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Alleged Predatory Conduct in Food
        Retailing
            by
                Willard F. Mueller
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# Alleged Predatory Conduct in Food Retailing* 

Willard F. Mueller**

## I. Introduction

I am pleased to testify today regarding recent developments in food distribution. First, let me make plain my interest in these proceedings. Through the years I have been involved in various antitrust matters in food distribution, including several cases in which I assisted the Federal Trade Commission and the Antitrust Division. ${ }^{\text {// }}$ Today, however, I appear at the request of no party and represent no one's views but my own.

As I understand the purposes of these hearings, the Federal Trade Commission staff is particularly interested in the emergence of warehouse grocery stores and the competitive response to them. The so-called warehouse store format is not new. In many respects, these stores are reminiscent of many supermarkets opened in the early 1930s that operated on slim margins and offered fewer services than the more conventional supermarkets. And like the supermarket innovation of the 1930 s, independents and small chains pioneered the warehouse store concept in the 1960 s and 1970 s.

I need not recite for you the broad range and variety of stores currently falling within the warehouse store rubric. But common to all warehouse stores is their substantially smaller gross operating margin (10 percent to 14 percent of sales) relative to that of conventional supermarkets. These lower margins reflect a variety of factors, including greater sales per square foot and per employee, fewer services and somewhat lower wages. The latter factor can easily be exaggerated however; the labor cost differential accounts for less than 2 percentage points of the
lower margins in a typical warehouse store and often a good deal less than this.

The emergence and growth of warehouse stores have increased the effectiveness of competition in many markets. Wisconsin has been one of the leading areas of warehouse store activity over the past decade and Wisconsin consumers have benefitted from this development. For example, in 1983 warehouse stores did over 40 percent of the grocery store business in Milwaukee and in 1984 they may well do over 50 percent. I calculate that, conservatively, warehouse stores saved consumers in the Milwaukee metropolitan area about $\$ 51$ million in 1983. 2 / In 1984 these savings may be about $\$ 60$ million. Clearly, warehouse stores have lowered marketing costs and increased competition in Milwaukee and in other markets where they have succeeded in capturing significant market shares.

What, then, are the public policy issues with respect to these recent developments? Most importantly, in my view, is the issue of the sorts of competitive responses established firms should be able to make when a warehouse store enters or expands in a market. Simply put, what types of conduct constitute normal, competitive responses and what types are properly viewed as predatory? This raises the question of developing appropriate legal/economic rules for distinguishing between these two . categories of conduct.

## II. Identifying Predatory Conduct

Predatory conduct is the pursuit of "business practices that would not otherwise enhance profits but which are utilized to enlarge the predator's market share with the expectation that this will lead to a long-run gain in profits." ${ }^{3 /}$ The classic example is where a dominant firm sells below cost
to destroy a rival and thereafter the predator is able to charge a monopoly price.

In recent years legal/economic scholars have sought to fashion objective criteria useful in separating predation from competition on the merits. They argue that cost-based rules are the most objective and precise means of identifying predatory conduct. One of the first and more comprehensive efforts to develop such rules was that of Professors Phillip Areeda and Donald F. Turner in their 1975 article on predation. 4/

The key Areeda-Turner rule is that only pricing below reasonably anticipated short-run marginal cost is predatory. Because of the practical difficulties of measuring short-run marginal cost, Areeda-Turner propose that in practice average variable cost be used, in nearly all cases, as a proxy for marginal cost. They acknowledge a potential problem with this standard: "The equally efficient rival might be destroyed or dissuaded from entering not because he is less efficient but because he has less capital." ${ }^{\text {5/ }}$ Though recognizing this problem, they nonetheless argue that prices at or above average variable cost should not be considered predatory. $6 /$

They reason that predation occurs when firms sell below their marginal costs because no rational profit maximizing business has an incentive to sell below out-of-pocket costs:

The monopolist is not only incurring private losses but wastes social resources when marginal costs exceed the value of what is produced. And pricing below marginal cost greatly increases the possibility that rivalry will be extinguished for reasons unrelated to the efficiency of the monopolist. Accordingly, a monopolist pricing below marginal cost should be g presumed to have $^{\text {m }}$ engaged in a predatory or exclusionary practice.-

A diverse group of legal/economic authorities has challenged the Areeda-Turner rule. 8/ This growing literature is in agreement on several
points. First, the critics accept the Areeda-Turner below marginal cost rule as one special case in identifying predatory conduct. They agree that because such pricing is so obviously inconsistent with short-run profit maximizing conduct, it alone should be a sufficient basis for inferring predatory intent. Second, the critics of Areeda-Turner agree that predation may occur at prices above marginal cost and even above average total cost.

Among the critics of the Areeda-Turner short-run marginal cost rules is Richard Posner, formerly of the University of Chicago and currently a judge for the Court of Appeals for the Seventh Circuit. Unlike AreedaTurner, Posner does not accept the often repeated assertion that predatory pricing is necessarily an infrequent occurrence. 9 / In his view, predation may be an especially appealing strategy for the powerful multi-market firm.

To impose costs on a competitor by imposing the same or greater costs on oneself does not seem a very promising method of excluding a competitor. If, however, a firm operates in a number of markets and faces actual or potential competitors each of whom is limited to one of its markets, it may find it worthwhile to expend considerable resources on crushing a single competitor in order to develop a reputation (for willingness to use predatory pricing) that may enable the firm to exclude other potential competitors without any additional below-cost selling. Stated otherwise, the costs incurred by the firm in using predatory pricing in one market may generate greater deterrence benefits in other markets. Knowing that the dominant firm might act in this way, a competitor may be reluctant to enter any market in which the firm operates, and if he is already in such a market, he may refrain from price competitiongr agree to sell out to the dominant firm at a low price.

Like Areeda-Turner, Posner suggests that predatory pricing should be identified by examining the price-cost relationships of an alleged predator. But he would adopt different standards than those Areeda-Turner suggest.

Posner defines predatory pricing as "pricing at a level calculated to exclude from the market an equally or more efficient competitor. "11/ He
reasons that two practices fit his definition. The first involves selling below short-run marginal costs because a seller would have no other incentive to price at this level: "A sale below cost in this sense can only have the purpose and (if persisted in) the likely effect of excluding an equally, or more efficient rival."12/ "The second practice that is predatory ... is selling below long-run marginal cost with the intent to exclude a competitor. "13/ Because pricing below long-run marginal cost can occur for reasons other than predation, such pricing "cannot be presumed to be anti-competitive unless there is intent to exclude--in which event it becomes a tactic calculated to exclude an equally efficient competitor."14/

Posner believes his cost criterion could be made more workable if "average balance-sheet costs" are substituted for "long-run marginal costs. 1 - / prevent abuse of his predatory pricing rule, Posner believes "it might be wise to require the plaintiff to prove that the relevant market has characteristics predisposing it toward the effective use of predatory pricing." ${ }^{16 /}$

Posner believes his cost rule is superior to Areeda-Turner's short-run marginal cost rule because their
reasoning ignores the fact that short-run marginal cost is lower than long-run marginal cost even when there is no excess capacity. In the short-run, marginal cost does not include interest, rent, depreciation, and other overhead items, because they do not vary in the short run with the amount of output produced; but they are part of the long-run marginal cost of production, which is why a firm's short-run marginal cost is normally lower than its long-run marginal cost.

The distinction is significant. It means that "a price equal to seller A's short-run marginal cost might enable A to drive from the market his competitor, $B$, who was more efficient than A because his long-run marginal cost was lower than A's, but was unwilling to remain in the market if forced to meet a price lower than his long-run marginal cost." 18 /

In sum, Posner has demonstrated a serious flaw in the Areeda-Turner analysis by showing that long-run marginal costs (as measured by average balance sheet costs) may provide the most appropriate cost standard in identifying predation. Viewed in this light, the Areeda-Turner short-run marginal cost rule is merely a special case: It is useful in identifying a pricing practice that is clearly predatory. On the other hand, selling below average total cost can also be predatory when combined with evidence of intent to exclude a competitor from the market.

Professor B.S. Yamey of the London School of Economics develops two points common to Posner's reasoning $19 /$ (1) predation may occur at prices above the predator's marginal costs, and (2) predators have an incentive to target their conduct in the narrowest possible market, e.g., a specific geographic market. As Yamey points out,

There can be predatory intent in price cutting whether or not the aggressor sets its prices above or below its costs (in one or other meaning of the latter term). Apart from intent, the common characteristic of predatory price cutting in the broad sense is that it is temporary and that it is in the predator's interest to confine, where possible, the temporary sacrifice of profits to those parts of the market (regions, product yarieties, classes of customers) in which the victim is trading.

Also, like Posner, Yamey believes that predator's objectives may include not only eliminating a rival but also "disciplining" a rival and "discouraging potential entrants."21/

Other authorities on predatory pricing agree with Posner that the Areeda-Turner marginal cost rule represents a special case of explicit predation. They recognize, however, that predation may occur above marginal costs and, in exceptional cases, at prices above average total costs.

Professors Joskow and Klevorick synthesize the views of a number of authorities and construct a two-tier conceptual framework. $\frac{22 /}{}$ They would first
examine both the structural characteristics of the market in question and the market power of the alleged predator firm to find out if they generate a reasonable expectation that predatory pricing q̧yld occur and impose significant economic losses on society.

