

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

Food Marketing Policy Center

The Predatory Impacts of the Ahold/Pathmark
Offer to Buy the Big V
ShopRite® Supermarket Chain

by Ronald W. Cotterill

Food Marketing Policy Center Research Report No. 64 May 2002

Research Report Series

http://www.are.uconn.edu/FMKTC.html



University of Connecticut
Department of Agricultural and Resource Economics

The Predatory Impacts of the Ahold/Pathmark Offer to Buy the Big V ShopRite® Supermarket Chain

by Ronald W. Cotterill

Food Marketing Policy Center Research Report No. 64 May 2002

Contents

Tables and Figures	iii
Acknowledgement	
Affiliation	iv
Preface	
1. Introduction	1
2. Underlying Facts	1
3. The Predatory Impact of the Ahold/Pathmark Move on Wholesale Markets	1
4. Competitive Effects: A Vertical Squeeze Play on Independents and Local Chains	4
5. The Predatory Impact of the Ahold/Pathmark Move on Retail Markets, It's Impact on Consumers, and It's Payoff for Ahold/Pathmark	4
6. But Will Wakefern/ShopRite® be Forced out of Business?	5
7. The Outside Buyer Option	7
References	8

List of Tables and Figures

Table 1. Leading Wholesalers in the Northeast Coastal Region	9
Table 2. Wholesale Market Positions in the Greater New York Market Area	9
Table 3. Wholesale Market Positions in the Greater Philadelphia Market Area.	10
Table 4. Wholesale Market Positions in the Greater Hartford Market Area	10
Table 5. Consumer Impact of the Ahold/Pathmark Predatory Move on Wakefern/ShopRite	11
Table 6. Analysis of the Interaction of Wakefern/ShopRite, Ahold and Pathmark and the Market Share Gains for the Latter Two Firms if Wakefern/ShopRite Fails	12
Table 7. Sales and Profit Impacts for Ahold and Pathmark if Wakefern/ShopRite Fails	13
Table 8. Documentation of the Demise of Twin County Grocers Cooperative: Annual Sales and Store Count Data for the Wholesale and Leading Members.	14
Table 9. Sales and Store Numbers for Wakefern Food Corporation and its Leading Members: 1994-2000	17
Figure 1. Histogram of ShopRite Store Annual Sales	20

Acknowledgement

The research assistance of Andrew Franklin is greatly appreciated.

Affiliation

The author is Professor in the Department of Agricultural and Resource Economics at the University of Connecticut and Director of the Food Marketing Policy Center, Storrs, CT 06269. Ronald.Cotterill@uconn.edu(860) 486-2742.

Preface

This paper presents a unique empirical analysis of Salop and Scheffman's raising rival's cost theory of predation. The cost efficiency of cooperative wholesaling organizations including the nations largest, Wakefern Food Corporation, are highly susceptible to throughput volume. The Royal Ahold/Pathmark offer to purchase Wakefern's largest member via a bankruptcy proceeding that attempted to supercede its membership contract, if consummated, would have reduced Wakefern's volume by 13 percent. It also would have triggered a domino effect of other member exits because it would have raised the costs of supplying remaining members. This report marshals the available empirical evidence to demonstrate that the predatory move by Royal Ahold and Pathmark would most likely be very profitable for them because it would have diminished competition in many markets where they compete with ShopRite supermarkets. Thus in this case, the move is credible.

Key words: predation, market power, wholesale concentration, cost efficiency

1. Introduction

The Ahold offer to buy Big V has immediate horizontal competitive effects at the market and trade area level in areas where Big V ShopRite® competes These direct horizontal with Ahold supermarkets. impacts are analyzed in Cotterill (2002). Subsequent to its original offer, Ahold amended its plan by partnering Pathmark agreed to purchase the with Pathmark. Trenton, N.J. Big V stores ostensibly to alleviate antitrust concerns in that local market area (Murray, 2002). Although this may mitigate direct horizontal impacts in Trenton, N.J., it provides no relief in the other horizontal markets: Newburgh, N.Y., Poughkeepsie, NY, and Westchester County N.Y. Moreover, the Ahold/Pathmark offer has a second far more substantial impact throughout the northeast U.S. coastal region. Big V is the largest member of the Wakefern Food Corporation ShopRite® Cooperative of supermarket retailers. If Ahold and Pathmark purchase Big V, they will raise the costs of key competitors: the Wakefern Food Corporation and its remaining members. This cost elevation will reduce price competition and may ultimately drive key competitors, i.e. ShopRite® supermarkets, out of business. The elimination of competition at wholesale as well as the retail level will elevate prices in many markets in New Jersey, New York, Connecticut, Pennsylvania and Delaware.

