

RATIONALIZATION OF THE RELATIONSHIPS OF INTEGRATED PETROLEUM
COMPANIES WITH THE RETAIL DISTRIBUTOR LEVEL OF GASOLINE

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CHAPTER I

INTRODUCTION AND HISTORY

The marketing of petroleum products today bears little resemblance to that of fifty years ago, either in products or methods of distribution. If we date the industry from about 1865, it means that it is about eighty-five years old. In the first half of that period, or up to 1900, the industry was a kerosene industry. The business consisted chiefly of delivering by tank wagon or in barrels, kerosene or illuminating oil to grocery and other existing retail establishments. Today the principal product is gasoline and a whole new system of distribution has come into existence.

The present marketing system of the petroleum industry is the product of economic forces operating in an environment of severe competition during a period of rapid expansion. This development was influenced not only by the urge of a mounting supply to find the points of contact with a rising demand, but also by the desires of a widening circle of individuals to avail themselves of a new means of livelihood.

The writer is thus confronted with diversified and completely separate views as to the reasoning behind the development of the existing marketing structure. Undoubtedly gasoline could be adequately distributed without the services of all the individuals now engaged in this activity. The physical plant engaged in the distribution of gasoline is spread over the entire country and consists of specialized transportation facilities, intermediate warehouses, and retail establishments. The last named are either service stations devoted to the sale of this commodity and related accessories, or establishments of various sorts that handle gasoline as a side-line.

The marketing structure which has evolved from the historical and physiological actions of the industry is the focus of incessant dissension and the object of endless proposals for regulation and change. These proposals engender a desire on the part of the industry to strive toward advancement through technological and scientific competition.

In the petroleum industry, as elsewhere, the word 'competition' means many things to many men. A suitable common denominator for the many forms taken by competition may be found in the phrase "a conflict for advantage". Enterprises and individuals in the marketing branch of the petroleum industry conflict with each other in lowering prices to obtain greater gallonage, in extending service to the motorist, in securing choice locations for filling stations, in advertising their products and services, and in improving the effectiveness of their salesmanship.

The individual companies have girded themselves for this conflict and the interested onlooker should have a comprehensive knowledge of the weapons, tactics, and basic strategy to be used plus an insight into the reasoning for each. The writer will endeavor to present a rationalistic view of the relations of integrated petroleum companies in the retail level distribution of gasoline. This thesis will not include gasoline in foreign trade, natural gases used for internal combustion engines, governmental purchases of gasoline supplies, and industrially and commercially used petroleums. Further limitations are automatically suggested by the title of this thesis, "Rationalization of the Relationships of Integrated Petroleum Companies with the Retail Distributor Level of Gasoline."

In defining the scope of this work the writer will strive to present the views as expressed by the vertically-integrated petroleum

companies¹ and the counterviews as expressed by the factious groups.²

Rationalization will bear the connotation of giving a rational or rationalistic explanation.³

Relationship signifies the mode in which one thing stands to another, or the mode in which two or more things stand to one another; the state of being mutually or reciprocally interested.³

Integrated petroleum companies may be defined as those petroleum companies which are relatively self-sufficient operating units, usually owning oil reserves, crude production facilities, pipe lines, large and completely equipped refineries, tank cars and trucks, distributive terminals, and refinery outlets.

The writer uses the phrase, distributor outlets to retail level, in the sense that it is commonly used in the petroleum industry; that is, the entire structure capable of procuring or carrying on business activities between the refiner and the ultimate consumer.⁴

Gasoline will be limited to the liquid motor fuel for use in internal combustion engines.

To tell the complete story of the historical development of the integrated petroleum companies would take volumes. The writer has arbitrarily selected and will show the growth of one of the major oil companies; other major integrated petroleum companies have developed along similar lines. When the Standard Oil Company was incorporated in

¹ Appendix

² Temporary National Economic Committee and Jobber Relations Groups

³ Webster's Collegiate Dictionary, p. 825.

⁴ Joe S. Bain, Pacific Coast Petroleum Industry, Part I., p. 29.

the year 1870, the competition in finished products⁵ lay chiefly between a group of "tinpan" refineries in Cleveland and a similar group in Pittsburgh and nearby sections of Pennsylvania. The Pittsburgh group, being located nearer to the wells, had a geographical advantage. But, Cleveland had the advantage of a more plentiful supply of labor and lower wages and acted as a gateway to the west.

The Cleveland men consolidated the group of Cleveland refineries forming the Standard Oil Company - and soon Cleveland became the oil capital of the world and the Pittsburgh district, as a refining center, faded into insignificance. At this time the Standard Oil Company controlled but a small percentage⁶ (about ten per cent) of the total refining business of the country.

By 1866 pipe lines had completely superseded the work of teamsters in local transportation of petroleum from the wells to railway shipping points. Simultaneously with the development of combination in the petroleum industry, there progressed the process of integration of processes and techniques. The oil industry seems especially adapted to this process. Without attempting at this point a complete discussion of the public gains from such integration, suffice it to say that a steady and certain supply of oil cannot be assured in the absence of adequate transportation facilities.

From an early stage in the development of the petroleum industry refineries have recognized the advantages of control over their own pipe lines,⁷ and since 1870 it has been a common practice for a refinery

⁵ Kerosene and Lubricating Greases

⁶ Petroleum Facts and Figures - Eighth Edition, p. 155.

⁷ Frances M. Buente, Autobiography of an Oil Company, p. 42.

to pipe oil directly from the field to its stills by its own lines. It is not surprising, therefore, to find the Standard Oil Company in the forefront of refinery enterprises, early extending its control to the pipe line service.

With both transportation and refining facilities well in hand, the company turned its major attention toward markets -- the development of dealer and distributor relationships. The Standard Oil Company did not wait until full control over these antecedent operations had been secured before attempting to acquire control over the marketing situation. Rather, efforts were directed simultaneously in the two directions, the one serving as an aid to the other.⁸ Control over the three fields having been established, the Standard Oil Company interests set themselves to organize marketing operations in an intelligent and systematic fashion.

Independent refineries had their own agents out looking for markets; others sold to wholesale dealers and jobbers, who in turn resold to local dealers, generally grocers. To replace these independents with their own employees was the Standard Oil Company's task. The task was attacked in a systematic and organized fashion. The United States as a marketing area was divided into a number of large divisions, each under the supervision and control of a Standard Oil Company marketing subsidiary.⁹ Each of these larger divisions was subdivided into sections supervised by local agents. This system had attained a working perfection within a decade, or by approximately 1910 and has remained in force with little change until the present time.

⁸ American Petroleum Institute, Petroleum, Third Issue, p. 84.

⁹ The Standard Oil Company of Ohio, The Lamp, January 10, 1945, p. 26.

Out of the conflicts and experiences of the country's industrial expansion, there had developed a number of the rules for the conduct of business which we have today. Many of these rules became laws on our statute books. Among these was the Sherman Anti-Trust Law.

In 1910, a suit which had been brought in the lower courts asking that The Standard Oil Company be dissolved, on the ground that it constituted a trust in violation of the Sherman Anti-Trust Law, reached the United States Supreme Court. In 1911 the Supreme Court ordered the Standard Oil "trust" dissolved. This was accomplished by giving each shareholder in The Standard Oil Company of New Jersey his equivalent number of shares in the stock of each of the thirty-four constituent companies. In short what had been "Standard Oil" now became thirty-four different companies, of various types, in various territories -- many of them soon to be competitors for each others business.

In 1911 when the Standard Oil Trust was dissolved the products which it sold to the people of America consisted chiefly of lubricating oil and greases, axle grease, coach oil, harness oil, and miscellaneous related items -- with kerosene for the household lamp as the backbone of the company's business.

The advent of the automobile revolutionized oil marketing. With the model "T" Ford, mass production of automobiles became an assured fact and motor gasoline became the dominant factor in the petroleum industry. The automobiles provided a use for gasoline which, until then, had been considered a waste product. This mode of transportation brought about a new device in the distribution of petroleum products, the service station. Sometime around 1907, service stations appeared in different sections of the country.¹⁰ Gulf Refining Company lay claim to having been the first

¹⁰ American Petroleum Institute, Petroleum, Third Issue, p. 86.

to erect a drive-in service station, December 1, 1913.¹¹ At this station the Gulf Company began selling merchandise with free service, (although admittedly unconscious of the fact).¹² Prior to the opening of this first drive-in service station, a charge had always been made for crankcase service. An attendant as a gesture of goodwill had performed the crankcase service and had not charged the usual labor charge. The result was that free crankcase service has become an integral part of service station performance. In addition to pioneering with free service, this particular Gulf station¹³ also claims the distinction of being the first "open all night" service station, the first station with a public restroom, and it was at this station the Gulf Company inaugurated the "no tipping policy" which today has been adopted by practically all major oil companies. Thus from the very start of gas filling stations (service stations) there has been competition in the offering of extra services to the motorist to induce a greater gallonage sale, as well as recurrent patronage. This method of merchandising spread rapidly and by the year 1920 there were about 15,000 service stations in the continental United States.¹⁴

In the twenties, with the discovery of great new western pools, competition for outlets became extreme, and service stations of competing companies sprang up like mushrooms. The situation called for mass marketing, intensive selling, and high volume, if earnings were to be secured in the face of narrow profit margins. Production of gasolines

¹¹ Gulf Oil Company, The Orange Disc, March 1940, p. 2.

¹² Gulf Oil Company, The Orange Disc, January 1934, p. 15.

¹³ Gulf Refining Company Gas Filling Station, Baum Boulevard and St. Clair Street, Pittsburgh, Pennsylvania.

¹⁴ Petroleum Facts and Figures, Fourth Edition, p. 105.

increased from 6,689,000 barrels in 1899 to 179,903,000 barrels in 1923, an increase of 2,691 per cent.¹⁵ "Uncontrolled crude production has meant temporary but recurring over-production. Over-production has meant cheap crude oil, and cheap crude oil has encouraged wasteful methods of refining and placed pressure upon the utilization of oil for fuel purposes." This was the common complaint of the entire petroleum in the early 1920's.

In an endeavor to avoid a recurrence of this over-production, the American Petroleum Institute appointed two important committees, one to consider changes in the methods of producing oil so that it would not be forced on the market beyond the ability of the market to absorb it at a profit, and the other to study the matter of utilization of petroleum products; that is, to study means of bringing about a wider use of petroleum products.

It was suggested that the factor of price could be expected to check and eventually to eliminate such wasteful methods in the utilization of petroleum. Mr. Joseph E. Pogue, Vice-President of Chase National Bank, pictured the refining practice as having developed through evolutionary stages.¹⁶

At the outset of new developments, with cheap and abundant crude petroleum, skimming and topping plants develop according to the type of crude; then, with advancing conditions, these incomplete plants either fall or else change into intermediate refineries that effect a fuller extraction of values; later, with increasing stress, the growth is in the direction of complete refineries, in which full advantage is taken of the potentialities present in crude oil, and finally pressure stills are installed to carry the extraction of values still further by converting a low-value product into one of greater worth. While this evolutionary trend is not

¹⁵ Facts and Figures of the Automobile Industry, 1924, p. 11

¹⁶ H. L. Doherty, The Utilization of Petroleum Products, p. 7.

entirely sharply defined, and local complications are present, it is practically certain that ultimately the complete plant with cracking installations will quantitatively dominate the situation, just as this type of plant now leads in economic and financial strength.

There is, no doubt, much truth in this prognostication. Yet the fact confronting the industry during the twenties was that plants of the less complete sort made up the bulk of the refining capacity of the country.

A major source of the wasted petroleum could be found in the incomplete refining of crude oil. The Standard Oil Company of New Jersey and Indiana claimed complete control over basic patents for the cracking process of refining.¹⁷ Both of these companies were active in warning all the independents against the use of cracking process, claiming, in some cases at least apparently without justification, that the cracking processes which independents were seeking to use were in violation of Standard Oil Companies' patents, and thus for years, through threats and institution of suits, the industry was deprived of processes by which the production of gasoline could have been doubled.

The decade, 1919 to 1929, could readily be called the "mad twenties" for the petroleum industry. With the meteoric rise in automobile registrations, there was induced a period of gallonage "grabs" by the entire industry. From what seemed at that time, 1919, a phenomenal figure of 86,688,000 barrels of gasoline, the demand increased at an amazing rate to reach the impossible 382,878,000 barrel figure in 1929.¹⁸ The industry, as a whole, was in the "never-never land" of insatiable demand. With this ever-growing demand in view, the question of crude supply seemed to be the only problem. While car registrations were increasing during

¹⁷ Cracking process is a method of distillation under pressure that regains a higher percentage of gasoline from crude oil.

¹⁸ Table I, p. 10.

TABLE I

COMPARISON OF GASOLINE CONSUMPTION, DOMESTIC CRUDE OIL PRODUCTION
AND MOTOR VEHICLE REGISTRATIONS - 1919-1929

<u>Year</u>	<u>Gasoline Consumption</u> ¹	<u>Motor Vehicle Registration</u>	<u>Domestic Production Crude Oil</u> ¹
1919	88,648	7,565,446	378,367
1920	108,948	9,231,941	410,407
1921	116,840	10,463,295	442,929
1922	137,770	12,238,375	472,183
1923	175,088	15,092,177	557,531
1924	196,586	17,595,373	732,407
1925	232,745	19,937,274	713,940
1926	268,128	22,001,393	763,743
1927	305,367	23,133,243	770,874
1928	338,881	24,493,124	901,129
1929	382,878	26,501,443	901,474

Source: American Petroleum Institute.¹ Unit is thousands of barrels.

this same period, at a rate of 470 per cent; however, the crude oil production lagged behind with a rate of 232 per cent.¹⁹ The Standard Oil Company's patented cracking process was the only available answer to the problem. By increasing the recovery of natural-gas gasoline and through further application of the cracking process, the crude supply was able to meet the demands placed upon it. The owners and leasees of the patent right were placed in a favorable marketing position. The twenties saw the installation of many service stations, and the middlemen were forced out of the distributive field. For example, the Standard Oil Company of Indiana, on January 1, 1923 operated 1,668 service stations throughout its marketing territory. During the first six months of 1922 the Shell Company of California marketed 44 per cent of the gasoline which it refined through its own service stations. Similarly, the Standard Oil Company of California, in the year 1923, marketed 37 per cent of its gasoline through its own service stations.²⁰ Of the gasoline not sold through company-owned service stations, not all was handled through dealers for resale, but a considerable proportion went to the larger consumers, such as ranchers, large farm operators, industrial, and commercial users.

The purchase of service stations by the major integrated petroleum companies was the direct result of national and sectional advertising. With the growth of advertised refinery brands, many jobbers sold their businesses and their bulk plants at attractive prices to refining companies desirous of obtaining more assured and continuous distribution

¹⁹ Facts and Figures of the Automotive Industry, 1929, p. 13

²⁰ G. W. Stocking, The Oil Industry, p. 268.

of their brands.

New crude discoveries increased the flow of petroleum toward the market. Refinery capacity had expanded sufficiently to handle most of the large volume of crude, but the domestic market had been unable to absorb all of the increased output.

The major companies had been declining somewhat in their proportionate control of refining capacity and of domestic gasoline sales.²¹ Some part of the minor refiners' reported volume, however, was not passing into the markets under their own brands but was being purchased in the refinery markets by the majors. Buying pools were established by the majors, with agreement and consent of the minors, for the purpose of purchasing gasoline at an established minimum price.²² The contracting minors had in turn agreed not to reduce their gasoline prices below a certain level. This pool arrangement apparently had its origin in the excessive crude and gasoline supply, and in the consequent price instability which had periodically emerged during 1928 and 1929.

A freely competitive situation remained, however, in the marketing and distributive levels. This competition was intense among the majors, among the minors, and between the major and minor groups. The inter-major competition was usually of a non-price character; however, the competition of the smaller, or minor refiners, was likely to be implemented on many occasions by price cutting. This was true of minors as a whole, but especially of the smallest or "tea-kettle refiners."²³ These

²¹ Hearing before the Temporary National Economic Committee Congress of the United States, Seventy-Sixth Congress, Part 14.

²² Ibid, Part 16.

²³ Small refiners who operated small skimming plants on the fields are designated "tea-kettle refiners."

minor refiners as relative outsiders to the market, without established brand names, or the financial means of establishing them, and also often without the facilities to produce output of a quality equal to that of the majors, had essentially to rely on price concessions as a means both of securing distributive outlets and of attracting consumer purchases. The result of their price-reducing tactics was often to attract retaliatory price cuts, first perhaps from other minors, and finally, from the majors themselves.

The majors as a group, as well as the stronger minors, looked with disfavor on such price-cutting tactics; therefore, it was natural that they should adopt countermeasures. Such countermeasures during the nineteen thirties included direct price competition, indirect price competition (through secondary brands), non-price competition of all sorts, and conciliation centering around major company buying programs. The history of the refinery market competition during the nineteen thirties largely involves the attempts of the major refiners first to preserve their positions in the market, and second, to prevent the competition of the independents from disrupting a profitable structure of refined-product prices.

By the end of 1931, the majors had evidently concluded that competition with the minor refineries could not be profitably controlled through retaliatory price cutting. Two new tactics of market warfare were introduced almost simultaneously by the majors in 1932. First, one major after another began developing the higher octane rating²⁴ of its

²⁴ The octane number is a measure of the tendency of the gasoline to cause knocking in the engine during acceleration or hill climbing. The higher the octane number, the less will be the tendency for the engine to knock.

"regular" grade gasoline, and coincidentally undertook advertising and promotional campaigns designed to emphasize this quality development. The second, and related, market tactic of the major was the introduction by each in turn of a "third-structure" gasoline to be priced slightly under the regular. These grades were implied to be the quality equivalent of the minor gasolines, thus fortifying the claims of superiority for the high-octane "regular" grade products of the majors.