If the first tier analysis identifies a potential predator, they propose applying the following second tier of behavioral rules to identify actual predators.
(a) Pricing below average variable cost. Joskow-Klevorick accept the

Areeda-Turner marginal cost rule as one method of identifying predatory pricing. But, like others, they view the Areeda-Turner rule as a special case of predatory conduct.
(b) Pricing between average variable cost and average total cost. A price in this range could drive an equally efficient and perhaps even more efficient rival from the market. 24 / As Joskow-Klevorick point out, "Although a dominant firm maximizing only short-run profits would probably lower its price in response to the threat of entry, it would not decrease its price to a level below average total cost. "25/ They therefore believe that "a price response that does not cover total cost should be presumed predatory unless the dominant firm can show that this strategy maximizes short-run profits. "26/ They believe the latter defense will only rarely be available.
(c) Pricing above average total cost. "A price decrease to a point
above total cost would be presumed to be legal unless the price cut were reversed either fully or to a significant extent within a reasonable period of time--for example two years. " $27 /$ Should the dominant
firm withdraw its price decrease in a shorter time, the burden would be on it to demonstrate that the price increase was justified by changes in costs or independent demand. $28 /$

The following capsulizes Joskow-Klevorick's views as to the purpose and effect of their approach.

The message our proposed behavioral inquiry would convey to firms with monopoly power is that they should not use the power to maintain their dominant position. They will know that price cuts below average variable cost will be viewed as clear predatory acts, that prices below average total costs will establish a presumption of predation and that other price cuts will be questioned only if subsequent increaseg are not justified by changes in cost or demand conditions.

While spelling out several rather specific rules for identifying predatory pricing, Joskow-Klevorick emphasize that their approach "does not preclude the examination of other evidence that could inform the court about the intent and effects of the pricing behavior, especially if the price and cost analysis turns out to be ambiguous. "30/

Professor Douglas F. Greer agrees with others in viewing "the Areeda-Turner standard as "much too limited when compared to a broader and more traditional standard comprised of (1) pricing below average total cost and (2) evidence of predatory intent." 3 / He reasons that Areeda-Turner err in arguing that predatory intent can only be demonstrated by prices lower than marginal costs. Like others, Greer believes that pricing below average total cost is sufficient to exterminate rivals and that because such pricing may occur for innocent reasons, evidence of intent is essential to establish "the presence of a long-run predatory strategy at work rather than a short-run expedient." ${ }^{32 /}$ Greer acknowledges that evidence of intent often may not always be available, but, unlike Posner, he believes direct or indirect evidence of predatory intent often does exist and that the diligent investigator can find it. ${ }^{33}$ /

Other economists also have criticized the Areeda-Turner rule because it is preoccupied with short-run considerations. Dirlam and Scherer, among others, believe the Areeda-Turner rule is too narrow for both efficiency and competitive reasons and would permit much anticompetitive conduct. $34 /$

## III. Summary of Proposed Rules

Although the economic authorities reviewed above are not in agreement on all points, all disagree with the Areeda-Turner formulation that below marginal cost (average variable cost) pricing is the only appropriate criterion for identifying predatory intent and behavior. They all accept the Areeda-Turner marginal cost rule as one special case, as a form of conduct that can be assumed to be predatory without any other evidence of intent. The reason for unanimity on this rule is that below marginal cost pricing is irrational unless it is part of a plan to discipline or destroy a competitor so as later to recoup lost profits with supra-competitive prices.

Most economic authorities also agree that whereas selling below average variable cost is a sufficient reason for inferring predation, it is not a necessary reason. They believe predation may occur when firms sell above average variable cost but below average total cost, and in some circumstances when selling above average total cost.

The economists who reason that predation can occur when prices are above average variable cost believe such pricing must be accompanied with evidence of intent to monopolize. Such evidence may take various forms. The most conclusive economic evidence useful in distinguishing between a predatory and a competitive price response is whether the alleged predator is engaged in profit maximizing behavior. 35/ Professor Lawrence Sullivan
captures the essense of such behavior when he says: "First, there will be something odd, something jarring or unnatural seeming about it. It will not strike the informed observer as normal business conduct, as honestly industrial. Second, it will be aimed at a target, at an identifiable competitor or potential competitor, or an identifiable group of them. "36/ When considering various types of evidence, Sullivan concludes that, "Perhaps the characteristic feature of such a predatory thrust is that the predator is acting in a way which will not maximize present or foreseeable future profits unless it drives or keeps others out or forces them to tread softly. "37/

Authorities also agree implicitly or explicitly that successful predation can only occur in certain market structures. Especially important is that the predator possess greater economic power than the targets of its predation and that there exist sufficient entry barriers so that prices can be raised above marginal costs without attracting sufficient entry to force prices to competitive levels.

In economics as well as in law, an attempt to monopolize case does not require a showing that the predator has achieved a monopoly. Rather, an alleged predator must possess sufficient economic power so that it can sustain predatory practices that, if not abated, promise to result in monopoly power.

How much economic power, then, must a predator possess? Areeda-Turner simply state that the predator must have "greater financial staying power than his rivals." ${ }^{38 /}$ Posner and Yamey, on the other hand, emphasize that multimarket firms are especially likely to find predation an attractive strategy. Thus, while it may be necessary to demonstrate that a predator has market power in the relevant economic market, it does not follow that
all or even a significant amount of such power derive from its position in the relevant market; power originating elsewhere may be transferred and used in restructuring the relevant market. $\frac{39 /}{}$
IV. Identifying Predation in Grocery Distribution

We turn now to the question, what constitutes a predatory response to the entry or expansion of warehouse stores in a market? As discussed above, economists agree that predatory pricing occurs when an established firm responds by selling below its short-run marginal costs, as measured by average variable costs (AVC). Clearly, such conduct does not represent "normal" competitive behavior since a firm would generally be better off closing its doors than voluntarily selling below AVC.

But what about a price response below ATC but above AVC? I believe all economic scholars of predation agree that such pricing, in and of itself, is not predatory. The mere additional capacity caused by entry could, by reducing the established firms' sales, cause its ATC to exceed its prices not because prices were cut but because ATC usually rises as sales decline. What kinds of evidence, then, are required to distinguish between a competitive and a predatory price when price is below ATC but above AVC? Although economists have suggested various kinds of relevant evidence, the strongest economic evidence of predatory intent is when an informed seller purposefully engages in non-profit maximizing behavior. The main concern here is whether it is possible in practice to determine when a firm is engaging in non-profit maximizing or loss minimizing behavior. I believe it often is. I will illustrate what can be done with evidence developed in a case alleging predatory pricing. $\frac{40 /}{}$

In March 1979, Shoppin' Bag of Pueblo, Inc. (Shoppin' Bag) opened a warehouse store in Pueblo, Colorado. As the first warehouse store in Pueblo, it received an enthusiastic response by Pueblo consumers. $\frac{41 /}{}$ (Since February 1978, Shoppin' Bag had successfully operated its first warehouse store in Denver.) Nine weeks after Shoppin' Bag opened the Pueblo store, the market leader King Soopers (owned by Dillon Company, which was subsequently acquired by Kroger) responded by lowering prices on thousands of grocery items to the level Shoppin' Bag charged. This situation continued until early September 1979 when King Soopers raised its prices to those it charged elsewhere.

King Soopers defended its behavior as a normal competitive response to a new entrant although King Soopers prices admittedly were well below ATC. Plaintiff's accountants testified the prices were also below AVC whereas defendant's accountants testified that prices were above AVC.

Assuming that King Soopers' prices were above AVC, were they at a profit maximizing level? The following relevant evidence appears in the public record. Prior to the opening of the Shoppin' Bag store, King Soopers' market analysts prepared a study, "Shop 'N' Bag's Effect on Store \#12" (see Appendix A). On January 19, 1979, this study was given to the chairman of the board, the president and to several vice presidents for King Soopers. The study concluded that if King Soopers maintained its prices, its two Pueblo stores would lose to Shoppin' Bag sales of from $\$ 70,000$ to $\$ 80,000$ per week by the end of the year, with the heaviest impact immediately following the opening. $\frac{42 /}{}$ Such a sales loss equalled 14.3 percent of King Soopers' sales in Pueblo prior to the entry of Shoppin' Bag. On the other hand, if King Soopers met Shoppin' Bag's prices, King Soopers would lose a maximum of $\$ 35,000$ in weekly sales. $\frac{43 /}{}$

These losses were far below those predicted for a competing Albertson's store and were only slightly higher than those predicted for Safeway's stores (Figure 1). To place these sales losses in perspective, they were well below the estimated sales losses suffered by all of King Soopers' Pueblo competitors when King Soopers opened a large supermarket in Pueblo in 1976 (Figure 1).

On February 9, 1979, a King Soopers employee prepared an "Action Plan" for a King Soopers store located across the street from the proposed new Shoppin' Bag store. The purpose of the study was to reduce employees "to conform to the predicted" decrease in sales of the store. This plan was subsequently implemented, reducing employee hours by over 20 percent. 44/

During the weeks following the opening of the Shoppin' Bag store, King Soopers' employees monitored the effects on King Soopers' two Pueblo stores. Four weeks after the Shoppin' Bag store opened, King Soopers' president directed the company's vice president of finance and controller to prepare profit estimates for the two Pueblo stores under alternative assumptions. The analysis was prepared after Shoppin' Bag had been operating for four weeks, and was based on King Soopers' actual sales experience up to that date. The results of this analysis are summarized in Figure 2 and Appendix B. The analysis concluded that if King Soopers did not cut prices, its Pueblo stores would earn a profit of $\$ 37,785$ per quarter in the current quarter, and presumably more by the end of the first year. But if it cut prices to Shoppin' Bag's level, King Soopers would incur losses of $\$ 161,615$ per quarter even if it enjoyed a 40 percent increase in sales. The King Soopers' study of January 19, 1979, had predicted a sales increase of only about 10 percent if it cut prices (Appendix A). Its subsequent financial study predicted that with a sales

## Sales Losses of Various Grocery Store Companies when King Soopers Entered Pueblo in 1976 and Shoppin' Bag Entered in 1979.



