be converted to statute miles by multiplying by 1.15155.

The estimate of the War Shipping Administration is based upon an assumption of 6.435006 barrels of crude oil per ton and a distance of 1,855 nautical miles (2,136.1 land miles) between Port Arthur, Texas, and New York City, using T2 government surplus type tankers as a basis for its determination.


20 The War Shipping Administration assumes that the market value of the tanker is $2,070,000.00 and that the ship has a voyage capacity of 116,000 barrels of crude oil and that it can make twenty-five round trips during the year.
With these assumptions before it the War Shipping Administration estimates the total transportation costs, including capital costs, as $0.07282 per nautical ton-mile, or 21.0 cents per barrel for the entire trip. Exclusive of capital costs, the transportation costs run $0.03954 per nautical ton-mile or 11.4 cents per barrel. T. E. Swigart, president of the Shell Pipe Line Corporation, who also prepared an estimate of transportation costs using the same type of tanker, i.e., T2 government surplus, was of the opinion that the supply of this type of tanker would be so plentiful that the market value would not exceed $1,500,000.00. Using this amount as the basis of his calculations Swigart estimated that the transportation costs, including a return on capital, would be $0.06346 per nautical ton-mile or 18.3 cents per barrel. Exclusive of capital costs, the estimated transportation costs ran $0.03954 per nautical ton-mile or 11.4 cents per barrel.

The Interstate Commerce Commission concurs with Swigart in that the lower valuation of the tanker, i.e., $1,500,000.00, will prevail, and consequently uses the lower cost figures in its analysis. By way of comparison the Federal Coordinator of Transportation reported that tanker operating costs for the 1935 period averaged six mills per ton-mile. This cost figure is in accord with the estimates of Swigart and the Interstate Commerce Commission.

21 Koontz, op. cit., p. 238.
In estimating costs of shipping crude oil by barge from
New Orleans to Paducah, Kentucky, Cincinnati, Ohio, and
Pittsburgh, Pennsylvania, the Commission arrived at the
following estimates in cents per barrel: 15.4 to Paducah,
21.3 to Cincinnati, and 28.0 to Pittsburgh, the respective
water distances being 1,018 miles, 1,482 miles, and 1,952
miles. 22 The costs in cents per ton-mile, according to the
estimate of the Commission, would be $0.097347 to Paducah,
$0.092487 to Cincinnati, and $0.092305 to Pittsburgh.

In Table 4, the costs per ton-mile for pipe line, rail-
way tanker and barge have been summarized. Costs shown in
the tables for pipe lines and railways are based on the aver-
age length of haul, whereas for tanker and barge transporta-
tion, they reflect selected hauls. The Commission calls
attention to the fact that for any distance other than that
shown in the table, the cost per ton-mile will differ. The
Commission cautions one to avoid making sweeping conclusions
involving comparisons of costs of transportation as a func-
tion of distance.

From Table 4 it will be noted that the cheapest shipping
facility prior to World War II from the standpoint of costs
was the tank ship, followed in order of increased costs by
the barge, pipe line and tank car. Actual shipping costs in
cents per ton-mile for the four types of facilities are: .06348

22 Interstate Commerce Commission, Bureau of Transport
<table>
<thead>
<tr>
<th>Carrier and Commodity</th>
<th>Year</th>
<th>Length of Haul (Miles)</th>
<th>Operating Expenses, Including Depreciation</th>
<th>Return on Investment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipe Lines:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude Oil</td>
<td>1939</td>
<td>-</td>
<td>.14418</td>
<td>.03912</td>
<td>.05241</td>
</tr>
<tr>
<td>Refined Oils</td>
<td>1939</td>
<td>-</td>
<td>.28362</td>
<td>.07494</td>
<td>.13230</td>
</tr>
<tr>
<td>Crude and Refined Oils</td>
<td>1939</td>
<td>-</td>
<td>.19099</td>
<td>.04726</td>
<td>.06161</td>
</tr>
<tr>
<td>All Companies combined</td>
<td>1939</td>
<td>-</td>
<td>.16055</td>
<td>.04268</td>
<td>.05883</td>
</tr>
<tr>
<td>Crude Oil</td>
<td>1942</td>
<td>398</td>
<td>.13061</td>
<td>.03164</td>
<td>.03592</td>
</tr>
<tr>
<td>Refined Oils</td>
<td>1942</td>
<td>502</td>
<td>.26751</td>
<td>.05005</td>
<td>.12135</td>
</tr>
<tr>
<td>Crude and Refined Oils</td>
<td>1942</td>
<td>24.2</td>
<td>.19960</td>
<td>.04355</td>
<td>.06994</td>
</tr>
<tr>
<td>All Companies combined</td>
<td>1942</td>
<td>358</td>
<td>.15616</td>
<td>.03561</td>
<td>.05003</td>
</tr>
<tr>
<td>Class I Railways:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude Oil</td>
<td>1939</td>
<td>225</td>
<td>.75355</td>
<td>.030799</td>
<td>.06154</td>
</tr>
<tr>
<td>Tanker:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude Oil</td>
<td>Post-War</td>
<td>1,855</td>
<td>.04856</td>
<td>.00728</td>
<td>.00763</td>
</tr>
<tr>
<td>Barges:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude and Refined Oils</td>
<td>Post-War</td>
<td>1,452</td>
<td>.07381</td>
<td>.00911</td>
<td>.00955</td>
</tr>
</tbody>
</table>

**a**Mileages shown are average hauls for pipe lines and railways, and selected hauls for tanker and barge transportation.

**b**For the purpose of convenience these figures have been carried out only five places.

**c**Included with operating expenses.

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for tank ships, .09248 for barge, .23572 for pipe lines, and 1.06154 for railway transportation. Estimated costs for the 1935 period were .06000 for water car-lot carriers (tankers), .01250 for water cargo carriers ( barges), .03200 for pipe lines, and .08300 mills for rail carriers.24

Using the 1939, $0.07355 railway cost of shipping a ton-mile of crude oil from Port Arthur, Texas, to New York City, a rail distance of 1,600 miles, we see that the cost is $12,056. This cost may be easily compared with the estimated post-war tanker costs of $1.18 per ton for shipment of crude oil from the same points (Table 4). It will be seen that rail costs were, for the 1939 period, approximately eleven times higher than the estimated post-war tanker costs for the Port Arthur, Texas-New York City shipment.

Low cost transportation has been the key to the growth and development of major companies in the industry. The multiplied advantages present in the ownership and control of pipe lines by these companies have made complete integration of the industry possible. Each phase of the industry, i.e., production, refining, and distribution, has been more closely bound together, the binding link being the pipe line. The integrated company, therefore, has been able to make the fullest possible use of the advantages brought its way by this medium of transportation. Not bound to any one producing

24 Koontz, op. cit., p. 238.
area, the integrated company has been able to locate its refineries in the most convenient location where, by use of pipe lines, it may have the product of any number of producing areas brought to its door at low costs. Refinery units do not have to be so numerous, instead, the major companies may concentrate their investment in plant facilities in one location, thereby effecting considerable savings in plant outlay.

Not owning this type of transportation medium nor having the advantage of low cost transportation vital to his needs, the independent finds himself bound to a small group of concerns whose number diminishes with the passing of the years.

Advantages inherent in ownership and control of pipe lines mean the difference between economic survival and defeat to the independent in his struggle with the major or integrated company.
CHAPTER III

OWNERSHIP AND CONTROL OF PIPE LINE TRANSPORTATION FACILITIES

Control and ownership of crude oil pipe lines reflect much of the same concentration that is found in the oil industry generally. Oil companies in developing their industrial establishments have brought into these organizations those facilities used in transporting crude petroleum and petroleum products. Many of these oil transportation companies, as will be seen in the following tables, have developed subsidiaries of their own, thus adding more concentration in the hands of an already highly integrated group of companies.

Ownership and control of these facilities under this type of arrangement give more strength to the argument on the part of the major or integrated companies that pipe lines serve merely as plant facilities for the members of the industry owning and controlling them.\(^1\) This argument has been used by the integrated companies to avoid any possible "over-regulation" of the industry as a public carrier.

In Table 5 is presented a list of pipe line companies

\(^1\)See Chapter V, Later Regulation of Crude Oil Pipe Lines as Common Carriers, p. 65, for a development of the argument of pipe lines as plant facilities.
operating in this country during the 1932 and 1933 period. This table presents the corporate affiliations of the pipeline companies operating during the period covered. In those instances where one or more corporations own an operating facility the joint ownership is indicated.

