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CHANGE IN GASOLINE MARKETING:  
AN INTERPRETATION

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## CHANGE IN GASOLINE MARKETING: AN INTERPRETATION

Edward J. Mitchell\*

In recent years the long term trend of gasoline marketing from full-service dealer-operated stations to no-frill employee-operated outlets has accelerated. While it is commonly believed that soaring prices of gasoline have spurred this shift, elementary economic logic does not support this belief. Independent dealers themselves see their decline as caused by predatory actions of the major oil companies, but this view also finds little support in logic or fact. Rather, it would appear that government regulation of the petroleum markets since the Arab embargo have broken the necessary implicit contracts between dealer operators and their customers and has otherwise favored no-service marketing. In addition, the high level of investment in full-service marketing facilities in the late 1960's, a seemingly economic decision at the time, has contributed to the economic hardship of the independent franchised dealer.

Shifts from the franchised service-oriented marketing format to the low service employee-operated approach are hardly novel in American economic history. Take the case of automobile tires. In 1922 over 98% of all sales of replacement tires were made by franchised dealers. By 1960 that figure was down to 41%. What happened was that:

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technological improvements in tire construction, improved roads and rapidly declining prices marked the 1920's and 1930's. In 1926, every car on the road required 8 tires per year. By 1960, car owners bought on the average only 1.2 tires per year. The weighted average price of all replacement tires declined from \$20.66 in 1923 to \$10.82 in 1933. With these improvements, the importance of the service rendered by tire dealers declined significantly. Technological improvements make it hard to appreciate statements such as the following: 'the successful dealer was more interested in giving his customers trouble free mileage than getting a repair job -- and ready to get up in the middle of the night and drive long miles to take care of a customer in trouble'.

With these changes, tires became more of a convenience good which consumers could purchase and have mounted while shopping for other goods or while having their car serviced. This provided substantial opportunities for department stores, chain stores, and oil companies which entered the market in 1920's and now account for about a third of all replacement tire sales.<sup>1</sup>

A similar economic process is now occurring in the retail gasoline business. Franchised full service gasoline stations are in the decline because consumer wants and technical change have made the provision of some services at gasoline stations less economic than they were before. This process has led to a political response from gasoline station dealers. Just as in the 1930's when the corner grocery stores and the small drug store were threatened by chain stores and supermarkets, economic forces have been dealt with by proposing legislation that would eliminate or at least stem the tide of the new innovation.

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1. Thomas G. Marx, "The Evolution of Franchising: Comparative Studies in Distribution Efficiency," Mimeo., pp.38-39.

To appreciate how this process is occurring in the organization of the retail marketing of gasoline consider the value of services in gasoline marketing and their relationship to independent dealers. A full service station is one that offers minor services and repairs, where your windshield will be cleaned, where credit can be obtained, and where rest rooms are available. Since it is extremely inconvenient to charge separately for these services, they are sold as a part of a package along with the gasoline itself, that is, the services are included in the price of the gasoline. Because there is no direct connection between the payment for these services through higher prices of gasoline and the actual usage of the services, the arrangement contemplates a long term relationship between the service station and the customer. It is expected that over a period of time this stream of extra gasoline charges will be connected to a supply of extra services such that both the dealer and the customer will regard the exchange as beneficial.

For this implied long term contract to be enforced the parties must continuously monitor performance on each side. For the customer this presents no problem, but on the seller side it precludes absentee management. An unsupervised employee has little incentive to honor this contract since its enforcement implies more work for him with no correlated rewards. Thus, the full service station tends to be more efficiently run by an on-site manager with a stake in the retail enterprise, that is, an

independent dealer.

In contrast to this arrangement, company operated stations tend to sell a mere commodity, that is, just gasoline. Since no long term arrangement is contemplated, since customers are free to shop around for the lowest price, moving from station to station, and since employees of the stations themselves will turn over rapidly, each transaction at such a station is to be regarded purely as the purchase of a commodity in a spot market.

The comments of William J. Thomas, Vice President of Marketing, of Rock Island Refining Corporation, a small midwest refiner marketer, puts the matter succinctly:

A customer demands for automotive services vary widely and constitute not one, but several markets. First, there is the consumer patronizing his neighborhood dealer who supplies him with gasoline, tires, batteries, accessories, maintenance and, in effect, an insurance policy that the dealer will make a road call on the cold winter day that the battery fails. Since this dealer typically runs a relatively low volume station with correspondingly high mark-ups, the consumer pays an insurance premium of perhaps 5¢ per gallon over what he would pay at a high volume, no frills outlet.

At the other extreme is the price conscious consumer, by definition immune to brand loyalty, who shops around for his gasoline and is often a do-it-yourselfer in the matter of repairs. For tires, batteries, motor oil and accessories, he frequently uses the discount houses.<sup>2</sup>

The trend in the United States at this time is overwhelmingly against the purchase of these extra services as a part of a complete package. There are numerous indicators to this effect.

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2. Statement of William J. Thomas on House Bill 6648 before the Michigan House Committee on Economic Development.

