Reprinted from **The Annals** of the American Academy of Political and Social Science,
Philadelphia, November, 1924.
Publication No. 1837

Distribution of Gasoline and Methods of Price Control

By Huston Thompson
Washington, D. C.

At the present time about 85 per cent of the total quantity of gasoline consumed in the United States is sold to the retailer or ultimate consumer either by the company manufacturing it or by an affiliated or subsidiary concern. The remainder is purchased by wholesalers F. O. B. plant from the smaller refiners. Gasoline is distributed in wholesale quantities in tank steamers, tank cars, motor tank-trucks and horse-drawn tank-wagons. The large refiners distribute gasoline from their refineries to the principal marketing centers in tank steamers and tank cars. Tank steamers are used extensively for coastwise shipments from refineries on San Francisco Bay and in southern California to the large markets of the Columbia River and Puget Sound regions. During the last two years millions of gallons of gasoline produced in California have been transported by tank steamer via the Panama Canal to the Atlantic Seaboard. Daily entire trainloads of gasoline in tank cars, destined for large consuming centers, leave the important refining regions of the Rocky Mountain and Mid-Continent oil fields and the large refineries farther east.

Adequate storage facilities are maintained in the large cities along the Atlantic, Gulf and Pacific Coast and at important interior refining points from which the requirements of the retail dealer are supplied. The seasonal demand for gasoline necessitates the accumulation of large stocks during the winter months in order to meet the requirements of the heavier spring, summer and autumn trade. The bulk of the retailers' supply of gasoline is distributed by tank-trucks or tank-wagons from storage tanks located near railroad sidings. Tank-truck and tank-wagon drivers usually sell at retail to anyone on the route who will buy five gallons or more at a single purchase.

The great bulk of the gasoline used as a motor fuel for automobile and other internal combustion engines is a blended product. Formerly only "natural" or "straight run" gasoline, obtained by distilling petroleum by the application of heat at atmospheric pressure, was sold for motor fuel purposes. But in recent years, due to the tremendous increase in gasoline consumption, large quantities of "casing head" gasoline, extracted from natural gas, and of "cracked" gasoline, produced by a number of cracking processes applying very high temperatures to gas and fuel oils while under superatmospheric pressure, have been produced to supplement the supplies of natural gasoline. These products are blended by the manufacturer before being sold to the trade. The yield of gasoline has been increased greatly by the widespread use of cracking processes. A refiner using Mid-Continent crude can recover from 45 to 55 per cent of gasoline from a barrel of crude petroleum when pressure stills are used, as compared with about 25 per cent from ordinary distilling methods. Improvements in internal combustion engines should soon make possible the utilization of a still larger yield of serviceable motor fuel than is now obtainable in the form of gasoline from cracking processes.

How Gasoline is Sold

The gasoline business of this country is conducted by two general types of companies. The first includes the large integrated companies with extensive investments which are engaged in several branches of the industry. Indeed many of them, either directly or through subsidiaries or affiliated companies, are engaged in producing, transporting and refining crude petroleum and in marketing gasoline both at wholesale and at retail. The other type of companies is those engaged in but a single branch of the industry such as wholesaling or retailing.

There are four kinds of gasoline prices: (1) refinery prices, at which gasoline is sold to wholesalers and jobbers, in tank car lots; (2) the tank-wagon price, which is the wholesale price to retail dealers such as garage men and service station operators; (3) special prices to large consumers, which are usually one cent over the wholesale price; and (4) the retail or service station price, which is the price charged the ultimate consumer.

Refinery sales are made both at current or spot prices and on contract. It is a common practice at the present time for wholesalers and independent refiners to base their contracts upon the tank-wagon (wholesale) price of the Standard marketing company in the territory to which shipment is made. Fixed differentials between the wholesale and retail prices of gasoline are maintained by the large gasoline marketing companies. This margin is two cents per gallon in some sections of the country and three cents in others. At some points where the large marketing concerns do not maintain service stations much larger differentials are added; for example, the Federal Trade Commission discovered cases in Montana in which retail concerns (engaged only in intrastate trade) sold at from five to ten cents per gallon above the wholesale price,[1] and the Commissioner of Agriculture for the State of Minnesota reported on November 14, 1923, that:[2]

> The ordinary gross retail margin is two cents per gallon on gasoline, though a spread as great as eight and ten cents has temporarily existed.