**Table 5**

**Alphabetical List of Pipe Line Companies with Corporate Affiliations**

<table>
<thead>
<tr>
<th>Company</th>
<th>Corporate Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ajax Pipe Line Co.</td>
<td>(Standard Oil Co. (New Jersey Corp.)</td>
</tr>
<tr>
<td></td>
<td>(Standard Oil Co. (Ohio)</td>
</tr>
<tr>
<td></td>
<td>(Pure Oil Co., The</td>
</tr>
<tr>
<td>Allegheny Pipe Line Co.</td>
<td>Consolidated Oil Corp.</td>
</tr>
<tr>
<td>American Petroleum Co.</td>
<td>(American Republics Corp.</td>
</tr>
<tr>
<td></td>
<td>(Houston Oil Co. of Texas</td>
</tr>
<tr>
<td>Arkana Transit Co.</td>
<td>(Atlantic Refining Co., The</td>
</tr>
<tr>
<td></td>
<td>(Cities Service Co.</td>
</tr>
<tr>
<td>Arkansas Pipeline Corp.</td>
<td>Cities Service Co.</td>
</tr>
<tr>
<td>Associated Oil Co.</td>
<td>Tide Water Associated Oil Co.</td>
</tr>
<tr>
<td>Associated Pipe Line Co.</td>
<td>(Standard Oil Co. of California</td>
</tr>
<tr>
<td></td>
<td>(Tide Water Associated Oil Co.</td>
</tr>
<tr>
<td></td>
<td>(Southern Pacific Co.</td>
</tr>
<tr>
<td>Atlantic Pipe Line Co.</td>
<td>Atlantic Refining Co., The</td>
</tr>
<tr>
<td>Atlas Pipeline Co.</td>
<td>Atlas Pipeline Co., Inc.</td>
</tr>
<tr>
<td>Barnsdall Refineries, Inc.</td>
<td>Barnsdall Corp.</td>
</tr>
<tr>
<td>Bartex Pipe Line Co.</td>
<td>Phillips Petroleum Co.</td>
</tr>
<tr>
<td>Bradford Transit Co.</td>
<td>(South Penn Oil Co.</td>
</tr>
<tr>
<td></td>
<td>(Tide Water Associated Oil Co.</td>
</tr>
<tr>
<td>Buckeye Pipe Line Co.</td>
<td>Northern group</td>
</tr>
<tr>
<td>Col-Tex Refining Co.</td>
<td>Standard Oil Co. of California</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Company</th>
<th>Corporate Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated Pipe Line Co.</td>
<td>Consolidated Oil Co.</td>
</tr>
<tr>
<td>Continental Pipe Line Co.</td>
<td>Continental Oil Co.</td>
</tr>
<tr>
<td>Cosden Pipe Line Co.</td>
<td>Mid-Continent Petroleum Co.</td>
</tr>
<tr>
<td>Crew Levick Co.</td>
<td>Cities Service Co.</td>
</tr>
<tr>
<td>Crude Transit Co.</td>
<td>Crude Transit Co.</td>
</tr>
<tr>
<td>Cumberland Pipe Line Co.</td>
<td>Southern group</td>
</tr>
<tr>
<td>Eastern Gulf Oil Co.</td>
<td>Gulf Oil Corp. of Penn.</td>
</tr>
<tr>
<td>Elk Oil Co.</td>
<td>Elk Oil Co.</td>
</tr>
<tr>
<td>Empire Pipe Line Co.</td>
<td>Cities Service Co.</td>
</tr>
<tr>
<td>Eureka Pipe Line Co.</td>
<td>Southern group</td>
</tr>
<tr>
<td>Fords Brook Pipe Line Co.</td>
<td>Consolidated Oil Corp.</td>
</tr>
<tr>
<td>Franklin Pipe Co., Ltd.</td>
<td>Franklin Pipe Co., Ltd.</td>
</tr>
<tr>
<td>General Petroleum Co. of California</td>
<td>Socony-Vacuum Corp.</td>
</tr>
<tr>
<td>General Pipe Line Co.</td>
<td>Socony-Vacuum Corp.</td>
</tr>
<tr>
<td>Great Lakes Pipe Line Co. (Delaware)</td>
<td>(Continental Oil Corp.)</td>
</tr>
<tr>
<td>Great Lakes Pipe Line Co. (Illinois)</td>
<td>(Barnsdall Corp.)</td>
</tr>
<tr>
<td>Gulf Coast Pipe Line Co.</td>
<td>(Phillips Petroleum Co.)</td>
</tr>
<tr>
<td>Gulf Pipe Line Co.</td>
<td>(Pure Oil Co., The)</td>
</tr>
<tr>
<td>Gulf Pipe Line Co., of Okla.</td>
<td>(Mid-Continent Petroleum Co.)</td>
</tr>
<tr>
<td>Gulf Pipe Line Co., of Penn.</td>
<td>(Skelly Oil Co.)</td>
</tr>
<tr>
<td>Gulf Refining Co., of La.</td>
<td>Wm. F. Morgan, Inc.</td>
</tr>
<tr>
<td>Humble Pipe Line Co.</td>
<td>Gulf Oil Corp. of Penn.</td>
</tr>
<tr>
<td>Illinois Pipe Line Co.</td>
<td>Standard Oil Co. (New Jersey Corp.)</td>
</tr>
<tr>
<td>Imperial Pipe Line Co., Ltd.</td>
<td>Ohio Oil Co.</td>
</tr>
<tr>
<td>Independent Pipe Line Co.</td>
<td>Standard Oil Co. (New Jersey Corp.)</td>
</tr>
<tr>
<td>Independent Pipe Line Co. of Kansas</td>
<td>Phillips Petroleum Co.</td>
</tr>
<tr>
<td>Indiana Pipe Line Co.</td>
<td>Northern group</td>
</tr>
<tr>
<td>Keystone Pipe Line Co.</td>
<td>Atlantic Refining Co., The</td>
</tr>
<tr>
<td>Louisiana Oil Refining Corp.</td>
<td>Cities Service Co.</td>
</tr>
<tr>
<td>Magnolia Petroleum Corp.</td>
<td>Socony-Vacuum Corp.</td>
</tr>
<tr>
<td>Magnolia Pipe Line Co.</td>
<td>Socony-Vacuum Corp.</td>
</tr>
<tr>
<td>Maryland Pipe Line Co.</td>
<td>National Transit Co.</td>
</tr>
<tr>
<td>Midwest Refining Co., The</td>
<td>Standard Oil Co. (Indiana)</td>
</tr>
<tr>
<td>Mountain State Gas Co.</td>
<td>Pure Oil Co., The</td>
</tr>
<tr>
<td>National Pipe Line Co.</td>
<td>National Refining Co., The</td>
</tr>
</tbody>
</table>
TABLE 5--Continued

<table>
<thead>
<tr>
<th>Company</th>
<th>Corporate Affiliation</th>
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<tbody>
<tr>
<td>National Refining Co. of Oklahoma</td>
<td>National Refining Co., The</td>
</tr>
<tr>
<td>National Transit Co.</td>
<td>National Transit Co.</td>
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<tr>
<td>New Mexico Pipe Line Co.</td>
<td>Continental Oil Co.</td>
</tr>
<tr>
<td>New York Transit Co.</td>
<td>Northern group</td>
</tr>
<tr>
<td>Northern Pipe Line Co.</td>
<td>Northern group</td>
</tr>
<tr>
<td>Oklahoma Pipe Line Co.</td>
<td>Standard Oil Co. (New Jersey Corp.)</td>
</tr>
<tr>
<td>Pasotex Pipe Line Co.</td>
<td>Standard Oil Co. of California</td>
</tr>
<tr>
<td>Pierce Pipe Line Co.</td>
<td>Consolidated Oil Corp.</td>
</tr>
<tr>
<td>Pondera Pipe Line Co.</td>
<td>(Ohio Oil Co. (Standard Oil Co. (Indiana))</td>
</tr>
<tr>
<td>Producers and Refiners Corp.</td>
<td>Consolidated Oil Corp.</td>
</tr>
<tr>
<td>Producers Transportation Co.</td>
<td>Union Oil Associates</td>
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<td>Pure Oil Pipe Line Co.</td>
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<tr>
<td><em>(Ohio)</em></td>
<td>Pure Oil Co., The</td>
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<td>Pure Oil Pipe Line Co.</td>
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<td><em>(Pennsylvania)</em></td>
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<td>Pure Van Pipe Line Co.</td>
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<td>Shell Union Oil Corp.</td>
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<td>Shell Pipe Line Corp.</td>
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<td>Sinclair Pipe Line Corp.</td>
<td>Consolidated Oil Corp.</td>
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<tr>
<td>Sinclair Prairie Pipe Line Co. of Texas</td>
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<td>Southern Pipe Line Co.</td>
<td>Southern group</td>
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<td>South West Penn. Pipe Lines</td>
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<tr>
<td>Spartan Refining Co., Inc.</td>
<td>Atlas Pipeline Co., Inc.</td>
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<tr>
<td>Standard Oil Co. of Calif.</td>
<td>Standard Oil Co. of California</td>
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<td>Standard Oil Co. (Kansas)</td>
<td>Standard Oil Co. (Kansas)</td>
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<td>Standard Oil Co. of New York, Inc.</td>
<td>Socony-Vacuum Corp.</td>
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<td>Standard Pipe Line Co.</td>
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</tr>
<tr>
<td>Stanolind Oil &amp; Gas Co.</td>
<td>Standard Oil Co. (Indiana)</td>
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<tr>
<td>Stanolind Pipe Line Co.</td>
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<td>Sun Co. of Delaware</td>
<td>Sun Oil Co.</td>
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<td>Sun Oil Line Co.</td>
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<td>Sun Oil Line of Michigan</td>
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<tr>
<td>Sun Pipe Line, Inc.</td>
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<td>Sun Pipe Line Co. (Texas)</td>
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<td>Susquehanna Pipe Line Co.</td>
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</tr>
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</table>
**TABLE 5--Continued**

<table>
<thead>
<tr>
<th>Company</th>
<th>Corporate Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas Co., The (California)</td>
<td>Texas Corp., The</td>
</tr>
<tr>
<td>Texas Co., The (Delaware)</td>
<td>(Texas Corp., The</td>
</tr>
<tr>
<td>Texas Empire Pipe Line Co., The (Delaware)</td>
<td>(Cities Service Co.</td>
</tr>
<tr>
<td>Texas Empire Pipe Line Co., The (Illinois)</td>
<td>(Tide Water Associated Oil Co.</td>
</tr>
<tr>
<td>Texas Empire Pipe Line Co. of Texas, The</td>
<td>(Texas Corp., The</td>
</tr>
<tr>
<td>Texas Pipe Line Co., The</td>
<td>(Cities Service Co.</td>
</tr>
<tr>
<td>Texas Pipe Line Co. of Oklahoma, The</td>
<td>(Tide Water Associated Oil Co.</td>
</tr>
<tr>
<td>Thurber Pipe Line Co.</td>
<td>Texas Pacific Coal &amp; Oil Co.</td>
</tr>
<tr>
<td>Tidal Pipe Line Co.</td>
<td>British American Oil Co., Ltd., The</td>
</tr>
<tr>
<td>Tidal Refining Co.</td>
<td>Tide Water Associated Oil Co.</td>
</tr>
<tr>
<td>Tide-Water Pipe Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td>Toronto Pipe Line Co.</td>
<td>Standard Oil Co. (New Jersey Corp.)</td>
</tr>
<tr>
<td>Tuscarora Oil Co., Ltd.</td>
<td></td>
</tr>
<tr>
<td>Union Oil Co. of California</td>
<td>Union Oil Associates</td>
</tr>
<tr>
<td>Vacuum Oil Co., Inc.</td>
<td>Socony-Vacuum Corp.</td>
</tr>
<tr>
<td>Valvoline Oil Co.</td>
<td>Valvoline Oil Co.</td>
</tr>
<tr>
<td>White Eagle Oil Corp.</td>
<td>Socony-Vacuum Corp.</td>
</tr>
</tbody>
</table>

From this list of pipe line companies and refining or other companies having pipe line properties, we can classify the companies owning transportation facilities under three headings: large and medium-sized integrated units of the industry and partially integrated and smaller integrated units of the oil industry and independently owned and operated
facilities. This breakdown in classification is shown in Table 6.\(^3\)