First, the ratio of motor oil sales at gasoline stations per gallon of gasoline sales has fallen almost continuously for three decades and in 1977 stood 80% below the 1950 level.<sup>3</sup> This decline has come largely from a shift to other retail sources of motor oil. In 1961 service stations accounted for 70% of all motor oil sales. By 1978 this share had fallen to 26%. Most of this market has been lost to mass merchandisers (Sears, Montgomery Ward's, etc.) whose share rose from 7% to 51% over the same period.<sup>4</sup> The decline of motor oil sales obviously implies an associated drop in demand for oil change and lubrication services, which are distinguishing features of a full service station.

Second, the percentage of gasoline sold by the self-service method has increased at an extraordinary pace over the past several years. In 1975 when the first data appeared, only 15% of the gasoline sold in the United States was sold on a self-service basis. In 1976 this rose to 30% and in 1977 to 40%.<sup>5</sup> Self-service is now believed to account for half of the gasoline sold in the United States. One of the obstacles in this trend has been law prohibiting self-service in various states. In 1968 only 30 states allowed self-service gasoline sales in some form. By

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3. National Petroleum News Fact Book Issue, Mid-June 1978, p.96.

4. Ibid., p. 98

5. Ibid., p. 106

1977, however, all but two states, Oregon and New Jersey, allowed the sale of self-service gasoline in one form or another.<sup>6</sup>

Third, as recently as 1969 approximately one in six batteries were sold at gasoline stations. By 1977 less than one in ten batteries were sold at gasoline stations.<sup>7</sup> In 1961, 40% of replacement batteries were sold at service stations; by 1971 the figure was 31%.<sup>8</sup> Again, this decline in sales was probably associated with a decline in associated services, such as battery charging and towing.

Fourth, it is estimated that in 1977 only one in six automobile tune-ups were performed at service stations. Over 35% of tune-ups were performed by the car owner himself.<sup>9</sup> The trend in the direction of do-it-yourself and away from service station tune-ups has been continuous since data have been gathered.

I would speculate that there are four reasons for this trend. First, as the fraction of low skilled workers in our economy continues its long term decline, low skill wages rise relative to wages and prices generally and consumers are induced to purchase less low-skill services and to perform more of these services themselves. These trends have been documented in the United States since the turn of the century.<sup>10</sup> The shift away

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6. Ibid., p. 106; Ibid, Mid-May 1972, p. 114.

7. Ibid., Mid-May 1972, p. 157.

8. Ibid., Mid-May 1972, p. 157.

9. Ibid, Mid-June 1978, p. 130.

10. See, for example, H. Ober, "Occupational Wage Differentials, 1907-1947", Monthly Labor Review (August 1948), pp. 127-134.



from full service stations is therefore merely a part of the economy-wide shift away from purchased low-skill services to doing it yourself. Self-serve supermarkets and do-it-yourself household repair and remodeling would be other examples.

Second, this effect is reinforced by higher marginal income tax rates. Because inflation has moved taxpayers into higher brackets and because social security taxes have risen, a worker who earns \$5 per hour might come away with only \$3.50 or \$4 after taxes. If he goes out to purchase an hour's worth of \$5 per hour labor services, he must work more than one hour because of this "wedge" created by income taxes. Thus, he is better off pumping his own gas than he is working extra time in order to pay someone else to pump his gas. This effect operates throughout the economy and is probably a major cause of the do-it-yourself trend. To purchase one hour of service requires more than one hour of work by the consumer since he must share his income with government. This so-called "wedge" has risen in recent years and reinforces the do-it-yourself trend.

Third, the quality of automobiles has changed: lubrication and oil changes are needed less frequently; radial tires require less frequent replacement than conventional tires. This decline in demand for services relative to the demand for gasoline means that the full service stations designed for the demands of the 50s and 60s is now overequipped to provide certain services that distinguish it from non-full service stations. Capital investment in lube bays, for example, would now appear to be excessive.

Fourth, there is the increasing specialization and convenience of competing facilities (e.g., Midas Muffler Shops). The growth of shopping centers has meant that automobiles can be left for servicing, tire changing, etc. while the owner is free to shop at other stores. Gas stations are located primarily as a convenience for the motorist while he is driving. But these locations are not necessarily convenient for a person who must leave his car for a period of time.

And fifth, there is the increasing mobility of modern life. Families move more often and further away, a fact that undermines the stability contemplated in the long term implicit contract with a full service station.

While this trend away from full service stations has been occurring for some length of time it is generally believed that it accelerated about 1975. It is at this time, for example, that the move from full service to self serve gasoline accelerated at a phenomenal rate. The common interpretation is that this acceleration was due to the Arab embargo. Many observers believe that the sudden high prices caused by the embargo induced consumers to seek out less costly sources of gasoline and therefore moved consumers from full service to the gas-and-go type of station.

But this interpretation is not very satisfying. First, high and rising oil prices do not in themselves raise the premium of full service over no service gasoline. The price of gasoline per se is the same in both types of stations. If there is no change in the service premium, what motivates the customer to buy less service?

Second, even if customers purchased less service when the price of gasoline rose, how do we reconcile this interpretation with the fact that up until last year real pump prices were lower in the post-embargo period than in the 1950s and much of the 1960s? Figure 1 shows a steady decline in real gasoline prices until the Arab embargo, than a sharp upswing that still does not reach the level of the 1950s, followed by a resumption of the decline, and then the sharp upswing associated with the Iranian Crisis.