Estimated Sales
$\frac{\text { Losses }}{1979}$

King
Safeway Albertsons Soopers Independents


## Hosman Report King Soopers' Profits and Losses With Alternative Assumptions -Pueblo Stores \#12 and \#43-

$\$ 37.785$


Source: Appendix B.
increase of 10 percent King Soopers would incur losses of $\$ 228,610$ per quarter (Figure 2).

King Soopers' employees continued to monitor the effects on its stores from the newly opened Shoppin' Bag store. $\frac{45 /}{}$ These reports showed that King Soopers' sales losses were somewhat less than had been predicted. At the end of the ninth week, the tracking report indicated that King Soopers "appeared to be getting the business back" $46 /$ even though it had not yet matched Shoppin' Bag's lower prices.

In the face of this information regarding the impact of Shoppin' Bag's entry on its sales and profits, King Soopers initiated a "price reduction program" on May 15,1979 , nine weeks after the Shoppin' Bag store opened. This program involved cutting prices to or below Shoppin' Bag's prices on thousands of grocery items in Pueblo. Pricing policy in all other Colorado SMSAs was not changed. $\frac{47 /}{}$ King Soopers made these deep price cuts with full knowledge that doing so would not maximize profits or minimize losses.

The results were as predicted by King Sooper's market analysts. Other chains cut prices, especially the number two company Safeway. Although King Soopers' sales responded favorably to the price cut, it sustained deep losses. As the King Soopers' study of January 19,1979 had predicted, the price cuts reduced Shoppin' Bag's sales by about one-half. $\frac{48 / \text { Unlike its }}{}$ experience in Denver, Shoppin' Bag incurred deep losses in Pueblo and was on the verge of closing its store when King Soopers raised prices in early September.

To summarize:
(1) Shoppin' Bag was the target of King Soopers "price reduction program".
(2) King Soopers anticipated that its price cuts would cause Shoppin' Bag to suffer large sales losses; these losses did indeed materialize as anticipated.
(3) King Soopers knew that it could have operated profitably if it did not cut its prices; in fact, during the first weeks following Shoppin' Bag's entry and before King Soopers cut prices, it operated profitable, the period that King Soopers had anticipated its sales losses would be greatest.
(4) King Soopers anticipated that it would incur large losses if it cut prices; this expectation also was realized.
(5) King Soopers and its competitors had not previously cut prices in response to entry in Pueblo even when such entry had caused much larger losses in sales than had occurred when Shoppin' Bag entered Pueblo.

These facts illustrate that King Soopers engaged in a deliberate pattern of non-profit maximizing conduct in response to Shoppin' Bag's entry in Pueblo. The fact that King Soopers subsequently reversed its price cuts in the absence of changed supply and demand conditions also supports the conclusion that the prices it set were not at a profit maximizing leve1.49/

## V. Responses to Warehouse Store Entry

Was the Pueblo experience unique? I think not. Rather, I believe that whenever an established conventional supermarket firm cuts many prices deeply in response to warehouse store entry, a careful analysis will reveal that the established firm is not engaging in profit-maximizing or lossminimizing pricing. The reason is to be found in the nature of demand
facing individual supermarkets. When a warehouse store enters a market with prices reflecting its lower gross margins of 10 percent to 14 percent of sales, certain consumers will prefer to patronize the warehouse store in preference to the established supermarkets. The effect is to shift to the left the demand curve facing individual conventional supermarkets selling at prices reflecting their higher costs. But because some consumers prefer the greater services provided by conventional supermarkets, they will continue to patronize them at their higher prices. Whether an individual conventional supermarket can hope to operate profitably (as was King Soopers) after the warehouse store has entered depends on its location and other factors. But irrespective of whether it can operate profitably after a warehouse store enters, an established supermarket is not able to improve its profitability by matching warehouse store prices across a broad front. Regardless of how much this would increase its sales, a conventional store's ATC are too high to permit profitable operations at warehouse store prices. Thus, a conventional supermarket pricing at warehouse store prices is engaged in strategic or predatory rather than competitive pricing.

What kind of conduct would we expect conventional supermarkets to pursue in these circumstances? I anticipate that most often an established supermarket will adopt various price and non-price strategies designed to persuade consumers that the warehouse store's prices really are not all that much lower than those of conventional supermarkets. These strategies may include increased advertising and offering deep price cuts on individual items, loss leaders, and double couponing (if not prohibited by state law). But such strategies would not involve selling the store's total product offerings at prices below long-run ATC, except for short periods of time. Indeed, this is what initially happened in Pueblo.

Immediately prior to and for nine weeks following Shoppin' Bag's entry, established supermarkets responded with selected price cuts and added promotional efforts.

Even in the absence of predation there is no way some conventional stores will be able to maintain sufficient volume following warehouse store entry to survive in the long run. Such stores will be unprofitable not because they are selling below competitive prices, but because they cannot generate, at any price, sufficient volume to cover their long-run ATC. Such firms may continue to operate for a time if they are still covering their AVC. But given the higher costs associated with a conventional supermarket and the nature of the demand curve it faces following warehouse store entry, I doubt whether such stores could ever minimize their losses by pricing their total product mix below their long-run ATC. 5 / The only exceptions would involve short-term promotional pricing. Thus, when a conventional store responds with prolonged deep price cuts, it almost certainly is engaging in strategic rather than competitive behavior.

## VI. Predation Targets

Ordinarily, when a warehouse store enters a market it is the main target of a predatory response. The predator's intent may be to destroy, discipline, or deter the new entrant's expansion. All of these motives may be anticompetitive. Even if a warehouse store is not destroyed, competition may be injured because the warehouse operator or other would-be entrants will be less inclined to enter other markets where the predator operates. As Posner puts it, "Knowing that the dominant firm might act in this way, a competitor may be reluctant to enter any market in which the
firm operates, and if he is already in such a market, he may refrain from price competition ...."51/

In some cases an established firm's target may not be solely the warehouse store, but other less powerful conventional supermarket operators. By selling at low prices for a sustained period of time, a powerful established firm may destroy its less powerful rivals. The result is that survival in the market following entry by a warehouse store is determined by the relative economic power of the conventional supermarket operators in the market, not by their relative efficiency or service to consumers. This clearly is not competition on the merits. The probable effect from predation is greater concentration of sales among conventional supermarket operators. Also warehouse stores will satisfy a smaller share of the market than they would absent such predation.

## VII. Prerequisites of Successful Predation

This raises the question, even assuming predatory-like conduct has occurred, is it likely that it will adversely affect competition and consumer welfare, or has it merely injured one or more individual competitors? In the law, an attempt to monopolize under Section 2 of the Sherman Act requires both predatory intent and a dangerous probability that the attempt will be successful. Though meeting the "dangerous probability" test depends partly on how one frames the analysis, answering the question is essentially an empirical matter.

The basic issue is whether there exist market conditions predisposing a market to the successful use of predation. The following have been identified as especially relevant predisposing conditions.
(1) Customers are sufficiently sensitive to price differences among competitors so that ${ }^{2} 9$ predator can cause the target firm to lose substantial sales. $\frac{527}{}$
(2) Barriers to entry and survival are sufficiently high so that supra-competitive prices can be maintained without attracting sufficient entry to force prices down to competitive levels. $\frac{33}{}$
(3) The predator already has a substantial market share $9 \frac{5}{4} /$ achieves a substantial share as a result of his predatory acts. $\frac{34}{}$
(4) The predator is a multi-market firm that already enjgys market power in some of the markets in which it operates.

Whether all of these conditions exist in a particular market is an empirical question. Clearly, grocery customers are sufficiently sensitive to price changes to meet condition 1 above. Likewise, most potential large predator grocery chains are multimarket enterprises with sufficient resources to bankroll costly predatory campaigns. $\frac{56 /}{}$

The condition most difficult to meet in some cases of alleged predation has been proof that entry barriers exist in a market. $\frac{57 / \text { Entry }}{}$ barriers are of crucial importance because the fruits of predation can only be harvested if entry barriers exist or can be erected. Otherwise there exists no economic incentive to engage in predation, and if someone did, he would be playing a fool's game. Although time does not permit a detailed analysis of entry barriers, I believe there is abundant evidence that barriers to entry are sufficiently high to reward a predator for his actions. $\frac{58 /}{}$ Although there is other relevant evidence, perhaps the most compelling evidence that significant entry barriers exist is found in empirical studies of the relationships between market power and prices or profits in food retailing. In the absence of significant entry barriers, prices and profits would not be higher in concentrated than in
unconcentrated markets. Yet five separate studies using different years, different methods, and different data sets have found à significant, positive relationship between the degree of market power and supermarket
profits, prices or both. 59/ Although all of these studies were done before warehouse stores became commonplace, I believe the relationships found in the studies are relevant for our purposes. 60/

To be a rational predator, a firm must expect that the present discounted value of any additional net revenues in the restructured or disciplined market will be greater than the present discounted value of any anticipated losses during the predatory period. Otherwise it would not be profitable to engage in the predation.