Prior to the competitive actions of 1930, a major attempt was made to subject petroleum marketing to code rules and practices. This attempt was embodied in the National Code of Practices for Marketing Refined Petroleum Products,²⁵ which was adopted in July 1929 upon authorization by the Federal Trade Commission, after numerous trade-practices conferences within the industry initiated by the American Petroleum Institute. This code was binding upon those who signed it, which included most of the major refining and marketing companies, but gave permission to signatory companies to disregard particular provisions of the code when necessary to meet competition from nonsigners who refused or failed to observe the provisions in question. While the code was specific in allowable practices, the general level of observance was never very high and tended to become less so as time passed. The rules of the code centered around the following main subjects:

1. Prohibiting suppliers from furnishing gasoline pumps and tanks, various other equipment, free painting, etc., to dealers.
2. Requiring open posting of all prices.
3. Prohibiting the giving away of premiums, conducting of lotteries, or extending any other ulterior inducements to the customer.

²⁵ Appendix

4. Prohibiting the giving of discounts at service stations.

5. Prohibiting selling below cost except where necessary to meet competition.

6. Prohibiting the subsidizing of retail dealers by producers or distributors who might otherwise lease said retailers' stations from them at one rental and then sub-lease them back at a lower rental.

This voluntary code failed to accomplish the task for which it was designed. Undoubtedly this failure was principally because of the forces of competition and the unwillingness of various groups to subject themselves to such rules. This feeling was stronger than had been expected, likewise, the legal and practical bases for enforcing the rules were far weaker than had been imagined by many code enthusiasts.

The basic law of the National Industrial Recovery Administration called upon private industries to write codes (or cartels) of fair competition, which were designed to outlaw practices which lead to destructive competition and to include provisions stabilizing the wages, hours, and conditions of employment of labor. Such codes when approved by the President or his agent, were to become law for their respective industries, enforceable as a last resort through appeal to the federal courts. The initial code of Fair Competition for the petroleum industry was approved August 19, 1933; substantive modifications were approved on September 13 and September 28, 1933, and on April 24, 1934.²⁶ On August 28, 1933, the Department of the Interior was named by the President as the federal-control agency, and the Secretary of the Interior, Harold Ickes, the administrator of the petroleum code.

The national petroleum code covered all the phases of the operation

²⁶ Hearing before the Temporary National Economic Committee Congress of the United States, Seventy-Sixth Congress, Part 15.

of an integrated industry. The marketing provisions contained in Article V affecting refiners, wholesalers, and retailers; represented a fairly comprehensive effort to eradicate the sources of market instability; a review of these provisions supplies a description of the variety of market tactics that had been employed prior to the adoption of the N.R.A. The principal requirements of Article V were:

1. the posting of the prices of all refined products by all sellers or resellers thereof, such prices to remain in effect for at least twenty-four hours after posting, except for direct sales by refiners;

2. the prohibition of any rebates, allowances, or concessions from these prices, except for contract sales, the price on these sales should be made available to competitors;

3. the prohibition of sales below the cost of production and distribution;

4. the stipulation of the maximum credit terms allowable to buyers by any seller;

5. the stipulation that integrated companies should set prices in order to allow proportionate profits to all of their departments;

6. the prohibition of any further leases, sales or loans, as a condition of the purchase of petroleum products, of vending pumps, lubrication equipment, air compressors, and so on, by refiners and distributors to service stations;

7. the similar prohibition of the construction, repair, lease, or loan of driveways, buildings, or lighting equipment, except that such prohibition did not apply to stations owned or validly leased by the supplying refiner on some basis other than a gallonage rental;

8. similar limitations on free painting of service stations;

9. prohibition of money loans by refiners or distributors to retailers, and other concealed subsidization;

10. prohibition of any "account-stealing" where-in a pre-existing contract with another supplier was violated;

11. prohibition of gifts, premiums, prizes in connection with marketing;

12. prohibition of sale to independent distributors which would be delivered into the trucks of the purchaser;

13. provision for resale price maintenance contracts;

14. prohibition of such unfair trade practices as misbranding and misrepresentation.

The intent of this concert of provisions was evidently, first, to limit undue and excessive non-price competition among refiners and other suppliers, by restricting the manner in which service station accounts could be solicited, and second, to eliminate certain sources of price instability. The principal blow to price cutters was the prohibition of sales to independent truckers. These truckers were simply 'pick-up and deliver' wholesalers, without bulk storage facilities other than their trucks, and they were the principal suppliers of the cut-rate independent bulk storage service stations.

The petroleum industry operated under this national code from its inception until the invalidation of the N.R.A. in the Schechter Case in 1935. Supplementary geographical area codes or agreements were immediately accepted in various sections of the country. These voluntary codes suffered the same fate as the National Code of 1929, due primarily to the same selfish aggrandizement.

In 1933, integrated petroleum companies owned and operated 24,627 service stations. In addition, these companies owned 7,770 stations which were operated by others. There were also 555 company-owned service stations closed down. Thus the integrated petroleum companies owned 32,952 stations out of the 170,404 stations found in the same year in the census enumerations. Integrated petroleum companies had leased

more than 7,000 company-owned stations by 1933.²⁷ These leases to dealers marked the initial phase of the dealer-marketing plan that avalanched the industry in 1935-36.

Suppliers were led by a variety of considerations to invest in retail service stations. The erection of service stations by integrated petroleum companies had begun in the years just before World War I. The initial objective was primarily to secure distribution at points where satisfactory outlets were not available.

Whatever the initial objective, the companies soon discovered two important facts. First, very real economies in marketing would be secured from the integration of the wholesale and retail functions. With controlled retail stations, sufficient storage capacity could be installed to permit relatively large deliveries which the station could be required to accept. Moreover, deliveries could be made at times most convenient from the standpoint of scheduled bulk plant operations and delivery truck movements. In addition, little selling effort was required. These economies contributed to a reduced cost of performing the combined wholesale-retail functions as contrasted with performance of such functions in the hands of separate organizations. The second fact which the companies discovered was that a real contribution to consumer satisfaction, (a satisfaction which was reflected in sales), could be made by improving the surroundings in which gasoline was sold, as well as by improving the service rendered at point of sale. These tasks could be more effectively performed by an organization sufficiently well financed to justify considerable experimentation and large enough to apply the results of

²⁷ Report of Marketing Facilities, U. S. Congress Hearings, Number 441.

experiments to a number of outlets. Moreover, the companies discovered that the operation of a chain of stations with carefully controlled service conditions was a highly valuable advertising medium because the chain of stations aided to a very considerable extent in increasing sales through other outlets selling the same brand.

As the years passed, the great advantages resulting from the integration of wholesale and retail functions began to be offset by difficulties and increasing costs. Discriminatory chain store taxes in 1934 and 1935 soon forced the petroleum companies to relinquish full proprietorship over the service stations. To escape the injurious effect of such regulation the "Iowa Plan" was devised under which the integrated companies leased these stations to men who formerly had been salaried managers of the stations.²⁸

The legal framework of the market was also of considerable importance. The existence on the statute books of the Sherman and Clayton Anti-Trust Acts undoubtedly tended to force policy into certain channels by inducing the majors to prefer one among several broad alternative price policies. Thus the successful development after 1912, of the major refiners, in addition to Standard, is traced, in part at least, to the legal sanctions implied against the formation of a single-firm monopoly in an industry. The fact that the majors later chose to live with, rather than buy out or break the minors, may also be attributed in part to the prevailing interpretation of the anti-trust laws. On the other hand, the refiners did not hesitate to risk violations of the Sherman Act through courses of action

²⁸ Resume of the "Iowa Plan" is contained in Chapter II of this thesis.

which ran afoul of the law on several occasions.²⁹ Their willingness to do so may be attributed, in part, to the ambiguous interpretation of the law during the period from 1920 to 1939, and to the relative unimportance of the penalties which were likely to be assessed for courses of action later found to be illegally in restraint of trade.

In the summer before Pearl Harbor, the oil industry began to prepare and organize for defense. This defensive action resulted in cooperation between the industry and the government, as well as cooperation within the industry itself. The handicaps faced by the industry were appalling. At the outset, physical and legal obstacles to immediate cooperation within the industry blocked the road. Before the physical obstacles could be tackled, certain legal impediments had to be temporarily set aside by the government. The requisite cooperation, between competitors could conceivably run into anti-trust laws, therefore, a whole emergency framework had to be built by the government in the interests of national defense. A framework was needed within which petroleum could be mobilized at maximum efficiency for the sole objective of defense and vigorous warfare.

This framework was set up several months before the attack on Pearl Harbor. The President of the United States had long recognized that petroleum and petroleum products were indispensable to national defense. In a letter appointing Secretary of the Interior, The Honorable Harold L. Ickes to be Petroleum Coordinator for National Defense (after April 20, 1942, known as Office of Coordinator for War) dated May 28, 1941, the President stated that:

Recent significant developments indicate the need of coordinating existing Federal authority over oil and gas

²⁹ One of the latest (U. S. vs General Petroleum in 1939) violations of the law was not established; the dependents pleading nolo contendere.

and insuring that the supply of petroleum and its products should be accommodated to the needs of the Nation and National Defense Program.³⁰

The needed machinery had to be developed from the ground up -- built to conform to the legal framework instead of the familiar competitive system. Two groups were organized, one to represent the Government, the second group to represent the Petroleum Industry. The country was divided into five districts. This districting was done in order to obtain working units of practical size and at the same time to facilitate adequate geographical representation on committees. For each district a General Chairman was appointed by Mr. Ickes to coordinate the work of the industry committees in the district.

In organizing the general committees for the five districts, the Coordinator appointed five functional committees for each of the five districts. Each functional committee represented a division of the industry -- Production, Refining, Transportation, Marketing, and Natural Gas and Gasoline.

The impact of war on the marketing of gasoline was extremely severe. As military demands soared, available civilian supplies fell. Rationing of gasoline, tires, and the cessation of manufacture of automobiles, trucks, and farm machinery manufactured for civilian use, heavily reduced sales through bulk and retail outlets. Retail sales for the year 1944 in the Midwestern and Central states were only 68 per cent of what they had been in 1941.³¹ The attrition of war forced the closing of 23 per cent of the filling stations and 5.6 per cent of the bulk stations.³²

³⁰ S. B. Eckert, Executive Vice-President, Sun Oil Company, Gasoline at War, Sunoco Diamond, October, 1946.

³¹ Ibid., p. 21.

³² Ibid., p. 22.

The Petroleum Administration for War completed the assigned task and was liquidated by President Truman's Executive Order of May 3, 1946 with the expressed hope that "the harmonious relations between government and industry should be continued."³³

The post-war period ushered in a series of competitive conflicts for advantage. Each refiner deemed the responsibility to be his, to secure, in the shortest period of time, the largest possible part of the increased demands of a ration-free consumer. Liberal expansion into economically unsound geographic areas, large multi-pump stations, and extensive exploration caused a Pyrrhic victory in the year 1929. Sinclair Oil Company in their annual report states:³⁴

In the marketing field, much work to reduce our cost is under way. Among other things we have withdrawn, or are in the process of withdrawing, from areas in which we have been marketing under unfavorable conditions.

The return of keen price competition in 1949-1950 brought about a transition from the unusual postwar sellers' market in the economy to a more normal one favoring the buyer. The backlog of postponed war-time demands had been largely satisfied and many industries had readjusted their operation to meet customary conditions.

The petroleum industry was no exception. Active price competition required the application of significant operating economies and the initiation of vigorous selling campaigns.

³³ S. B. Eckert, op. cit., p. 21.

³⁴ P. C. Spencer, President, Sinclair Oil Corporation, "Annual Report for the year 1949.", p. 2.

Gasoline price wars, noticeably absent during the early postwar years, reappeared. In such instances, accelerated service station building programs and the presence of adequate gasoline supplies combined to encourage sellers to accept reduced gross unit profit margins to increase their sale of products.

CHAPTER II

RETAIL LEVEL

The physical plant engaged in the distribution of gasoline is spread over the entire country and consists of specialized transportation facilities, intermediate warehouses, and retail establishments. Retail establishments are either service stations devoted to the sale of gasoline and related accessories, or establishments that handle gasoline as a side line.

An outstanding characteristic of the marketing of gasoline is the close relationship which usually exists between retailers and suppliers. The reasons for the interest of the suppliers in the activities of retailers are two in number. In the first place, the service station is specialized to a high degree compared with almost any other retail store. While it is true that service stations have been adding new items to their basic stock, the sale of petroleum products is still overwhelmingly the major business. Wherever retail stores specialize on the lines produced by individual manufacturers, the manufacturers show a marked direct interest in the retailers' operations. For example, the relationship between automobile manufacturers and automobile dealers is very much closer than the relationship between manufacturers of grocery items and grocery stores. In the second place, most retailers carry the name of the supplier. The public is prone to think of the station as representing the supplier, whatever the legal relationship that actually exists between the two. Under these conditions the activities of retailers have a profound effect on the supplying company and on other retailers selling the supplier's products. Throughout the last twenty years, these major reasons have been supplemented by the fact that many retailers or

prospective retailers needed the backing of larger and more stable enterprises in order to secure credit for erecting stations and installing equipment.

Leases.

The legal relationship between suppliers and retailers has taken many forms. The various types of retail stations may be classified as follows:¹

1. Service station owned and operated on a salary basis by a marketing company:

A. Selling the branded products of a fully or semi-integrated company that has distribution over a large area, usually referred to as nationally branded. (A common type of integrated company operation.)

B. Selling a locally-branded product, often well-known and of good public acceptance within the locality.

2. Service station owned by marketing company but leased to the dealer, who in turn is responsible for all operating costs, including wages and his own remuneration. The operator of this type of outlet usually received a guaranteed margin on gasoline, regardless of whether the price was normal or subnormal.

3. The so-called third-party operation, in which the marketing company leased land and improved it or leased improved property and then subleased the service station with improvements and equipment to a dealer who was not the lessor, which dealer operated it on the same basis as type 2.

4. The lease and agency service station was an operation in which the dealer owned the land, improvements, and equipment or may have leased the land and installed improvements and equipment. The dealer entered into written agreement with the oil company. One of these was the lease, whereby the station and facilities were leased to the oil company for a definite period for a flat rental or a rental based on gallonage sold. Another instrument appointed the dealer as an agent to sell the products of the supplying company. This agency contract usually stipulated that the dealer sell the products of the supplying company exclusively, and the agency was commonly called "a 100-per cent account." Sometimes the supplying company furnished part or all of the dispensing equipment, and in such cases another contract was executed loaning the equipment to the dealer. When these three agreements were used, this arrangement was often called a "triple A" agreement, i.e., lease, agency, and loan.

¹ Dr. John W. Frey, "Final Report of the Marketing Division of the Petroleum Administrative Board."

5. Lease and license stations, except for the legal form of the contract (license) were for all practical purposes similar to lease and agency. (Discussed under type 4.)

6. Independent dealer owning and operating station with or without sales contract with supplier:

- A. 100-per cent account refinery branded. (Quite uncommon.)
- B. Split pump; that is, the products of several suppliers sold at the same station, margins generally guaranteed but somewhat less than 100-per cent accounts, usually one-half cent less.
- C. Individually branded stations -- the majority of the so-called "independent" cut-price stations were of this type.

7. Trackage service stations:

- A. Owned and operated by chain organizations.
- B. Individually owned and operated.

Type 7-A is similar to type 1, except for the physical layout and price policy, and 7-B is similar to 6-C. This type of station, usually located at a trackside and highway intersection or accessible to a trackside by pipe-line connection, usually had storage capacity for full carloads of any of the principal products it sold. Most trackside service stations sold gasoline at a lower price than that obtained for nationally-branded gasoline in the same area.

8. Cooperative service stations, as the name implies, generally owned by consumers and commonly selling an unbranded or locally-branded product at regular prices and usually rebating patronage dividends to its members.

9. Garage service stations. The principal difference between this type of operation and that of others described was in the physical layout. The relationship to the supplier was like that of types of operation 1, 2, 4, 5, and 6. Where the station was of the lease-and-agency or lease-and-license type, usually only that part of the garage reserved for gasoline sales was rented. This same thing may also be said of parking lots.

10. Marine service stations, principally for the supply of motor boats, were commonly jobber operations, but many of these stations were operated at retail outlets similar to drive-in service stations. In physical layout, some were located on the water front, others on barges or self-propelled small tankers. They usually sold at prevailing service-station prices or higher. The affiliations with the supplying company varied from full company ownership and operation to so-called independents.

In the year 1946, National Petroleum News conducted a nationwide survey of the practices of the integrated petroleum companies in leasing of service stations. The information secured in 1946, in the opinion of several marketing men and service station lessees² would conform to the

² Due to existing conditions and legal actions in the petroleum industry the sources of the information have requested that their names be withheld.

methods used in 1950. The facts as gathered by the National Petroleum News were:

1. Short-term station leases for six months or one year are the most common.
2. Salary-operated stations are not increasing except for training purposes.
3. Rent increases have been general since the war.
4. Turnover among dealers continues high.
5. There is a large backlog of applicants for dealerships.
6. Market-dealer relationships in general are good, but a few dealer-associations continue to agitate for governmental intervention on their behalf.³

The service-station lease, like any other business contract, is based upon the idea that it must be mutually advantageous. This legal base does not take into account that the integrated company or jobber has a much greater capital investment than the lessee as well as the opportunity to find another dealer. The service station is the oil industry's front door; if a lessee-dealer is operating it, the marketer wants him to be a credit to the company and to the industry. In short, the station owner wishes to make a profit -- though not -- necessarily one far out of proportion to his efforts and investment, and leases are so written as to give both the owner and lessee a profit.

Service station leases cover three features of paramount importance to both parties. They are:

1. Length of term.
2. Rental rate.
3. Station equipment.

³ National Petroleum News, p. 26, October 9, 1946, Vol. 38.