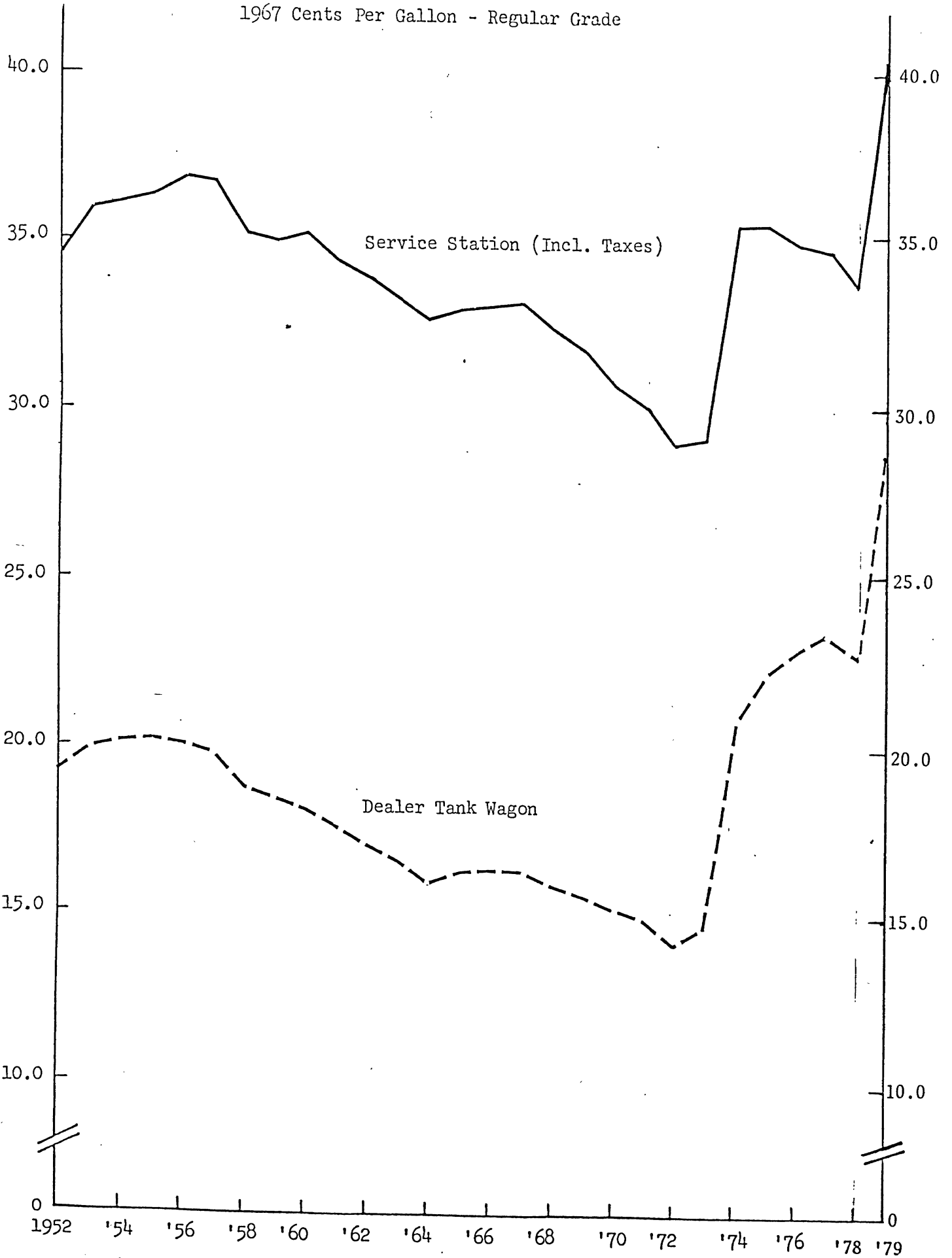
Thus, it is difficult to explain the trend, or recent acceleration in the trend, away from full service stations on the basis of the overall level of gasoline prices. Perhaps the most that can be made of this argument is that the trauma of sudden price increases stimulated some search activity toward alternative gasoline sources and that the long-term movement toward less service was merely telescoped in time.

An alternative interpretation for the negative impact of the embargo on full service station sales lies in the federal government's response to the embargo, not the embargo itself. The embargo led to a scarcity of crude oil and petroleum products including gasoline. The market clearing price of oil and gasoline rose sharply. The response of the federal government was to put a ceiling on crude oil and gasoline prices in the United States which led in turn to both a shortage of gasoline and to a peculiar structure of prices at gasoline pumps. Elementary economics tell us that a price held below the level at which the demand and supply

FIGURE 1

AVERAGE REAL GASOLINE PRICES\* - U.S.

1967 Cents Per Gallon - Regular Grade



\*Deflated By The U.S. Consumer Price Index

equate creates a shortage and that consumers will be frustrated in their attempts to purchase gasoline. This means that when a customer drives in to his service station, where he has an implicit long term arrangement with a full service dealer, he would as often as not find that his dealer did not have gasoline to sell him. This meant to the customer that the dealer had in effect broken the long term arrangement that has been developed over a period of years. Federal regulation did not take account of the implicit contract between full service stations and its customers; the law did not allow the favoritism to established customers that such an arrangement would imply.