Figure 3 is from a statistical analysis done by the Food System Research Group at the University of Wisconsin-Madison, and illustrates why a dominant firm has an incentive to engage in predation. $\frac{61 /}{}$ It displays the predicted relative prices and profits of supermarket firms holding various market shares and operating in markets with various levels of concentration. The figure shows an index of estimated grocery prices of sellers with different market shares in differently concentrated markets. When the four-firm concentration ratio, CR4, is 40 and a seller has a relative firm market share, RFMS, of 10 (i.e., the seller's share is 10 percent of the top 4 firms' share), the index equals $100 . \underline{62}$ By comparison, a seller with a RFMS of 55 operating in a market with a CR4 of 70 , has an index of estimated grocery prices of 108.6 , or 8.6 percent higher. The pretax profits as a percentage of sales in the two examples are 0.36 percent and 3.57 percent, respectively.

The information displayed in Figure 3 illustrates why an established dominant firm has an incentive to engage in predation to enhance or protect its position in a market. For example, suppose a dominant firm's position, such as in the second example, were threatened by entry of new firms or by the expansion of an established firm. Suppose next that if the firm did

## FIGURE 3

Estimated Index of Grocery Prices and Pretax Profit-Sales Ratios Associated with Various Levels of Market Concentration and Relative Firm Market Share

|  | 40 |  | 50 Four-Firm Concentration Ratio $\left(\mathrm{CR}_{4}\right)$ |  |  |  |  | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Relative <br> Firm <br> Market Share (RFMS) | Index of Grocery Prices | $\begin{aligned} & \text { Profits } \\ & \text { as } \\ & \text { Percent } \\ & \text { of } b \\ & \text { Sales } \end{aligned}$ | Index of Grocery Prices | ```Profits as Percent of Sales``` | Index of <br> Grocery <br> Prices | ```Profits as Percent of Sales``` | Index of Grocery Prices | Profits <br> as <br> Percent of Sales |
| 10 | 100.0 | . 36 | 101.0 | . 96 | 103.0 | 1.18 | 105.4 | 1.23 |
| 25 | 100.7 | 1.14 | 101.7 | 1.74 | 103.7 | 1.96 | 106.1 | 2.01 |
| 40 | 102.2 | 1.92 | 103.2 | 2.52 | 105.2 | 2.74 | 107.6 | 2.79 |
| 55 | 103.2 | 2.70 | 104.2 | 3.30 | 106.2 | 3.52 | 108.6 | 3.57 |

${ }^{\mathrm{a}}$ The estimated grocery basket cost for each combination of RFMS and $\mathrm{CR}_{4}$ was calculated using equation 1 h , Table 4.3, and holing other independent variables at their respective means. The index was constructed by setting the grocery basket computed for $\mathrm{RFMS}=10, \mathrm{CR}_{4}=40$ equal to 100.0
${ }^{\text {b }}$ Profits as a percent of sales were estimated for each combination of RFMS and CR4 using equation ld, Table 3.7, introducing all other variables except API at their means; the binary variable API was introduced with a value of 1. Equation ld was developed using the average division profit levels for 1970, 1971, and 1974. The grocery price models were based upon 1974 prices.

Source: Marion, et. al., supra note 59 .
not respond predatorily, the market would become competitively structured. For this purpose, I will assume a competitively structured market is one where each of the four leading firms' RFMS is 25 and the top 4 firms' share is 50 . In such a market, each of the four leading firms' pre-tax profits would be 1.74 percent of sales versus the previous 3.57 percent in the dominant firm example assumed above. 63 / Faced with this prospect, the dominant firm would have a strong incentive to protect the profits conferred upon it by its dominance in the highly concentrated pre-entry market. If the firm were operating in a metropolitan area with annual sales of $\$ 1.6$ billion (the size of the Milwaukee SMSA) and its market share were 40 percent, its pre-entry profits would have been $\$ 22.8$ million annually, compared to $\$ 3.5$ million in a competitively structured market (where it held a 12.5 percent market share and the top four sellers held a 50 percent share). If one estimates the present value of the expected lost profits to the firm, it is clear that it would have a strong financial incentive to engage in predation. 64/

The incentive for predation would be even greater if predation would enable the predator to actually increase market share. This is what King Soopers did in Pueblo, when its market share rose from 34.3 percent in 1978 to 42.5 percent in $1980 . \frac{65 /}{}$ Such a share increase would translate into millions of additional profits in an SMSA the size of Milwaukee. The incentive would be further magnified if practicing occasional predation had a disciplining or deterrent effect on other would-be competitors in the same or other markets in which the dominant firm operated.

Predation may involve other tactics than deep price cutting. It may involve a calculated policy of "overstoring" or massive advertising designed to deprive new or potential entrants of sufficient volume to
operate profitably. 66/ It may involve building warehouse stores near a new entrant. Careful analysis is required to determine whether such practices have a predatory intent and effect. One begins by placing the practice within its market context, searching for a pattern of conduct that differs from that of a profit maximizing competitive firm. I suspect that generally firms with a large share of the conventional supermarket business in a market will not have a short-run profit-maximizing incentive to open a warehouse store. In making its profit calculus, such a firm must examine not only the expected profits of its new warehouse store but also the impact that the new store will have on the profitability of its existing conventional supermarkets. Because the firm's warehouse store will garner sales at the expense of conventional supermarkets, a firm with a large market share will impact adversely its own conventional stores. This explains why firms without conventional stores in a market are most inclined to open warehouse stores. 67/

I have discussed specific practices that perhaps best lend themselves to economic analysis. This is not intended to imply that one should be concerned only with situations that lend themselves to such examination. Sometimes the analysis requires examination of the totality of a pattern of conduct. 68 / Then one may find that "actions themselves individually unacceptionable, may form together a consistent pattern, explicable and condemable solely on the basis of the general policy (intent) which they mirror."69/

In sum, often powerful multimarket grocery retailers enjoying supra-competitive profits have a profit-maximizing incentive to engage in predation to forestall or retard entry by warehouse stores and to restructure the conventional supermarket segment of the market. Such
efforts will be rewarded with success in markets that are predisposed to successful predation. Importantly, the best available empirical evidence indicates that a profit incentive for predation exists even where the firm does not yet enjoy a monopoly position as defined in the legal precedents, which generally have required shares well above 50 percent. $\frac{70 /}{}$

## VIII. Public Policy Toward Predation

Significant savings accrue to Milwaukee consumers from grocery warehouse stores. Taken across the United States, the potential savings to consumers amount to billions of dollars. When established retailers respond to warehouse store entry by not highlighting their own competitive strengths but by engaging in strategic conduct that eliminates or deters entrants we no longer have competition on the merits. Consumers as well as individual competitors are injured in the long run from predatorily enforced market discipline. Public policy must respond promptly and affectively to such anticompetitive conduct. The policies must be flexible enough to reach more than the clearly eggregious cases. The costs from not deterring predation are too high to make half a loaf acceptable.

Predatory pricing may be challenged under Section 2 of the Sherman Act:. As currently interpreted by some courts, however, there is only a dangerous probability that predation will be successful if substantial barriers to entry exist and the predator already has a substantial market share. Assuming the entry barriers requirement can be met in grocery retailing, the market dominance requirement may not be met in some cases that adversely affect competition sufficiently to injure consumer welfare. As shown in Figure 3, profits may exceed competitive levels in highly concentrated markets even if the leading firm's share is between 30 percent
and 40 percent. ${ }^{71 /}$ Hence, the fruits of predation can be enjoyed by a firm with a share below 40 percent to 50 percent, which is under the threshold some courts have adapted in attempt to monopolize cases. Adoption of such a criterion destroys the effectiveness of the Sherman Act in dealing with the predation problem in food distribution.

If the Sherman Act is not responsive, predation victims must look to the Clayton and FTC Acts. The legislative history of these acts indicate that they were enacted because of perceived deficiencies' in the Sherman Act. The 1914 statutes, as Congressman Patman was fond of saying, were enacted "to catch the weed in the seed." If these statutes are to protect fully consumer interests and the competitive process, we need inforcement that prohibits predatory conduct leading to dangerous increases in oligopoly, as well as predatory conduct promoting single firm dominance. As discussed earlier, empirical studies in food retailing are unanimous in finding that prices in highly concentrated markets are higher than prices in low or moderately concentrated markets. The Robinson-Patman Act, which prohibits geographic price discrimination that results in primary line injury to competition, would seem to promise much in curbing predation leading to greater oligopoly. Unfortunately, the Act cannot reach predation in food retailing when it involves only intrastate commerce; 72/ $^{\text {/ }}$ nor can it reach the predator who sells far below his costs, even his AVC, when the conduct may be justified as merely "meeting competition" because it matches the low prices of a warehouse store.

Because of the limited reach of the Sherman Act and the technical deficiencies of the Robinson-Patman Act, the only other existing statute capable of reaching predation-caused increases in oligopoly is Section 5 of the FTC Act, with its prohibitions on "unfair methods of competition."

Congress enacted Section 5 in order to give the FTC the authority to reach dangerous threats to competition not within the reach of the Sherman Act or Clayton Acts. As the Supreme Court put it,
unfair competition can best be prevented through the action of an administrative body of practical men . . . who will be able to apply the rule enacted by Congress to particular business situations, so as to eradicate evils with the least risk of interfering with legitimate business operations .... In thus divining that there is no limit to business ingenyity and legal gymnastics the Congress displayed much foresight.-

The Supreme Court subsequently said that Section 5 gives the FTC "broad power [to challenge] trade practices which conflict with the basic policies of the Sherman Act even though such practices may not actually violate these laws." ${ }^{74 /}$ This language clearly authorizes the FTC to challenge practices that fall short of Sherman Act attempts to monopolize but that do injure competition.