**TABLE 6**

**CLASSIFICATION OF COMPANIES AND LIST OF PIPE LINE SUBSIDIARIES**

**Group 1. Large and Medium-Sized Integrated Units of Oil Industry (Twenty Major Companies)**

Atlantic Refining Co.:  
Arkana Transit Corp.\(^a\)  
Atlantic Pipe Line Co.  
Keystone Pipe Line Co.  
Barnsdall Corp.:  
Barnsdall Refineries, Inc.  
Great Lakes Pipe Line Co.\(^b\)  
Cities Service Co.:  
Arkana Transit Corp.\(^a\)  
Arkansas Pipeline Corp.  
Crew-Levick Co.  
Empire Pipeline Co.  
Louisiana Oil Refining Corp.  
Texas-Empire Pipe Line Co. (Delaware)\(^c\)  
Texas-Empire Pipe Line Co. (Illinois)\(^c\)  
Texas-Empire Pipe Line Co. of Texas\(^d\)  
Consolidated Oil Corp.:  
Allegheny Pipe Line Co.  
Consolidated Pipe Line Co.  
Fords Brook Pipe Line Co.  
Pierce Pipe Line Co.  
Producers & Refiners Corp.  
Sinclair Prairie Pipe Line Co.  
Sinclair Prairie Pipe Line Co. of Texas  
Union Pipe Line Co.  
Continental Oil Co.:  
Continental Pipe Line Co.  
Great Lakes Pipe Line Co.\(^b\)  
New Mexico Pipe Line Co.  
Gulf Oil Corp. of Pennsylvania:  
Gulf Pipe Line Co.  
Gulf Pipe Line Co. of Oklahoma  
Gulf Pipe Line Co. of Pennsylvania  
Gulf Refining Co. of Louisiana

---

\(^3\)Ibid., pp. xxiv-xxvi.
TABLE 6—Continued

Mid-Continent Petroleum Corp.:
  Gosden Pipe Line Co.
  Great Lakes Pipe Line Co.\textsuperscript{b}
Ohio Oil Co.:
  Illinois Pipe Line Co.
  Pondera Pipe Line Co.\textsuperscript{g}
Phillips Petroleum Co.:
  Berton Pipe Line Co.
  Great Lakes Pipe Line Co.\textsuperscript{b}
  Independent Pipe Line Co.
  Independent Pipe Line Co. of Kansas
  Phillips Pipe Line Co.
Pure Oil Co.:
  Ajax Pipe Line Co.\textsuperscript{f}
  Great Lakes Pipe Line Co.\textsuperscript{b}
  Mountain States Gas Co.
  Pure Oil Pipe Line Co. (Ohio)
  Pure Oil Pipe Line Co. (Pennsylvania)
  Pure Van Pipe Line Co.
Shell Union Oil Corp.:
  Shell Oil Co.
  Shell Pipe Line Corp.
Socony-Vacuum Corp.:
  General Petroleum Corp. of California
  General Pipe Line Co.
  Magnolia Petroleum Corp.
  Magnolia Pipe Line Co.
  Standard Oil Co. of New York, Inc.
  Vacuum Oil Co., Inc.
  White Eagle Oil Corp.
Stanolind Oil Co.:
  Deep Rock Oil Corp.
Standard Oil Co. of California:
  Associated Pipe Line Co.\textsuperscript{e}
  Col-Tex Refining Co.
  Fasotex Pipe Line Co.
  Standard Oil Co. of California
Standard Oil Co. (Indiana):
  Midwest Refining Co.
  Pondera Pipe Line Co.\textsuperscript{g}
  Stanolind Oil and Gas Co.
  Stanolind Pipe Line Co.
Standard Oil Co. (New Jersey Corp.):
  Ajax Pipe Line Co.\textsuperscript{f}
  Humble Pipe Line Co.
  Imperial Pipe Line Co., Ltd.
  Oklahoma Pipe Line Co.
  Standard Pipe Line Co., Inc.
  Tuscarora Oil Co., Ltd.
### Table 6—Continued

<table>
<thead>
<tr>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun Oil Co.:</td>
</tr>
<tr>
<td>Sun Co. of Delaware</td>
</tr>
<tr>
<td>Sun Oil Line Co.</td>
</tr>
<tr>
<td>Sun Oil Line Co. of Michigan</td>
</tr>
<tr>
<td>Sun Pipe Line Co. (Texas)</td>
</tr>
<tr>
<td>Sun Pipe Line, Inc.</td>
</tr>
<tr>
<td>Susquehanna Pipe Line Co.</td>
</tr>
<tr>
<td>Texas Corp.:</td>
</tr>
<tr>
<td>Texas Co. (Delaware)</td>
</tr>
<tr>
<td>Texas Co. (California)</td>
</tr>
<tr>
<td>Texas-Empire Pipe Line Co. (Delaware)</td>
</tr>
<tr>
<td>Texas-Empire Pipe Line Co. (Illinois)</td>
</tr>
<tr>
<td>Texas-Empire Pipe Line Co. of Texas</td>
</tr>
<tr>
<td>Texas Pipe Line Co.</td>
</tr>
<tr>
<td>Texas Pipe Line Co. of Oklahoma</td>
</tr>
<tr>
<td>Tide Water Associated Oil Co.:</td>
</tr>
<tr>
<td>Associated Oil Co.</td>
</tr>
<tr>
<td>Associated Pipe Line Co.</td>
</tr>
<tr>
<td>Bradford Transit Co.</td>
</tr>
<tr>
<td>Texas-Empire Pipe Line Co. of Texas</td>
</tr>
<tr>
<td>Tidal Pipe Line Co.</td>
</tr>
<tr>
<td>Tidal Refining Co.</td>
</tr>
<tr>
<td>Tide-Water Pipe Co., Ltd.</td>
</tr>
<tr>
<td>Union Oil Associates:</td>
</tr>
<tr>
<td>Union Oil Co. of California</td>
</tr>
<tr>
<td>Producers Transportation Co.</td>
</tr>
</tbody>
</table>

**Group 2. Partially Integrated and Smaller Integrated Units of the Oil Industry. (Eleven Partially Integrated Companies)**

<table>
<thead>
<tr>
<th>Company Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Republics Corp.:</td>
</tr>
<tr>
<td>American Petroleum Co. (Texas)</td>
</tr>
<tr>
<td>Atlas Pipeline Co., Inc.:</td>
</tr>
<tr>
<td>Atlas Pipeline Co., Inc.</td>
</tr>
<tr>
<td>Spartan Refining Co., Inc.</td>
</tr>
<tr>
<td>British-American Oil Co., Ltd.:</td>
</tr>
<tr>
<td>Toronto Pipe Line Co.</td>
</tr>
<tr>
<td>Houston Oil Co. of Texas:</td>
</tr>
<tr>
<td>A third interest in certain lines owned by</td>
</tr>
<tr>
<td>American Petroleum Co. (Texas)</td>
</tr>
<tr>
<td>Wm. F. Morgan, Inc.:</td>
</tr>
<tr>
<td>Gulf Coast Pipe Line Co.</td>
</tr>
<tr>
<td>National Refining Co.:</td>
</tr>
<tr>
<td>National Pipe Line Co.</td>
</tr>
<tr>
<td>National Refining Co. of Oklahoma</td>
</tr>
<tr>
<td>South Penn Oil Co.:</td>
</tr>
<tr>
<td>Bradford Transit Co.</td>
</tr>
<tr>
<td>Standard Oil Co. (Kansas)</td>
</tr>
</tbody>
</table>
TABLE 6—Continued

Standard Oil Co. (Ohio):
   Ajax Pipe Line
Texas and Pacific Coal and Oil Co. of Texas:
   Thurber Pipe Line Co.
   Valvoline Oil Co.

Group 3. Independent Pipe Line Companies (Eleven Independent Companies).

   National Transit Co.:
   Maryland Pipe Line Co.
   "Northern" group:
      Indiana Pipe Line Co.
      Buckeye Pipe Line Co.
      Northern Pipe Line Co.
      New York Transit Co.
   "Southern" group:
      Eureka Pipe Line Co.
      Southern Pipe Line Co.
      South West Pennsylvania Pipe Lines
         (Cumberland Pipe Line Co.)
   Crude Transport Co.
   Elk Oil Co.
   Franklin Pipe Co., Ltd.
   *Owned jointly by Atlantic Refining Co. and Cities Service Company.
   cOwned jointly by Cities Service Co. and The Texas Corp.
   dOwned jointly by Cities Service Co., The Texas Corp., and Tide Water Associated Oil Co.
   eOwned jointly by Ohio Oil Co., and Standard Oil Co. (Indiana).
   fOwned jointly by Ohio Oil Co., Standard Oil Co. (New Jersey Corp.), and Standard Oil Co. (Ohio).
   gOwned jointly by Standard Oil Co. of California, Tide Water Associated Oil Co., and Southern Pacific Co.
   hOwned jointly by Tide Water and South Penn Oil Co.

Control of pipe lines rests largely, as noted in Table 6, in the hands of approximately twenty major or integrated independent pipe line companies. The relative importance of
the three groups according to mileage owned and operated during the 1932 period is shown in Table 7.4

TABLE 7

COMPARATIVE SIZE OF THREE GROUPS OF COMPANIES ACCORDING TO MILEAGE OWNED

<table>
<thead>
<tr>
<th>Basis of Comparison</th>
<th>Integrated Units of Oil Industry</th>
<th>Partially Integrated Units of Industry</th>
<th>Independent Companies</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Miles Owned*</td>
<td>82,508.46</td>
<td>3,697.68</td>
<td>19,531.98</td>
<td>105,738.12</td>
</tr>
<tr>
<td>Per Cent</td>
<td>78.00</td>
<td>3.50</td>
<td>18.50</td>
<td>100.00</td>
</tr>
</tbody>
</table>

*Includes both trunk and gathering line mileage.

As of the year 1932, we see that more than three-fourths of the mileage of crude oil pipe lines, including both trunk and gathering facilities, rests in the hands of the twenty major or integrated companies, less than one-fifth in the hands of the partially integrated companies, and less than twenty-five per cent in the hands of the independent companies.

Four years later, in 1936, out of a total of 110,580 miles of pipe lines, 52.3 per cent being trunk and 47.7 per cent gathering facilities, twenty major oil companies owned

4Ibid., p. xxvii.
or controlled 85.4 per cent of the trunk and 57.4 per cent of the total gathering line mileage of the industry.\(^5\)

Table 8 shows a breakdown of pipe line mileage owned by twenty major companies and all other companies as of January 1, 1938.