Furthermore, the price controls required cost-based prices. Since the prices of domestic and foreign oil varied greatly and the cost basis of gasoline at any particular station was composed of different proportions of foreign and domestic oil, prices at the gasoline pump were mandated to be dramatically different, as much as 20¢ per gallon different from station to station. Thus, even if the customer found that his usual full service station did have gasoline to offer that gasoline might well have been priced at a far higher premium than would normally be the case. Thus, the loyalty of the full service customer could also be broken by extraordinary government-compelled differences in prices. Note that while the gas and go station faced some of the same problems it was not adversely affected by destroyed loyalty. Its customers were "shoppers" all along.

Yet another government program developed after the Arab embargo created a strong bias against full service gasoline. The entitlements program which allocated cheap domestic oil among refiners contained what is known as the "small refiners bias." This bias means that the average cost of crude oil for a small refiner is lower than for a large refiner as a matter of deliberate government policy. Small refiners more often distribute their gasoline through limited service gas-and-go facilities. Thus, not only did company operated convenience-type stations have lower costs due to less costly marketing system but they also had lower costs due to government subsidies.

Still another government regulation associated with the price control program is the Department of Energy's rule that forces refiners to move wholesale prices on a regional basis. This means that a refiner operating region-wide cannot reduce dealer tank wagon (wholesale) prices in a particular area to meet competition in that area. In this way more narrowly based local refiners and marketers have greater price flexibility and therefore can afford to be more aggressive on price and more responsive to local conditions. Local refiners and marketers operate a much higher percentage of limited service stations than the large national oil companies.

The upshot is that federal government policy has been hostile to the independent retailer of major brand gasoline.<sup>11</sup>

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11. One exception may be the retail margins allowed under the price control program, which appear to be rather large during the 1974-75 and 1979 periods. See below, p.

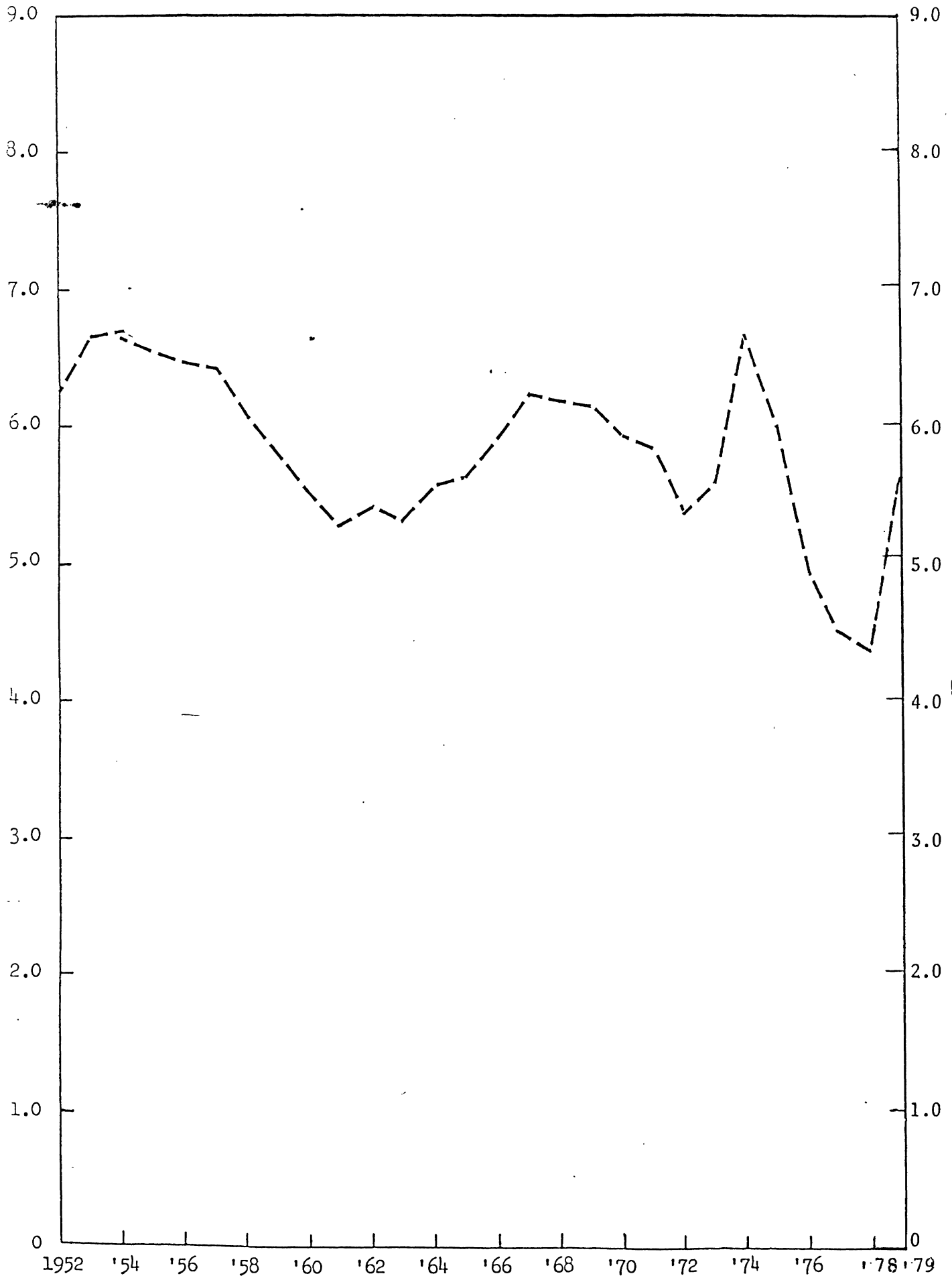
This does not imply that the problem facing independent dealers would not have surfaced without federal intervention. As noted above, long term economic trends appear to be working against full service retailers, and as will be developed below, there appears to have been an overbuilding and consequent glut of full service stations even prior to the embargo. Nevertheless, the political response to dealers seems to have been mistakenly focussed on state regulation of major oil companies, rather than federal deregulation of all oil companies.