What, then, can the FTC do about anticompetitive practices in grocery retailing? I believe the FTC can use economic analysis successfully to identify predatory pricing involving attempts to destroy, deter or discipline warehouse store (as well as non-warehouse store) entry or expansion. Even if the alleged predator is not a sufficiently dominant firm as is necessary for a Sherman Act challenge, I believe that a careful analysis of anticompetitive conduct in food distribution will provide a basis for FTC action. The analysis of non-profit maximizing conduct will reveal the sort of evidence the Commission, in its recent ITT Continental Baking decision, said was necessary to rebut a presumption that prices above AVC are presumed to be legal. 7 /

If anticompetitive pricing conduct occurs but cannot be challenged under the Sherman Act, Section 5 of the FTC Act should provide a basis for publicly challenging the practice. (Of course, it does not provide for a
private cause of action.) Whether Section 5 comprehends more than just extreme cases of predatory pricing depends on the FTC's commitment to protecting the competitive process Congress sought to promote in passing the FTC Act. If the FTC disagrees with this clearly enunciated Congressional mandate, the only remaining remedy is new legislation. The potential costs to consumers from predation are too great to tolerate inaction.

* Testimony presented at hearings held by the Federal Trade Commission, Milwaukee, Wisconsin, September 12, 1984.
** William F. Vilas Research Professor of Agricultural Economics, Professor of Economics, and Professor in the Law School, University of Wisconsin-Madison.

1/ I have been involved as a witness or consultant in the following antitrust cases involving food retailing: United States v. Von's Grocery Co. 384 U.S. 270 (1966); Grand Union Company, FTC Docket No. 8458, consent agreement, June 10, 1965; National Tea Co., FTC Docket No. 7464, decision May 4, 1966; Food Town, Inc., FTC Docket No. 9080 (1976); National Tea Co., Docket No. 9126 (1979); Parkview Markets v. Kroger Co., 1978 Trade Cos. (CCH) 162,373 (S.D. Ohio 1978); Colonial Stores v. Grand Union Co., (1978); and Shoppin' Bag v. Dillon Companies, Inc., United States District Court for Colorado, No. 81-Z-1548, (1979). In a jury trial, December 1984, this defendant was found not guilty. The case is now on appeal before the United States Court of Appeals for the Tenth Circuit. Hereinafter this case will be cited as Shoppin' Bag.
2/ This assumes that warehouse stores had the following shares of grocery store sales in 1983: Pick ' $N$ ' Save $37 \%$, Schultz Sav-U Stores 4\%, and Cub $3 \%$. Supermarket News, Market Profiles, 1984, at 28 (July 30, 1984). It was assumed that these stores' gross margins were 7 percentage points below the average margins of the stores whose business they displaced. Total food store sales in Milwaukee in 1983 were about $\$ 1,655$ million.
3/ Brodley and Hay, "Predatory Pricing: Competing Economic Theories and the Evolution of Legal Standards," 66 Cornell Law Review 738, 741 (1981).
4/ Areeda and Turner, "Predatory Pricing and Related Practices under Section 2 of the Sherman Act," 88 Harvard Law Review 697 (1975).

5/ Id. at 710 .
6/ Id. at 711 .
I/ Id. at 712 (emphasis added).
8/ A comprehensive summary of these authorities appears in Hay, "A Confused Lawyer's Guide to the Predatory Pricing Literature," Federal Trade Commission, Strategy, Predation and Antitrust Analysis, 155 (1981).

9/ Posner, Antitrust Law: An Economic Perspective, 186 (1976).
10/ Id. at 186 (emphasis added).
11/ Id.
12/ Id. at 188 .

13/ Id. at 189.
$14 /$ Id.
15/ Id. at 190 .
16/ Id. at 191.
$17 / \mathrm{Id}$.
18/ Id. at 192.
19/ Yamey, "Predatory Price Cutting: Notes and Comments," 15 Journal of Law and Economics 129 (1972).
20/ Id. at 134 (emphasis added).
21/ Id. at 133.
22/ Joskow and Klevorick, "A Framework for Analyzing Predatory Pricing Policy," 89 Yale Law Journal 213 (1979).
23/ Id. at 244 . The structural criteria Joskow and Kelvorick use in their first tier test would appear to be more appropriate for monopolization cases than for attempt to monopolize cases because they call for market structures where the dominant firm already has monopoly power. In their analysis they also refer to the predator as a monopolist rather than a seller attempting to monopolize.
24/
Id. at 253.
25/
Id.
26/
Id.
27/ Id. at 255.
28/ This is essentially the rule William Baumol proposed in
"Quasi-Performance of Price Reducitons: A Policy for Prevention of Predatory Pricing," 89 Yale Law Journal 1 (1979). The rule also incorporates a rule proposed by Oliver Williamson that limits the excess capacity defense. Williamson, "Predatory Pricing: A Strategic and Welfare Analysis," 87 Yale Law Journal 284 (1977).
29/ Joskow and Klevorick, supra note 22 at 258.
30/ Id. at 258 , underlining added.
31/ Greer, "A Critique of the Areeda and Turner Standard for Predatory Practices," 24 The Antitrust Bulletin 233, 235 (1979).
32/
Id. at 242.
33/
Id. at 247-48.

34／Dirlam，＂Marginal Cost Pricing Test for Predation：Naive Welfare Economics and Public Policy，＂ 26 The Antitrust Bulletin 769 （1981）． Scherer，＂Predatory Pricing and the Sherman Act：A Comment，＂ 89 Harvard Law Review 868 （1976）．
35／The Federal Trace Commission recently proposed this standard for identifying predation when prices are below ATC but above AVC．ITT Continental，Antitrust \＆Trade Reg．Rep．（BNA）No．1177，at 283， 286 （Aug． 9 ，1984）．
36／Sullivan，Antitrust 111－12（1977）．
37／Id．at 113.
38／Areeda and Turner，supra note 4，at 698.
39／Posner，supra note 9，at 191 ．
40／Shoppin＇Bag v．Dillon，Inc．，supra note 1 （hereinafter cited as Shoppin＇Bag）．By emphasizing the usefulness of a non－profit maximizing rule，I do not intend to imply that this is the only sort of evidence useful in identifying predatory pricing below ATC but above AVC．Certainly Baumol＇s price reversal rule and the various sorts of evidence Greer and Scherer have suggested also have relevance in food distribution．
41／Shoppin＇Bag had gross margins of about 12 percent which compares with conventional supermarkets＇gross margins of $20-22$ percent．
42／＂［T］he sales loss to $⿰ ⿰ 三 丨 ⿰ 丨 三 一 12$ during the first few months after opening will be larger than the year end figures regardless of pricing structure．＂See Appendix A ，at 2.
43／Id．and Shoppin＇Bag，Tr．at 357－68．
44／Shoppin＇Bag，PX 59.
45／Shoppin＇Bag，Tr．at 559 and 1034；PX 64－85．
46／
Id．
47／Id．at $\operatorname{Tr}$ ．375－76 and 447－48．For many years before this，King Soopers had maintained a uniform price policy charging the same price for each product sold in the five Colorado SMSAs in which it operated．Tr．at 376－77．The Pueblo price cut was the first exception to the policy． Tr ． at 377.
48／By mid－July，Shoppin＇Bag＇s sales had dropped by about 50 percent． $\operatorname{Tr}$ ． at 120 ．
49／Joskow and Klevorick，supra note 22 at 255 would find such a price reversal as predatory if it could not be justified as a profit maximizing price．

50/
There is much industry experience supporting this conclusion. For example, when King Coopers opened a new store in Pueblo in 1976, it caused much more excess capacity than Shoppin' Bag caused in 1979 (see Figure 1 and Appendix C). Despite this, no other firms responded with deep price cutting. Interviews with grocery store operators indicate that the "normal" competitive response does not take the form of deep price cutting, and that such conduct does not maximize profits or minimize losses.
51/
Posner, supra note 9, at 186 .
52/ Posner, supra note 9, at 184. "Predatory pricing depends on the purchasers' willingness to buy from the predator (or the intended victim) at the predatory price."

53/
This is recognized by most economic and legal authorities as an essential prerequisite to a successful attempt to monopolize, especially if the predator is not selling below his AVC. However, it can be argued that no predator would engage in the practice unless he expected to be successful in his attempt.
54/
Some of the literature on predation, especially that by economists, fails to distinguish clearly between the size of a market share required in attempts to monopolize cases versus monopolization cases. For example, throughout their analysis, Joskow and Klevorick, supra note 22, discuss predatory conduct by a monopolist. These authorities tend to suggest that the predator is not likely to be successful unless he has a higher market share than is required by the legal authorities who distinguish between monopolization and attempt to monopolize cases.
55/
This characteristic of the predator has long been identified with successful predation. See quotations from Posher and Yamey in corresponding to notes 11 and 20, supra.
56/
See Cotterill and Mueller, "The Impact of Firm Conglomeration on Market Structure: Evidence for the U.S. Food Retailing Industry," 25 The Antitrust Bulletin 557 (1980).

57/
For example, in the Grand Union decision the Commission found that no significant entry barriers existed in the relevant markets. (This case involved the issue of an alleged elimination of potential competition, which also requires the existence of entry barriers.) The Commission apparently was especially impressed with the large number of convenience and small independent stores that entered (and left) the relevant markets. I suggest that, during the course of these hearings, the FTC staff ask the views of retailers as to whether they believe convenience and other small food stores actually compete so directly with supermarkets and warehouse stores that the pricing decisions of the latter are significantly effected thereby.