**TABLE 8**

PIPE LINE MILEAGE OF TWENTY MAJOR OIL COMPANIES AND ALL OTHER COMPANIES AS OF JANUARY 1, 1938

<table>
<thead>
<tr>
<th>Name of Company</th>
<th>Reported to T.N.E.C.</th>
<th>Processed</th>
<th>Total</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated Oil Corp.</td>
<td>13,130</td>
<td>253</td>
<td>13,383</td>
<td>11.6</td>
</tr>
<tr>
<td>Standard Oil Co. (N.J.)</td>
<td>10,902</td>
<td>318</td>
<td>11,220</td>
<td>9.8</td>
</tr>
<tr>
<td>Standard Oil Co. (Ind.)</td>
<td>8,382</td>
<td></td>
<td>8,382</td>
<td>7.3</td>
</tr>
<tr>
<td>The Texas Corp.</td>
<td>6,555</td>
<td>1,433</td>
<td>7,988</td>
<td>6.9</td>
</tr>
<tr>
<td>Gulf Oil Corp. of Pa.</td>
<td>7,961</td>
<td></td>
<td>7,961</td>
<td>6.9</td>
</tr>
<tr>
<td>Socony-Vacuum Oil Co., Inc.</td>
<td>7,309</td>
<td></td>
<td>7,309</td>
<td>6.3</td>
</tr>
<tr>
<td>The Ohio Oil Co.</td>
<td>4,814</td>
<td></td>
<td>4,814</td>
<td>4.2</td>
</tr>
<tr>
<td>Shell Union Oil Co.</td>
<td>4,226</td>
<td></td>
<td>4,226</td>
<td>3.6</td>
</tr>
<tr>
<td>Tide Water Assoc. Oil Co.</td>
<td>3,701</td>
<td>155</td>
<td>3,856</td>
<td>3.3</td>
</tr>
<tr>
<td>Cities Service Co.</td>
<td>1,337</td>
<td>977</td>
<td>2,314</td>
<td>2.0</td>
</tr>
<tr>
<td>Continental Oil Co.</td>
<td>1,682</td>
<td></td>
<td>1,682</td>
<td>1.5</td>
</tr>
<tr>
<td>Phillips Petroleum Co.</td>
<td>1,306</td>
<td>148</td>
<td>1,454</td>
<td>1.3</td>
</tr>
<tr>
<td>Atlantic Refining Co.</td>
<td>1,449</td>
<td></td>
<td>1,449</td>
<td>1.3</td>
</tr>
<tr>
<td>The Pure Oil Co.</td>
<td>1,118</td>
<td>239</td>
<td>1,357</td>
<td>1.1</td>
</tr>
<tr>
<td>Mid-Continent Pet. Corp.</td>
<td>1,212</td>
<td></td>
<td>1,212</td>
<td>1.0</td>
</tr>
<tr>
<td>Union Oil Co. of Calif.</td>
<td>911</td>
<td></td>
<td>911</td>
<td>0.8</td>
</tr>
<tr>
<td>Standard Oil Co. of Ohio</td>
<td>500</td>
<td>239</td>
<td>739</td>
<td>0.7</td>
</tr>
<tr>
<td>Skelly Oil Co.</td>
<td>666</td>
<td></td>
<td>666</td>
<td>0.6</td>
</tr>
<tr>
<td>Sun Oil Co.</td>
<td>646</td>
<td></td>
<td>646</td>
<td>0.6</td>
</tr>
<tr>
<td>Standard Oil Co. of Calif.</td>
<td>560</td>
<td></td>
<td>560</td>
<td>0.6</td>
</tr>
<tr>
<td>Richfield Oil Corp.</td>
<td>470</td>
<td></td>
<td>470</td>
<td>0.4</td>
</tr>
<tr>
<td>20 Major Oil Companies</td>
<td>78,784</td>
<td>3,762</td>
<td>82,546</td>
<td>71.8</td>
</tr>
<tr>
<td>All Other companies</td>
<td>32,454</td>
<td></td>
<td>32,454</td>
<td>28.2</td>
</tr>
<tr>
<td>Total</td>
<td>115,000</td>
<td></td>
<td>115,000</td>
<td>100.0</td>
</tr>
</tbody>
</table>


\(^6\)Ibid., p. 7792.
The data presented in the above table were compiled by the Temporary National Economic Committee staff from statistical information obtained from oil companies prior to the beginning of the series of hearings conducted in 1938 and 1939. Companies are listed in order of their ownership of total miles of crude oil pipe lines. In those instances where ownership of a facility rests in the hands of one or more companies, the total mileage has been prorated. Finally, the table includes percentage of ownership of trunk line facilities by the twenty major companies.

Of the fifty-eight pipe line companies reporting to the Interstate Commerce Commission in 1938, two years later, forty-two were owned or controlled by the twenty major or integrated companies of the industry.\(^7\) These forty-two companies in turn owned eighty-nine per cent of the trunk line mileage and sixty-six per cent of the gathering line mileage reported to the Commission for that year. Fourteen of the forty-two companies owned 45,915 miles of crude trunk lines\(^8\) amounting to eighty-nine per cent of the total 51,569 miles of crude oil trunk lines reported to the Interstate Commerce Commission, Bureau of Transport Economics and Statistics, Statistics of Oil Pipe Line Companies for the Year Ending December 31, 1938, Statement No. 3955, p. 4.

\(^7\)Actually these fourteen companies represent parent companies of the total forty-two companies mentioned in the preceding sentence. Therefore, twenty-eight of the forty-two companies would be operating subsidiaries of the fourteen parent organizations.
Commission for that year. The Interstate Commerce Commission in its 1938 report shows that of the 38,873 miles of gathering lines owned by companies reporting to it, 25,612 miles, or about sixty-six per cent, were owned or controlled by the twenty major companies.

In the 1942 report of the Interstate Commerce Commission, sixty-nine companies reported a grand total of 106,485 miles of pipe lines in operation. This figure represents 56,485 miles of crude oil trunk lines, 7,405 miles of refined oil lines, and 42,318 miles of gathering lines. In the year 1942, representing the last year for which a report is available, twenty major or integrated companies owned or controlled 91.4 per cent of the total trunk mileage while on the other hand ownership or control of gathering lines was 76.7 per cent.

Of the total mileage in 1942, including both trunk and gathering lines, major or integrated companies owned or controlled 85.1 per cent.

Table 9 shows a percentage comparison of control of crude oil pipe lines by twenty major companies for the years 1932, 1936, 1938, and 1942.

9Temporary National Economic Committee, op. cit., p. 7720.


### Table 9

<table>
<thead>
<tr>
<th>Year</th>
<th>Pipe Line Mileage Reported to I.C.C.</th>
<th>Per Cent Control of Twenty Major Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trunk&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Gathering</td>
</tr>
<tr>
<td>1932</td>
<td>51,404</td>
<td>41,378</td>
</tr>
<tr>
<td>1936</td>
<td>54,460</td>
<td>39,600</td>
</tr>
<tr>
<td>1938</td>
<td>51,569</td>
<td>38,873</td>
</tr>
<tr>
<td>1942</td>
<td>56,762</td>
<td>42,318</td>
</tr>
</tbody>
</table>


<sup>b</sup>These figures do not include refined oil pipe line mileage.

<sup>c</sup>Percentage control of trunk and gathering line facilities owned by twenty major companies cannot be computed from available data since there is no breakdown in classification in the number of miles owned and operated. (See Table 7).

<sup>d</sup>The decrease in percentage control of the major companies, as shown for the year 1936, possibly may be due to two factors: 1) the depression of the middle thirties and 2) the discovery and development of the East Texas Oil Field largely by independent companies.

By way of summary we see that in 1932, 81.5 per cent of the total pipe line mileage in the United States rested in the hands of integrated and partially integrated companies; that in 1936, twenty major oil companies owned or controlled 85.4 per cent of the total trunk line facilities and 57.4 per
cent of the total gathering line mileage. In 1938, control had shifted to eighty-nine per cent of the total crude oil trunk lines and sixty-six per cent of the gathering line mileage of the country. For the year 1942, representing the last year for which a report is available, major or integrated companies owned or controlled 91.4 per cent of the trunk line mileage, representing a total control of 85.1 per cent of the two types of pipe lines reported to the Commission for this period. Thus we see that in the 1936-1942 period, ownership and control of trunk pipe lines by the twenty major or integrated companies has increased from 85.4 to 91.4 per cent while ownership and control of gathering lines increased from 57.4 to 76.7 per cent. Over-all percentage control by the twenty major companies reflects an increase from 78.0 in 1932 to 85.1 per cent in 1942.

Of the twelve members of the so-called independent group of pipe line companies covered in the "Splawn Report" of 1933\(^2\) only eight reported to the Commission in 1942. These companies reported ownership and control of 10,729 miles of

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\(^2\)See Table 6, Group 3, for a list of twelve independent pipe line companies operating in the 1932-1933 period. The four companies not reporting in 1942 were the Maryland Pipe Line Company, Crude Transport Company, Elk Oil Company, and Franklin Pipe Co., Ltd. With one exception a search of Moody's Analysis of Investments for the years 1924 through 1942 fails to disclose any information on the disappearance of these companies. Maryland Pipe Line Company, a formerly wholly owned subsidiary of National Transit Company, was liquidated in 1933.
gathering and 5,222 miles of trunk line facilities, representing approximately twenty-four and eight per cent control respectively.\(^{13}\)

With the end of world war II many new pipe line facilities constructed by the government during the emergency period are available for disposal.\(^{14}\) We probably can assume with some degree of safety that the disposal of these units will not disrupt, to any considerable extent, the amount of control exercised at the hands of the major or integrated companies.\(^{15}\)

Since concentration of ownership is in the hands of the integrated or major companies, it is possible for these concerns to control effectively the amount of use of pipe line facilities by outside shippers. J. Howard Pew, President of the Sun Oil Company, Philadelphia, Pennsylvania, owner and operator of pipe line transportation facilities, reluctantly revealed the situation in his testimony before the Temporary National Economic Committee:

Mr. Cox: Can you tell us by way of illustration how much oil is carried in your crude-oil pipe lines for the account of other companies?


Mr. Pew: I think that substantially all of the oil carried by our lines is our own oil. Now in some cases we carry oil for other people, but our procedure has rather been that of buying the oil in the field and putting it through the line and selling it at the other end.

Mr. Cox: You have title to it?

Mr. Pew: We have title to it. That is just a question of procedure, but after taking that point into consideration—I will give you the figure here. Eighty-four per cent is our own oil.

Mr. Cox: That is the crude oil or the gasoline?

Mr. Pew: Crude oil.

Mr. Cox: What about the gasoline pipe lines?

Mr. Pew: 91.2.

Mr. Cox: 91.2 of gasoline. Can you tell us how much of the balance that is carried for the account of others is carried for the account of other integrated companies as large or larger than your own? How much for smaller non-integrated companies?

Mr. Pew: I think substantially all of it is carried by integrated companies, for integrated companies which are substantially as large as our own.

Mr. Cox: In other words, as far as your pipe lines of both kinds are concerned, of crude oil and gasoline, you don't carry any oil for the small independent?

Mr. Pew: No, if our lines attract the other integrated companies the services are available for any who want to make use of them and under whatever conditions the Interstate Commerce Commission may see fit to impose.

Mr. Cox: So the situation is simply that these independents haven't tendered any oil to you?
Mr. Poe: I think the discussion is more or less academic, if I may be permitted to say so, because that branch of our industry is already under the control of the Government.

Mr. Coxe: You mean the Interstate Commerce Commission?