A significant part of the independent dealer's problem is the overbuilding of gasoline stations generally. This overbuilding could hardly have been the intention of the major oil companies or independent dealers since they are the ones most injured by overbuilding. On the contrary the data suggest that refiners and dealers were lured into retail expansion by rapidly rising sales and real dealer margins during the 1960s, only to discover that the stations built in response to these incentives were to come on stream at a time when dealer margins had already turned down, a decline that has been continuous and severe (with the exception of certain years when federal gasoline allocations were in effect).

Figure 2 shows the history of retail dealer margins in the United States. The mid-sixties were relatively good years in comparison to what came just before and just after. Not surprisingly, the response to these relatively high margins was a substantial

FIGURE 2  
AVERAGE REAL DEALER MARGIN\* - U.S.

1967 Cents Per Gallon - Regular Grade



\*As Deflated By The U.S. Consumer Price Index



investment in marketing facilities by the larger oil companies. From 1966 to 1972 these companies invested over a billion dollars each year in marketing, something that has not occurred before or since.<sup>12</sup> Marketing capital expenditures averaged 17.8% of all capital expenditures by these companies over the same years, also a figure that has never been realized in any individual year before or since.<sup>13</sup> Figure 2 shows that by 1972 real margins had retreated from the late 1960s levels and in that year these same companies began drastically cutting back on marketing investments. From an all-time peak of 21.1% in 1971, the percentage of total investment by oil companies allocated to marketing fell in 1972 to 14.7%, in 1973 to 9.8%, and averaged only 3.8% from 1974 through 1977, a level that is unprecedented in postwar history.<sup>14</sup>

The explanation for rising dealer margins in the 1960s presumably comes from the abundant supplies of crude oil, and hence, gasoline, available during that era. As mentioned above the real price of gasoline fell steadily in the 1950s and 1960s. From 1950 to 1960, the real pump price of regular gasoline fell

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12. Chase Manhattan Bank, Financial Analysis of a Group of Oil Companies, various issues.

13. Ibid.,

14. Ibid.,

6.8%, and from 1960 to 1970 that rate of decline accelerated to 12.6% per decade. This retail price decline was induced by a wholesale price decline that was even larger. From 1950 to 1960 real dealer tank wagon prices in the United States fell 13.4%, and from 1960 to 1970 fell 16.2%.<sup>15</sup>

A straightforward interpretation of events is that abundant supplies of crude oil and gasoline depressed wholesale gasoline prices. Competition at the retail level reduced pump prices, but not as fast. Consumption of gasoline grew rapidly and this, together with widening retail margins, attracted capital into marketing. By the early 1970s, however, these investments in marketing had produced an abundance of gasoline stations. When gasoline supplies became tight due to government price regulation and prices reversed themselves in 1973 due to the Arab embargo the abundance of stations became a glut as gasoline consumption was held down by soaring prices. The number of gasoline stations in the United States began to fall precipitously in 1973 and now stands about 16% below the level of the early 1970s.<sup>16</sup>

The high real margins in 1974, 1975, and 1979 are the only significant deviations from an otherwise steady decline since 1967. These years appear to be aberrations caused by the price control and allocation program in those years. The scarcity of gasoline during the Arab embargo led the federal government to allocate gasoline among dealers beginning on January 15, 1974. These

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15. Calculated from data in Table 1.

16. U.S. Department of Commerce, Franchising in the Economy 1976-1978, U.S. Government Printing Office, Washington, D.C. (January 1978), pp.34-36.

allocations meant that dealers could not compete supplies away from one another. Price competition at the retail level could not gain either additional sales or supplies for the retail dealer. Since the only reason any seller voluntarily chooses a lower price rather than a higher price is to increase sales, the sole motivation for price competition among retail dealers was eliminated. In the fall of 1976, gasoline supplies in excess of allocation quantities became available and, with price competition at the dealer level presumably restored, dealer margins resumed their declining trend. Again in 1979, oil companies were forced to reinstitute allocations because of Iranian crude production cutbacks and other supply problems and high retail margins returned. With a return to normal conditions allocation should disappear and retail margins would drop again.

These economic cycles with their overshooting in investments are, of course, not uncommon in commodity markets. Farmers, for example, are familiar with the hog cycle. No one could rationally accuse farmers of intentionally creating a depression in hog prices. By the same token no one can rationally accuse oil companies or retail dealers of intentionally creating a depression in retail margins. They are both due to the unavoidable fact that the future cannot be predicted perfectly, a condition that we will never overcome. While it is evident that independent dealers have suffered severely, major losses actually have been incurred by the large oil companies who are principally the ones who have overinvested in full service stations.