The failure of wholesale and retail dealers to pass the benefits of price reduction on to the consumer has led to the establishment of co-operative retail stations in different sections of the country and to the sale of gasoline by the state or municipality in other places. After a careful inquiry into conditions in Minnesota in the summer of 1923, the State Commissioner of Agriculture reported that with one or two exceptions "all retail dealers took advantage of the extremely high prices prevailing during the summer of 1923," and that

[1] *The Petroleum Trade of Wyoming and Montana*, p. 1.

[2] Bulletin No. 30, *Report of Investigation of Gasoline and Kerosene Prices and Methods of Distribution*, p. 15.

"it is apparent that the motor vehicle owner has no relief or protection against excessive gas and oil prices under current conditions in Minnesota except through the organization *and maintenance* of co-operative stations."[3]

BEFORE AND AFTER DISSOLUTION

In order to make clear the present situation with respect to price control in the sale of gasoline, it is necessary to call attention to certain facts with respect to the dissolution of the Standard Oil Company. At the time of the Standard Oil dissolution, effective in December, 1911, the Standard did 85 per cent of the total domestic business of the United States in refining and marketing petroleum products. The few independent refiners and marketers then in business were allowed to exist merely by sufferance to give an appearance of competition.

The only branch of the petroleum industry in which the Standard did not do the bulk of the business was that of production. As the crude-oil producing business is a hazardous one, the Standard was willing to allow independents to develop production, the bulk of which it purchased at the oil wells at prices announced or posted by its purchasing agents.

It is still customary in the business and financial world as well as in general practice to distinguish between two groups of interest in the petroleum industry; one group includes companies which were subsidiaries of the Standard Oil Company (New Jersey) at the time of the dissolution and of companies since acquired by any of the Standard units, while the other group embraces all other companies, which are commonly referred to as "Independents." While in this discussion the Standard companies are frequently referred to as a group, it should be borne in mind that since the dissolution each unit has maintained a separate organization, each having separate officers, directors and refining, transporting and marketing equipment.

[3] *Ibid.*, pp. 14–15.

Since the dissolution the generally prevailing prices of gasoline and other petroleum products have been those named by the several Standard marketing companies, notwithstanding the fact that the proportion of the business done by independents has steadily increased until the percentage is now about three times as great as it was in 1911. Large independent companies such as the Gulf Oil Corporation and the Texas Company east of the Rockies and the Union Oil Company of California on the Pacific Coast, are now as large as some of the larger Standard units.

MAINTAINING PRICE CONTROL

The maintenance of this price leadership in practically all parts of the country has been chiefly due to the fact that, with only minor exceptions in recent years, the different Standard units have not competed with each other in the purchase of crude nor in the sale of gasoline at retail, but in these respects have apparently continued the harmonious business relationships of predissolution days. For example, prior to the dissolution, the Prairie Oil & Gas Company in the Mid-Continent Oil Field, and the Seep Purchasing Agency in the Appalachian Field, acted as the crude oil purchasing agents for several Standard refining companies. This practice was continued unchanged for a number of years and still exists with some modifications, with the result that there has been little price competition between these Standard refineries in the crude market. Likewise the Standard pipe line companies have practically served only Standard refineries, notwithstanding the fact that in 1914 the United States Supreme Court upheld the constitutionality of the Hepburn Act declaring interstate pipe lines common carriers. The use of these pipe lines by Standard companies, while eastern independents were at first denied their use and later prevented from using them through onerous shipping requirements, probably has been the most important factor in enabling the Standard companies east of the Mississippi River to maintain their dominant price leadership.