Mr. Poe: The Interstate Commerce Commission, and if our rates are too high it is within their province to reduce them.\textsuperscript{16}

One might ask Mr. Poe, "If the 'common carrier' facilities are being utilized to near capacity by their owners or are engaged in transporting oil for the account of other integrated companies what does it avail the independent shipper to complain to the Interstate Commerce Commission as to unjust and unreasonable tariff charges?"

\textsuperscript{16}Temporary National Economic Committee, Investigation of Concentration of Economic Power, \textit{op. cit.}, p. 7209.
CHAPTER IV

EARLY REGULATION OF PIPE LINES AS COMMON CARRIERS

A study of the early days of the American petroleum industry shows that the search for a cheap and efficient means of moving or conveying petroleum led to the construction by private interests of a number of short pipe lines from producing areas to adjacent railroads, refining facilities, or water-ways. These facilities were made available by the owners to those producers wishing to transmit oil to a designated place. Specified rates or fees were assigned by the pipe line owners for the transportation of the consignment. Disputes frequently arose between the users of the then existing facilities and the line owners themselves. Courts of law were called upon to settle the disputes and it was early detected that there was a resemblance between the activities of the line user-owner and those of common carriers at law.¹

As the mushroom network of pipe lines spread from the Titusville, Pennsylvania, area to the eastern seaboard and other locations, bringing with its expansion collusion

¹William Beard, Regulation of Pipe Lines as Common Carriers, p. 10.
between railroads and refining interests against independent operators, legislative bodies were forced to set up a system of administrative regulation of oil pipe lines as common carriers in order that protection might be extended to those caught in the mesh of monopolistic tactics exercised by large integrated companies. Certain practices of oil interests, notably those of the Standard Oil Company, hastened the day of federal intervention.

In its efforts to secure and maintain control of the early pipe lines in the country Standard resorted to devices of varying shades and colors. One method used was to interfere with the construction of independent pipe lines either by direct purchasing of land along the proposed route of the independent or by securing rights of its own across the contemplated routes of the independents.\(^2\) When this method failed the support of the railroads was sought and thereupon these would refuse to extend rights-of-way across the tracts to rivals of the Standard Company.\(^3\)

The railroads enjoyed a community of interest with the Standard Oil Company in that neither wanted to encourage the development of rival transportation systems. Railroads employed physical violence to deter pipe line


\(^3\)Ibid., p. 24.
crews from completing construction projects. When a pipe line was faced with having to cross a railroad and tried to solve its problem by erecting tanks on either side of the railroad and hauling oil across the tracks in wagons via a public road, the railroad involved developed the practice of leaving long strings of box-cars on the crossing.

If an independent line was able to overcome such obstacles as enumerated in the preceding paragraphs there was no assurance from any quarter that it could remain independent. There was always the chance that the Standard Oil interests might secretly purchase stocks in the new enterprise and thus gain control of the lines. This occurred in the case of the Tidewater Pipe Line Company, owner and operator of a 109 mile pipe line extending from Rixford in the Pennsylvania oil fields to Williamstown, located at a point on the Reading Railroad.

When independent producers and refiners were not in a position to retain control over their own pipe lines, they had to resort to the practice of sending and receiving shipments of petroleum through the use of railroad facilities. Here again they were faced with the control and dominance of

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5Congressional Record, June 5, 1914, p. 9868.

Standard interests. Costs of transportation by pipe line were much cheaper than by rail, yet if access to pipe lines was denied the independent he was forced to use the railroad medium of transportation. Many times the rate advantage enjoyed by the pipe lines was further enhanced by understandings between the owners of the two types of transportation under discussion. For example, the National Transit Company, a pipe line member of the Standard group, signed a contract with the Pennsylvania Railroad in August, 1884, whereby in return for a valuable consideration the railroad was to keep rates on independent oil, moving by rail, up to levels satisfactory to the pipe line organization. 7

Standard interests resorted to other methods also. One that frequently was used to force independent pipe lines out of business was the paying of premiums for crude oil to producers located in the vicinity of an independent pipe line, thus depriving the independent line of any traffic. 8 The Standard Company could afford to practice this type of price discrimination without influencing to any great extent the average price which it paid for oil, whereas the small company meeting this type of competition on all or a major portion of his business did so at a loss. However, when this method failed, the Standard frequently was known to have made

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8Stocking, op. cit., p. 28.
outright purchases of oil wells or refineries upon which independent pipe lines had to depend for their existence.\(^9\) Either method served to take away from the independent the business which it had formerly handled. On the one hand the independent pipe line company lost the sources of its needed traffic and on the other hand it lost its customers for the crude that it transported by means of pipe lines.

Situations like those pointed out above led to an early demand for regulation of pipe lines. Strangely enough, the inclusion of regulation of pipe lines in the provisions of the Hepburn Act of 1906 was brought about through an investigation of activities of transportation agencies, particularly the railroads, which was underway in the states of Pennsylvania, Ohio and New York during the period 1878 and 1879.\(^10\) In 1878 the Petroleum Producer's Union of Pennsylvania filed with Governor John F. Hartranft of that state a "plain statement of facts" setting out certain discriminations practiced by the Pennsylvania Railroad and Standard Oil interests.\(^11\) By September of 1878 Pennsylvania state authorities had begun their investigation. Testimony brought out that the railroads had refused to furnish cars for independents when they had

\(^9\)Ibid., p. 25.


\(^11\)Ibid. For a copy of the complete text of the document submitted by the Petroleum Producer's Union see Appendix No. XXXII.
them empty; that the United Pipe Lines12 had clearly violated its duty as a common carrier; that "the Pennsylvania Railroad had become the creature of the Standard Oil Company; that it was not only giving that company rates much lower than to any other organization, but that it was using its facilities with a direct view of preventing any outside refiner or dealer in oil from carrying on an independent business."13 Toward the latter part of 1878 the Chamber of Commerce of New York City demanded from the Legislature of the state an investigation of the New York railroads. Alonzo Barton Hepburn, a member of the New York State Legislature, was appointed chairman of the investigating committee.

For the first time in the new era an authentic light was thrown on the outrageous system of discrimination, graft, and corruption in national affairs. The nation was shocked. For the first time the name of John D. Rockefeller came to have a national currency as a symbol of the new order and its evils.14

A significant development in the New York hearings was the relationship of the Erie and Central Railroad companies to the Standard Oil Company.

At the same time the Pennsylvania suits were going on and the Hepburn Committee was doing its work, the legislature of Ohio instituted an investigation of a similar nature.

12Controlled by Standard Oil Company.
14Flynn, op. cit., p. 218.
This investigation was to reveal interesting facts related to the policy of rebates.\textsuperscript{15}

The bringing to the forefront of the flagrant abuses of "big interests" unearthed in the various state investigations during 1878 and 1879 accomplished little in the way of concrete remedial measures. However, the results of the investigations did help to crystallize and mold public opinion. Not only were citizens of the New York, Pennsylvania and Ohio area aroused, but the Middle West, still an infant in an industrial sense, found its plans for expansion thwarted by certain railroad practices. Investigations were undertaken at the insistence of such groups as the Grangers and others. Legislatures were pressed into action. The rising tide of public resentment found its expression in the passage of the Act to Regulate Commerce of 1887.\textsuperscript{16}

Political parties, preparing for the elections of 1888, responded to the widespread public resentment against trusts and business combinations then running rampant over the nation. Both the Democrats and the Republicans turned their attention toward the issue in their platforms. The outcome of the campaign pledges was the passage of the Sherman Anti-Trust

\textsuperscript{15}Tarbell, \textit{op. cit.}, p. 228.

\textsuperscript{16}It is not believed necessary to take up a discussion of the provisions of the Act to Regulate Commerce of 1887 at this point since the Act was designed primarily to correct practices found in the railroad industry of the country during this period. For a discussion of the Act see Emory R. Johnson, Government Regulation of Transportation, pp. 219-223.
Act of 1890. Section I of the measure as finally passed provides that "every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or foreign nations, is hereby declared illegal." Section II of the Act provides that "every person who shall monopolize trade among the several States or with foreign nations, shall be deemed guilty of a misdemeanor." Penalties are provided for the violation of either section.

States, riding on the wave of the public anti-trust sentiment which brought about the passage of the Sherman Anti-Trust Act, undertook trust investigations. One of the early targets of the investigations was the Standard Oil Company.

In 1890 the Attorney General of the State of Ohio filed a petition before the Supreme Court of the same state "averring that, in violation of the law of Ohio, the Standard Oil Company had entered into an agreement by which it had transferred 34,993 shares out of 35,000 to the trustees of the Standard Oil Trust, most of whom were non-residents of the state; that it was these trustees who chose the board of directors of the Standard Oil Company of Ohio, and directed its policy, and prayed then on account of this violation of law, the company should be 'adjudged to have forfeited and

17Stocking, op. cit., pp. 40-41.
surrendered its corporate rights, privileges, powers and franchises, and that it be ousted and excluded therefrom, and that it be dissolved.\textsuperscript{18} The trial extended over a period of two years and in March, 1892, the Court held the Standard guilty of the violations enumerated above. The Standard Oil Company of Ohio was ordered to sever its connection with the Standard Trust. According to the arrangements for dissolution, stock in those companies making up the trust was to be returned to the original owners on a prorate basis according to the number of trust certificates held by each. It happened that the nine members of the board of trustees, owning a majority of the trust certificates, found that they owned a majority of stock in each of the companies severed from the trust organization after the exchange arrangement had been completed. One source points out that the results of the breaking up of the trust amounted to nothing more than each player in the game receiving a new deck of cards, extreme care having been taken by the players not to shuffle the deck or redeal the cards used in the same.

As a way of by-passing the order of the Ohio court, the Standard Oil Trust sought refuge under New Jersey corporation law. In 1899 the Standard Oil Company of New Jersey increased its capital stock from \$10,000,000.00 to \$110,000,000.00 and proceeded to absorb the smaller Standard companies by

\textsuperscript{18}Tarbell, \textit{op. cit.}, pp. 143-144.
exchanging the outstanding trust certificates and shares of stock of subsidiaries for shares in the New Jersey holding company. The reorganization, being a change in form only, obviously resulted in no great change of the Standard's position in the oil industry.

In 1903 the Bureau of Corporations was established as an investigating body under the newly created Department of Commerce and Labor. Its duties were to investigate the activities and affairs of those corporations engaged in interstate commerce. One of its first projects consisted of an investigation on behalf of the activities of the Standard Oil Company, particularly its influence on the field of transportation. The commission submitted its report in May, 1906, representing a detailed analysis of the history and activities of the Standard Oil Company. Particular attention was paid to the extent of the Standard's monopoly control and the methods by which this control had been secured.