The first is a controlling feature, for at the expiration of the lease term, all other conditions contained in the lease can be revised or the lease can be cancelled at the pleasure of either party. The threat of cancellation at the end of a short-term lease is the primary cause of certain dealers' existing resentment.

Some dealer associations assert that price wars, which are ruinous to dealer profits, are an indirect result of short-term leases. The existence of a short-term cancellation clause permits a supplier to demand a larger gallonage of his dealer, under threat of an early cancellation. Both jobbers and major oil companies have been charged with using this type of threat.⁴ It is alleged that the method used is to notify a dealer or a group of dealers that a certain gallonage quota has been assigned and must be met, or cancellation will be the result. In effect, the supplier tells the dealer that if he does not meet the quota, he will be replaced with a dealer who will meet it. Price cutting is openly suggested as a means of building up the gallonage sold, thus reducing the dealers' margin without an equivalent cut in the suppliers' profit.

The instances of the use of the cancellation threat as a lever to force price cutting, while admitted to be rare,⁵ are said to produce widespread uneasiness and resentment in dealer circles. As a countermove some dealer associations are seeking legislative protection.⁶

A lease is a contract for the use of real estate, and it is the custom for leases to stipulate for what purposes the real estate is to

⁴ Hearings on S. 2879, Senate Judiciary Committee, 75th Congress, First Session, 1938, p. 40

⁵ Due to existing conditions and legal actions in the petroleum industry the sources of the information have requested that their names be withheld.

⁶ Hearings on H.R. 2318, House Judiciary Committee, 76th Congress, First Session, 1939, pp. 145-156.

be used. In service station leases this clause usually specifies that the premises shall be used as a service station, for the sale of petroleum products, accessories, and automobile service. The lease does not require the dealer to handle only those products made or sold by the marketer from whom he leases.

Nevertheless, complaint is frequent, against both independent oil jobbers and major oil companies, that pressure is brought to bear on dealers to handle only those products which can be purchased from the company who owns or controls the station real estate.⁷ Gasoline is seldom involved in this debate -- only lubricants and merchandise.

Specifically, the pressure complained of is again the cancellation threat, always available to the supplier on a short-term lease. Alleged "line forcing," the term used to describe insistence by the gasoline supplier on dictating what the dealer shall sell, has a tendency, according to some dealer associations, to force the dealer out of business by compelling him to sell low-profit items.

Many dealers recognize that the marketers must protect their large investment by retaining control of the property by means of a short-term lease. The others who complain, say force is applied when leases expire, for the following purposes:

1. To raise the rental rate after a dealer has built up a good business.
2. To compel price cutting to meet a gallonage quota.
3. To force dealer to sell profit items obtained specifically through the supplying oil company.⁸

The short-term cancellation clauses in station leases make it impossible for the lessees to be independent and are understandably unfair

⁷ Hearings on H.R. 2318, p. 155.

⁸ Tires, Batteries, Accessories, and Oil.

to the dealers. If the lease may be cancelled in thirty days or five days, the dealer is likely to believe that he is under real compulsion to carry out company policies.

From the company standpoint, the reason for including these short-term cancellation clauses when first leasing to a new dealer is equally understandable. The companies are turning over to individuals the operation of stations representing substantial investments. There is no assurance that men who possibly might be satisfactory as paid employees with all decisions made for them will be equally satisfactory as independent dealers. A poor dealer could seriously affect the amount of the company's business through the station. The companies, therefore, feel that it is essential to protect the business built up at the company locations by reserving the right to install new lessees in a relatively short time. After a trial period, the term of lease is advanced to six months or longer, but by this time the length of lease is no longer important, as both parties take renewal for granted.

The most common complaint is that a short-term lease brings a raise in rent, whenever a dealer, by his own hard work, brings about a large increase in business. In reply the marketers say that the current trend to rent increases is only temporary, and is only another sign of the inflationary monetary trend of the economy. The marketer also points out to the lessee that competing dealers complain that they, the lessees of company-owned stations, are subsidized by low rentals. Actually, there are no verifying statistics or data available to either prove or disprove the soundness of the last point.

As yet there is no trend in any part of the country toward longer or shorter leases than have prevailed in the past, but there is a minority opinion in some marketing circles favoring longer base terms.

One major company has a number of dealers under two-year leases;⁹ another has many leases ranging from three to five years. These companies expressed the belief that the longer lease would attract better men into the retail field.¹⁰

Still others believe, "that thinking has been for longer terms. Major companies anticipating store-type operations which require \$30,000 to \$50,000 each will offer longer leases."¹¹ This, in all probability, will lead to demand for longer leases on all types of stations, in pursuit of superior-type operators.

The leasing of company-owned stations is comparatively a recent innovation, thus it is reasonable to anticipate a continual shift and change in search of the most practical and economical method. The practice of leasing all stations as a matter of general policy began about the year, 1935, and was loosely known in the industry as the "Iowa Plan."

The Iowa Plan is a quasi-voluntary program whereby major oil companies in the Midwest and East divested themselves of legal control of their retail facilities, leasing them on a gallonage basis to former hired operators, and generally abandoning any attempt to maintain retail prices. The movement was set off by the imposition of chain-store taxes in Iowa and other states, but the plan was also adopted in states where service-station chains were not taxed, reportedly because the majors wished to avoid social security taxes and other similar expenses. It is reported, however, that the refiners generally retained potential control and active influence over service-station operations through short-term

⁹ Information secured through assurance of confidence.

¹⁰ Ibid.

¹¹ Mr. Ed Williams, Sales Department, Magnolia Petroleum Company.

cancellation provisions in their leases, and continued to subsidize stations by charging rent only on a gallonage basis and by continuing to furnish various free services to the operators.¹² The innovation was that refiners ceased quoting retail prices or supporting the margin between retail and tank-wagon prices, and instead condoned or even encouraged retail price cutting by service station operators.

A rational approach to the leasing of service stations by the integrated petroleum companies would be, that these stations be completely segregated and uncontrolled in the amount of the service dispensed or the charges to the consumer. The marketer should be treated in a similar fashion as by any landlord, without subterfuge or hidden "fine-line" contractual deals. The tenant should be responsible for the furnishings of the property and, in the case of dealer-owned properties, be fully responsible for the physical care and appearance of the station. The situation that exists at the present time is an historical paternalism which reasonably should have disappeared with the birth of the "Iowa" or similar divorcement plans.

The two-party lease, which was declared illegal under the N.R.A.,¹³ is in common use today to secure advantageous locations or prized stations. The method of operating this lease can be very simple; an owner of a choice location that is a busy thoroughfare, corner automobile salesroom, or garage, will contact a marketer. The marketer offers to purchase the lease from the owner and immediately leases the site back to the owner for considerably less. This two-party lease practice is rapidly being

¹² Joe S. Bain, Pacific Coast Petroleum Industry, Part III. p. 103.

¹³ Point 11, p. 17, this thesis.

changed due to fear of legal proceedings.¹⁴

Advertising.

After the processes of leasing are completed, the next step is to tell the consumer world that they can secure services and gasoline from a particular chain or single station. The integrated petroleum companies have placed great emphasis upon the value of advertising.¹⁵ Differentiation among the individual gasolines is principally created through advertising by radio, in periodicals, in the daily press, on billboards, and by distinctive distributing facilities. Several California refiners also systematically train their employees in methods of direct and door-to-door sales promotion.¹⁶ The volume of advertising expenditure by the majors is large, and it has apparently succeeded in winning customer allegiance to the group as a whole and to its several members. Gasoline and lubricant advertising is of the same general quality as that for tires and cigarettes, combining direct emotional and goodwill appeals with an emphasis upon the performance qualities of products. Whatever the advertising merits, the effects on the market have been important.

There are three methods of determining the advertising appropriation in current use:

1. Market survey method.
2. Percentage of sales method.
3. Unit of sales method.

Each of these methods has its advantages and disadvantages for an integrated business. The market survey method is being increasingly favored by both major and minor integrated petroleum companies. Stated

¹⁴ Magnolia Petroleum Company's legal department considers the two-party lease as illegal, the differential of money exchanged is considered a gift in defiance of the Robinson-Patman Act.

¹⁵ Frances M. Buente, Autobiography of an Oil Company, pp. 50-53.

¹⁶ Joe S. Bain, op. cit., Part I, p. 199.

in its simplest terms, the method consists of determining for a certain future period, through field survey, the job that advertising is to do as part of the sales program, and then appropriating whatever amount will be necessary to enable advertising to do that job. The chief point in favor of the market survey method is that it represents an attempt to substitute for guesswork, a method of determining the advertising appropriation which is founded on known facts. This method defines the job that advertising is to do, and then allocates the amount necessary to do the job. The market survey method is more than just a means of deciding how much to spend for advertising, instead it is a thorough review of the company's marketing and selling system, of which advertising is one part, and points the way to a planned program.

The chief objection to the market survey method is the work and expense that it entails. Furthermore, unforeseen changes may upset the most careful calculations. Despite the objections offered, this method is the most common base for appropriations of the larger nationally distributing petroleum companies.

The percentage of sales method of setting appropriations for advertising is extremely popular among the petroleum companies with limited geographical coverage. This method consists of setting aside for advertising a fixed percentage of some figure related to actual or estimated sales volume of either preceding, present, or future periods of time.

The figure most generally taken by advertisers using the percentage of sales method, is a percentage of estimated or anticipated sales for a future period. There is no formula for determining the percentage figure to be used in the percentage of sales method. The figure varies with different companies and changes due to operational integration or geographic location. In the final analysis, the advertiser has to decide

the percentage in the light of his individual circumstances.¹⁷

The chief advantages of the percentage of sales method are two:

1. This method is easy to use.
2. The percentage of sales method relates advertising to sales volume. That is, the amount spent for advertising is made dependent upon the volume of sales -- usually, upon the estimated volume of sales for a future period. To base advertising upon sales volume is, in general, a logical procedure.

Two important disadvantages of this method are:

1. There, as is often the case, the percentage figure is based upon the figure for the industry as a whole or upon figures used by other companies in the same line, the method is liable to become one of just keeping up, proportionately to sales, with competitors' advertising. Competitors may be wasteful in spending money on advertising, or may have overlooked opportunities that increased advertising would turn into sales.
2. Although the percentage of sales method does relate advertising expenditure to sales volume, this relation is often approximate and indefinite.

The use of the unit of sales method for the appropriation of advertising expense was rather general for many years. The petroleum industry has almost completely discarded the practice, and at present, this method is in use only in atrophied instances. The method is very simple. Production costs are known and selling costs may be estimated from past experience. An estimate of future sales is made. A certain sum per unit of anticipated sales is then appropriated for advertising. Thus a refiner might estimate his sales for the coming year at 4,000,000 barrels of

¹⁷ John Cameron Aspley, Sales Manager's Handbook gives 1.25 per cent as the general base for petroleum appropriations.

gasoline and set aside for advertising \$5 per 100 barrels. His total appropriation would then be \$5 x 40,000, or \$200,000.

The advertising of gasolines has been severely criticized by the economists and the enemies of bigness in industry. In essence the criticism is that, since most advertised gasolines at any one time differ only slightly, the competitive advertising of various companies represents a social waste.¹⁸

√ The importance of advertising in the petroleum industry should not be disregarded. An important role has been played by advertising in increasing the aggregate demand for gasoline and in spurring companies to improve the quality of the products sold. The part that gasoline advertising has played in the increase in demand cannot be measured quantitatively. The sharp reduction in the price of automobiles over the years, the construction of highways, the heavy advertising of the automobile industry, and the steady decline in the price of gasoline, perhaps were all more important than the advertising of gasoline in bringing about the tremendous rise in the aggregate consumption. Yet no one may maintain with certainty that the steady emphasis by oil companies on the pleasures of touring; the provision of road information, maps, touraides; and other services, all of which are included in advertising expenditures, have not contributed to bringing about the increase in aggregate demand.

More important than this consideration, is the significance of competitive advertising in stimulating companies to improve products. It is claimed that there are only minor differences among the advertised gasolines today.¹⁹ Since all gasolines must be manufactured to drive the same group

¹⁸ Hearings P.R. 113, 75th Congress, Second Session, p. 8709.

¹⁹ Joe S. Bain, *op. cit.*, Part I, pp. 119-125.

of automobiles, the differences among them cannot be too great.

Obviously, there may be many definitions of what constitutes a minor difference. What may be important to the technical expert may be unnoticed by the laymen. Actually there are current differences among gasolines which affect the operation of automobiles. Geographic and climatic differences of location demand different specifications to overcome these marked differences. The performance of an automobile will vary proportionately with the terrain and climatic conditions under which this performance is conducted.²⁰ Gasoline, as a finished fuel, of course, retains some physical differentiation, but the product competition of the market has tended to minimize and even eliminate the significant aspects of this differentiation. Competing companies continually match each other's development promptly enough that physical differences among gasolines are at most times not significant to the usual buyer.²¹

The effectiveness of advertising as a means by which new enterprises can find a place in the industry also should not be passed by unnoticed. Several companies, small indeed, no more than ten or fifteen years ago, ascribe to advertising a substantial part of their success in challenging the established units in the industry.²²

The fact cannot be ignored that competitive advertising and one major practice, exchange of gasoline, do not agree. The willingness²³ of oil companies to sell under their own brands products manufactured by others is evidence that there is little or no justification for the advertising

²⁰ Western Petroleum Refiners Association, Report to National Petroleum News, July 5, 1939, p. 11.

²¹ Hearing P.R. 113, 75th Congress, Second Session, pp. 8711-8712.

²² Ibid., p. 8712.

²³ Substantiated through confidential discussion with petroleum sales and production employees.

claims made in favor of particular brands.

The extent to which different companies engage in exchanges differs widely, depending upon the location of marketing territories in relation to refining and transportation facilities. One West Texas refinery exchanges gasoline, or sells the finished product, to approximately eight competitive petroleum companies.²⁴ This practice of exchanging gasoline grew out of the importance of transportation charges among the total costs of the industry, and the fact that there is a substantial advantage in marketing a single brand over a wide area. Few companies have sufficient funds to have refining capacity near all the market which they serve. Few companies have been skillful and fortunate enough in the location of refineries to have transportation charges to all parts of their marketing territories below those of their competitors. The economies of large-scale refineries are sufficiently great so that it is seldom desirable to scatter small refineries throughout the marketing territory. Accordingly, some companies found it cheaper to purchase gasoline from other refineries near a particular part of the marketing territory than to ship it from their own refineries. Shortly thereafter, offsetting transactions were found to be feasible; that is, each of two or more companies could save transportation costs if gasoline was exchanged at different points. The justification offered by companies, who admit the practice of exchanging gasoline, is that the gasolines delivered on the exchange meet the receiving company's specifications.

Many units in the industry (refiners, jobbers, and wholesalers) market under their own brand names products, which are manufactured by others. A substantial proportion of the large companies do not refine

²⁴ Substantiated through confidential discussion with petroleum sales and production employees.

all the gasoline which they sell, and therefore find it necessary to purchase gasoline from concerns with refining or storage capacity greater than is required to meet the needs of their own marketing organizations. Wholesalers characteristically sell under their own brands products which they do not manufacture. ✓

The brand name of the individual company, promoted in advertising of various kinds, does not represent the physical characteristics of the product alone. It stands for a combination of product, accessibility, service, and progressiveness. Each refiner in the industry may well believe that he has found the best combination and may appropriately proclaim its superiority in his advertising.

The usual practice of the large petroleum companies in conducting their advertising campaign is to divorce advertising from actual company action. The refiner selects an advertising agency and informs them of the amount that can be expended for advertising. The agency develops a complete campaign along lines suggested by the refinery executives. The resulting advertising too often misses the viewpoint of the dealer. Dealers are not particularly interested in institutional or goodwill gestures. The retailer is interested primarily in the effect advertising will have upon his gallonage sales. The retailer believes that he is the forgotten man of the petroleum industry, and that the only method available to him to increase his gallonage is by his own advertising.

The amazing fact that confronts the interested observer, is that the major petroleum companies are losing gallonage through ineffective advertising. A survey taken in North Central Oklahoma of 252 individuals concerning their preference of particular branded gasolines substantiates

this statement.²⁵ The facts developed by this local survey were: That 38.5 per cent purchased at a particular service station due to friendly relationships with the service station owner or attendant; 11.5 per cent placed emphasis for patronage upon courteous service; and, 16 per cent of the universe cited the values of a better gasoline. At a glance, the fact is apparent that 50 per cent of those questioned had little or no thought of brand or brand names, but the gallonage sales resulted from the actions of the attendants and owners. Despite the prodigious amounts of money allocated yearly by the petroleum companies to advance their brand as being as good as, or better than, competitive brands, the fact that 16 per cent gave "better gasoline" as the reason for their preference, demonstrates clearly that the petroleum companies have probably been indulging in faulty advertising.

The smaller independent refiner, although operating with smaller appropriations than the majors, have placed greater emphasis upon the retailer than upon the brand name. Independent refiners strive to connect the individual dealer's name with all their advertising. One independent who requested that his name be withheld stated:

In advertising we place emphasis upon aid to dealers. Our aid to these dealers consists of posted billboard signs and painted signs on heavily travelled highways and small identification signs approaching the dealer's location, radio news programs with spot announcements tied in with the dealers name in conjunction with our over-all program, some newspaper advertising in localized newspapers, both radio and newspaper stressing the independent dealer approach. At point of sale we furnish direct mailing pieces, usually of the postcard variety. Some of this mailing is done through a central distributing point using the dealers' own mailing lists. We realize our appropriation limitation but believe that a sane advertising approach about the consumers' friend

²⁵ William A. Cramer, "A Consumer Study in Three Oklahoma Cities," A report prepared for Business Administration 433, Oklahoma A. and M. College, May 11, 1949.

and neighbor, the service-station dealer, will engender goodwill and induce increased sales.