This interpretation of the decline of full service stations is considerably at odds with that of the organized retail dealer associations. They have argued that it is predatory pricing by the major oil companies for the purpose of eliminating dealers that is responsible for the events described. They argue that marketing operations, in particular company-operated stations, are being subsidized by the producing and refining profits of the major companies. Predatory pricing of this sort can be remedied only by preventing refiners from operating marketing facilities. Independent dealers argue that to remove these subsidies operation of retail stations must be left exclusively in the hands of either independent franchised dealers, or company-operated stations that are owned by firms without investments in production or refining. They call, therefore, for a ban on refiner ownership of retail stations, or retail marketing divestiture (RMD) as it is known. Independent dealers have also proposed that local voluntary assistance, that is local cuts in dealer tank wagon (wholesale) prices, be abolished and that only statewide reductions in wholesale gasoline prices be permitted. While this latter proposal appears to have no direct bearing on the problem just described, it will be seen later that it would certainly be expected to favor the economic position of independent dealers.

Is it plausible that major oil companies are attempting to drive independent dealers out of business? To answer this question, let us examine the conditions necessary for successful predatory pricing generally. Predatory pricing occurs when one firm or group of firms intentionally sets prices below long run marginal

cost for the purpose of imposing losses on competing firms. The objective of this tactic is to drive the competing firms out of the market. Obviously this requires that the predatory firm be better able to withstand low predatory prices than the competing firms. This requirement is met if the predatory firm is either (1) much larger or stronger financially, or (2) markets over a much larger area than the competing firms and thus needs only incur losses selectively while the prey absorbs losses everywhere, or (3) is significantly more efficient so that the prey actually incur much larger losses than the predator. If the third condition is met, predatory pricing is obviously unnecessary since pricing at full cost (including a normal rate of return) would eventually drive out competitors anyway (and should since the competitors could only be maintained by higher than competitive prices).

-Once the predator has found competing firms out of business, the assets of these firms must be acquired by the predators. Otherwise, they will be acquired by still other competitors, or could potentially be brought back into operation by the original prey. In either case, potential competition would remain to the same extent as before.

When the predator has driven competing firms from the business and acquired their assets, he must then raise prices to a level high enough to compensate for the losses incurred when prices were low and predatory, to compensate for the costs of acquiring the assets of competing firms, and finally to compensate for the risks that the strategy will fail because either firms are

not driven out or because anti-trust action stops the process. The predator must be certain that prices after predation are monopolistic, not competitive. This requires that there be no competition among the predatory firms and that entry by new firms or re-entry by the prey be difficult.

If we observe price-cutting and intense competition in a market, conditions for the price-cutters to be considered potentially as predators would include:

- (1) the price-cutters be large, financially strong firms, or broadly based compared to their competitors;
- (2) as competing firms fail, they must be acquired by the predatory firms;
- (3) there must be no competition among the price-cutters, that is, the predators must act as a cartel;
- (4) it must be difficult for new firms to enter the market or former competitors to re-enter during the period of high monopoly prices that must follow to make predation rewarding.

(The presence of these conditions would not prove predatory pricing. They are necessary not sufficient. Proof would require evidence of pricing below short-run marginal cost, or pricing below long-run marginal cost together with evidence of intent to exclude competitors.<sup>17</sup>)

None of these necessary conditions are met in the case of retail gasoline marketing. First, the aggressive price competitors that are fingered as predatory are the company-operated retail outlets. The prey are supposedly the independent dealers. Yet

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17. R. Posner, Antitrust Law: An Economic Perspective, (Chicago, 1976), pp. 184-196.

company-operated stations are primarily owned by small regional or local refiners or marketers, while independent dealers are overwhelmingly supplied and financed by large financially strong national companies.

In 1972, so-called major or large integrated refiners accounted for 73.6 percent of all gasoline sales, but only 43.6 percent of sales to refiner salaried retail outlets. Small and independent refiners, who accounted for only 26.4 percent of all gasoline sales in 1972, had 61 percent of the increment in sales through refiner salaried retail outlets from 1972 to 1976.<sup>18</sup> Thus, not only are small firms the largest part of the company operated segment, they are also the fastest growing part of the company-operated segment, which suggests that they are the most price competitive. Thus, we are asked to believe either that small firms are predators against dealers backed by large financially strong firms, or that the predators are firms that have a minor and shrinking share of the segment that is aggressively price competing. Neither proposition is plausible.

Second, if the major oil companies are alleged to be the predator firms, then they are not acquiring the assets of the fallen prey as they are supposed to. Indeed, several major companies, including Texaco, Exxon, Gulf, and Phillips, have publicly announced decisions to abandon large market areas.

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18. U.S. Department of Energy, An Analysis of the Relative Competitive Position of Marketers of Motor Gasoline, March 1978, p. 5.

Instead of acquiring marketing assets they are disposing of them.

Third, competition within the major company segment of the gasoline market is itself aggressive, and therefore, precludes the possibility of cartel pricing even if other competition were eliminated. This competition is evidenced by lack of concentration, shifting market shares among the companies, and the absence of successful price-fixing suits against them. The lack of parallelism in their behavior is demonstrated in the case at hand. The movement toward salaried retail outlets is concentrated among just five refiners (of the thirty largest) who have opened up 90 percent of the new outlets.<sup>19</sup> Thus, the remaining twenty-five large refiners continue to be tied almost exclusively to independent dealers, the group that is supposed to be driven out of business. Thus, we are asked to believe that large refiners would operate as a cartel after successful predation while currently one part of them does the predating and another part acts as the prey.