As a result of the investigations conducted by the Commissioner of Corporations, the Department of Justice instituted proceedings against the Standard Oil Company in the United States District Court, Missouri district. In November, 1906, a bill was filed in which it was alleged that the Standard Company had violated the Sherman Anti-Trust Act of 1890. The trial, extending over a period of nearly

19Stocking, op. cit., p. 44.
three years, developed facts indicating that the Standard Oil Company of New Jersey owned directly stock in sixty-five companies and controlled indirectly, through ownership of stock in subsidiaries, forty-nine other companies, a total of one hundred and fourteen concerns.\textsuperscript{20} In November, 1909, a decision was handed down by the court. The court held that the stock of thirty-six domestic subsidiaries and one foreign subsidiary was held by means of an illegal combination in violation and contravention of the terms and provisions of the Sherman Act. Appeal was made by the Standard Company to the Supreme Court of the United States. The decision of the court was issued in May, 1911, the court reaffirming the decision of the lower court.\textsuperscript{21} It should be borne in mind that the dissolution decree of 1911 did not involve a change in ownership of the companies concerned. It merely represented a change in the form of ownership. Ownership and control virtually remained in the hands of the group which formerly had control of it.

As an outgrowth of accumulated data unearthed in various investigations during the period 1887 to 1906 it became evident that additional legislation was needed to strengthen the Act to Regulate Commerce of 1887. This additional legislation appeared in the form of the Hepburn Act which was drawn up

\textsuperscript{20}Ibid., p. 46.
\textsuperscript{21}221 U. S. Reports, 1, pp. 75-77.
and presented to the Congress of the United States where it was enacted into law on June 29, 1906.\textsuperscript{22}

With the passage of the Hepburn Act of 1906 the authority of the Interstate Commerce Commission was greatly increased. In actual form the Act merely constituted an amendment to the Act to Regulate Commerce of 1887, but in reality the Hepburn Act thoroughly overhauled the original law.\textsuperscript{23} Under this Act interstate pipe lines other than those used in the transportation of natural or artificial gas and water were declared to be common carriers and were placed under the jurisdiction of the Interstate Commerce Commission. The law required pipe line companies to publish schedules of rates, to file reports, and to follow a standard form of accounting.

Having now been declared common carriers, the pipe lines apparently could be forced to carry oil for independent producers and refiners at what constituted just and reasonable rates, thereby breaking up the advantage held by the Standard or other integrated companies. With the common carrier status before them many of the pipe line companies still refused to recognize their new status as shippers of any oil tendered them for shipment. This attitude on the part of those shippers declared common carriers represented a flat defiance of

\textsuperscript{22}For a description of conditions in the railroad industry giving rise to a demand for further legislation, see Elliot Jones, \textit{Principles of Railway Transportation}, pp. 231-248.

\textsuperscript{23}\textit{Statutes at Large}, Part I, pp. 584-585.
the newly determined public policy. In their minds a policy of "the public be damned" existed. Under the new determination of common carriage the pattern of control exercised at the hands of the major companies shifted in a new direction.

Many of the pipe line companies refused to file tariffs with the Interstate Commerce Commission. Companies adopted the practice of purchasing all oil which was offered them for transportation by outsiders. The pipe line companies were in a position to contend that they were transporting their own oil and were not transporting oil for the general public. How could they be subject to regulation when the oil being transported belonged to them the companies reasoned. What then was the need for filing tariff schedules with the Interstate Commerce Commission?

With the pipe line companies resorting to the practice of purchasing in the field all oil moved through their pipes, the plight of the independent producer or refiner was no better than prior to the passage of the Act. It became necessary for the Commission to institute an investigation and determine whether it had jurisdiction over these pipe lines. The Interstate Commerce Commission considered the effect of the Hepburn Act and construed the law as placing under its jurisdiction all pipe lines carrying oil in interstate commerce, whether or not they had previously held themselves out to be common carriers.24 During the course of

24 24 I.C.C. 1, In the Matter of Pipe Lines, 1912.
the investigation the Commission found that in certain instances separate corporations had been created in each state through which the oil was transported. Where these instances were found the Commission held that the transportation was, in substance, interstate. In another instance the Commission observed that the transfer of a portion of the property of a common carrier pipe line to a private corporation without change in the actual activities of the pipe lines did not release such property from the obligations imposed by its common carrier status. It further held that the intention of Congress as expressed in the Hepburn Act was to convert interstate pipe lines into common carriers. The Commission, after completing the investigation, ordered all of the respondent interstate pipe line companies to file tariffs and schedules in accordance with Section 6 of the Interstate Commerce Act. The courts were left to decide the delicate question of whether Congress could convert pipe lines into common carriers by legislative fiat or not.

The act of the Commission in ordering interstate pipe line companies to file tariffs and schedules in accordance with Section 6 of the Interstate Commerce Act was reviewed by the Supreme Court in what is known as the Pipe Line Cases.  

\[25\text{Ibid.}\]

\[26\text{234 U. S. Reports 548. Docket title of these cases: No. 481, United States vs. Ohio Oil Co. No. 482, United States vs. Standard Oil Co. No. 483, United States vs. Standard Oil Co. of La. No. 506, United States vs. Prairie Oil Co. No. 507, United States vs. Uncle Sam Oil Co. No. 508, United States vs. Benson, doing business under the partnership name of Tide Water Pipe Co., Ltd.}\]
The Supreme Court upheld the action of the Commission in requiring these pipe lines to file their tariffs although one company transporting oil from its own wells to its own refinery was held not to be a common carrier. The Court held that the pipe line companies were common carriers even though they had purchased the oil prior to its going into the pipe lines. Justice Holmes delivered the opinion of the Court. His statements, made thirty-three years ago, are so applicable to present-day conditions that they are worth quoting:

By the before mentioned and subordinate lines the Standard Oil Company had made itself master of the only practicable oil transportation between the oil fields east of California and the Atlantic Ocean and carried much the greater part of the oil between these points. Before the recent dissolution the New York and Pennsylvania companies had extended their lines into New Jersey and Maryland to the refineries and the laws of those States did not require them to be common carriers. To meet the present amendment the Standard Oil Company took a conveyance of the New Jersey and Maryland lines, and the common carrier lines now end at insignificant places where there are neither markets nor appliances except those of the Standard Oil, by which it would seem that the whole transport of the carriers lines is received. There is what seems to be merely a formal breach of continuity when the carriers' pipes stop. The change is not material to the view of the case.

Availing itself of its mastery of the means of transportation the Standard Oil Company refused through its subordinates to carry any oil unless the same was sold to it or them and through them to it on terms more or less dictated by itself. In this way it made itself master of the fields without the necessity of owning them and carried across half the continent a great subject of international commerce coming from many owners but, by the duress of which the Standard Oil Company was master, carrying it all as its own.
It would not only be a sacrifice of fact to form but would empty the act if the carriage to the seaboard of nearly all the oil east of California, were held not to be transportation within its meaning, because by the exercise of their power the carriers imposed as a condition to the carriage a sale to themselves. 27

Thus the Commission's jurisdiction over pipe lines was finally established.

Since the passage of the Act of 1906, and the Supreme Court decision in the Pipe Line cases of 1914, no significant legislative developments have occurred. The Interstate Commerce Commission, already overburdened with its duties of policing the gigantic railroad system that is ours, found itself faced with the additional duties of regulating that phase of the petroleum industry's activities covering the area of pipe line transportation.

The independent producer and refiner, after having his hopes for free access to pipe lines at just and reasonable rates aroused by the passage of the Act of 1906 and subsequent developments in the form of the decision in 1914 in the Pipe Line cases, lapsed back into a darker mood in the face of practices which crept into the scene following the court determination in 1914.

As related in the succeeding chapter, significant developments, vitally affecting the independent producer and

27Ibid., pp. 558-560.
refiner, occurred in the form and type of control exercised by major or integrated companies over pipe line facilities.
CHAPTER V

LATER REGULATION OF CRUDE OIL PIPE LINES
AS COMMON CARRIERS

The discussion in this chapter centers around the type of private restrictions that have been used by the major or integrated companies to limit the use of pipe lines as common carriers by independent shippers and producers of crude petroleum. These major companies, firmly entrenched in their control over crude oil pipe lines, have implemented their control by adopting policies which thus far have prohibited any undermining of their strategic position by outside forces.

Restricted shipping requirements, such as minimum tenders, high tariff rates, control of storage facilities, control over crude oil prices, concentrated ownership and control by major companies and other private restrictions, have existed in the industry in spite of the fact that pipe line operations have been under the regulatory jurisdiction of the Interstate Commerce Commission since 1906, or for a period of forty-one years.

While all of the pipe line companies which conduct an interstate traffic in crude petroleum have been declared by Congress and the courts of the land to be common carriers, no adequate and effective measures have yet been taken to
make them common carriers in fact. Companies in control of the pipe lines have constantly hedged about the pipe line service so as to make it practically unavailable except to a few companies in the favored group. For example, prior to the Supreme Court decision in 1914 wherein interstate pipe lines were held to be common carriers, the large Standard pipe line companies had always refused to act as common carriers for independent oil companies desiring to transport quantities of oil, although they did act as carriers of oil for the various Standard refining companies then existing. Following the court decision of 1914, the Standard lines running toward the eastern section of the United States required of all shippers a minimum tender of 100,000 barrels for a single shipment. It is not difficult to see what it would mean to the independent shipper of petroleum to be faced with such a minimum tender requirement. It meant that the independent shipper either had to construct additional tank storage facilities for storing such a quantity of oil prior to shipment or had to increase the size of the refining unit to the point where excess amounts of petroleum could be put through the refining process without having to resort to shipment of oil in crude form to outside sources. The typical independent refiner of that day could use only 5,000

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barrels of petroleum per day. Either course that the independent refiner took meant that he had to spend a considerable sum of money; this the independent generally could not afford because of his lack of sufficient capital. An examination of tariffs on file with the Interstate Commerce Commission today will show that the typical minimum tender requirement is 50,000 barrels and in some instances, 100,000 barrels. Since it will take many small refineries nearly a month to consume 100,000 barrels of crude oil and since many producers would have to accumulate their crude oil for years before they obtained 100,000 barrels, it is evident that such a large minimum shipment requirement alone may prevent small companies from using pipe lines as common carriers. The majors' regulations requiring minimum shipments of 25,000 to 100,000 barrels had an important effect in keeping the independents from using the lines declared as common carriers. In so far as the major companies were concerned it did not matter how high the minimum tenders were so long as they transported oil for themselves. The Federal Trade Commission in a report of 1928 had the following statement to make concerning certain restrictions found in pipe line tariffs:

The tariffs filed with the Interstate Commerce Commission under this act by the Standard lines required a minimum quantity for shipment so large as to preclude the use of these lines by independent

\[\text{Tbid., p. 24.}\]
refiners in most cases. As a consequence they continued to serve only Standard refineries.\(^3\)

With the authority and jurisdiction of the Commission definitely determined by the Supreme Court decision of 1914 in the matter of the Pipe Line cases, the way was open for the Commission to consider questions presented in cases before it. It is of some importance perhaps to note that in thirty-one years of regulation the Commission has had before it only three cases concerning pipe lines.\(^4\) The question of minimum tender requirements was an issue in one of these cases.\(^5\) One independent producer complained that the pipe line rates were excessive and that the minimum tender requirements were so high that the smaller producer was discriminated against. The Interstate Commerce Commission ordered the pipe line company to reduce its tender requirements from a 100,000 barrel minimum to 10,000 barrels. While recognizing that the pipe lines are essentially a "bulk business," and cannot be operated on a "driblet" basis, the Commission found that the 100,000 barrel tender was higher than the economics of operation required.