The careful husbanding of the independent refiners advertising dollars and the expenditure of these dollars in developing better relationships between dealer and consumer, has added in the competitive conflict for gallonage.

True, some of the major petroleum companies recognize the dire need for better dealer advertising relations. One petroleum executive²⁶ stated, "We realize that our advertising is not getting the desired results but as long as the top staff has final say on advertising campaign promotion, we will plug brand."

The consensus of opinion of the lower bracket executives, sales managers, sales representatives, research managers, and supervisors is that, the executives who dictate policy are impressed with size and brand name, thus they do not see the lowly dealer. These brand-conscious executives dogmatically refuse to credit the dealer with the ability to sway consumer preference.

Skelly Oil Company has developed a well-rounded advertising approach to the existing problem. This company with distribution in fifteen states, has recognized the need for individual jobber and dealer advertising. Beginning in the year 1924, this company started, what is now acknowledged to be a profitable method of advertisement, the 50-50 newspaper advertising. In the ensuing years this share method, under which the company pays fifty cents of every advertising dollar spent on service station advertising, has been expanded until it now includes direct mail, outdoor posters, signs, stationary, advertising novelties, uniforms, and many other business-building techniques. The writer has secured permission from Skelly Oil

²⁶ Name and company withheld as requested.

Company to list what this firm believes to be a complete advertising promotion:

1. Radio - A popular news commentator.
A program of interest to farmers.
2. Newspaper - Farm paper advertising.
Trade paper space.
3. Direct-mail advertising - Inexpensive cards, and broadsides.
4. Road maps and moto memo booklets
5. Skelly almanacs
6. Full sheet and half-sheet posters
7. Window trims and counter displays
8. Distributor stationery
9. Book matches
10. Credit-card signs
11. 50-50 newspaper
12. Billboard
13. Product literature
14. Trademark signs
15. Neon signs
16. Similar painting and lettering specifications for stations, pump, and tank-trucks

The task that merchandising has allocated to advertising is a tremendous labor, but with a rational approach the results will justify the effort. Many of the petroleum companies are in the evolutionary process of confirming the dealers' place in the advertising program of their particular company. When the petroleum industry discards the emotional approach to advertising and changes to a realistically rational route, the present advertising relationship of the large integrated companies will be discarded in favor of a closer mutual relationship between dealer and refiner.²⁷

Price and Price Incentives.

Much has been said and written concerning prices and the making of prices in the petroleum industry. Whenever petroleum representatives have been confronted with the problem and asked for an explanation they have escaped into the realms of techniques and technical trade jargon. An interpretation of the refiners' explanation culminates in a single

²⁷ Views as expressed by sales promotion managers and sales representatives of three major companies who desired to remain anonymous.

but profound statement - "Prices are set by competition." A general discussion and explanation of prices and price setting is necessary prior to any attempt to place emphasis upon price relations in the industry.

At the outset, it is desirable to explain and destroy a widely prevalent misconception in regard to prices in the petroleum industry. Marketers believe in the necessity of making a clear-cut distinction between posted or published prices and the prices at which goods actually move. A substantial proportion of the petroleum business is done at prices which are not those posted or published. For many companies and many territories the great bulk of jobbers do not pay the posted tank-car price.²⁸ There is at present a practice in the retailing of gasolines of selling at less than market to large consumers, truckers, or friends.

The first prices to be considered are those quoted in basic markets for large quantities of gasoline. There are nine refinery districts.²⁹

1. The Atlantic seaboard;
2. Appalachian;
3. Indiana, Illinois, and Kentucky areas;
4. Mid-Continent, largely composed of Oklahoma, Kansas, and Missouri;
5. Texas Gulf Coast and Inland Texas;
6. Louisiana Gulf Coast;
7. North Louisiana and Arkansas;
8. Rocky Mountain; and
9. California.

²⁸ Hearings, P.R. 113, op. cit., p. 8691.

²⁹ T.N.E.C., Report 39, op. cit., p. 47.

Inter-district competition is so important and persistent that the price-making forces in each district affect the others. The most important price quotations for large quantities of gasoline are the Gulf (including Louisiana and Texas refinery districts), Group three (much of the Mid-Continent refinery district), and the Pacific Coast; these pricing districts are generally regarded as most promptly and accurately reflecting the basic conditions of demand and supply throughout the United States.³⁰

Throughout each basic market there is a constant sale and purchase of gasoline in bulk. Each day Platt's Oilgram consults refiners, known buyers, and brokers representing both buyers and sellers, and from the 40 or 50 quotations in each market, publishes a typical price or price spread for each market. Modern methods of transportation enable petroleum and its products to move quickly and for long distances in many directions. No petroleum market today is dependent upon a single source or even a few sources of supply; and conversely, a producer or refiner is not limited to any one market. A price rise in any marketing area is an open invitation to suppliers from more remote areas to which they are quick to respond. If a refiner finds himself confronted with a large accumulation of stock, he immediately casts about for a marketing area into which he can move his products. Thus, the Mid-Continent market, for much of its territory is in competition with the Gulf and more recently with Illinois, the Midwest spot tank-car market, and the Gulf cargo market, may fluctuate within narrow limits independently of each other, but no major influence on one fails to exert an indirect influence on the other.

Determining the price for refinery tank-car sales, ocean terminal

³⁰ Hearings P.R. 113, op. cit., p. 8692.

tank-car prices or river terminal barge prices, involves two lines of approach: First, determining the total of the costs incurred up to that point, plus a desired profit; and, second, reviewing the demand considerations which tend to indicate what price can be secured for the gasoline. The seller would naturally like to recover all costs plus a comfortable profit, the major limitation upon this desired price is that the buyer has his choice of seller. The refiner must meet all competitive prices to retain his selling position. Many sellers make little or no use of the first approach. They look to the prices prevailing in their markets as the figure they have to meet if they are to do business.

In the retail market there is a great deal of uniformity of posted retail price. This uniformity stems from the character of the product and the conditions under which it is purchased. The purchaser of the gasoline is in a moving vehicle. He is ordinarily able to defer purchase, if necessary, while he passes many filling stations to the one which satisfies not only his purse but fulfills his ideas of required service.

The uniformity of price seldom covers local brands or track-side bulk storage stations. These stations openly post and boast of prices 1 to 5 cents lower than the popular higher-priced branded gasolines. If these differentials persist for any length of time, substantial gallonage is diverted from the well-known brands, and retailers of these brands are forced to reduce prices. In this manner, through competitive pricing, the well-known brands are kept in line. If retaliatory action is taken by either of the competitive brands and is followed by a continuance of cutting, a gasoline price war results.³¹

³¹ Joe S. Bain, op. cit., Part II, p. 254.

Price wars are nothing more than the manifestations of competition. They result from the rivalry among dealers to win or protect the patronage of motorists by offering gasoline at prices below the going levels. Of themselves, price wars are not unethical or illegal. In a free market, the price of the gasoline is an element of competition -- just as quality of product, convenience of location, station hours, customer service and advertising are elements of competition.³²

Gasoline price wars start because an individual, a group of individuals, or a corporation -- knowing that even a slight reduction in price attracts a great deal of additional gallonage -- sees in the spread between the purchase price and the selling price of gasoline an opportunity to cut the retail price and make more profit. The individual who takes the initial step in reducing the retail price of gasoline does so for one or more of the following reasons:

1. He is able to buy for less, and is willing to pass part or all of the saving along to the motorist.³³

2. He has effected economies and efficiencies that reduce his cost of doing business and permit him to show a profit at a lower selling price.³⁴

3. He is willing and able to forego immediate profits in order to get a foothold in a specific market.

4. He believes that his lower price will not be met, and, therefore, he will be able to gain and sustain large gallonage at an accompanying low-cost of operation.

³² Joe S. Bain, op. cit., Part III, p. 257.

³³ Wholesaler or independent purchase of "distress" gasoline.

³⁴ Trackside bulk storage stations, self-service stations, multi-pump efficiency stations, or sub-marginal rent stations.

Fair trade laws and price stabilization legislation cannot protect dealers against price-reducing competitors, except where it can be proven that prices are reduced below cost with intent to injure or destroy competition.³⁵ Retaliatory actions by the individual petroleum companies are rare for these firms do not desire to enter the price battlefield on the retail level. The consensus of opinion can be summed up in the statement of one executive, who requested his name and company be held in confidence.

When we turn our gasoline over to the dealer and he pays for it, then that gasoline is his and we don't know or care what he does with it. We try to sell him our products at such a price that he can sell sufficient gallonage to show a nice profit. If he can't hold onto his profit edge, then that is his headache.

This rather shortsighted comment on the disregard of the larger integrated petroleum companies for the individual service station leasee or owner is not universal. Mr. S. B. Eckert, Executive Vice-President of Sun Oil Company, explained the stand and belief of Sunoco pertaining to competitive pricing.³⁶

Sun's policy regarding gasoline price wars is definitely established. Here it is: (a) Sun will meet this competition wherever and whenever it arises in its marketing territory; (b) Sun suggests that Sunoco dealers meet this competition locally; and (c) Sun pledges its assistance to those Sunoco dealers who are forced to meet such competition to protect their gallonage.

There is a normal expected gallonage for each Sunoco station based upon a definite formula. It is our joint responsibility to protect this gallonage.

Because of our mutuality of interests, Sun Oil Company believes that the Sunoco dealer should not be expected to absorb the complete loss of margin incurred in these price skirmishes. For that reason, it has been the practice of Sun, in most cases, to share this loss by reducing the price of gasoline to the Sunoco dealer. To do otherwise would be

³⁵ Joe S. Bain, op. cit., Part III, p. 256.

³⁶ Sunoco Diamond, October 1950, Volume 20, No. 7, p. 11.

inconsistent with Sun's policy and would work to the advantage of the price-cutting competitor.

Sun's experience of more than twenty years in selling gasoline in eighteen states, indicates the wisdom of promptly meeting gasoline price competition before it gets a foothold and becomes ruinous.

This may have temporary disadvantages, but in the end it is a procedure that best serves the interests of the motoring public as well as the interests of all efficient dealers by bringing about a return to a fair retail price.

Sun's experience has also shown that where dealers sit tight and hold prices unchanged, the price competitor expands his business at their expense.

A rational approach to price wars and competitive pricing recognizes the inherent instability that is characteristic of the price structure of gasolines. The practical solution that seems warranted would be immediate retaliation upon the price cutter by the competitive service stations, who would be supported in their margin by the supplying company voluntarily reducing his margin to aid the warring dealer. One drawback that immediately arises is that this method seemingly condones price wars, as long as the dealer is guaranteed a profit margin he can reduce his price to strive for greater gallonage, thus defeating the purpose of the price war policy.

The demand for gasoline appears to be inelastic. For example, in the period 1927-46, gasoline prices were quite low,³⁷ yet sales and demand³⁸ have not reflected these price changes. There is no acceptable substitute for gasoline readily available to the motoring public. Because of the important part the automobile plays in everyday life, the motorist grumbles over a price rise, but does not curtail his purchases appreciably due to a price change. An interesting fact that

³⁷ Table II, p. 49.

³⁸ Table III, p. 50.

TABLE II
AVERAGE RETAIL GASOLINE PRICES, BY YEARS

Year	Service-Station (Exclusive of Tax)	Gasoline Taxes ¹ Totalled	Service-Station (Including Tax)
1920	0.2973	0.0010	0.2983
1921	0.2608	0.0021	0.2629
1922	0.2482	0.0039	0.2521
1923	0.2106	0.0092	0.2198
1924	0.1946	0.0148	0.2094
1925	0.2009	0.0211	0.2220
1926	0.2097	0.0241	0.2338
1927	0.1831	0.0281	0.2112
1928	0.1790	0.0304	0.2094
1929	0.1792	0.0350	0.2142
1930	0.1616	0.0379	0.1995
1931	0.1300	0.0400	0.1700
1932	0.1330	0.0463	0.1793
1933	0.1241	0.0541	0.1782
1934	0.1364	0.0521	0.1885
1935	0.1355	0.0529	0.1884
1936	0.1410	0.0535	0.1945
1937	0.1459	0.0540	0.1999
1938	0.1407	0.0544	0.1951
1939	0.1331	0.0544	0.1875
1940	0.1275	0.0566	0.1841
1941	0.1330	0.0593	0.1923
1942	0.1446	0.0597	0.2043
1943	0.1456	0.0597	0.2053
1944	0.1462	0.0597	0.2059
1945	0.1448	0.0602	0.2050
1946	0.1469	0.0608	0.2077
1947	0.1693	0.0681	0.2274
1948	0.1954	0.0634	0.2588
1949	0.2027	0.0652	0.2679
1950	0.1999	0.0667	0.2666

¹ Federal taxes levied as follows: 1 cent a gallon, effective June 21, 1932; 1½ cents a gallon, June 17, 1933; 1 cent a gallon, January 1, 1934; 1½ cents a gallon, July 1, 1940.

Source: Petroleum Facts and Figures, Eighth Edition, 1947.

Authority: Data gathered and compiled by The Texas Company.

TABLE III
DOMESTIC DEMAND AND EXPORTS OF MOTOR FUEL

Year	Domestic Demand ¹ Annual Total ²	Export Demand ¹ Annual Total
1920	108,945	15,678
1921	116,840	13,363
1922	137,770	14,362
1923	174,462	21,094
1924	196,586	29,151
1925	232,745	31,684
1926	268,128	43,769
1927	305,367	44,951
1928	338,881	53,412
1929	382,878	62,059
1930	397,609	65,575
1931	407,843	45,716
1932	377,791	35,438
1933	380,494	29,321
1934	410,339	24,686
1935	434,810	30,613
1936	481,606	28,646
1937	519,352	38,306
1938	523,003	50,109
1939	555,509	44,638
1940	589,490	25,377
1941	667,505	27,083
1942	589,110	35,097
1943	568,238	51,577
1944	632,482	100,537
1945	696,333	88,059
1946	735,417	45,334
1947	795,015	47,449
1948	871,270	37,302
1949	912,960	39,474

¹ Thousands of barrels.

² Domestic demand includes imports.

Source: American Petroleum Institute; Bureau of Mines.

might be mentioned parenthetically is that state and federal governments have recognized the inelasticity characteristics in the demand for gasoline and imposed taxes accordingly.³⁹

While total demand is inelastic within a wide range, the demand is extremely elastic as between sellers at any given time and place. The industry practice has been, in "non-price-war" price changes, to follow the prices established by the dominant marketer in the particular area. The dominant marketer in the majority of the selling areas of the continental United States is generally a Standard Oil Company and the reasons for this continued dominance are contained in the following quotation:

It may be asked why, since dissolution of the old Standard Oil Company became effective, the Standard Oil units, whose proportionate share of business has declined, have so largely continued as important factors in setting market prices in the oil industry. Among the reasons which may be cited are the following:

1. Those units have a certain historical prestige, a carry-over from the old days of the Standard Oil Company.
2. The Standard Oil Companies of the present day, as a group, pretty well blanket the domestic market of the United States.
3. The Standard Oil Companies are, generally speaking, still the largest single factors in the various regions in which they respectively operate.⁴⁰

Concurrence of pricing is obtained through a de facto system of informal price leadership* and adherence to the practice has not ordinarily been considered a restraint of trade under the Sherman Act. Generally, factors that favor the practice of price leadership exist in the gasoline business. These factors are:

1. A highly standardized product. The gasolines today are highly standardized due to governmental standards and Ethyl Corporation pre-set

³⁹ Table II, supra, p. 49.

⁴⁰ R. B. Shuman, The Petroleum Industry, pp. 130-131.

standards. This concern manufactures Ethyl fluid which is used almost universally to increase the natural anti-knock quality of gasoline. The corporation has a minimum specification for base stock and will not permit the use of this fluid in gasolines which do not meet these specifications.⁴¹

2. The number of producers is small and most of these are large concerns. The gasoline industry has many refiners, but in every area the few larger ones dominate.⁴²

3. A high ratio of fixed costs to variable costs, makes the industry one of decreasing costs. This is especially true of gasoline refining.

4. While the total demand for gasoline is inelastic, any one seller finds an elastic demand should he sell below the going price.

5. All sellers must therefore meet the lowest price. This leads to lower profit margins, because about the same quantity would be sold at the higher price. Thus marketers see the disadvantage of price-cutting. There are too many refiners to make collusion a great danger.

6. The leader attempts to set a price favorable to the marginal producer, thus making a good profit margin for all others concerned.

7. Competition in such a situation becomes non-price, and centers on aggressive selling and services. These effect the demand schedules of any one marketer relative to other marketers, but do not affect the total demand. As all marketers enter into this type competition, costs rise and higher selling prices are required in order to maintain profits.

The results of price leadership in gasoline marketing may be summarized:

⁴¹ Hearings P.R. 113, Part 15, op. cit., p. 8700.

⁴² Hearings P.R. 113, Part 14A, p. 7737.

1. Establishment by the dominant marketer of a price higher than would exist under normal competition. Gasoline has a relatively inelastic demand, with this inelasticity as a basis for pricing, the administered or 'normal' price will therefore be higher than a freely established price, with resultant increases in the profit of all sellers.

2. The following of this fixed price by price competition, since the competitive companies realize that any price cutting could bring immediate action to meet the lower price. Price cutting in one area could possibly result in retaliatory action by the leading marketer lowering price over a wide area to discourage such action in the future.

Price leadership is further complicated by the independent dealer who markets an unbranded gasoline. These concerns find that to attract a profitable volume, they must offer a concession in price below that of their competitors selling a branded product. The independent, selling non-branded gasoline to self-owned service stations became a recognizable threat to the integrated petroleum companies during the depression years. These independents became a factor in gasoline marketing due to three causes: (1) the stronger appeal of reduced price, (2) the use of transport trucks which freed the independent from the necessity of locating on a railroad siding, and finally, (3) the increased number of men seeking a new business field.