58/
For a discussion of entry barriers see Marion, Parker and Handy, Food Retailing, Part III, Organization and Performance of the U.S. Food System, (forthcoming). I would emphasize here, however, that it is a mistake to infer that entry into grocery retailing must be easy because, in the absence of a predatory response by powerful established firms, many
warehouse stores have successfully entered the industry in recent years. Such entry reflects that a certain subset of consumers prefer warehouse stores to conventional stores. Given free consumer choice and the absence of predatory conduct, warehouse stores will capture this segment of the market at the expense of existing supermarkets. Until this segment has been filled, warehouse-type stores will be able to enter the market more freely than will a conventional supermarket. But once warehouse stores have captured a share reflecting the unique consumers' preferences of a particular market, entry barriers for subsequent warehouse stores will be as great or greater than now exist in the conventional supermarket segment of grocery retailing. Warehouse stores will face higher entry barriers because their large size erect greater economies of scale barriers, i.e., to gain the large share of the market required for efficient operations, the warehouse entrant must take a substantial amount of business away from competitors. Entry will become increasingly difficult as warehouse store entry fully reflects consumers' preferences. Even in metropolitan areas with populations up to 250,000 , subsequent warehouse store entrants would face substantial entry barriers after as few as one to three large warehouse stores became established. We may then expect the market to consist of two main strategic groups of stores, higher margin variations of conventional supermarkets and lower margin stores following a warehouse-type format. Once an equilibrium is reached between the two strategic groups, new entry into either could become very difficult.

59/
B.W. Marion, W.F. Mueller, R.W. Cotterill, F.E. Geithman and J.R. Schmelzer, The Food Retailing Industry: Market Structure, Profits, and Prices (New York: Praeger Publishers 1979) at 61-141. The authors' results were also published in "The Price and Profit Performance of Leading Food Chains," 61 American Journal of Agricultural Economics 412-33 (1979). For comments on an earlier version of these studies by industry, government and academic economists, see "Hearings of Prices and Profits of Leading Retail Food Chains, 1970-74," Joint Economic Committee of the United States Congress, lst Sess., March 30 and April 5, 1977. Of the over 20 academic economists commenting on this study, all but one viewed it as an important contribution to reliable knowledge on this subject. Id. at 185-225.

Three subsequent published studies on this subject also found significant relationships between the degree of market concentration and the level of prices charged consumers. Hall, Schmitz and Cothern "Beef Wholesale-Retail Marketing Margins and Concentration," 46 Economica 295-300 (1979) ; and R. McFall Lamm, "Prices and Concentration in the Food Retailing Industry," 30 The Journal of Industrial Economics 67-78 (1981); Lamm, "Unionism and Prices in the Food Retailing Industry," III Journal of Labor Research 70-79 (1982). Professor Ronald Cotterill of the University of Connecticut recently completed a study in which he likewise finds a positive relationship between market shares and profitability in grocery retailing.

The only study to find only "a very slight tendency for gross margins to be higher where a market share was high," was conducted by the staff of the National Commission on Food Marketing (Washington: Government Printing Office, 1966) at 179-210. A comprehensive review of the research literature in the food industries commented as follows on the Padberg study: "Little attention was given to conceptualization and vigorously testing industrial organization hypotheses." Helmberger, Campbell, and Dobson, "Organization, and Performance of Agricultural Markets" in L.R.

Martin (ed.), A Survey of Agricultural Economics Literature for the American Agricultural Economics Association (Minneapolis: University of Minnesota Press, 1981) at 531.

60/First, the studies demonstrate the profit incentive a dominant conventional supermarket firm has in forestalling the entry of a warehouse store. Second, if the total exclusion of warehouse stores is not a long-run profit-maximizing strategy, the dominant firm may use the warehouse store's entry as an opportunity to restructure further the conventional supermarket segment of the market. By following the latter strategy, the predator may end up dominating even more fully the conventional supermarket segment of the market than he did prior to the entry of a warehouse store. Then, once an equilibrium is reached between the warehouse store and conventional supermarket segments (see note 57), the dominant firm may monopolize the conventional supermarket segment more fully than previously. And even where predatory efforts fail to forestall completely the entry of warehouse stores, such conduct very probably reduces the number of warehouse stores below that which would otherwise have existed.
61/ Marion, et. al., supra note 59 .
62/ Relative firm market share (RFMS) measures a seller's share as a percent of the top 4 firms' share. This measure is conceptually and statistically superior to market shares. See Marion et. al., note 59 at 71.

63/ The estimated pretax profits of 1.74 percent of sales is near the average profits of grocery supermarket chains in recent decades. In 1982 and 1983 leading grocery chains had average pretax profits of about 2.1 percent. Value Line Investment, Edition 10 at 1507 (August 31, 1984).
64/ The short-run decline in profits would exceed that suggested by the example because as the dominant firm lost market share it would incur substantial short-run losses until its capacity was adjusted to its new demand.

65/
Shoppin' Bag, PX 176.
66/
In 1973 Canadian antitrust authorities challenged a variety of practice directed at limiting the expansion of Safeway's competitors and creating entry barriers. One provision of a consent order in this case prohibited, for a period of five years, Safeway from "engaging in market saturation advertising policies" in Calgary. Statement of judge summarizing the consent order in Regina v. Canada Safeway Limited, October 5, 1973, as reported in 19 Antitrust Bulletin 61 (1974). The order also prohibited price cutting to meet or undercut "the price of a competitor, unless the price so charged by the Defendant is applied uniformly and simultaneously by it, for the identical grocery item in all of its Calgary stores."
67/ A study prepared by King Soopers' market analysts demonstrated that it could operate profitably a warehouse store in Denver paying the same wages it paid employees in its existing stores. However, when it included in its
calculation the "losses to [its] other stores" the opening of a warehouse would have been unprofitable. Shoppin' Bag, PX 21.
68/
Scherer, supra note 34 .
69/ Dirlam and Kahn, Fair Competition: The Law and Economics of Antitrust Policy 53 (1959).

In Dimmitt Agri Industries, Inc. v. CPC International Inc., 679 F. 2d at 528 (1982), the Fifth Circuit Court of Appeals reviewed the monopolization cases and concluded that there were none where the dominant firm held a share significantly below 50 percent. In all the cases it cited the dominant firm had a share ranging from 75 percent to 100 percent. Id. at 11 .
71/ In the most "monopolized" structure displayed in Figure 3 the largest firm has a share of 38.5 percent ( 55 percent of 70 percent).

72/ Cliff Food Stores, Inc. v. Kroger, Inc., 417 F. 2d. 203, 209-10 (1969).
73/ FTC v. Cement Institute, 333 U.S. 683, 693 (1948).
74/ FTC v. Brown Shoe Co., 384 U.S. 316,321 (1966).
75/ The Commission said prices above AVC "should be strongly, often conclusively, presumed to be legal. The presumption could possibly be rebutted in some circumstances by a strong showing that sales at such prices were not, absent the effect of the alleged predation, consistent with profit maximization or loss minimization." ITT Continental, supra note 36 at 286.

## MEMORANDUM

TO: Ray RoseJim BaldwinRoss McCotterJohn BrooksJan LoutzenhiserDon Gallegos
FROM: Lee MorrisonEric Larson
DATE: January 19, 1979

Ed Behlke
Tom Hosman
Bill Boggess
Don Bergh
Daryl Penneta
RE: SLASH Study - Pueblo, Colorado Shop ' $N$ ' Bag's Affect on Store \#12
TRADE AREA BOUNDARIES
Pueblo City Limits and Rural Postal Routes
TRADE AREA CHARACTERISTICS
Population - 129,284
Potential - \$1,886,658 per week
P.C.W. - $\$ 14.59$ per person per weekNoise - $15.09 \%$ or $\$ 285,000$ per week
PROJECTIONS
New Shop 'N' Bag located at Prairie and Northern (Flavor of 200 used forthe Shop ' $N$ ' Bag to account for a price advantage. King Soopers \#12is flavored at 204.)
First Year End ..... Sales
Jan. 1980 \$199,000
Loss to King Soopers Stores (First Year End)
\#12 - \$70,000 to \$75,000 per week
\#43 - - 0 - to $\$ 5,000$ per week
Maximum Loss to King Soopers
\$80,000 per week
A000Ry:
SOLRCE: Shoppin' Bag, supra note 1, PX 35
₹ New Shop ' $N$ ' Bag with a flavor of 120 to account for no price advantage (Store \#12 matches prices)

| First Year End | Sales |
| :---: | :---: |
| Jan. 1980 | \$134,000 |
| Loss to King Soopers | es (First Year |
| $\begin{aligned} & \# 12-\$ 30,000 \text { to } \\ & \# 43--0- \end{aligned}$ | 000 per week |

Maximum Loss to King Soopers
$\$ 35,000$ per week

MARKET SHARE ANALYSIS

|  | Current |  | New Shop 'N' Bag <br> Open (200 Flavor) |  |
| :--- | :---: | :---: | :---: | :---: | | New Shop 'N' Bag |
| :---: |
| Company (120 Flavor) |


| Name/Address |  |
| :--- | :--- | :--- | :--- |
| 1. Safeway <br> 29th Street and Elizabeth | Size |

Weekly Hours, Sales Check-outs \& Amenities
Current Estimate Flavor
$\$ 80,000$ 8-9 M-Sat, 9-7 Sun, ..... 726 Check-outs
\$ 45,000 8-7:30 M-Sat, 9-7 ..... 68Sun, 6 Check-outs
8:30-8:30 M-Sat, ..... 99
9-7 Sun, 8 Check-outs
Hours Not Posted, ..... 946 Check-outs, Bakery,Expanded GM
160\$125,000 8-9 M-Sat, 9-7 Sun,8 Check-outs, Deli
$\$ 135,000$ Hours Not Posted, ..... 1209 Check-outs, Deli,Expanded GM
$\$ 88,000$ 9-9 M-Sat, 9-6 Sun, ..... 83Bakery, Deli

## CONCLUSIONS

1. The new Shop ' $N$ ' Bag will have a large affect on Store \#12 if it has a price advantage.
2. If \#12 meets the Shop ' $N$ ' Bag prices, the year end loss will be $\$ 30,000$ to $\$ 35,000$ per week. Based on the amount of advertising Shop ' $N$ ' Bag has done in the Denver area, the loss to \#12 dưiping


3. 1 Shop ' $N$ ' Bags initial effect could be decreased by counter advertising revealing our pricing changes.
4. Pueblo does not appear to be able to support a new King Soopers in the foreseeable future.
5. A bridge behind \#43 extending 29th Street into the Bellmonte area would increase \#43's sales by $\$ 25,000$ to $\$ 30,000$ per week.