This report analyzes the economics of this predatory move by Ahold/Pathmark in two stages. First, we assume that the predatory move in fact does drive Wakefern and its members out of business. The structural impact on wholesale markets in the region is extremely large. Analysis of the changes in local retail market concentration and retail food price levels document the impact on consumers. It also establishes the pay-off matrix for Ahold and Pathmark from this predatory move.

The second stage of our analysis addresses the impact of the loss of its largest member, Big V Supermarkets, on the Wakefern Cooperative grocery wholesale operation and its remaining members. The critical question is whether the loss of Big V triggers an implosion of the cooperative? Will other members of the cooperative fail, causing the wholesale volume of the group to continue to shrink, further elevating costs and causing more members to fail? This is the "domino effect." Also, given the payoff to Ahold and Pathmark from the demise of the ShopRite® supermarket cooperative and the known amount that they are paying out to capture Big V, do the predators have remaining gains that they can use to capture other ShopRites as they are forced into bankruptcy? In other words, can the

predators actively insure that the domino effect occurs by picking off other ShopRite members?

In addition to addressing the Ahold/Pathmark predatory move, we also analyze a hypothetical acquisition of Big V by an outside buyer to demonstrate that the predatory impacts on wholesale and retail markets are merger specific. An outside buyer is defined to be a purchaser that may operate supermarkets elsewhere in the United States but currently does not operate in markets that ShopRite® supplies. outside buyer does not join the ShopRite® cooperative. If it did, there would be no cost elevation or predatory impact. We demonstrate that an outside buyer reaps no anti-competitive pay-off. As a result, an outside buyer would not be willing to pay more than what the ShopRite® cooperative is willing to pay for its bankrupt Therefore the current purchase member's stores. proposal by Ahold/Pathmark is the only economically rational move that is predatory, and its benefits for those chains are inextricably intertwined with the exercise of market power that damages consumers.

2. Underlying Facts

The current situation includes the following facts that are important for our analysis. Royal Ahold has offered to purchase 27 Big V ShopRites® for \$255 million. The Trenton stores are to be spun off to Pathmark. Royal Ahold already purchased arguably the two newest and best Big V Shop Rites® (the Hyde Park and Beekman Road stores in the Poughkeepsie market). Wakefern Food Cooperation (WFC), the wholesale cooperative consisting of ShopRite® supermarket owners offered to purchase the 27 Big V ShopRites® for \$155 million. Big V is WFC's largest member, and its exit from the cooperative would reduce its sales at wholesale 13 percent.

3. The Predatory Impact of the Ahold/Pathmark Move on Wholesale Markets

The wholesale grocery supply industry for independent supermarket operators in the southern New York, New Jersey, eastern Pennsylvania and Connecticut geographic market areas is highly concentrated. Wakefern and C&S Wholesale Grocers, Inc. ("C&S") are two of the nation's leading wholesalers. Wakefern is the nation's seventh largest wholesaler with \$3.95 billion in sales in 2000; and, C&S is the fourth largest with \$7.1 billion in sales in 2000 (*Trade Dimensions*, p. 43). They are key players in northeast coastal wholesale markets from Connecticut to Philadelphia. C&S has enjoyed phenomenal growth because it has assumed grocery

wholesaling activities for many leading supermarket chains in the region, including A&P, Pathmark, Safeway, Stop and Shop and Giant Food Stores/Super G (*Trade Dimensions*, p. 88). It also purchased 170 bankrupt Grand Union supermarkets. It sold 36 to Stop and Shop and 20 to Tops (Ahold chains), 5 to Hannaford (*Trade Dimensions*, p. 65) and others to Pathmark. It also operates 30 Grand Unions (*Trade Dimensions*, p. 88).

Given its strategic alliances with large chains, C&S does not operate like a typical cooperative or voluntary wholesaler. It does not focus upon independents and small chains in a fashion that enables these chains to compete more effectively with leading supermarket chains. It does, however, supply a few traditional independents such as AR-DE's, a nine store operator in Norwich, New York (Trade Dimensions, *Marketing Guidebook*, 2002 p. 104). C&S offers a private label program (Best Way, Red and White) to independents that affiliate with it, but the program is weak. AR-DE's, for example, has no private label lines. C&S warehouses and delivers whatever each particular large chain orders, including its private label line.