As the chief element in the cost of producing gasoline is the raw material —crude petroleum—the harmonious relationships of Standard companies enabled them to secure their crude on more favorable terms than their competitors. The proportion of the total cost represented by the cost of crude varies with the price of the crude—the higher the price the greater is its percentage of the total cost. Consequently, the development of eastern independents, being prevented from availing themselves of a cheap and abundant supply of crude from the Mid-Continent Field on equal terms with Standard plants, has been stunted and they have not become an important factor in competition. The only independents that have become large factors in the petroleum business are those having their own pipe line systems, such as the Texas and Gulf companies. An inquiry into petroleum refining costs made by the Federal Trade Commission, which included the costs of five large companies running 90 per cent of the total quantity of crude petroleum refined in the Pacific Coast territory, shows that in 1919 the cost of the crude represented about 80 per cent of the total cost of refining when the average cost of the crude was 95 cents per barrel, but that the proportion was over 90 per cent when the average crude cost was $1.63 per barrel.[4] East of the Rocky Mountains, particularly near the Atlantic Seaboard, the proportion would be still higher. At the present time pipe line charges from the Mid-Continent Field to the Atlantic Seaboard constitute about 50 per cent of the delivered cost of the crude, consequently they are an important factor in gasoline costs.

In 1916, the Federal Trade Commission issued a report which called attention to the following important facts: (1) that "pipe lines are as fundamental a factor for the oil industry as the railroads are for agriculture"; (2) that the pipe line rates then charged were exorbitant; and (3) that competition in the petroleum industry would be promoted if the smaller refiners were enabled to use the existing lines under reasonable rates and equitable shipping conditions.[5]

The fact that small independents have not been able, generally speaking, to use the large interstate pipe lines as common carriers has resulted in the location of the vast majority of their refineries in the immediate vicinity of the large oil fields and thus prevented them from becoming a competitive factor in the large consuming centers, because it is much cheaper to transport crude petroleum by pipe line to such centers than to refine it in the oil fields and transport the gasoline by rail in tank cars. The only sections of the United States in which a reduction in crude prices is surely and promptly followed by a reduction in gasoline

[4] Report on *The Petroleum Industry of the Pacific Coast*, Part I, p. 183, and Report on the *Price of Gasoline in 1915*, p. 15.

[5] *Pipe Line Transportation of Petroleum*, pp. XXVIII and XXXII.

prices is in Oklahoma and Texas, which are near these large independent refining centers.

The continued harmonious business methods of the former members of the Standard Oil combination is further evidenced by the fact that they have, with only two important exceptions, continued to market gasoline at retail in the same way as before the dissolution. The Standard marketing territories, in almost all cases, arbitrarily follow state lines. In some sections the marketing territory is confined to a single state, as in the case of the Standard Oil Company of Ohio and the Standard Oil Company of Nebraska, while in others the marketing territory embraces a number of states, as in the case of the Standard Oil Company (Indiana) which sells gasoline at retail throughout Michigan, Wisconsin, Minnesota, North and South Dakota, Iowa, Illinois, Indiana, Missouri and Kansas.

POWER OF THE STANDARD GROUP

During the last few years some of the Standard group have exhibited a greater degree of independence than formerly with respect to this phase of their business. The most important example is that of the Atlantic Refining Company, which has extended its wholesale and retail gasoline and kerosene business into Massachusetts, Rhode Island and Connecticut, originally the marketing territory allotted to the Standard Oil Company of New York.

Two reports of the Federal Trade Commission describe these Standard marketing territories.[6] The Commission's report on the *Price of Gasoline* in 1915 shows that arbitrary price differences frequently existed in neighboring towns located in different states. This was strikingly illustrated in the case of towns in the states of Idaho and Washington, the former in the territory served by the Continental Oil Company, and the latter by the Standard Oil Company (California). The same situation existed in the border towns of Indiana, Ohio and Kentucky, which are served by the Standard of Indiana, Standard of Ohio and Standard of Kentucky, respectively. It was found that the inequalities in prices in such cases were often two cents per gallon and ranged as high as eight cents.

It is the power of the various Standard companies to dominate the situation which prevents freedom of competitive action. In testimony before the Committee on Manufactures of the United States Senate in 1922 and before the Federal Trade Commission in 1916, representatives of the different independent companies and organizations called attention to the fact that they feared the Standard's power. For example, R. L. Welch, then general counsel for the Western Oil Jobbers Association, stated:[7]

> I don't believe there is a jobber in our organization who can survive who does not follow the market of the Standard Oil Company, and so far as I am concerned I would advise them to do so.

When asked whether the members of his organization sold at higher prices than the Standard, Mr. Welch testified:

> Occasionally here and there some one has risen above it, but whenever he has done it he has lost enough gallonage to get his lesson.