These independents found the established price structure so high that they were able to offer a cut price and still enjoy a profitable margin. This competition resulted in placing a limitation upon the policy of price leadership. Inroads on volume of the established marketers were sufficient to cause them to lower prices to a competitive level. As the independents became firmly entrenched, the dominant marketers raised the price sufficient to permit a limited price

differential favorable to the independents.

That this limitation upon the policy of price leadership was effective is indicated by the creation of so-called "normal" and "sub-normal" areas by the price leader. Within the "sub-normal" market, the price was low enough to discourage an excessive price differential between the independents and the majors. Thus the retail price is set by the dominant major oil company in any area. But, if this price is higher than will permit the independent to sell at two cents per gallon differential, he will increase the differential to the detriment of his major competitors. This threat of underselling by the independent marketer acts as a brake on indiscriminate price advances.

The quality of petroleum products has displayed the progressive improvement characteristic of all commodities whose technology has received the stimulus of keen competition. The gasoline available to the motorist has been increasing in utility from an engineering standpoint for the past thirty years. Mr. Frank W. Abrams, Chairman of the Board of the Standard Oil Company (New Jersey), presented the views of the petroleum industry in regard to price, when he said:

A lot of people think the price of gasoline is high. Actually, the average retail price of gasoline received by the vendor, is about the same today as it was twenty-five years ago. Of course, that does not include the taxes you have to pay on it, which have increased more than three-fold since then.

Furthermore, since the quality of gasoline has steadily improved in the last quarter of a century, the power delivered by two gallons of today's gasoline is equal to three gallons of 1925 motor fuel. While costs have materially advanced -- the price of gasoline -- less taxes -- is about the same as it was although the quality of gasoline is much better.⁴³

⁴³ Frank W. Abram's address, The Professional Character of Business Management, at the Annual Meeting, New Jersey Chamber of Commerce, November 30, 1950, p. 6.

The average retail price of gasoline (excluding sales tax) in fifty representative cities in the United States declined from 29.73 cents per gallon in 1920 to 19.99 cents per gallon.⁴⁴ During the same period, and for the same cities, the average sales tax, Federal and State, has increased from .1 cent per gallon in 1920 to 6.67 cents per gallon in 1950.

Recalculating the retail price of gasoline, excluding sales tax, in fifty representative cities in the form of index numbers with 1923 taken as a base of 100, and comparing the results with the National Industrial Conference Board indexes, which has like bases, the retail price of gasoline in 1946 averaged 69.7 per cent of the 1923 level whereas the index number for other listed items averaged from 91 per cent to 127.6 per cent.⁴⁵ The various price comparisons by years from 1931 to 1946 well bears out Mr. Abram's statement that gasoline prices are a recognition of the long-term claims of its customers to a better and better buy when they go to the market place for products.⁴⁶

Credit.

The average service station does not have a sufficient volume of business to warrant the services of a capable credit manager. The operator himself is often a poor judge of credit risks, being more anxious to close a sale than to be cautious in his credit extension.

The credit card system used by the integrated oil companies provides an answer to the credit problem. Under the existing credit card system, application for consumer credit is channeled by the operator to the credit manager of his supplier. After the usual investigation,

⁴⁴ Table II, supra, p. 49.

⁴⁵ Table IV, p. 56.

⁴⁶ Frank W. Abrams, op. cit., p. 6.

TABLE IV

INDEXES OF U. S. RETAIL PRICES OF GASOLINE AND OTHER ESSENTIALS

(1923 = 100)

Year	Gasoline Service- Station (Exclusive of Tax)	Cost of Living ¹	Foods	Clothing	Housing	Fuel and Light	Sundries
1931	61.7	87.2	83.7	79.5	82.4	90.5	96.6
1932	63.2	77.9	69.7	66.5	72.4	86.9	93.6
1933	58.9	74.9	67.8	67.6	63.8	85.2	91.4
1934	64.7	79.4	75.3	77.5	64.8	86.9	93.2
1935	64.3	82.2	80.8	75.0	70.3	85.7	93.8
1936	67.0	84.1	81.6	73.8	77.9	86.0	94.6
1937	69.2	87.8	84.7	76.9	86.5	85.2	96.9
1938	66.8	85.7	78.7	74.3	87.0	85.2	97.3
1939	63.2	84.5	76.6	72.3	86.3	84.9	96.8
1940	60.5	85.3	77.7	73.1	86.9	85.4	97.4
1941	63.1	89.0	85.3	75.3	88.5	87.9	99.4
1942	68.6	97.7	100.9	87.3	90.8	90.4	104.5
1943	69.1	103.1	112.6	89.3	90.8	93.1	107.8
1944	69.4	104.6	110.9	92.6	90.9	95.8	113.2
1945	68.7	106.3	113.0	94.7	91.0	96.7	115.3
1946	69.7	113.1	127.6	99.2	91.0	98.8	119.8

¹ Combined Index.

Source: Gasoline indexes computed from prices reported to the American Petroleum Institute; all other indexes from National Industrial Conference Board.

(expenses for investigation are borne by the company) the card is issued to the customer who may then purchase company products on credit from any of the company outlets or from contractual outlets outside the company's market area. Through reciprocal agreements with companies operating in other areas, this credit card may be honored elsewhere in the United States, Canada, and Mexico. A few of the larger companies have agreements with foreign oil firms and in these instances the credit card is recognized for credit anywhere in the civilized world.

Though providing a solution to station operators' credit problems, credit cards have at the same time, been a source of considerable expense to the issuing company. Upon occasion, credit cards have been used as a promotional device. When so used, the cards were issued to a selected list of potential customers without the customary credit investigation. Heavy credit losses were sometimes incurred. Even aside from losses due to bad debts, credit cards have proven expensive to the marketer with their estimated cost ranging from one-tenth cent to over one cent per gallon of gasoline sold in this manner.⁴⁷

The independent dealer and marketer complain of the bludgeoning and coercive effect of credit cards upon their independent status. These complaints were brought forth in the T.N.E.C. Report.⁴⁸

The majors issue credit cards for their "100 per cent" dealers and assume the risk involved in late or non-payment of purchases made. Usually in States where a particular major does not market, a reciprocal agreement is made with some other major. This makes it possible for a person holding a credit card to buy petroleum products and accessories on credit anywhere in the United States, even

⁴⁷ The credit manager for a major oil company states that these estimates of credit card costs are not wholly accurate but the costs for an individual company's will be somewhere in this range, depending upon the strictness of the issuing company's credit policies.

⁴⁸ T.N.E.C., op. cit., Report 39, p. 49.

though the company issuing the card may operate in a limited area. Two examples may be given. Standard Oil Company (New Jersey) and Phillips Petroleum Company each have reciprocal agreements with five other majors covering the United States. This credit card policy is an inducement for a split dealer to become exclusive or 100 per cent, since these credit cards bring a sizable amount of business to him at no credit risk, in addition to obtaining one-half cent higher margin.

This concerted action of the majors in the use of credit cards makes it more difficult for the independent jobber or refiner to compete, since he usually sells in a very limited area and does not have reciprocal dealings with other companies for credit. Therefore, the motorists who prefer credit usually buy gasoline from the "100 per cent" major stations, especially so on long trips.

Merchandising.

The securing and holding of gallonage sales by service stations are two problems confronting the marketer as well as the service station owner. For without the continued demand from the service stations, the marketer would be forced to either withdraw completely from the market or 'peddle' his gasoline to any and all buyers. Marketers of today have recognized the fact that the service station is a customer who is demanding, and getting, prompt and efficient service. This service covers a multitude of items.

The major task of the marketer is to develop sound rational relationships with the individual service station to obtain a maximum volume of sales through each outlet. The marketer knows that, if the service station is to establish efficient sales promotion he must have assistance. The larger integrated petroleum companies have conducted much research to find what the consumer prefers and desires. A great effort has been expended to publish manuals to aid the service station in retaining present customers and securing new sales.

The manuals supplied to the individual brand service stations may actually be considered a correspondence course in service station

management and selling. Through the use of these guides, the training of personnel by marketer representatives, slide films, educational movies, and training apparatus, the retailer will increase the efficiency of his employees and secure additional gallonage at no added cost to himself. The marketers who sponsor such merchandising programs do so at considerable cost. Such an initial outlay of funds, with no visible immediate results would be prohibitive to the smaller marketer.⁴⁹

The primary purpose of merchandising is to increase gallonage sales; the secondary purpose is to build confidence in brand service. The creation of confidence will aid in the sale of the complete brand line. Union Oil Company of California has conducted exhaustive sales methods research, the results of which have been consolidated in a Minute Man Service Manual. This looseleaf notebook style manual is available on loan to all dealers in Union Oil Company products.

The condensed section headings are:

1. Pump island procedure
2. Maintenance and operations
3. Petroleum products and selling points
4. Stop-wear lubrication
5. Installation and service - spark plugs - filters - tire repair
6. Batteries product data
7. Credit sales
8. Tires product data
9. Sales aids
10. Sales methods and sales promotion
11. How you can get new customers

⁴⁹ Skelly Oil Company estimates \$120,000 was spent in the initiating of a sales promotion merchandising plan.

The manual covers completely the points which are considered necessary parts of the service station attendant's knowledge in order that he become a creditable salesman. The Sales Managers and District Sales Representatives considered the training sponsored by the individual dealers to have proven ineffectual and infantile. The average service station dealer lacks the resources and the time to fully develop the requisite training program. This condemnation is fully accepted by the dealers consulted. In rebuttal, the dealers for small marketers say: "We know that we miss a lot, but if no one will help, we must help ourselves." Admission of the lack of ability of station operators to solve such problems, plus the recognition of the dire need for trained attendants clearly shows the smaller distributive marketer his responsibility. Several dealers guardedly discussed plans for leasing their stations to marketers who could and would assist in sales promotion and training of service station attendants.

Self-Serve Stations.

Self-serve stations, with their cut prices and big gallonages are claimed by some to be the forerunner of a super-market era in gasoline distribution. Others think they are a passing fad, like flag-pole-sitting or miniature golf, to be ignored until the public gets tired of them. Still others see the "self-serve" boom as something in between these extremes -- perhaps a warning that the industry must intensify the study of operating, pricing, and industry relations policies, particularly in areas where there is an unusual concentration of automobiles.

The "self-serves" are a potential problem to every oil marketing firm, if for no other reason than their cut prices may give the public the impression there is too much profit in all gasoline sales.

"Self-serves" are prohibited as fire hazards by laws of eleven states, and they have been kept out of many larger cities by local ordinances.

The increased gallonage demand has been explained in many ways; the psychology of mass patronage approach is based upon these beliefs:

1. People save money.
2. People feel they earn the discount. When someone offers four cents off with full service, the motorist is wary because he thinks there is a "chisel". The motorist feels he saves by serving himself; that otherwise that discount would not prevail.
3. People like to serve themselves. This great, tinkering American public like the idea of completing the service operation themselves.
4. There is no sales pressure.
5. The self-serve station is successful. In the oil business, if you have trade, people want to deal with you. There is a tendency to avoid the empty driveway.
6. There is no waiting. The American public dislike waiting even though it likes to patronize the busy merchant.
7. The self-serve stations are large. Large-scale activities and operations catch the fancy of the American public.

The successful promoters of self-service stations confidently believe they have set a trend which the majors will ultimately follow. They do not, however, predict a wholesale switch to self-serve because of the supply problem with which few operators can cope.

These promoters do forecast a "self-serve" landslide in the densely populated areas in the event of surplus stocks of gasoline, saying that the present close balance between supply and demand is all that is holding

back the deluge of self-serve stations. The belief is widespread that the majors could have contained or constricted self-serve growth, if they had chosen to do so. Independent operators argue that the majors could force the "self-serve" men out of business. They believe the withholding of pressure by the major operators is due to fear they might antagonize public opinion, or that they might have trouble with the anti-trust laws.

T.B.A.

The abbreviated form for tires, batteries, and accessories (T.B.A.) is used extensively in the petroleum industry when referring to items sold through service stations, other than gasoline, kerosene, or lubricating oils. In the early days of service station growth, all the efforts of the refiner were devoted either directly or indirectly to the sale of a greater quantity of gasoline. Historically, the mushrooming effect of service station growth was phenomenal. This increase in the number of stations was due primarily to the enormous profits which could be secured from this type of business. The profits to the dealer and jobber on gasoline and other petroleum products were extremely high; some of the jobbers can remember and boast of a 10 to 12 cent margin per gallon on gasoline. With the advent of greater numbers of jobbers and service stations, which in many cases resulted in the refiner displacing the jobber and service station owner, competition forced a reduction of the margin. As margins shortened, the service station operators recognized the fact that other sources of revenue were a necessary adjunct to complete the dealer's and jobber's profit picture.

As early as the year 1928, some of the leading petroleum companies, comprehending the plight of the retailing structure, embarked upon a program of offering tires, batteries, and accessories for sale in their service station outlets. This program was started through a limited

number of retail outlets. The purpose of this "trial balloon" method was to sales test their new items, in service station lines, and to ascertain their salability and profitability. By the year 1930, T.B.A. inclusion was fully accepted by the buying public, and the petroleum industry had entered wholeheartedly in the promotion and sale of a profitable non-petroleum line of supplies.

In the early days of T.B.A., promotion and sale, intra-industry competition developed in procurement of nationally known brand-name merchandise to sell through each firm's controlled retail outlets. The majority of the industry soon realized they had become jobbers for the manufacturers of tires and batteries. As middlemen, their share of the profits was limited to what they, the petroleum marketers, could secure from the service station level. Experience proved disheartening to the petroleum marketers because nationally-branded merchandisers could not be depended upon for proper profit margins and reasonable premiums for avoiding undue or excessive numbers of outlets conducive only to destructive competition.

The petroleum marketer in self-defense proceeded, over a period of years, to develop company-owned T.B.A. brands. In some instances, the petroleum companies have retained distributorships for nationally-recognized merchandise. The normal policy, followed by integrated petroleum companies, has been the letting of contracts for T.B.A. to manufacturers who number reciprocative companies strongly as customers for their petroleum products. The petroleum companies, in theory, and often in practice, establish specifications which are ordered by their individual research bureaus or departments. The major petroleum companies believe that through the sale of quality branded T.B.A. merchandise they are advancing company goodwill and increasing the return-trade of customers.

Skelly Oil Company in their Marketing Institute Manual present a table⁵⁰ to demonstrate the increasing importance of T.B.A. sales. An increase from a low of \$22.50 per 1000 gallons of gasoline in the year 1930, to a high of \$58.50 in the year 1947, is ample proof of the important part tires, batteries, and accessories have played in the over-all picture of returns to service-station dealers. In 1928, the Skelly Oil Company had a total sales volume in T.B.A. of \$5,000. Such sales increased at an unbelievably rapid rate; so during 1945, total T.B.A. sales aggregated over \$2,000,000. Then in 1946, Skelly hit an all-time T.B.A. high of \$3,750,000.⁵¹

The sales of T.B.A. have rapidly become an important source of profit for the aggressive jobber and dealer. During the lean, depression-ridden years, in the 1930's, many jobbers and dealers would not have stayed in business except as a result of additional profits made from the sale of tires, batteries, and accessories.

An interesting facet of the sale of T.B.A. has developed in the years following the war. Service stations offered the automotive consumer such merchandise as electrical appliances for routine household use, such as toasters, electric irons, waffle irons, electric fans, and other like items. Petroleum marketers voice the opinion that tests have proven to them that while they could do an acceptable job on the sale of this type merchandise in times of short supply, they are now satisfied that this non-automotive merchandise does not belong in service stations in normal times. Some of the "die-hard" executives will continue to force service stations to carry a full line of company-branded merchandise. Much

⁵⁰ Reproduced on p. 65.

⁵¹ Skelly Marketing Institute Manual, p. DAB-TBA-5R.

TABLE V
T.B.A. SALES THROUGH SERVICE STATIONS

<u>1930</u>	
Tires	\$10.00 to every 1000 gallons of gasoline
Batteries	\$ 4.50 to every 1000 gallons of gasoline
Accessories	\$ 8.00 to every 1000 gallons of gasoline
<u>1935</u>	
Tires	\$24.00 to every 1000 gallons of gasoline
Batteries	\$ 6.00 to every 1000 gallons of gasoline
Accessories	\$12.00 to every 1000 gallons of gasoline
<u>1947 (Estimate)</u>	
Tires	\$35.00 to every 1000 gallons of gasoline
Batteries	\$ 7.50 to every 1000 gallons of gasoline
Accessories	\$16.00 to every 1000 gallons of gasoline

Source: Skelly Marketing Institute Manual.

low-turnover merchandise represents a substantial financial investment for the service station operators who are normally not in a too liquid position. The petroleum companies who aggressively push 100 per cent brand lining are creating an unfavorable impression if not active hostility in the minds of the operators regarding T.B.A. sales. These opinions must be recognized and successfully conciliated before the jobber or service-station operator can do his best in aggressive selling of T.B.A.

The question that arises is: Why sell T.B.A. in a service station? The service station is a logical place for motorists to buy tires, batteries, and accessories. The natural state of affairs should be that motorists who drive into a service station for gasoline and motor oil, should also find it convenient to purchase their automotive needs -- products they need for the safe and economical operation of their car. The reasons follow:

1. The service station is usually conveniently located for the motorist. Being near the consumer's home, office, or place of work, the service station is situated favorably so that the motorist need not go out of his way to stop and buy.

2. The service station is a logical one-stop service, following the trails blazed by alert merchandisers in department stores, drug stores, and grocery supermarkets. People have become conditioned to buy most of their special needs at one shopping place.

3. Motorists who trade regularly with a particular service station invariably have confidence in the manager and his associates; hence, they are in an admirable position to recommend products to customers.