KING Soopers, Inc.
Pueblo Stores \#12 and \#43
Present Prices and No Increase in Sales

STORE \#12

| S AMOUNT | 8 |
| :---: | :---: |
| 3,750,500 | 100.00 |
| 3,050,300 | 81.33 |
| 700,200 | 18.67 |
| 17,000 | . 45 |
| 397,900 | 10.61 |
| 6,600 | . 18 |
| 1,830 | . 05 |
| 10,700 | . 29 |
| (500) | (.01) |
| 433,530 | 11.56 |
| 266,670 | 7.11 |
| 220,135 | 5.87 |
| 28,125 | . 75 |
| 18,410 | . 49 |

Birect Expenses
Payroll Taxes
Print Shop
Ind. Supplies
Check Fees
Bank Chgs.
Returned Checks
-ong - Short
.isc.
News - Adv.
Radio - TV Adv.
Adv. Allow.
Neon Sign Repair
Excess Rent
Health \& Welfare
Emp. Retire. Ins.
Workmen's Comp.
Telephone \& Telegraph
utilities
Public Relations
Base Rent
Equip. Rental
Trash Hauling

- Fixture Maint.

Bldg. Maint.,
, Jepr. \& Amort.
jontents \& Misc. Ins.
?roperty Taxes
lisc. Taxes \& Licenses
ting Sooper Check Card
ravel
isc. Fized

INDIRECT EXPENSES
SOURCE: Shoppin' Bag, supra note 1, PX 1.

KING Soopers, Inc.
Pueblo Stores \#12 and \#43


KING Soopers, Inc.

Pueblo Stores \#12 and \#43
Shop \& Bag Prices and $10 \%$ Increase in Sales
SIORE \#12
it of sales Gross Profit

- :trollable Expense Vacation Salaries Salaries
- Mgr. Salaries General Exp. Supplies Money Order Fee (cr) al Controlled Exp. tribution to Overhead irect Expenses agement \& Interest Eit from Operations
irect Enpenses
Payroll Taxes
Print Shop
Ind. Supplies
Check Fees
Bank Chgs.
Retumed Checks
Long - Short
tisc.
News - Adv.
Radio - TV Adv.
Adv. Allow.
Neon Sign Repair
Excess Rent
Health \& Welfare
Emp. Retire. Ins.
Vorkmen's Comp.
Telepione \& Telegraph
Utilities
Public Relations
Base Rent
Equip. Rental
Trash Hauling
Fixture Maint.
Bldg. Maint.
Depr. \& Amort.
- Contents \& Misc. Ins.

Property Taxes
Misc. Taxes \& Licenses
King Sooper Check Card Travel
Misc. Fixed
MI INDIRECT EXPENSES

31,300
750
19,450
(250)

1,700
2,000
1,500
1,700
29,000
3,500
$(12,000)$
13,050
28,950
16,075.
3,000
2,000
30,000
210
15,900
200
2,000
5,500
4,700
21,500
2,900
2,700
200
850
700
100
229,185
$\frac{\%}{100.00}$
$\begin{array}{r}84.78 \\ \hline 15.22\end{array}$
.43
10.83
.17
.05
. 30

| $(.01)$ |
| ---: |
| 11.76 |
| 3.46 |
| 5.79 |
| .75 |
| $(3.08)$ |


| STORE \#43 |  |  |
| :--- | ---: | :---: |
| S AMOUNT | $\%$ |  |
| $3,591,300$ | 100.00 |  |
| $3,027,100$ | 84.29 |  |
| 564,200 | $\frac{15.71}{}$ |  |


| TOIAL |  |
| :---: | ---: |
| SAMOUNT | $\%$ |
| $7,548,900$ | 100.00 |
| $6,382,350$ | 84.55 |
| $1,166,550$ | 15.45 |


| 12,500. | . 35 | 29,500 | . 39 |
| :---: | :---: | :---: | :---: |
| 409,000 | 11.39 | 837,700 | 11.10 |
| 6,050 | . 17 | 12,650 | . 17 |
| 1,800 | . 05 | 3,800 | . 05 |
| 12,400 | . 35 | 24,150 | . 32 |
| (200) | (.01) | (700) | (.01) |
| 441,550 | 12.29 | 907,100 | 12.02 |
| 122,650 | 3.42 | 259,450 | 3.44 |
| 202,225 | 5.63 | 431,410 | 5.71 |
| 26,950 | . 75 | 56,650 | . 75 |
| $(106,525)$ | (2.97) | $(228,610)$ | (3.03) |

$$
29,850
$$

$$
750
$$

16,950
(250)

1,500
2,000
500
1,500
24,000
2,500
$(10,000)$
---
24,550
16,350
2,000
1,850
22,000
150
33,995
180
1,800.
3,250
2,500
16,100
1,950
3,000
200
650
400
5.79

2,000
202,225


431,410
5.71


Pueblo Stores \#12 and \#43
Shop \& Bag Prices and $30 \%$ Increase in Sales
les
st of Sales
Gross Profit
atrollable Expense
Vacation Salaries
Salaries
Mgr. Salaries
General Exp.
Supplies
Money Order Fee (cr)
=al Controlled Exp.
itribution to Overhead
iirect Expenses
agement \& Interest
Jfit from Operations
irect Expenses
Payroll Taxes
Print. Shop
Ind. Supplies
Check Fees
Bank Chgs.
Retumed Checks
Iong - Short
"isc.
..ews - Acv.
Radio - TV Actv.
Adv. Allow.
veon Sign Repair
Excess Rent
fealth \& Welfare
Zmp. Retire. Ins.
iorkmen's Comp.
relephone \& Telegraph
Jtilities
rublic Relations
3ase Rent
jquip. Rental
Trash Hauling
ixture Maint.
ildg. Maint.
epr. \& Amort.
ontents \& Misc. Ins.
roperty Taxes
isc. Taxes \& Licenses
ing Sooper Check Card ravel
isc. Fixed
I INDIRECT EXPENSES

STORE \#12
STORE \#43

| SAMOUNT | $\frac{8}{4,244,200}$ |
| :---: | :---: |
| $\frac{100.00}{4,577,450}$ | 84.29 |
| 666,750 | 15.71 |

12,500 . 29
467,325
490,200
6,600
2,375
13,875
(500)

| (500) | (.01) |
| :---: | :---: |
| 529,550 | 11.32 |
| 182,300 | 3.90 |
| 247,585 | 5.29 |
| 35,075 | . 75 |
| (100,360) | (2.15) |

35,775
750
23,000
(250)

2,000
2,000
1,500
2,000
29,000
3,500
$(12,000)$
---
16,375
33,075
18,400
3,000
2,000
30,000
210
15,900
200
2,000
5,500
4,700
21,500
2,900
2,700
200
850
700
100
$247,585 \quad 5.29$

$$
10.48
$$

| $\frac{8}{100.00}$ |
| :---: |
| 84.78 |
| 15.22 |

.14
.05
$\begin{array}{r}.30 \\ (.01) \\ \hline 11.32 \\ \hline 3.90 \\ 5.29 \\ \hline .75 \\ \hline \hline\end{array}$
.

34,100
750
20,050
(250)

1,750
2,000
500
1,750
24,000
2,500
$(10,000)$
---
28,050
18,700
2,000
1,850
22,000
150
33,995
180
1,800
3,250
2,500
16,100
1,950
3,000
200
650
400
2,000
215,925

TOIAL

| S AMDUNT | ${ }^{\text {\% }}$ |
| :---: | :---: |
| 8,921,300 | 100.00 |
| 7,542,700 | 84.55 |
| 1,378,600 | 15.45 |
| 29,500 | . 33 |
| 957,525 | 10.73 |
| 12,650 | . 14 |
| 4,525 | . 05 |
| 28,525 | . 32 |
| (700) | (.01) |
| 1,032,025 | 11.57 |
| 346,575 | $3.88{ }^{-}$ |
| 463,510 | 5.20 |
| 66,925 | . 75 |
| $(183,860)$ | (2.06) |

KING Soopers, Inc.
Pueblo Stores \#12 and \#43 Shop \& Bag Prices and 40\% Increase in Sales STORE \#12 STORE \#43'