The Federal Trade Commission's inquiry into competitive conditions in the Pacific Coast territory shows that following a period of keen competition

[6] See reports on the *Price of Gasoline in 1915* and the *Pacific Coast Petroleum Industry*, Part II.

[7] *Federal Trade Commission Report on the Prices of Gasoline in 1915*, p. 157.

in 1914 and early 1915, during which a number of independents went bankrupt, the independent marketers organized an association, and that:[8]

Since September, 1915, members of the association agreed among themselves to maintain the prices announced by the Standard Oil Company (California), and in order to maintain these prices they adopted the same differentials and classifications of customers as were used by the Standard. They listed and, pursuant to agreement, refused to sell to retailers who sold below the agreed price until such retailers maintained list prices.

This was still the situation when the Commission completed its inquiry in 1921. It is interesting to note in this connection that the records of this association did not disclose any reference to price discussion, but that a very complete record of their price agreements was found in unsigned memoranda. At a hearing before the Commission the secretary of the association stated in response to a question by Commissioner Murdock that after adjourning the regular meetings—[9]

They go out arm in arm. The chances are they haven't seen each other for a week. After the crowd is outside they do the real thing they are interested in.

The harmonious relations which continued to a marked degree for a dozen years after the Standard dissolution, resulting in a continuance of monopoly control of the entire petroleum industry, are undoubtedly due to the interlocking of stock ownership resting in the hands of a few persons.

The dissolution decree allowed the stock in the subsidiaries of the Standard Oil Company (New Jersey) to be distributed ratably among the stockholders, the provisions relating to distribution of stock being as follows:[10]

But the defendants are not prohibited by this decree from distributing ratably to the shareholders of the principal company the shares to which they are equitably entitled in the stocks of the defendant corporations that are parties to the combination.

The shares in each of the subsidiary companies which were formerly held by the Standard Oil Company (New Jersey) were distributed ratably among the stockholders and the control of each subsidiary passed from the holding company to the persons who had dominated the Standard Oil combination.

Testimony before the Senate Committee on Manufactures during 1922 disclosed the fact that certain formerly important stockholders had disposed of their holdings in some of the larger Standard units; and that within the last two or three years the stock has become quite widely distributed. For example, it was testified that John D. Rockefeller, Sr., was no longer a stockholder in the Standard Oil Company (Indiana) and certain other Standard units. The lessening of the degree of interlocking stockholdings by the group of capitalists formerly controlling the various Standard units may account for the fact that in certain phases of the petroleum industry some of the Standard units are now displaying more independence; for example, the Standard Oil Company of Indiana and the Standard Oil Company of New Jersey no longer purchase all of their crude petroleum in the Mid-Continent oil field from the Prairie Oil & Gas Company.

The greatest menace to future improvement in competition in the sale of gasoline and other petroleum

[8] *Pacific Coast Petroleum Industry*, Part II, p. X.

[9] *Federal Trade Commission Report on the Pacific Coast Petroleum Industry*, Part II, p. 193.

[10] 173 Fed. Rep. 177, 199, Sec. 5.

products appears to be the establishment of greater control in certain Standard marketing territories through the acquisition of independent interest. For example, during the past three years the Standard Oil Company (Indiana) acquired the Midwest Refining Company, which was already the dominant factor in production and refining in the Wyoming oil field. Notwithstanding the fact that the Wyoming and Montana producer of crude petroleum receives a lower price for his product than producers in the Mid-Continent and other oil fields east of the Rocky Mountains, the consumer in Idaho and Montana is forced to pay a higher price for gasoline because the Standard charges higher prices for shipments into those states than for shipments into territory tributary to the independent refining center at Tulsa, Oklahoma.[11]

The situation with respect to price control in the sale of gasoline was summarized in a recent report of the Federal Trade Commission as follows:[12]

> Price initiative today seems to be left generally to the Standard companies, and competition is apparently more directed to developing facilities for getting business than in seeking to obtain it by underselling.

[11] Federal Trade Commission, *The Petroleum Trade in Wyoming and Montana*, p. 2.

[12] *The Advance in Price of Petroleum Products*, p. 53.