4. The motorist has added confidence because nationally-advertised T.B.A. products are usually sold at service stations.

5. A service station is open for business for more hours per day than the automotive stores, and thus the motorist has more opportunities to shop. Too, adjustments on tires, and batteries can be made easier, even on Sundays and holidays, when service stations are open for business although other places of business are usually closed.

The retail level must rationally recognize the dominant position service stations hold for distributing T.B.A. The petroleum industry is interested in the profits engendered by the sale of tires, batteries, and accessories, thus these marketers strive to promote more fully the sale of this merchandise.

There are basically four parts in a successful T.B.A. promotion.

1. The advertising, which if successful, gets the motorist to the point of sale for the first time. All company advertising is created with that thought in mind.

2. The proper use of exterior and window displays. This phase of promotion is considered very important, since the actual merchandise may be displayed with a timely sales story, and these displays are usually located near the station entrance, thus leading customers into the sales room.

3. Interior display tells the complete story to the prospective buyer. Once inside the station, customers may actually pick up the merchandise, compare and decide.

4. The sale itself, since the first three aspects are valueless unless the dealer is properly instructed and taught to complete the transaction.

Two of the petroleum companies consulted in developing this thesis had such widely divergent ideas and policies regarding the sale of tires, batteries, and accessories that the writer secured permission to identify

and present their views. Difference of policy seems to be one of the privileges of the American business world.

Continental Oil Company expressed the following opinions:

1. T.B.A. merchandise is too specialized and Continental is a petroleum company and is interested only in petroleum products.
2. Continental deems itself insufficiently equipped to meet the competition of automotive corporations.
3. The service station is physically designed to sell gasoline and not built to store, or sell T.B.A. merchandise.
4. Continental does not believe they would be rendering a service to the public.

Magnolia Petroleum Company presented their views in the following fashion:

1. T.B.A. would be sold in service stations irrespective of policy.
2. Magnolia has furnished the T.B.A. manufacturers retail outlets so they might as well accept the profits.
3. T.B.A. is an integral part of the service to the customers.
4. Magnolia specifications are set high, to insure only quality merchandise, thus they are supplying a service to the customer.
5. Service stations prefer one supplier.
6. Company handling T.B.A. is economically more efficient.

The difficulty of determining which company is using the proper merchandising procedures can not be solved by an emotional method. Empirically, if T.B.A. can be handled with economic ease and increased profits, the solution would definitely point toward increased sale of T.B.A. through service station outlets. If added departments, contacts with suppliers, and increased merchandising expense are not offset by increased gallonage, and the profits ensuing from T.B.A. sales, the answer would definitely be for the petroleum company to confine itself to refining and selling petroleum products.

CHAPTER III

WHOLESALE LEVEL

The wholesaling function is performed today, in the same fashion as it was in the early days of the industry, both by refining companies through company-owned and managed bulk stations, and by independent wholesalers. Independent wholesalers are referred to in the petroleum industry as either jobbers or distributors. The wholesaling function consists of receiving gasoline, motor oil, and other products in tank-car or other wholesale quantities into the bulk-station storage tanks and warehouse space.

The group of functions which have been denominated as wholesale functions are performed by fully-integrated marketers and by three other types of institutions, distributors, wholesalers, and cooperatives. Many fully-integrated marketers operate two types of bulk plant: the salary bulk plant and the commission-agent bulk plant. Normally, the fully-integrated marketer owns most of the equipment of both kinds of stations. Salary plants are operated by managers receiving salaries from the companies; all the bulk plant employees are considered and treated as employees of the marketer. Commission plants are operated by agents who receive their compensation in the form of gallonage flow commission. The agent normally pays wages to the bulk plant employees, and other expenses out of his commission. Some integrated companies have a third type of bulk plant, operated on a consignment basis.

The three remaining types of institutions which perform the wholesale function are distributors, wholesalers, and cooperatives. Distributors are defined in the petroleum industry as organizations, which sell gasoline under the brands of their supplier. Distributors normally have continued

relationships with a single supplier, although they are occasionally induced for practical reasons to shift from one supplier to another. Most distributors are partially integrated marketers, in that they have some retail stations of their own; furthermore, they have integrated the wholesale and retail functions in varying degrees depending upon the nature of the business they handle. A few distributors are examples of non-integrated marketers for they sell exclusively to retail stations which they do not own.

Wholesalers differ from distributors, in that they do not handle the brands of suppliers, but sell their own brands of gasoline. Wholesalers shop continuously among suppliers for low prices, and are believed by many to be the most important purchasers in the spot-cargo and tank-car markets. Most wholesalers operate some retail stations of their own.

In the petroleum trade both distributors and wholesalers are usually called "jobbers", but they differ so much in function and methods of operation they should be distinguished. In this thesis, the term "jobber" will be used only where the statement made applies equally to both distributors and wholesalers. Where the statement does not apply equally to both, the terms just defined will be used.

Closely resembling the activities of the independent jobber are those of the cooperative oil-distributing companies, usually referred to as "co-op". In recent years, consumer cooperative associations have assumed some of the wholesale functions. Cooperatives were originally organized for the purchase of farm supplies, but they have extended their operations to include motor fuels and lubricants. With the growth of cooperative retail sales in some Midwestern states, the retail societies began to band together to do their own wholesaling. There is a strong possibility

of the cooperative action carrying integration one step further by erection of refineries.¹ The growth of cooperative enterprises in this field has been fostered by certain exemptions from taxation and other governmental encouragement.

The independent oil jobber is an individual or localized corporation, who owns and operates a business, distributing part or all of a general line of petroleum products. One jobber, or company may place emphasis on the sale of gasoline, while another specializes on lubricating oils or T.B.A. One such jobber may own and operate service stations, while another leases his stations, and still another may devote most of his attention to the farm trade.

Whatever the detailed variation in the types of their businesses; these local jobbers own distributing facilities of sufficient size to warrant receipt of large volume shipments direct from refinery or marine terminal. This means that these jobbers own from one to a score or more of tank-car bulk plants, or one or more barge or marine terminals. The jobber may possess strings of service stations so equipped as to receive petroleum in large bulk quantities or in tank-truck transports. Whatever type the facilities, they must be large enough to unload and store petroleum products shipped in large quantities.

These jobbers are necessary to receive petroleum products at the terminus of the lowest-cost bulk transportation and there to break up the shipments into the smaller quantities required by the consumer. Breaking bulk may take the form of tank-truck delivery to retail outlets or delivery direct to the consumer's automobile tank from the vending pump. To provide the quickest and cheapest transition from bulk to the quantities

¹ The first cooperative refinery was built in 1939 at Phillipsburg, Kansas, by the Consumers Cooperative Association, North Kansas City, Missouri.

used by the ultimate consumer, is the function performed by the jobber.

In addition to providing the physical break-up from bulk into consumer quantities, the independent oil jobber acts as supervisory manager of the wholesale-retail operation. The jobber is fully responsible for the friendly relationship with the ultimate customer that is necessary for profit. He transacts or supervises all the small details of this relationship with the oil industry's final customers.

If the final delivery is through a dealer or retailer, the jobber sees that the individual retailer does a job that is satisfactory to all concerned. The customer should be satisfied with the service and product. The refiner should be pleased at obtaining an outlet for the gasoline. The jobber should make certain of an adequate margin, and finally, in the long chain to be reckoned with, the dealer should obtain a profit commensurate with his labors.

In presenting the reasons wholesalers developed in the industry, one must realize the importance of distinguishing among the Pacific Coast, the East, and the Mid-Continent regions. There are relatively few wholesalers on the Pacific Coast, a large number in the east, but the majority of wholesalers are in the Middle West.² The number of wholesalers reflects to a substantial degree basic differences in the character of the industry in the several areas. On the Pacific Coast, suppliers, whether large or small are close to the market. The small refiner using a few transport trucks, often can deliver directly from his refinery to retail stations. Since many suppliers are near tidewater, the suppliers find they can ship in large quantities to terminals or terminal operators at points along the coast.

² Estimate by Office of War Information, 1945, that the Midwest contained more than 8,000 distributor-jobbers -- more than 70 per cent of the total in the United States.

In the East, there are more wholesalers than on the Pacific Coast, but considerably fewer than in the Middle West. Petroleum marketing was first developed by the original Standard Oil Company and its subsidiaries, which used company-bulk plants quite extensively from the beginning. Wholesalers are strongest at seaboard points where they are able to draw supplies from small refineries located on the Gulf, from integrated companies, and occasionally from foreign sources. Wholesalers range in size from those with a single-bulk plant and no retail stations to terminal operators with river and ocean terminals, bulk plants, and a chain of retail stations. Some of these wholesalers have developed a strong consumer acceptance for their products which permits them to compete directly with integrated companies.

The wholesaler developed early in the Mid-Continent area. With many new oil fields opening up rapidly, a large number of small refineries were erected by firms with limited financial resources. These concerns were not able to finance both refining and marketing facilities; hence, wholesalers quickly developed in order to market the products of these refineries. Since the unit of transportation was the tank car, it was relatively easy for men with limited financial resources to engage in the wholesaling of gasoline without a great investment for inventory. Such wholesalers were in a favorable bargaining position, because they were able to "play" one refiner against another. The result was that wholesalers became more important in this region than anywhere else in the country.³

The reasons for the development of distributors differ to some extent from those just given for wholesalers. Sectional variations are not so pronounced. The variations that do exist result largely from differences

³ D. Thomas Curtain, Men, Oil and War, p. 235.

in volume of business, which depends in part, on concentration of population.

There are many reasons why integrated oil companies use distributors in lieu of their own bulk plants in certain territories. Many firms, though doing business in several states, have "spotty" distribution: that is, they do not have a bulk plant near enough to all consuming centers to permit economical deliveries. When such an integrated marketer is expanding distribution, he may seek distributors in order to avoid the financial cost of bulk-tank station investments. The integrated petroleum company may seek an existing distributor in order to avoid duplicating facilities. Sometimes a company enters into contracts with distributors who have unusual selling abilities and large clientele in order to obtain the volume which they control. The distributor is often a jobber who has previously been a wholesaler and who desired or was forced to shift to well-known brands. Occasionally a company uses as a distributor, a man whom they would like to employ as a salaried manager, but who prefers to remain independent. As a result of advances in wage rates and in taxes, independent distributors, in some instances, now have lower costs than company-bulk plants. In some areas, due to transportation factors, a bulk plant is desirable, but there may not be enough sales to support the management, sales, and office overhead of a specialized bulk plant operation. A distributor, therefore, who can manage more than one business, employ a sales force for service station sales, contract or control other service station purchases, and sell and manage sales of T.B.A., will survive. If this distributor is capable of economizing on the overhead of the marketing steps taken, he may be in a position to perform the function of wholesaling more cheaply than the fully-integrated marketer.

Contract-buying.

During the early 1920's, most independent jobbers sold their products under their own brand names, buying the finished gasoline on the open market. They were extremely competitive in both purchase and sale. A policy has always existed among the major oil companies of chastising any market where independent competition became important. In the early days, the Standard Oil Company did not post a retail price. They posted a tank-wagon price at which the dealer purchased. By ruse, or otherwise, the Standard Oil Company would get a ticket showing a lower price by some company in a territory where it had a bulk plant and Standard would immediately lower the tank-wagon price. With bulk plants everywhere, the control of the selling price of jobbers was an easy matter for Standard.

The fact should be pointed out that Standard Companies have always posted a tank-wagon price at which they are willing to sell dealers. For many years, they also posted a service-station price. With complete bulk plant coverage and control of a substantial portion of the volume, no one could sell at a figure higher than the price fixed by Standard. If the industry sold lower, the usual Standard policy was to meet the lower price. When the spread between refinery price, (tank-car spot sales) and the price to retailers (tank-wagon prices) diminished, the jobber in a price "squeeze" had to absorb the loss or go out of business.

Being "hard-pressed" in a local area, the independent would probably ask his independent refiner for a "guaranteed margin" on the local market. That is, protection of a certain amount of spread so that he could stay in business. Failing to get this concession from an independent refiner, the jobber would be ready to accept such a contract from the major oil companies.

The huge advertising program of the major oil companies for their products involving newspaper, magazines, radio and billboard, enticed

another group of independent jobbers to leave their independent sources of supply and transfer to a major oil company source of supply. With this transfer, the distributor sold under the major oil company's brand.

Many other methods were used by the integrated petroleum companies to induce or force jobbers into contracts with them. The petroleum companies' activities have followed several methods of attack which have been outlined by Mr. Paul E. Hadlick, Secretary and Counsel, National Oil Marketers Association:⁴

1. Spasmodic price wars were brought about, jobbers' overall margins were cut considerably; sometimes the price wars caused them to distribute at a loss. At the same time the major companies offered the jobbers in the price-war area uniform contracts containing a guarantee of a $2\frac{1}{2}$ cent net margin. The argument was used that the jobber would be protected in event of price wars and that the guarantee clause would bring about a splitting of the losses between the jobber and the major companies. This was the origin of the so-called "split feature" contract. Many a jobber signed up on these contracts since the situation looked rather disastrous to his business. He knew price wars existed, but he was unable to collect proof that the major companies, who were offering him the guaranteed contract, had brought about the price wars. At times price wars were not developed in the open but price-cutting was indulged in. Courtesy cards setting up charge accounts carried by the major companies were distributed by those companies to motorists generally without regard to whether they were customers of their brand or not. At times it was the practice of giving these courtesy card customers a discount at the end of the month when they were billed for what they had purchased. The retailer, who was selling a major brand on this charge account system, did not bear the expense of carrying the account. The major oil companies financed the customer 30 days. The independent filling station operator naturally called upon his supplier to finance a like charge account system. The jobber in many cases was unable to do this because his margin of profit was not large enough and he was often unable to borrow money from the banks, even at high rates of interest, to finance service station customers for 30 days.

2. The major companies had all embarked upon national advertising. The billboard, the newspaper, the magazine, and the radio were used to advertise these major refiners' brands. Public acceptance was built up by these means. The jobber who had built up his goodwill in his own brand in his local area

⁴ Hearing, P.R. 113, op. cit., pp. 9158-59.

was repeatedly requested by his dealers to supply the nationally advertised brand. He would offer them the brand of an independent refiner but the independent refiner's brand did not have the same amount of advertising and was probably known in a state or two only as compared with the 48 states of Texaco, Shell, Sinclair, etc. Public demand was another argument to the service station operator to take on nationally advertised brands. The service station operator looked to the jobber to supply him with a known brand to replace the independent refiner's of the past 20 years.

3. The crude oil supply of the independent refiners was gradually being tightened. He was unable, because of proration, pipe line control, squeeze of margin, crude oil price, tank car price and other factors, to make a quantity of gasoline necessary to supply his independent jobbers who had been selling his gasoline over a several-state area. Gradually, the independent refiners passed out of the picture and the jobber was faced with the alternative of either closing up and going out of business too or finding a source of supply with the majors. The majors, of course, offered him their contracts. They refused to sell him on any other basis.

4. Major companies over a period of years had built up service stations which they owned in fee. About 1928, each major company conducted a drive for gallonage. Huge budgets were appropriated for the purpose of purchasing filling stations outright. The Standard Oil Company of New York, previous to merging with Vacuum, appropriated \$350,000 to buy side-street service stations in Rochester, New York. They purchased the use of sidewalks in front of a hardware store and a corner of a parking lot next to a hamburger stand. In addition to buying service stations, major companies evolved the various "Lease and Agency," "Lease and License," "Commission Agent" and other exclusive dealing forms of contract. Many times the independent dealer has maintained a split station, a pump or two for his own or local jobber's brand and similar equipment for products of other suppliers. The exclusive form of contract forced on the dealer by the major company prohibited the sale of any other supplier's products at that service station.

5. The major oil companies approached service station operators who owned their stations and equipment in fee and proceeded to sign them up on exclusive dealing contracts on condition that the company loan the service station operator money for repairs, new installations and new equipment. These loans were of sizable amounts and were repaid, if at all, on a gallonage basis.

6. The major companies also overhauled the premises and equipment of independent service station operators, gave them new concrete driveways, painted stations inside and out, supplied them with modern electric signs, paid their electric light bills for many months after installation and offered many inducements of this character to become exclusive distributors of major company brands.

The result of such action by the petroleum companies was to shock the jobbers into the realization of their precarious position. In desperation, the jobbers demanded guaranteed margins from their sources of supply. Eventually, most of the jobbers were thus signed up on contracts bearing a strange familiarity one to another, contracts which guaranteed them a definite margin in their locality under the posted retail price of the Standard Oil Company or price leader for that area. The use of local price wars hastened many jobbers to make up their minds. The margin of the initial contracts was fair enough, but with a sliding scale provision based on the prices for gasoline published in trade papers, all that was needed was for the majors to control the refinery price and the situation was in their hands.

The advent of the petroleum code under the N.R.A. gave the large integrated companies their golden opportunity. Under the guise of doing something about marketing, they bent their efforts to perfecting controls of production and refining. When the code did not work fast enough to satisfy them, the major petroleum companies resorted to illegal pool-buying of gasoline.⁵

At times there may be a question as to whether a so-called independent jobber is really independent in anything but spirit. Some former jobbers have leased their plants to integrated refiners and operate them as the refiner's agent, receiving goods on consignment. The spirit of that man may be independent but actually he is no longer in control of his actions, either in buying or selling. The law may classify him as an independent contractor for social security and other tax purposes, but he can no longer be truly classified as an independent oil jobber.

⁵ United States vs Standard Oil Company (Indiana) et al., No. 11365, Criminal.

Bulk Plants.

The wholesale market spans the entire country, and bulk plants are almost as widely scattered as are service stations. Bulk plant operators receive gasoline in tank-car lots, store it, and make delivery by tank-truck to service stations, commercial accounts, and farm trade. Not many service stations, and few of other bulk plant customers, are equipped to receive gasoline in any other way than the small quantities which these plants can deliver efficiently. The bulk plants are necessary, therefore, to the existing gasoline marketing structure.