Fourth, the condition that new entry or re-entry be difficult is not met. As mentioned above, tens of thousands of gasoline stations have been abandoned or converted to other uses. (In Ann Arbor, they now house bakeries, pizza parlors, pin ball machines, auto specialty shops, or just serve as parking lots.) Many of these facilities would, by structure and location,

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19. Ibid., p. 3.



serve ideally again as gasoline stations if super high future retail margins prevailed, as would be necessary to make predatory pricing successful. Remember that the predatory pricing, as alleged, is not directed at the producing, refining, or transportation segments of the industry, but only at retail marketing. With these other segments undisturbed and with such a large number of readily available competing retail facilities waiting in the wings, how could monopolistically high retail margins be sustained?

Finally, the numbers simply do not support the alleged movement of major companies away from independent dealers. In spite of very small shifts in major company sales through salaried outlets -- from 6% of total sales in 1972 to 7% in 1976 -- sales to independent dealers and jobbers by major companies actually rose from 84% to 84.6%.<sup>20</sup> (This shift in sales to the independent sector came entirely from a reduction in direct sales to bulk purchasers, such as rental firms, truck fleets, and so forth). Thus, at a time when major companies were allegedly doing in dealers, the facts show that they were actually selling them relatively more gasoline.

It should also be stressed that competition between salaried and franchised retailing of the same company's or industry's product is hardly novel. In 1976, if we look at all franchised business, 83,000 out of 443,000 establishments are company-owned,

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20. Ibid.

roughly 18.8%. If we look at gasoline service stations alone, the Department of Commerce estimates that 37,000 out of 186,000, or 20% are company owned.<sup>21</sup> Thus, the extent of company owned facilities is roughly the same in the gasoline business as in all franchised businesses taken together. Indeed, a number of important franchised businesses have more than 20% of total establishments company owned. These include employment services, tax preparation services, convenience stores, fast food restaurants, and auto and truck rentals.<sup>22</sup>

What would happen if states outlawed refiner salaried stations? If enacted we would have to assume that many currently salaried stations would be up for sale or lease. Typically, though, these stations would not be suitable for an independent dealer full-service type operation because of a lack of service facilities. Given the consumer trends we have already discussed and given the physical nature of the stations and their locations the likely buyers of these stations therefore would be independent marketers who had no refining investments and who would operate these stations through salaried employees; or independent jobbers who would operate the stations with either salaried employees or lessee dealers.

If this is the case, then prices at the pump of these stations would almost surely fall. Data gathered by the Lundberg survey in Detroit and several other cities (see Table 3) indicate

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21. Franchising in the Economy 1976-1978, pp. 34-36.

22. Ibid.

that pump prices of jobber owned (leased or employee operated stations) and unbranded stations (employee or dealer operated) are much lower than the pump prices at refiner stations, whether company-operated, dealer-leased or dealer-owned. Jobbers and independent marketers have generally been much more aggressive price cutters and have taken an overwhelmingly no-frills approach. If jobbers or independent marketers acquire the refiner employee-operated stations then it is likely that independent dealers of the major companies will face essentially the same competing stations. It is unclear why this would necessarily make independent dealers better off.

However, it is possible although seemingly less likely, that independent dealers will buy or lease these stations. The result would then be higher pump prices and more service. But this additional service would not be worth the higher price to consumers who are now choosing the salaried stations (otherwise they would have chosen the existing dealer stations instead). If dealers wind up with these stations it is likely that dealers generally will be better off; major oil companies will be better off because they sell overwhelmingly through dealer stations; and the consumer will be considerably worse off.

Retail marketing divestiture (RMD) would reduce potential entrants and competition because even dealer oriented major companies often use salaried stations to enter new markets (as Exxon did in Florida) to absorb the risks of an unfamiliar brand that a dealer could not handle.

RMD also would reduce marketing experimentation since some companies, such as Amoco, use employee-operated stations as laboratories to try out new innovations.

RMD would increase the likelihood of cartels and price fixing, which are not uncommon among retail dealers, because similarity or parallelism in marketing allows easier fixing of margins. When different marketing formats are used, such as full service vs. no frills, a variety of markups must exist. It is much harder under these circumstances for conspirators to agree on margins allowed for each sub-group. Generally speaking, the more homogeneous the product and its marketing the easier that price fixing becomes.

Finally, retail marketing divestiture reduces competition in refining because it eliminates a common route of entry, namely backward integration by independent marketers.

Retail dealers in some states also propose to require that voluntary assistance given by refiners to independent retail stations be done at a state-wide level at a minimum. (Voluntary assistance is a method by which refiners give discounts to retail dealers in areas where retail prices are under substantial downward pressure.) This would mean generally higher prices since

local competition will not be met by large refiners if they must reduce all prices across the state. Local price cutting is generally regarded by economists as a major source of eventual broader price declines. This proposal reduces the probability that local price competition will spread to other areas. It is therefore good for the dealers, good for the refiners, indeed good for any seller of gasoline (with the possible exception of dealers near a state border who will not get wholesale price reductions to compete with stations across the border). The restriction of competition is generally a good thing for competitors and obviously a bad thing for consumers.