\(^3\) The Federal Trade Commission, Petroleum Industry: Prices, Profits and Competition, p. 73.

\(^4\) Interstate Commerce Commission, Interstate Commerce Commission Activities, 1887-1937, p. 234. A diligent search of available material has failed to satisfy the writer's mind as to why more cases were not brought before the Commission during this period of time.

This case represents the only one before the Interstate Commerce Commission concerning the question of excessive tender requirements. Few complaints have been filed and the other phases of the Commission's regulatory jurisdiction have kept it busy. One source points out that the lack of complaints may be due to the fear by small producing customers of discriminating reprisals by large oil companies owning pipe lines. Another consideration is that it is very costly for the independent to bring cases before the Interstate Commerce Commission. So far the record indicates that pipe lines are common carriers in name only and not in fact.

Because of excessive tender requirements set by the major companies and approved by the Commission, the independent producer and refiner finds himself precluded from use of trunk pipe lines as a means of transporting accumulated petroleum stocks. What is to be done with the petroleum that is produced in excess of the small producer's needs? What market is there for the excess crude oil stocks of the independent if arrangements cannot be made for transporting the petroleum at just and reasonable rates and under non-discriminatory practices via common carrier pipe lines?

The major companies stand ready to relieve the independent producer and refiner of any excess petroleum that he may have on his hands at a price. The ownership of trunk

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6Myron W. Watkins, Oil: Stabilization or Conservation, p. 56.
pipe lines by the major companies makes it possible for these companies to fix the price of crude oil in any given field. About thirty-five per cent of the refinery requirements of major companies are met by purchases of crude oil from independent producers. In any given field there are seldom enough buyers even to suggest a competitive market, and since the major companies usually own the trunk lines, they are the ones that set the price. Even in fields where there is more than one major company owning and operating a trunk line as a common carrier, the crude prices are identical. In the East Texas oil field, for example, where there are many independent producers and six major pipe line companies purchasing crude oil, the list prices of the six companies were the same dollar and cent amounts and changes were made by these companies at the same time. This is suggestive of an agreement on the part of the major companies to control crude prices in the producing areas. Thus we see that there is no free market in crude oil. This is chiefly due to the fact that virtually all purchases are made through the concentrated pipe line systems owned and operated by the major companies. These companies have been largely responsible .


8Ibid., p. 71. This practice occurred during the years 1931-1933, prior to the time the Texas Railroad Commission became actively interested in the problem.
for setting minimum tender requirements at high levels in tariff schedules filed with the Interstate Commerce Commission and by so doing have found themselves in a favorable position in the matter of controlling crude oil market prices in the producing areas which their trunk lines serve. The independent sees both the minimum shipment requirements and the practice of posting prices for crude oil as powerful instruments of control in the hands of a strong group of integrated refiners whose purpose it is to maintain a stranglehold on the industry through one means or another.

An additional device by means of which oil companies owning and controlling pipe lines derive an advantage over independent producers and refiners is by maintaining high pipe line rates. The belief persists in some quarters that by maintaining high pipe line rates the integrated companies can depress the price of crude oil at the wells in the producing areas at a distinct disadvantage to the independent producers and at the same time place refiners, who are forced to rely upon pipe lines which their competitors have control over, at a disadvantage.

In 1934 the Interstate Commerce Commission, on its own motion, undertook an investigation of rates charged by interstate pipe line carriers.9 The Commission’s decision to begin an investigation at this time perhaps was hastened

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9 Interstate Commerce Commission, Reduced Pipe Line Rates and Gathering Charges, Docket No. 26570.
by the findings of Congressional investigations in 1931 and 1933. In September, 1934, the Commission served thirty-seven respondent lines, which included all of the larger trunk lines, with a questionnaire to be filled out and returned to the Commission on or before December 31, 1934. The Commission requested of the companies data relative to operations of their lines for the period 1929-1933, as well as a detailed history of pipe-line rates for a ten-year period.

On July 23, 1935, a hearing was held before an examiner in Washington. There being no additional evidence revealed in addition to what had been reported by companies in the questionnaires, a proposed report was served upon the parties by the examiner on April 3, 1936. In his report J. Paul Kelley, Examiner, recommended (1) that tender requirements in excess of 10,000 barrels should be declared unreasonable, (2) that the Commission reopen the proceedings to obtain additional data for the 1934 and 1935 period, and (3) that the parties should show cause why rates in excess of sixty-five per cent of the rates in effect on December 31, 1933, should not be found unreasonable.

In the intervening period between April 3, 1936, the date of the examiner's report, and February 1, 1940, the date of the second examiner's report, the Commission had had time

10U. S. Congress, House of Representatives, *Oil and Oil Pipe Lines*, Hearing before Committee on Interstate and Foreign Commerce, House of Representatives, 73rd Congress, 2nd Sess. on H.R. Bills 9676 and 8672, 1931,

to complete its evaluation of pipe lines. On February 1, 1940, J. Paul Kelley issued his second report in which it was recommended that the Interstate Commerce Commission should find that the rates, rules, regulations, and practices of the respondent pipe line companies are not unlawful and that the proceeding should be discontinued.\textsuperscript{11}

In December, 1940, the Commission gave its decision, in no way following the examiner's recommendations. In regard to minimum tender requirements, the Commission was of the opinion that any requirement in excess of 10,000 barrels was unreasonable. In regard to rates, the Commission concluded that a return of eight per cent was fair and ample, after considering the hazards of unpredictable future volume of traffic.\textsuperscript{12}

Pipe line carriers, in an order from the Commission, were given sixty days to show cause why rates should not be reduced and to give reasons why the minimum tender should not be 10,000 barrels. It is encouraging to note that after thirty-four years of jurisdictional authority the Commission finally got around to taking a step toward a more stringent control over pipe lines.

Even under a reduced schedule of rates independent

\textsuperscript{11}Interstate Commerce Commission, op. cit., report proposed by J. Paul Kelley, Examiner, Sheet 37.

\textsuperscript{12}Ibid., Sheet 45.
refiners who transport their oil over the pipe lines of major oil companies are still at a competitive disadvantage since rates are much higher to them than to the companies owning the transport facilities. Major companies are in a position to use the difference in rates to put the independent refiner or producer at a competitive disadvantage. For example,

Standard Oil Company (Indiana) owns the Stanolind Pipe Line Company which extends from fields in Oklahoma and Texas to the parent company's mass-production refinery at Whiting, Indiana, a distance of over 500 miles. During 1938, the Stanolind Pipe Line Company transported 34,485,625,000 barrel-miles of crude oil at a cost of $11,050,478.00, which included all operating expenses, State and Federal Taxes, and fixed and contingent expenses. This is an average cost of only 0.032 cent per barrel-mile. An examination of the company's tariffs filed with the Interstate Commerce Commission discloses that the rate from Oklahoma to Whiting, Indiana, was 34.5 cents per barrel, or 0.069 per barrel-mile based on 500 miles.\(^{13}\)

This shows without a doubt that the cost is less than half the tariff rate which must be paid by independents if they do ship over the pipe line owned by the major company. Major companies are in a position to recoup from pipe line earnings the losses they may sustain in other branches of the industry. They are also able to push the independent to the wall in the area of marketing and distribution, using the independent's money, in part, to do it.

Another problem facing the independent shipper is that

of adequate storage facilities. In the absence of storage facilities at the refinery end, the independent is unable to hold his crude oil stocks for a more favorable price nor is he able to meet minimum tender requirements needed to send his crude oil to market elsewhere.\textsuperscript{14} Therefore, excessive minimum tender requirements, as well as the storing of oil for a better market price, requires that the independent construct costly tank farms to store the accumulated stocks. Another consideration is that tariffs filed by pipe line companies before the Interstate Commerce Commission generally provide that crude oil will not be received for shipment unless provision is made for immediate acceptance of the shipment in tanks provided by the consignee at the point of destination.\textsuperscript{15} Therefore the independent shipper or producer has to provide storage tanks at both ends of the line which requires a considerable outlay of capital.

Finally, the major companies have resorted to another device worthy of mention. Deliveries of crude petroleum have been accepted only in general, for certain "established delivery stations" on the lines of the company owning the


transportation facility. These established delivery stations are generally the points at which refineries of the affiliated pipe line company are located. Independent refineries located elsewhere, even though located along the route of an interstate pipe line, have not been able to avail themselves of the transportation facilities.\textsuperscript{16}

Thus by one means or another the pipe lines of the country which do an interstate traffic in petroleum have, although they are common carriers by law, remained in fact little more than plant facilities of the affiliated refineries of the pipe line companies. It seems that neither the legislation of Congress nor the Court's decree has yet served to make the pipe lines traversing the country common carriers in fact, though they are common carriers at law. They stand today largely as plant facilities for their owners.

The advantage which oil companies controlling pipe lines obtain over their competitors is essentially the same as that which railroad coal mines possessed over independent coal operators. For this reason there has been strong agitation to apply the commodities clause principle to pipe lines and thereby force the separation of oil production and refining from the business of transporting oil. The initial attempt to separate on a national scale the transportation of minerals from other branches of the mineral industry came in 1906. In

\textsuperscript{16}Stocking, \textit{op. cit.}, p. 99.
that year, under the Hepburn Act, it was proposed that the railroads of the country be forbidden to transport in Interstate Commerce commodities in which they had an interest.\textsuperscript{17} The commodities clause of the Hepburn Act was aimed at a particular type of discrimination. It had been found that railroads which owned coal mines or engaged in the production of other commodities in competition with independent producers had a distinct advantage over the independents. By charging high rates railroads were in a position to undersell and force out their competitors and thus monopolize the production of the commodity in question. If the railroads had to pay no transportation rates on the goods they produced, their advantage in maintaining high rates on a commodity was an obvious one. If the railroad-owned industry, operating as an affiliate or subsidiary of the railroad company, paid transportation charges on the goods it shipped, the advantage to the rail transportation company was the same, since the payment of the freight charges amounted to nothing more than taking money out of one pocket and transferring it to another. To prevent this type of discrimination Congress sought to separate the railroad business from other forms of enterprise.