The cost of operation of a full-service bulk plant is about 2 to 3 cents per gallon, depending on volume and the distances covered by delivery tank-trucks.⁶ This cost, plus the four-cent per gallon margin allowed the service stations, makes a spread of 6 to 7 cents per gallon for marketing gasoline. During the depression, certain independent marketers took advantage of this high margin, and built service stations with underground storage capacity sufficient to receive deliveries direct from refineries, thus by-passing the bulk plant. In addition to this wide spread of 6 to 7 cents per gallon, these operators were able to buy gasoline below the net refinery price which the integrated companies were realizing. As a result, these stations were able to reduce the retail price substantially, and still secure a profitable volume at each station.

This development leads to certain conclusions regarding the future status of the bulk plant as a marketing institution. The bulk plant was of prime importance to kerosene marketing. Already established for kerosene marketing, the natural marketing reaction was to use the existing bulk plants for the distribution of gasoline. Material was received

⁶ Hearings, P.R. 113, op. cit., p. 3693.

at the bulk plant by tank-car, stored, and delivered by tank-truck. Together with the newly developed service station, the bulk plant represented a high degree of marketing efficiency.

Deliveries to service stations were made in small quantities, because of the limited load capabilities of the tank-wagon trucks. Underground storage tanks at service stations ranged in capacity from 270 to 1000 gallons. This was sufficient storage considering the accessibility of the service station to the bulk plant.

The pressure to expand marketing operations resulted in the major companies increasing the number of outlets, each of which consequently did a smaller total volume of business. This expansion served to entrench the bulk plant as a vital link in the marketing structure. With the introduction of the truck transport, some independent retailers took a step toward decreasing marketing costs by receiving shipments direct from the refinery at service stations. This saved the cost of bulk plant operations and made it possible to sell at a lower retail price.

Some of the integrated petroleum companies have rationally followed this lead, and have been able to make use of strategically located pipeline terminals to effect further savings in transportation costs. Pipeline transportation is cheaper than truck. A judicious combination of the two, enable any company having the pipe-line facilities to by-pass the bulk plant completely, so far as service station deliveries are concerned. This is accomplished by shipping direct from the pipe-line terminal to the service station by transport truck, thus making the bulk plant obsolete, except for delivery to farm and other small-volume commercial accounts.

Jobber Complaints.

There are some differences between the basic problems and complaints of the two types of jobbers; namely, wholesalers, and distributors.

Basically, wholesalers complain that it is difficult to make a profit. Some of them even argue that the integrated companies deliberately endeavor to "squeeze" wholesalers out of the industry. To evaluate this complaint, the conditions under which wholesalers operate must be scrutinized. They sell their own private brands of gasoline, not the brands of the large integrated companies. Because of advertising, product improvement, and service, the public generally accepts the brands of the integrated companies as the standards of value, and ordinarily does not buy less-well-known private brands without a price inducement. This means that wholesalers' private brands of gasoline usually must be sold on a price-appeal basis. This, of course, is a situation quite common to a great many other industries, such as groceries, drugs, and cosmetics. Since wholesalers must sell their private brands at a price below those of the brands of major companies, the problem is how to do this and still make a profit. Wholesalers ordinarily are not able to undersell on the basis of lower costs of bulk-plant operation. Hence if wholesalers are to undersell, they usually must accomplish this end by reducing retail costs through high volume at cut prices or by buying at lower prices. Thus, there are two situations in which wholesalers get along very well, namely, periods of business depression and periods of rapid exploitation of new sources of crude petroleum, for in both these situations, there are plentiful supplies of cheap gasoline.

When states adopted proration laws, supplies available at distress prices may have been reduced, even though there was considerable gasoline available which had been refined by small refineries from so-called "hot oil". With the passage of the Connally Act prohibiting interstate shipment of products produced from "hot oil" and with the improvement in business and gasoline demand, the supply of lower-price gasoline available to whole-

salers has decreased. Some wholesalers opposed the passage of the Connally Act because they thought the act would result in a smaller supply of lower-priced gasoline.

One of the factors which has put the wholesalers under pressure has been the long downward trend in gasoline prices. The prices of the brands of the major companies have moved downward over a substantial period, to the great benefit of the consumer but, of course, to the disadvantage of wholesalers, who have to maintain a price differential lower than the prices of advertised brands. The large integrated companies have the most up-to-date refining equipment and have thus been able to improve the quality of gasoline to a very marked degree, whereas wholesalers buy much of their gasoline from small refiners who often do not have the cracking equipment from which the better gasolines are ordinarily obtained. This quality difference increases the difficulty of the wholesaler in attempting to maintain a differential between prices of better known brands and his own supply of gasoline.

Another development in the oil industry during the last 15 or 20 years has contributed to the difficulties of the wholesalers. The integrated petroleum companies have given more attention to the development of brand demand. In the early stages of the industry, the companies sought to create a greater brand demand by increased advertising and sales promotion and particularly, by the provision of stations and service which pleased customers and brought increased patronage. Alert wholesalers recognized the values of service and location; nevertheless, they did not possess the advantages of advertising.

Distributors complain that the integrated petroleum companies have deliberately reduced the margins of the distributors in an effort to eliminate them from the industry. This idea of elimination is a false

concept. Some refiners rely almost entirely on distributors and most refiners sell through distributors at least in parts of their marketing territory. Distributors, therefore, are considered by their refinery suppliers as an essential part of the distribution system for their gasoline. Because of their local standing, distributors frequently are preferred over company facilities, so long as they can operate at least as effectively as the companies themselves. When a distributor, in the eyes of the refiner, fails to keep pace in methods of selling, or in facilities for physical handling, or when his costs or volume are out of line with the manufacturer's own experience, the manufacturer usually undertakes the job of wholesaling himself.

There has admittedly been a decrease in the margin of spread during recent years for both wholesalers and distributors. The declining price structure of the petroleum industry inevitably has exerted pressure on the jobbers' margins. Another factor which has exerted pressure on the margins of wholesalers and distributors, is the decrease in the cost of performing the wholesale function; that is, the decrease in the cost of operating bulk plants. New transport trucks and new types of trucks for making deliveries from bulk plants to service stations, coupled with improvements in highways, have directly lowered unit costs, and have indirectly made possible other savings from the consolidation of bulk plants. Many large integrated companies have been steadily reducing the number of bulk plants and increasing the quantities handled in each. Intensive study has been devoted to the best methods of loading trucks at bulk plants and unloading them at service stations. Similarly, careful studies of truck routes have minimized backtracking and have reduced the number of trips made with less-than-capacity loads.

Both wholesalers and distributors sometimes complain about suppliers competing with them for business of commercial consumers and service stations. Price-cutting by the refiner to the commercial accounts is the method in use by the refiner. Service-station sales are secured by non-price competition of supplying equipment or extra services. Doubtless where such methods of weaning away the jobbers' developed accounts are resorted to regularly, rather violent competition often results.

Market Risk.

Inherent in gasoline marketing are risks of these general types:

1. Destruction or deterioration of the gasoline itself
2. Evaporation
3. Temperature change
4. Price fluctuation

These foregoing risks must be borne by the title-holders. The inflammable nature of gasoline creates a constant fire hazard. Methods of safe handling have been so highly developed that this risk, although constantly present around gasoline, has been greatly reduced. Insurance is available to cover this risk and the premium is often paid, in part, by the marketing leasor. Marketers depend upon rapid stock turn to offset the deterioration in storage to which gasoline is subject.

Evaporation may also cause the marketer possible loss. Because of its volatile nature, a certain amount of gasoline escapes into the outer air except when the gasoline is contained in a closed vessel. This loss may be minimized by the use of: (1) devices on storage tanks that trap the escaping vapors and recondense them, (2) light reflecting paint, and (3) care in storage and handling. Nevertheless, a certain amount is lost. Many states recognize this fact and allow a percentage loss in volume in accounting for the state gasoline tax.

Temperature changes are a potential cause of loss in volume of gasoline handled. The customary practice is to measure gasoline corrected to a temperature of sixty-degree Fahrenheit. The product shrinks with a drop in temperature and vice versa. Although receipts are accounted for by a refinery and bulk plant at the sixty-degree temperature, no correction is made on deliveries by tank-truck. Depending on weather conditions, a bulk plant operator will show either a loss or gain in volume during any period of time. These losses and gains tend to average out over a year's period, but wholesalers generally allow a one per cent net loss on yearly volume as an added safety element to avoid loss.

Risks of market fluctuation, also borne by the title-holder, are not a source of serious worry to marketers. The fluctuations are usually small in relation to total price. In addition, there is a general knowledge of impending price changes before the event, so stocks may be adjusted accordingly.

Aid To Jobbers.

There are two distinct schools of thought in the petroleum industry regarding the integrated petroleum companies' aid and assistance to the wholesale levels of distribution. The more rational approach is to identify the jobber as an immediate part of the individual company. As an affiliate member, the jobber receives all the aid and assistance that can possibly be given to him. The jobber receives the identical treatment extended to a company-owned and operated bulk plant operator. Diametrically opposed to this method are the policies of the integrated petroleum companies who strive for competitive advantage over their contracting jobbers. These companies assert that once the gasoline has been delivered to the jobber, it is his and not their responsibility, as to whether or not paid jobber sells the gasoline.

Cosden Petroleum Corporation, a smaller-than-average integrated petroleum company, is an advocate of increased aid to jobbers. Cosden realizes that the financial resources of the jobber are limited. Cosden likewise recognized that the jobbers had little or no wholesale storage and hardly enough rolling equipment to start a business, and possessed insufficient operating capital. The problems confronting a jobber are tremendous and without aid and assistance, the refiner often senses that jobbers will fail. Cosden has various means of aiding jobbers in coping with their financial difficulties, but the Cosden Company does not agree to bear the entire responsibility. A credit department, for the aid of jobbers in financial distress, is the method of assistance used by Cosden. Although the basis of payment for jobbers is theoretically cash on delivery, Cosden, nevertheless, supplies short-term credit for a number of the more substantial jobbers. Terms of 30-60-90 days are granted on lubricating oils and tires.

The practice in the industry, for credit extension to jobbers, is similar in many instances to Cosden's policy. To relieve the jobber of as much financial worry as possible, the interested refiner will extend limited credit, and will carry customer accounts for the jobbers.

An aggressive jobber is almost constantly in need of capital for expansion. Some of the integrated companies make loans directly to the jobbers. These loans are secured and carry six per cent interest, and in almost every instance they are payable on demand. Other companies make a practice of acting as a co-signer of the jobber's note. Most of these loans on notes are collected by retention of rebates on light oil purchases. Each loan is considered individually on its own merits, and risky loans are not made, but the jobber is free to borrow from other sources. Loans generally recognized as desirable are those required for

the expansion of the jobber's business or for the improvement of the jobber's service stations, bulk plants or other facilities.

Atlantic Refining Company retains eleven marketing specialists to aid distributor executives on management problems. These specialists are available to jobbers and wholesalers affiliated with Atlantic. There are ninety-three retail specialists employed by Atlantic to help jobbers in their relation with the retail level and problems of service station sales. The retail specialists are assigned to the individual jobber to assist him in building greater sales and to aid him to achieve a profitable operation of his service station outlet.

The major petroleum companies which extend aid to jobbers normally have a marketing operation department. This department renders valuable assistance to the jobbers in counseling with them upon many subjects. Some of the subjects covered are:

1. Truck routing - Methods of mapping the route to be taken by each truck. The routine assigning of routes will eliminate duplication of coverage, back-tracking, and increase the proficiency of service. The industry, today realizes the importance of the truck to the industry, a sign of this recognition is the employment of specially-trained traffic engineers. These engineers have reduced the wasteful and inefficient operation of trucks.

2. Stock Control - Methods of controlling the amount of gasoline, lubricating oil, and T.B.A. to be warehoused in an efficient ratio to the gallonage disposed of in a pre-determined period of time. By expert stock control, a jobber is able to retain the previous gallonage with a reduced expenditure. The savings engendered from proper stock control may be invested in further operations.

3. Bookkeeping - Very few of the veteran jobbers knew, or bothered to learn, proper accounting methods. Operating expenses have increased

threefold over the past ten years and many jobbers have failed, due to the non-recognition of decreased returns and the use of working capital to pay themselves profits.

4. Terminal Operations - Through costly experimentation, the integrated refiner is finding newer and better methods for the operation of terminals and bulk plants. The average jobber is forced, due to initial expense, to refrain from new methods or the installation of unproved equipment in their bulk plants. When the refiner has fully developed a more efficient method or better equipment, he instructs the jobber on methods, or aids in financing the new equipment. Recently the mechanization of warehouse equipment revolutionized the industrial methods of storage and handling. Jobbers were among the first to receive the benefits of this increased proficiency. Refiners aided the handling and storage of supplies by scientifically designing more easily stored containers and packaged goods.

5. Credit Policies - Despite the willingness of the refiner to carry the credit extensions of the jobbers, usually at a nominal cost of one per cent, the jobbers persist in carrying a great part of their customer accounts. Through experience and training, the credit departments of the petroleum companies have developed proficiency in extending, handling, and collecting credit accounts. The petroleum companies often extend these abilities to the jobbers.

6. Sales Promotion - Through a united "brand" effort, many new sales may be made. The aggressive petroleum company strives to combine forces with his jobber to fully develop the sales promotional efforts designed to popularize the brand. Many refiners invite the jobber to develop and make available to the refiner, a mailing list of dealers. Thus, all sales promotional material is released simultaneously to all dealers. The normal

sales promotion for the retail level is, in this way, a united brand front as viewed by competitors.

In lieu of a marketing operation department, many concerns conduct a school for their jobbers. These schools or classes are held at varied intervals and are used primarily to introduce new products and create goodwill. Jobbers look upon these schools as childish and believe they are conducted to force them to listen to the executive propaganda. As a direct result of this enmity, the schooling fails to produce desired results.

District sales managers or representatives are often used to disburse information and aid to the individual jobber. These managers are regular paid employees of the integrated petroleum companies and their task is to act for the company in a specific locale. The manager will collaborate with the jobber and assist him in his relations with the retail level. Jobbers tend to distrust the help of such a sales manager or representative, due to his being responsible, at the same time, for policies in company leased service stations.

The practices of the industry in regard to dispensing knowledge and aid to the wholesale level are many and vary with the geographical locale, competition, and top-management thinking. Thus, a single company may have any one, or all, of three basic approaches to this problem:

1. School or classes
2. District Sales Manager or Representative
3. Marketing Operation Department

The integrated petroleum company sales promotion development, when acting with or for the distributors or wholesalers, must give cognizance to three facts:

1. Since distributors are independent business men, the company can offer suggestions only -- it cannot control or dictate to them.

2. There are many "old-time oil men" among the distributors.
3. There will always be a few beginners.

Thus, any program evolved by the refiner must meet these criteria: The program should provide a quick refresher course for the experienced oil man. At the same time, the program should contain some of the more simple business fundamentals for the novice. The fact should be made clear that the entire program is a suggestion for those who care to use it, but can be ignored by the disinterested.

T.B.A.

Tire, battery and accessory distribution on the wholesale level is comparable to the marketing of gasoline. The petroleum industry has the choice of two alternatives in selling T.B.A. The most common and widely used procedure is directed through the petroleum jobber. In this method, the petroleum distributor is considered to be the T.B.A. jobber. Stocks of merchandise, all of which were originally purchased by the parent company, are stocked in the commission agents' or jobbers' bulk plant. The company often supplies the commission agent with any special storage facilities required due to the nature of T.B.A. The jobber is responsible for obtaining proper storage facilities without benefit of the refiner's assistance. The jobber or agent handles distribution as an indivisible part of his regular petroleum delivery schedule.

The second method of distribution for T.B.A., is through the T.B.A. jobber or distributor. The T.B.A. jobbers' operations are handled distinctly separate from the petroleum distribution. Arrangements are made for independent distributors who will warehouse and deliver all T.B.A. merchandise to the retail dealers. Deliveries are made in special type (warehouse) trucks, which carry rather complete stocks of fast-moving items. Normal schedules permit semi-weekly or weekly deliveries, although special

trips are made when emergency situations warrant.

The petroleum wholesalers who handle T.B.A. contact the T.B.A. manufacturers and purchase on contract. Thus the amount purchased and the selling profit are controlled solely by the purchasing ability of the individual wholesaler. A few large-scale independent wholesalers have developed a cooperative purchasing committee in order to competitively match the large quantity purchases of refiners.

CHAPTER IV

SUMMARY AND CONCLUSION

The petroleum industry has taken two very important and significant steps in the endeavor to increase the efficiency of petroleum marketing. These steps are, first, the development of the bulk plant which now characterizes the wholesale marketing structure. This improvement in distribution was made before gasoline assumed prime importance in the petroleum industry. The second step was the development of the service station which symbolizes the retail market. The service station is the most significant achievement in gasoline distribution. To rationalize the actions of the industry, the minor acts of the individual firms will be sublimated to more overwhelming mass decisions. Thus, the development of bulk stations and service stations are the cumulative effect of mass action.

Summary.

The bulk plants and service stations are either controlled by integrated petroleum companies or by independent marketers. Integrated petroleum companies differ widely in degree of size, integration, and geographical or physical scope. Major integrated petroleum companies operate on a sectional or national basis, generally made possible through ownership of transportation facilities that favor this widespread distribution. There are integrated companies, generally called "minors", that roughly parallel the majors in everything but size, extent of ownership of transportation facilities, and marketing area. Minor integrated petroleum companies generally exist where crude production is adjacent to a major retail market.