TOTAL

| STORE \#43 ${ }^{\circ}$ |  | TOTAL |  |
| :---: | :---: | :---: | :---: |
| S AMOUNT | \% | S AMDUNT | 3 |
| 4,570,700 | 100.00 | 9,607,620 | 100.00 |
| 3,852,650 | 84.29 | 8,122,950 | 84.55 |
| 718,050 | 15.71 | 1,484,670 | 15.45 |


| \$ AMOUNT | \% |
| :---: | :---: |
| 5,036,920 | 100.00 |
| 4,270,300 | 84.78 |
| 766,620 | 15.22 |
| 17,000 | . 34 |
| 521,000 | 10.34 |
| 6,600 | . 13 |
| 2,550 | . 05 |
| 14,950 | . 30 |
| (500) | (.01) |
| 561,600 | 11.15 |
| 205,020 | 4.07 |
| 256,860 | 5.10 |
| 37,750 | . 75 |
| (89,590) | (1.78) |


| S AMOUNT | $\frac{8}{4,570,700}$ |
| :---: | :---: |
| 100.00 |  |
| $3,852,650$ | $\frac{84.29}{718,050}$ |
| 15.71 |  |

Gross Profit
itrollable Expense
Vacation Salaries
Salaries
Mgr. Salaries
General Exp.
Supplies
les

Money Order Fee (cr) cal Controlled Exp. itribution to Overhead Birect Expenses iagement \& Interest
رfit from Operations
lirect Expenses
Payroll Taxes
Print Shop
Ind. Supplies
Check Fees
Bank Chgs.
Retumed Checks
Long - Short
Misc.
News - Adv.
Radio - TV Adv.
Adv. Allow.
Neon Sign Repair
Excess Rent
Health \& Welfare
Emp. Retire. Ins.
horkmen's Comp.
Telephone \& Telegraph
Utilities
Public Relations
Base Rent
Equip. Rental
Trash Hauling
Fixture Maint.
Bldg. Maint.
Depr. \& Amort.
Contents \& Misc. Ins.
Property Taxes
Misc. Taxes \& Licenses
King Scoper Check Card
Travel
Misc. Fixed
FAL INDIRECT EXPENSES

30,000
750
24,750
(250)

2,150
2,000
1,500
2,150
29,000
3,500
$(12,000)$
18,150
35,150
19,550
3,000
2,000
30,000
210
15,900
200
2,000
5,500
4,700
21,500
2,900
2,700
200
850
700
100
256,860

36,250
750
21,575
(250)

1,925
2,000
500
1,925
24,000
2,500
$(10,000)$
---
29,800
19,850
2,000
1,850
22,000
150
33,995
180
1,800
3,250
2,500
16,100
1,950
3,000
200
650
400
2,000
5.10

222,850

29,500
10.59
.13
. 32
(.01)
4.06
4.06
4.99
$\begin{array}{r}4.88 \\ .75 \\ \hline(1.58) \\ \hline\end{array}$
. 75
30,750 . 32

$$
\begin{aligned}
& - \\
& - \\
& -
\end{aligned}
$$

(1.68)

| 12,500 | .27 |
| ---: | ---: |
| 496,500 | 10.86 |
| 6,050 | .13 |
| 2,300 | .05 |
| 15,800 | .35 |

$$
5
$$

## COIFIDENTIAL

# SALES PROJECTIONS STORE $\# 43$ <br> Pueblo, Coloraco 

## PRESENTED TO:

RAY V. ROSE

PRESIDENT
KING SOOPERS, INC.

## Copies to:

- Pay v. Rose -Tom Hosman
- Jim Baldwin - Bob Handwerk
- Bon Miller - Milt Vincent
- Ross McCutter - Russ Dispense
- John 3rooks -Jim Kobach
- Don rallegos - Jan Loutzenhizer
-Dor Eançston -Carl Davis
Ron Wright


SOURCE: Shoppin' Bag, supra note 1, PX 89.

Pueblo, Colorado

| Year-end |  | Sales |  | - |
| :---: | :---: | :---: | :---: | :---: |
| 1 |  | \$230,605 |  |  |
| 2 |  | 266,349 |  |  |
| 3 |  | 285,951 |  |  |
| Year-averade |  | Sales |  |  |
| 1 |  | \$207,545 |  |  |
| 2 |  | 253,666 |  |  |
| 3 |  | 277,880 |  |  |
| Quarter (lst year) |  | Sales |  |  |
| * 1 |  | \$191,403 |  |  |
| 2 |  | 201,780 |  |  |
| 3 |  | 211,004 |  |  |
| *Does not reflect the holiday effect. 225,99 |  |  |  |  |
|  |  |  |  |  |
| LOSS OF BUSINESS TO EXISTING KING SOOPERS STORES |  |  |  |  |
| Store Business |  |  |  |  |
| 12 |  | -\$10,658 to \$11,843 |  |  |
| $\begin{aligned} \text { Net Gain First Year-end for King Soopers }= & \\ & +\$ 219,047 \text { to } \$ 218,762 \end{aligned}$ |  |  |  |  |
| TOTAL MARKET SHARES OF TRADE AREP BY COMPANY |  |  |  |  |
| Before $\# 43$ opens $\quad$ After 43 opens (year-end) |  |  |  |  |
| Company \# of Stores | $\#$ of Stores \% | Company \# of Stores |  | 3 |
| Safeway 5 | $5 \quad 32.89 \%$ | Safeway |  | 25.963 |
| Kings l | $1 \quad 16.62$ | Kings |  | 30.32 |
| National 3 | 311.52 | National |  | $8.65{ }^{\text {c }}$ |
| Arapahoe 7 | $7 \quad 9.80$ | Arapainoe 7 |  | 7.69 |
| Chets 2 | $2 \quad 2.84$ | Chets |  | 2.10 |
| Blencie 1 | $1 \quad 1.72$ | Blende 1 |  | 1.30 |
| So-Lo Discount $\frac{1}{20}$ | $1 \quad 3.05$ | So-io Discount $\frac{1}{21}$ |  | 2.38 |
|  | $\overline{20} \quad \overline{78.44}$ |  |  | 78.40 |
| Noise | $\frac{21.56}{100.003}$ | Noise |  | $\frac{21.60}{100.00 \approx}$ |
|  |  |  |  |  |

## COMPETITION ANALYSIS

Projected
Volume
－Name／Adidress
－Naさion三l
19，435
Hoy．sis s
：1．
．SaEmay
26，389
29th \＆
West
… Cheis Cered in 1982
－27tis \＆
－Elizabeth
：．National（now chets） 24,688
Hivy． 50 \＆
Bonforte
；．Arapahoe $\cdots \frac{10,866}{}$
i．Arapahoe
？．Safervay
9，831
25,000
4 checkstands
$\$ 15,479$
$9-3$
9－6 Sun．
Electronic
Registers
74,000
7 checkstands \＄51，219
76
8－10
9－7 Sun．
Bakery
35，000 4 checkstands $\$ 24,449$
8：30－8
9－6 Sun．
3 checkstands \＄6，058 9－7 Closed Sun．

6 checkstands \＄48，882
8：30－8：30
9－7 Sun．
8－10
9－9 Sun．
Bakery
Deli

Hwy． 50 \＆
Bonforte
cくiマatース：

бth $\dot{\alpha}$
Alame
8，000

63，000
，

8th \＆
LaCrosse

Arapahoe Cとかに号 5,598 ：
8 th \＆
Morument


28,000

116,000
3 checkstands $\$ 21,697$
8：30－8 10－6 Sun．

9 checkstands $\$ 89,796$
8：30－10
9－8 Sun．
Some G．M．
23,000

Name/Acidress Size(Sq.Ft.) Sales (\$)/Wk. Facilities After H Opens. Fl:
1.

Arapanoe
Abriendo


- Michigan \&
- Abriendo

3. Nationai

习rajas: e
1?

4. Arapahoe Sufu Forxin,338

Prairie $\quad \therefore \quad \therefore \because$ ofnt
Bay State
7. Arapahoe C K 8, 16,000
Northern \&
Wabas:
.3. Sāeway
22,587
Noreharn \&
Orman
9. So-io Discount 8,279 49,000

Northern \&
Spruce

Hwy. 5 - 50
\& San Mateo


15,000

20,000

63,000

84,000

266,000

30,000

113,000

9 checkstands $\$ 106,429$
8-10
9-7 Sun.
Deli
6 checkstands $\$ 37,961$ 115:
9-8
Closed Sun.
Electronic registers

3 checkstands $\$ 20,772$

## J-CURVE ANALYSIS - 443

$$
\begin{array}{lr}
\text { Opening Week - } & \$ 260,000 \\
\text { Bottom Point - } & \$ 180,000 \\
\text { Year-end Sales - } & \$ 235,000
\end{array}
$$

| Fiesk | Period | g of Year-end Total | Volume |
| :---: | :---: | :---: | :---: |
| 3 | 1 |  |  |
| 7 | 2 | .80 | $\$ 188,000$ |
| 9 | 3 | .85 | $\$ 200,000$ |
| 11 | 4 | .80 | $\$ 200,000$ |
| 15 | 6 | .82 | $\$ 188,000$ |
| 19 | 7 | .85 | $\$ 192,700$ |
| 23 | 8 | .88 | $\$ 200,000$ |
| 27 | 10 | .89 | $\$ 206,800$ |
| 31 | 11 | .91 | $\$ 209,150$ |
| 35 | 12 | .94 | $\$ 213,850$ |
| 39 | 13 | 1.02 | $\$ 220,900$ |
| 43 | 14 | 1.93 | $\$ 235,620$ |
| 47 |  | 1.04 | $\$ 237,930$ |
| 51 |  |  | $\$ 240,240$ |

* Bcttoming-out should occur in the sixth week, with another low occurring between the 11 th and 15 th week after the holidays.


## POTENMIAL CO:PDETITVE MARKET CHANGES:

When Saferay at No:thern and Prairie moves to the new, larger
 t.