Turning back to the retail marketing divestiture proposal, it is clear that the independent dealers hope that the divested stations would again become dealer stations. If that did occur, pump prices would be expected to rise to the levels currently in force at existing dealer stations. If that were the case, how much more would consumers pay for gasoline? In the state of Michigan, where such legislation has been proposed, let us take the 2.6¢ per gallon difference of independent dealer prices over employee operated stations (Table 2) and multiply that by a lower bound estimate of gallonage sold by the divested stations (total state gallonage times 8%, the fraction of all stations that are refiner employee operated).<sup>23</sup> We come up with a figure of \$10

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23. The committee of Independent Refiner Marketers estimates that 560, or 8.3 percent of Michigan's stations are refiner employee operated.

million per year. This is a conservative estimate because employee-operated stations generally have much higher volumes than dealer-operated stations. Consumers, of course, will tend to get more service from these stations since they will be operated by independent dealers, but they will not get \$10 million worth of service, because if they did they would have been buying at full service stations all along. In addition, it is possible that with fewer no frill stations in existence, competition will decline and prices will rise there.

It is not hard to figure out which consumers will bear this cost: those who do their own tuneups, change their own oil, pump their own gas and shop for the cheapest gas. In other words, the less affluent.

This kind of political response to a retailing innovation is nothing new in American economic life. In the 1920s and 1930s independent grocery stores and druggists fought the supermarkets and chain stores with very similar legislation, namely Robinson-Patman, chain store taxes, and fair trade laws. (Interestingly, the first state to successfully introduce RMD, Maryland, was also one of the first states to pass the chain store tax.<sup>24</sup>) In each case, predatory pricing was alleged and in each case the legislation proposed to fight the predator was in itself anti-competitive.

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24. Joseph C. Palamountain, The Politics of Distribution  
(Cambridge, 1955), p. 161.

It is easy to sympathize with the position of the independent dealer. His hardship is genuine. Yet looking at the situation from a societal point of view, who today would argue that we should go back to the era before supermarkets, chain stores and discount houses? Certainly there is a market for the independent retailer, whether in groceries or gasoline, but it is currently a limited and shrinking market.

TABLE 1

Average Real Gasoline Prices\* - U.S.  
1967 Cents Per Gallon - Regular Grade

	<u>Dealer</u>	<u>Dealer</u>	<u>Service Station</u>	
	<u>Tank Wagon</u>	<u>Margin</u>	<u>Ex Taxes</u>	<u>Incl. Taxes</u>
1952	19.21	6.25	25.46	34.67
1953	19.91	6.66	26.57	35.82
1954	20.11	6.67	26.78	36.07
1955	20.17	6.54	26.71	36.25
1956	20.05	6.45	26.50	36.77
1957	19.80	6.43	26.23	36.73
1958	18.73	6.06	24.79	35.08
1959	18.43	5.83	24.26	34.93
1960	18.13	5.53	23.66	35.10
1961	17.63	5.28	22.91	34.33
1962	17.05	5.42	22.47	33.82
1963	16.60	5.33	21.93	33.17
1964	15.95	5.56	21.51	32.67
1965	16.28	5.62	21.90	32.96
1966	16.29	5.90	22.19	33.00
1967	16.31	6.24	22.55	33.16
1968	15.84	6.17	22.01	32.35
1969	15.58	6.14	21.72	31.73
1970	15.20	5.91	21.11	30.69
1971	14.93	5.84	20.77	30.03
1972	14.14	5.38	19.52	28.83
1973	14.64	5.56	20.20	29.17
1974	20.67	6.69	27.36	35.48
1975	22.20	5.99	28.19	35.50
1976	22.87	4.95	27.82	34.88
1977	23.42	4.51	27.93	34.75
1978	22.79	4.38	27.17	33.63
1979	28.53	5.64	34.17	40.37

\* Deflated by the U.S. Consumer Price Index: 1967 = 100

Source of original data:

Gasoline Prices: Platt's Oilgram Price Service

Consumer Price Index: U.S. Department of Labor, Bureau of Labor Statistics



TABLE 2

ATTENDED REGULAR GRADE PRICE COMPARISONS

	State of Maryland	Metro Baltimore, Maryland	Metro Detroit, Michigan	State of New Jersey	Metro Philadelphia, Pennsylvania
Refiner/Producer, Company-Operated	62.9¢	61.7¢	65.1¢	61.7¢	61.7¢
Refiner/Producer, Lease Dealers	67.8	66.3	67.7	63.1	65.2
Refiner/Producer, Open Dealers	66.7	66.9	67.2	63.7	63.6
Jobber, Company-Operated	63.9¢	60.9¢	-¢	61.3¢	60.5¢
Jobber, Lease Dealers	66.7	-	65.1	62.4	63.2
Jobber, Open Dealers	66.4	62.9	64.8	63.3	61.8
Non-Branded, Company-Operated	61.1¢	62.7¢	61.9¢	59.2¢	60.4¢
Non-Branded, Lease Dealers	61.7	-	-	60.6	59.2
Non-Branded, Open Dealers	62.8	59.9	62.9	60.9	59.5
Refiner/Producer, Company-Operated Versus...					
Refiner/Producer Lease Dealers	-4.9¢	-4.6¢	-2.6¢	-1.4¢	-3.5¢
All Outlets Ex. R/P, Company-Ops	-3.8¢	-4.5¢	-2.0¢	-1.4¢	-4.5¢

Source: Lundberg Surveys, Inc.

12/18/78