Independent marketers are non-integrated concerns which specialize in some phase of the marketing function. The fact has been observed that independent marketers, on the wholesale level, are independent in name

only, and are capable of being circumvented at will by the refiner. The independent marketer does not dominate the retailing of gasoline; however, the independent marketer is of relatively more importance at the retail than at the wholesale level. The independent retailer has maintained a competitive position by constantly underselling the integrated petroleum brands. Due to this fact, the independent has limited the power of the refiner in changing the retail price of gasoline. These independent jobbers reached considerable importance as marketers in the years immediately prior to World War II. Having no assured source of supply, they found their position somewhat precarious in a normal situation when refiners are in a sellers' market rather than a buyers' market. The relationship existing between the integrated refiner, with an assured source of supply, and the independent marketer, with no guaranteed source of supply, is a delicate balance which can be swayed at will by either. The rational-thinking petroleum company can, and does, retain the favorable marketing equilibrium in either a buyers' or sellers' market.

Through integration of the various functions, exploration and drilling, transporting, refining, and marketing, the integrated petroleum companies enjoy the certainty of a positive source and control of the petroleum throughout each function. Integration would benefit the public were it not for the fact that profits from other divisions have been used to subsidize the marketing departments. This subsidy has resulted in the overbuilding of the service-station system, which engendered the necessity for maintenance of excessively high retail margins.

Since the year 1920, the retail marketing structure has been irrationally extended beyond needed capacity. Through the years, there have been progressively fewer automobiles per retail outlet. This decreased station traffic has reduced the volume in many major oil company

stations to the point where operations could not continue at a profit within the allowed margin.¹ The result has been an increasing tendency to add to the line of merchandise sold. The stocking of items other than petroleum products has been reported to be profitable. The far-seeing and aggressive marketers have entered this related-items field wholeheartedly. The irrational and, oft-times retarded marketers, are waiting for proof of profitability. Despite the proof of twenty-five years of acceptability by the consumer, these doubting few, question that the ultimate consumer will buy non-petroleum products through service stations in profitable quantities.

Much planning has been done toward adding a multitude of household articles, each contributing toward the payment of its share of the overhead costs. Gasoline dealers generally know gasoline and are familiar with margins and other factors that form the daily routine of the gasoline business. This is far different from merchandising of radios, deep-freeze units, bicycles, and washing machines.

If the policy is to extend the marketing activities of the service station to include these shopping goods, then more display space is needed, as is a different type of sales force, and credit policy. If the result is the development of a neighborhood general store, gasoline sales will suffer, since the tendency will be to push the high-margin merchandise. The pattern is rationalized by comparing the service station expansion to the super-market grocery stores. The difference is that super markets remain primarily food stores, while the new items added by service stations are foreign to the present line. The sale of gasoline is far different from the sale of shopping goods. True, the demand for many of these items

¹ Joe S. Bain, op. cit., Part II, p. 228.

will be strong for a particular period; that is, a period of short supply. When the market is glutted with these items there will be a demand for extended credit, lower prices, and a scramble for the shrinking market.

Rapid stock turn and many small profits on gasoline sales would reasonably seem to be better for the service station than greater profits on a few higher-priced items. The answer to better gasoline marketing does not lie in these additions to the historically accepted service station lines. Marketing will likely be more sound as a result of leaving the super markets to those qualified to operate them and thus to return to selling gasoline and allied materials in the service station.

An interesting fact in this connection, is that service stations of the major oil companies, which constitute the largest chain store operations in the country, function on a merchandising principle which is the exact opposite of the usual chain store method. "Chain-store" gasoline service stations depend on high prices and wide margins to return a profit on a relatively small volume of sales. Chain stores exist through the sale of large volume and small margins.

In recent years, the oil industry has been forced to consider the competition of the "low-price" retailing independent. These marketers have been able to undersell the major petroleum companies. By underselling, the independents have increased their gallonage to the point where they are able to make more profit on a small margin than the major stations are capable of making with a large margin and less volume. The fact that these independent marketers have profitably conducted large-volume business on margins as low as 2 cents per gallon, when the rest of the industry considered 6 cents per gallon hardly enough working margin, is evidence that the entire industry has much to learn from this method of operation.

The opportunity exists for a major company with courage to inaugurate a program of gasoline marketing modeled after the direct method developed by the independents. Competition would eventually be forced to do likewise. This would result in a rational distribution, to the consumer and retailer, of the benefits of integration. This method of distribution would reasonably be assumed to be the logical advance in the evolutionary process of gasoline marketing.

To sum up the critical analysis of the institutional framework of gasoline marketing and to reach any conclusion pertaining to the benefits of existing relationships between integrated petroleum companies and their retail outlets, a question might well be asked: Has the public been served satisfactorily, both in availability of the product and in its price? Availability of the product to the consuming public, and the manner in which the product has been sold have been entirely satisfactory. Prices have been reasonable, but largely as a result of independent competition. Thus, the public has been served, but in the rendering of this service, the petroleum industry has had little or no thought for those rendering the service.

The petroleum industry has been more interested in the degree of profitability of the function of creating a demand for their particular brand. Selfishness has developed an irrational and emotional viewpoint in the distribution and sale of gasoline. There are markedly unbusiness-like practices prevalent in the relationships existing in petroleum distribution. With the elimination of the misunderstandings between retailers, jobbers, and refiners, the public will secure an increased service with a decreased price for future gasoline.

The divorcement of marketing from the refiner has been a much discussed and argued proposal. At the present, and most probably for future years, there are proposals to sever the connections between the

functionally integrated portions of the petroleum industry. There is a great deal to be feared from the legislative action against integrated petroleum companies, because, historically all evolutionary advances have required the financial support of big business. When big business is legally forbidden to function in efficient manner, the public and consumer will be forced to bear the brunt of evolutionary expenses.

Conclusion.

From the data set forth, these conclusions might now be reached:

1. Demand for petroleum products will continue to be strong.
2. Integrated petroleum companies will each strive to secure a greater share of this demand.
3. Jobbers and distributors will, through evolutionary action, be assimilated by the integrated petroleum companies.
4. Integrated petroleum companies, in an endeavor to increase profits, will develop more efficient marketing methods.
5. Marketing research will be forced into a leading position, due to the increased costs and reduced profits of distribution.
6. "Self-serve" gasoline stations will continue to replace the normal service stations in the more heavily populated districts.
7. There will be a greater development of pipe-line terminals to replace bulk plants.
8. The past relations between the integrated petroleum companies and the marketers at the retail level have been the result of irrational and unbusinesslike actions involving unwillingness to understand reciprocal problems.

Proposal.

The basic cause of the over-built service station structure was the pressure exerted upon the oil companies to move the gasoline which the

refiners poured forth. The excess refinery output, in turn, resulted from crude oil production which was in no way geared to refinery, or market needs. This over-produced condition is history which is not expected to repeat itself.

Should any major oil company, integrated so as to be assured crude oil supply, refinery capacity, and transportation facilities, limit its marketing activity to the area these integrated transportation facilities efficiently serve, a competitor could not possibly undersell such a firm. One proposal is that such companies should take advantage of integration and sell gasoline at service stations specializing in petroleum products and related items only.

The pattern, including price policies, to be followed would be that established by the low-priced independent marketer. Full use would be made of pipe lines and transport trucks to by-pass the bulk plant. These latter institutions could be retained to sell the farm and fuel oil trade, but it is a mistake to retain them at the expense of efficiency in gasoline retailing, where they are no longer needed.

Should the integrated companies follow this proposal, they would find gallonage increasing at the service station to the extent enabled by the fact that these outlets would no longer require a 4 cents per gallon margin. Decreased delivery costs plus decreased dealer margins should be passed on to the public in the form of lower retail prices. The increased gallonage resultant from the decreases in price would result in the integrated companies forcing the competition to eliminate the inefficient practices. The practice that would ensue, would be the change from extensive marketing to intensive coverage of areas served by the individual companies within the profitable limit of transportation facilities as related to storage facilities. Neither dealer nor company

profits would be impaired in the long run.

Due to the inelasticity of demand for gasoline, the motorist is willing to pay for the marketing structure as it now exists. When fewer stations and lower prices are preferred, then competition can be depended upon to give the public what they desire. The company initiating this logical step in the improvement of gasoline marketing will secure sufficient goodwill unto itself to warrant taking prompt initiative in an advance that is now overdue.

The physical distribution of gasoline from refiner to ultimate consumer is one of the few places in the marketing of petroleum where actual future savings will be made. The reasons for this statement are:

First, mass production has been developed to a point at which gains in efficiency during the foreseeable future will be slight.

Second, manufacturing costs are high and are not likely to decline appreciably. Labor rates show no sign of dropping, nor do taxes, costs of material, or any of the other factors which contribute to manufacturing costs.

Third, as production continues at high levels and consumer demand is more fully satisfied, competition will stiffen and prices decline.

Consequently, the petroleum industry finds itself squeezed between high costs and falling income.

The solution to this problem of increased cost and decreasing returns is to make distribution more efficient. The petroleum industry is confronted with the need to trim the cost element in the spread between manufacturing costs and selling prices. The industry must raise the distribution efficiency and effectiveness through elimination of unprofitable practices. The practices that could be adopted by the industry to increase the distribution efficiency are:

1. Increase the size of the deliveries, so as to maintain or increase the volume of gallonage delivered with a smaller investment in trucks.

2. Run shift operations with night deliveries in order to make the maximum use of delivery trucks.

3. Use more efficient truck drivers who will secure the maximum gallonage flow.

4. Develop mechanized handling of equipment and supplies.

5. Obtain greater coverage of pipe lines and pipe-line terminals to eliminate duplication of localized bulk stations.

Thus, by circumventing and eliminating the inefficient practices, the integrated petroleum companies will be financially capable of fully developing better relations with the retail level. The marketers in the petroleum industry will be profitably rewarded for their endeavors and will reap the benefit of reciprocally friendly feelings toward the refiner.

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APPENDIX

COOPERATING PETROLEUM COMPANIES

Anderson-Prichard Oil Corporation
Barber Oil Company
Bareco Oil Company
Continental Oil Company
Cosden Petroleum Company
Creole Petroleum Corporation
Deep Rock Oil Corporation
Eason Oil Company
Gulf Oil Corporation
Hancock Oil Company
Hickok Oil Corporation
Kendall Refining Company
Kerr-McGee Oil Industries, Incorporated
Leonard Refining, Incorporated
Magnolia Petroleum Company
Mid-Continent Petroleum Corporation
Ohio Oil Company
Phillips Petroleum Company
Pittson Oil Company, Incorporated
Quaker Oil Refining Corporation
Signal Oil Company
Sinclair Oil Corporation
Shell Oil Company
Skelly Oil Company
Socony-Vacuum Oil Company, Incorporated
Standard Oil Company of California
Standard Oil Company of Indiana
Standard Oil Company of New Jersey
Standard Oil Company of Ohio
Sun Oil Company
The Texas Company
Tidewater Associated Oil Company, Incorporated
Union Oil Company of California
Warren Petroleum Corporation

NATIONAL CODE OF PRACTICES FOR MARKETING
REFINED PETROLEUM PRODUCTS

GROUP I

RULE 1

The practice of loaning or leasing gasoline pumps, tanks, and other equipment is unsound and uneconomic, and should be discontinued at the earliest possible moment, consistent with existing conditions. Until such time as this situation can be brought about, and only in those states in which the practice is now observed, gasoline or kerosene pumps and tanks, motor oil equipment and grease outfits (the grease outfits not exceeding in cost \$50 each) may be loaned or leased for the exclusive storage and handling of the products of the lender or lessor, but the borrower or lessee shall not be prohibited from handling in other equipment the products of another supplier. Where no equipment is at present installed by any company, or where additional equipment may be added to existing locations, the borrower or lessee shall be required to pay for the installation of each loaned or leased equipment the actual cost of installing said equipment, and for this purpose shall make a cash deposit of at least \$100 in advance for each underground unit to be installed, and shall pay, as or when due, all privilege taxes attaching because of the installation or maintenance of such equipment.

RULE 2

Refining companies, wholesalers, distributors, and/or jobbers may acquire by bona fide leases or sub-leases, service and filling stations or sites for same, such stations and/or sites may be leased or licensed by such company to dealers for the purpose of distributing its products. Such stations and/or sites shall not be acquired at one rental and then sub-leased or licensed at a reduced rental for the purpose of rebating. In the event the company makes improvements to such properties prior to sub-leasing same, such sub-lease shall provide in addition for reasonable return upon the cost of such improvements, in order that the transaction may not result in rebating.

RULE 3

No company shall paint over any sign or colors of another company until it has communicated with the company whose signs or colors are involved, inquiring whether or not the latter company has any written contract which would be violated by the proposed painting. The latter company shall respond promptly, giving the information requested; and if it holds a contract which would be violated, shall offer to submit it for inspection at its office. If the contract so submitted discloses that the proposed painting would constitute a breach of the contract, the painting shall not be done.

RULE 4

No refiner, distributor, jobber, or wholesaler shall knowingly induce, attempt to induce, or assist a party to break an existing written contract for the sale of petroleum products between that party and another.

RULE 5

All above-ground equipment for refined products shall bear in a conspicuous place the name or trade-mark of the owner or lessor; and no refiner, distributor, jobber, wholesaler or retailer shall knowingly deliver into such equipment any refined product other than the brand designated, or in any way be a party to the substitution of one grade or brand of refined products for another.

RULE 6

Lotteries, prizes, wheels of fortune, and/or other groups of chance shall not be used in connection with the sales of gasoline or motor oils.

RULE 7

The selling of refined petroleum products below cost for the purpose of injuring a competitor, and with the effect of lessening competition, is an unfair trade practice.

GROUP III

RULE 8

On account of the special nature of service required in supplying petroleum products to airports, no dispensing or storage equipment of any kind shall be leased, loaned, or other-wise furnished, to airport operators, except at full cost, including cost of equipment and storage installation.

RULE 9

A lender or lessor of equipment shall neither extend credit to the borrower or lessee for installation costs, nor advance money to him to cover payment of privilege taxes, or any other expense in any manner related to the installation of loaned or leased equipment.

It is not the intention of Rule 1 and Rule 9 to require the payment of installation costs from the borrower or lessee for exchanges and/or substitution in existing equipment on locations where gasoline, kerosene or lubricating oils are being sold upon the date of the Federal Trade Commission's approval of this code. The privilege of exchange or substitution of equipment is declared to extend to all dealers, not merely to the original lenders.

RULE 10

Except as may be provided in Rule 2, refiner, wholesaler, distributors and/or jobbers shall not construct for retailers any driveways, canopies, sheds, greasing pits, building or other structures; do painting other than their standard signs or loaned equipment; make improvements to existing structure of facilities; nor furnish or loan air compressors, greasing lifts or racks, or other things of value, except equipment stated in Rule 1 hereof, nor bear any part of the expense of construction work on the premises of resellers, nor loan money for the same.

RULE 11

No equipment except trade-marked pump globes and other standard advertising devices shall be loaned to tank car buyers and/or distributors.

RULE 12

Refiners, distributors, jobbers, and/or wholesalers shall not pay rentals or make any allowance for the privilege of installing pumps and tanks, or for displaying advertising on premises where refined products are sold.

RULE 13

Refiners, distributors, jobbers, and/or wholesalers shall not rent from any dealer or consumer any delivery equipment, and shall not purchase from any dealer or consumer any delivery equipment for more than its actual value.

RULE 14

Refining companies, wholesalers, distributors, and/or jobbers may own service and filling stations or sites for same, and may lease such stations and/or sites to dealers for purposes of distributing its products, provided that such leases shall stipulate for a reasonable return to the lessor upon the then fair value of the property for filling station purposes.

RULE 15

Gasoline shall not be sold from tank wagons or trucks to other motor vehicles except in emergency cases.

RULE 16

No oil or other thing of value shall be given away, or special inducement granted, on opening days, special sale days, or other occasions.

RULE 17

All refiners, distributors, jobbers, and wholesalers shall conspicuously post, at each point from which they make delivery, the several posted prices of gasoline and kerosene for each class of delivery for such deliveries at the time of delivery.

Retailers and other operators serving consumers through service stations, garages, curb pumps, or pumps located at bulk plants, shall conspicuously post, at the place from which delivery is made, prices at which gasoline, kerosene, and motor oils are sold.

No seller shall make any deviation from his posted prices (whether wholesale or retail) by means of rebates, allowance, bonuses, concessions benefits, unusual credits, scrip books, or any plan, device, or other scheme which may directly or indirectly permit the buyer to obtain gasoline or kerosene at a lower net cost to him.

Commercial accounts, whether for delivery at service stations or otherwise, may be recognized as an exception to this rule in sections where they are now in vogue, but shall apply only to written contracts for charge accounts.

RULE 18

The practice of making deliveries of gasoline at refineries or wholesale plants into tank wagons or trucks operated by or for the purchasers thereof is discouraged.

RULE 19

Coupon books or other scrip of any nature, if used, shall be sold and redeemed at their face value without any discount.

RULE 20

On a change in the posted price, no adjustments, allowances, credits or refunds shall be given to any buyer on deliveries already made.

RULE 21

DEFINITIONS.

For the purpose of this code, the following definitions are adopted:

(a) Consumer. One who destroys the exchangeable value of a commodity by using it. He is an eligible buyer from service station, tank wagon, tank car, or in packages.

(b) Refiner. One who refines crude petroleum and natural gas into refined products.

(c) Jobber, Distributor, or Wholesaler. One who carries a stock of petroleum products to sell to retail dealers or other for resale, but who may also sell direct to consumers.

(d) Retail Dealer. One who carries a stock of petroleum products to sell to the consumers only.

(e) Commercial Accounts. Petroleum products sold to persons, firms, or corporations using commercial vehicles in transportation or delivery of passengers, merchandise, freight or express, for use only in such vehicles properly licensed by public authorities for those purposes.

THESIS TITLE: Rationalization of The Relationships of
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