When the bill which later became the Hepburn Act was under consideration by Congress in 1906 there was sentiment

\textsuperscript{17}For a discussion of the commodities clause provision of the Hepburn Act of 1906 see Eliot Jones, Principles of Railway Transportation, p. 242.
in favor of making the proposed commodities clause applicable to pipe lines as well as railroads. In the conference committee the railroads were left under the ban while pipe lines were removed from the reach of the commodities clause. When this modified measure came before the House of Representatives efforts were made to restore it to its original form so that pipe lines would be covered as well as railroads. Arguing that oil companies should be denied the right to be in the transportation business and at the same time be engaged in the monopolization of oil or other products, Representative Jemas, with the assistance of Representatives Sulzer and Rhinock, sought to have petroleum companies brought within the scope of the commodities clause. Representative Rhinock stated that if monopolies were operating the transportation business, let them engage in that alone and not use transportation lines to monopolize oil, coal or any other necessary item. "Let us do all in our power," Representative Rhinock continued, "to make it possible to light the cabins of the poor with unmonopolized oil." Despite the attempt on the part of these members of Congress to bring about the inclusion of pipe lines under the commodities clause, the narrower version of the bill was passed, and in this final version the statute forbade

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18 Congressional Record, June 26, 1906, p. 9337.
19 Ibid., pp. 9337-9340.
20 Ibid., p. 9340.
railroads but not pipe lines to carry commodities in which they had an interest.

Since the passage of the Act of 1906 making the commodities clause applicable to railroad operations, numerous proposals have been made to bring pipe lines within the purview of this particular provision of the statute. Again in 1933 the proposal to apply the provisions of the commodities clause to pipe lines made its appearance in the halls of Congress. On the fifth of May Representative Ford made reference to the ending of what had once been the scandalous ownership of coal companies by railroads. Ford pointed out that today we had what was in many respects an infinitely worse situation—ownership of oil pipe lines by producing and refining companies and the monopolistic practices indulged in under such a type of ownership. The enactment of a measure prohibiting interstate shipment of oil through any pipe line owned or controlled by any producing company could end this evil situation, he argued. To date no such legislation


22 Congressional Record, May 5, 1933, pp. 2955-2956.
has been enacted although Section 9 (b) of the National Industrial Recovery Act gave power to the President to institute proceedings for the divorcement from any holding company of a subsidiary pipe line company which tended by unfair practices or by exorbitant rates to create a monopoly.\(^{23}\) No action was taken under this provision of the act however. In 1933 President Roosevelt expressed himself in favor of legislation to divorce oil pipe lines from other branches of the industry.\(^{24}\) Regardless of the fact that no legislation has yet been enacted to make the commodities clause of the Hepburn Act applicable to pipe line operations, it is highly improbable that this absence of legislative action closes the long drive for the adoption of such a provision. The application of the commodities clause to the operations of the industry in question still stands as a powerful instrument of control for those who are in a position to wield it.

A strict application of this provision would lead to the divorcement of pipe lines from the producing and refining phases of the petroleum industry. By such a move pipe lines could be set up as separate companies much in the same manner as those companies divorced from the Standard organization by


\(^{24}\) *U. S. Congress, House of Representatives, Oil and Oil Pipe Lines*, Hearing before Committee on Interstate and Foreign Commerce, House of Representatives, 73rd Congress, 2nd Sess. on H.R. Bills 9676 and 8672, 1934, p. 229.
the Dissolution Decree of 1911. As related in the preceding chapter, divorce in this instance represented nothing more than a reorganization of the outstanding stocks of the companies involved. Theoretically, however, such a plan might be made to work. With the pipe line operating companies divorced from the integrated organization, much closer regulation and supervision of the operations and activities of these companies would be possible at the hands of governmental regulatory bodies. In practice, however, we probably would find ourselves confronted with a contradiction between mythology and reality. Intelligent regulation, then, would probably take the course of mere ceremony, as has been demonstrated in so many like instances in past years.

The argument that separation of pipe lines from other branches of the petroleum industry would be impossible for want of purchasers of the facilities has arisen in some areas. W. K. X. Spilaw, Special Counsel for the Committee on Interstate and Foreign Commerce of the House of Representatives, entertains the following question in his report to the above-named committee, "If the oil companies were forced to sell the pipe line companies who would buy them and who would build to newly discovered fields?"25 Perhaps the question can best be answered by another question. When the Standard

Oil Trust was dissolved by action of the courts in 1911 and
the pipe line companies owned by it were divorced from other
phases of the industry, did such action destroy the value
either of the pipe line companies or the parent company?
The answer is "no" as we shall see developed in the following
paragraphs.

Elsewhere in the report of Splawn is found the following
statement:

The ownership of crude oil pipe lines rests largely
and that of gasoline lines wholly with large or medium-
sized integrated units of the oil industry. There is
a further concentration of the large part of the pipe
lines in the hands of a relatively few of such inte-
grated units. Only eight important pipe lines—the
so-called northern and southern groups and the National
Transit Co., have the usual earmarks of common carriers.
Their unique status is, however, explained by the fact
that they were separated from producing or other units
of the oil industry by court action. They therefore
are not exceptions to the well-recognized rule that
pipe line facilities have developed as adjuncts of the
oil industry, designed to serve the individual interests
of that industry.26

Splawn makes reference in the above paragraph to the
fact that only eight important pipe lines operating in the
country today have the usual earmarks of common carriers.
Quickly he explains that the unique status of these lines
arises from the fact that they were separated (by court decree
in 1911) from producing or other units of the oil industry.
Who owns, controls and operates these pipe line facilities?
What has been their earning record over past operating years?

26Ibid., p. lxxvi.
The following information seems to be the answer to the questions that Splawn raises:

Since the Interstate Commerce Commission requires reports of pipe line companies belonging to the major companies as well as those owned by independents or non-integrated companies, records are available for inspection. As reported to the Interstate Commerce Commission, six pipe line companies owned by private investors have had earnings from 1929 through 1937 of an average of 9.3 per cent annually.\(^27\) By way of contrast, sixteen integrated companies made an average profit of 45.8 per cent annually. The Commission shows the investment of the non-integrated or independent pipe line companies to be $1,033.00 for each mile of pipe line which they owned and operated, whereas the sixteen integrated companies reported a figure of $4,493.00 for each mile of pipe line under their ownership. These figures show that despite the question raised by Splawn in regard to who would purchase pipe lines if they were separated from producing and refining interests, we do have examples of separated pipe line companies owned and controlled by independent stockholder interests which have operated at a just and fair profit to their owners during past years. The question as to who

would purchase and operate pipe lines separated from major or integrated companies should cause no concern.

In answer to the second part of Splawn's question, "Who would build to newly discovered fields?" one might state simply that those non-integrated companies, owned by the independent stockholders and engaged solely in the business of common carriage, would provide the means of transporting oil to the market. If pipe lines were not the cheapest and best means of reaching a new producing area, then other mediums of transportation could be employed.

There are those who argue that pipe lines are merely plant facilities and that ownership of such a means of transportation is necessary to the successful operation of the refining industry. The basis of this argument springs perhaps from another statement in Splawn's report to the House Committee on Interstate and Foreign Commerce. In his conclusions he states, "Oil pipe lines are found as a result of this investigation to be plant facilities in an integrated industry."28 Is there reason to believe that pipe lines operate as a plant facility for petroleum companies any more than railroads occupy the same relationship to coal mines?

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28Committee on Interstate and Foreign Commerce of the House of Representatives, op. cit., p. lxxviii.
This same argument could be used with some force in butcher shops as well as airplane factories. It is probable that major or integrated companies largely have used this argument to avoid additional troublesome regulation at the hands of Congress or other legislative bodies.

If, as has been pointed out, regulation of pipe lines as common carriers has failed, what recourse is left for those interested in seeing monopolistic practices removed from the industry? How can the shift from "monopoly" to "freedom" be accomplished?

Complete separation of the four divisions of the industry; i.e., (1) Production, (2) Transportation, (3) Refining, and (4) Distribution, would be one answer to the problem. As the situation stands at present, major companies are in a position to control the supply and price of crude petroleum, and as the supply passes through their hands, to take whatever toll they desire from the consuming public. The Congress of the United States could provide by law that no person, firm or corporation engaged in interstate commerce in either of the four branches of the industry should be permitted to engage in any other. Action of this type would guarantee to the independent shipper and producer an adequate outlet at all times for his crude oil product but on the other hand would practically make it impossible for an industry of the nature of the one under discussion to operate successfully. The consumer very likely would be faced with
higher prices for his purchases of petroleum products. This type of move towards control of the industry represents the least desirable one from many standpoints.

As a first alternative to complete separation of the four divisions of the industry, the transportation phase could be divorced by making use of provisions in existing statutes, particularly the commodities clause provision in the Hepburn Act. Oil refining and producing companies would be required under the provisions of this statute to divest themselves of pipe line and other transportation facilities. The pipe line companies would then be set up as separate operating companies engaged in the business of common carriage. Equal access to this type of transportation facility would be available for all desiring to make use of it. Under this arrangement there would be no discriminations against independent or non-integrated companies shipping petroleum in interstate commerce. As pointed out elsewhere in this discussion, action of this type theoretically would work, but in practice would be a different thing altogether.

As a second alternative to complete separation of the four divisions of the industry, it is suggested that the common law doctrine be put to use to the effect that combinations in restraint of trade are illegal. Under the Anti-Trust laws of this country it is possible for us to break up any monopoly. In the past we have gone through the ritual of breaking them up, but the results have been small compared to
the effort put forth. There is perhaps no reason to believe that the pursuit of such a course in the handling of monopolies in the future will be fruitful. Yet there remains the fact that in existing governmental machinery there is found ample authority for an intelligent investigation, correction, and regulation of any malpractices found at play in the industry.

Finally, regulation of the industry as a public utility stands as a distinct possibility. At the present time the pipe line subsidiaries, or the parent company itself, may exercise the power of eminent domain to condemn land for the purpose of right-of-way, a power that can be employed only for a public purpose. If this power is used by the pipe line companies to gain a right-of-way for a facility of a supposedly public character, then we find ourselves in the somewhat awkward situation whereby pipe line companies may condemn land under the right of eminent domain for a facility that may be a common carrier in name, but in fact is operated wholly for private ends.

One of the chief gains from the treatment of the oil industry as a public utility would be that a broad governmental policy of regulation could then be applied to all phases of the industry rather than having diverse policies applied to its various components such as pipe lines. Such a program of coordinated control would make possible a more effective conservation of our petroleum resources as well as pass on to the consumers of petroleum products considerable
savings in the form of lower prices. If the view prevails that the petroleum industry is a public utility, then a new area within the field of public utility regulation is open for study and investigation.

Until the day arrives that some action is taken to rid the industry of the economic strangle-hold that the major companies have at present, the independent or non-integrated company will find itself continually pushed nearer and nearer the brink of economic destruction.
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