The C&S focus on large leading supermarket chains very well may compromise its incentives to supply independents and small chains that compete with its large customers. Consequently, they may supply such chains at a higher wholesale cost and with less-than topflight private labels, merchandising, advertising, and As a result, C&S' primary promotion services. customers, most notably the Royal Ahold and Pathmark chains in New York, New Jersey, Pennsylvania and Delaware, typically may face less effective competition. The resulting price elevation at retail by large, leading chains could easily be shared with C&S "in payment" for its protection of its key retail customers. increase in C&S' domination of wholesale markets in the region as a consequence of the Ahold/Pathmark acquisition of Big V would strengthen this strategic alliance and increase the potential for the exercise of market power to the detriment of consumers in the region. Note that C&S sold no Grand Union stores to local or regional supermarket chains.

WFC/ShopRite® on the other hand, is a cooperative venture that is committed and inextricably tied to the success of independent supermarket operators (less than 10 stores), as well as local and regional supermarket chains. The ShopRite® program, with its common logo, joint advertising and promotion campaigns, loyalty card program, and extensive line of private label products, provides a platform for competing against leading chain supermarkets. C&S does not offer most of these programs. Moreover, a recent trial involving Wakefern

and Big V documented that if Big V were to switch to C&S, its actual annual wholesale cost would increase at least \$30 million over its current WFC ShopRite® cost (Big V Supermarkets et al. v. Wakefern Food Corp). The chain then would be less able to compete with C&S-supplied Stop & Shop and Pathmark stores. WFC is a low cost supplier to superstore operators such as Big V. The wholesale cost advantage of the Wakefern ShopRite system in part undoubtedly comes, as we document below, from its near exclusive focus on superstores (supermarkets with more than 30,000 square feet of selling floor space and more than \$12 million in annual sales).

There is other evidence of the strength of the WFC/ShopRite® system. Consider its private label program. ShopRite® private label products capture 24 percent of retail sales. In comparison, SUPERVALU private label penetration is only 6.9 percent of sales. Although we do not have an estimate of private label penetration for independent and small chain operators who may use the C&S private labels, we strongly expect that it is near the low level of SUPERVALU private label. Only Wakefern provides a private label program to its member retailers that is equal in penetration to Pathmark (24 percent) and superior to Hannaford (19.2 percent).

Table 1 identifies all supermarket wholesalers in the Northeast Coastal region, which is defined to include the following wholesale market areas delineated in the 2002 Trade Dimensions Marketing Guidebook: Hartford, New York, Philadelphia and Baltimore/Washington. SUPERVALU ranks first in terms of total number of stores supplied (629) and C&S ranks second with 615 stores. More important for analysis of competition between medium and large format supermarket operators are the wholesalers who are equipped for and routinely supply such stores, i.e. superstores. The second and third column identifies wholesalers who sell to superstores. C&S is far and away the most important wholesaler to superstores, supplying 415 stores because it supplies the leading chains in the region. These stores account for 67.5 percent of C&S stores supplied. SUPERVALU is second with 212 superstores, but these stores account for only 33.7% of all stores supplied. SUPERVALU deals with a large number of small stores with an attendant increase in wholesaling costs.

¹ Penetration for ShopRite is via communication with Joseph Sheridan a Wakefern executive on March 21, 2002. The other rates are from *Griffin Report*, p. 20. We do not have a penetration rate for the Ahold chains in this matter, Stop and Shop or Super G, but expect it to be over 20 percent.

WFC/ShopRite® is a close third with 195 superstores and these stores account for 95.1% of the WFC/ShopRite® stores. WFC/ShopRite® is the only wholesaler that almost exclusively supplies superstores. This gives ShopRite® a pure systems and logistics advantage over competing wholesalers. As a cooperative, Wakefern does business at cost and passes that advantage on to its independent and "small" chain members. We put "small" in quotes because Big V, the largest cooperative member, operated over 30 supermarkets with retail sales of approximately \$950 million at its peak. Other ShopRite® members have sales above \$500 million but many members are earlier in the firm growth cycle with single stores and sales in the \$12-\$30 million range.

Let us shift now to market positions, market shares and concentration indices for three critical wholesale markets in this matter: the greater New York City metropolitan area, the greater Philadelphia metropolitan area, and the greater Hartford metropolitan area. These three areas cover Connecticut, southern New York, New Jersey, and southeastern Pennsylvania. When computing wholesale market shares, we include only those firms who would supply independents and small chains. In other words, we include what the industry calls cooperative and voluntary wholesalers. We do not include integrated supermarket chains that operate their own warehouse, distribution, private label, advertising, merchandising and promotion programs.

Table 2 examines the New York City metropolitan area wholesale market. We have computed market shares for the grocery wholesale market and for the supermarket wholesale market. The grocery wholesale market shares and corresponding concentration indices are straightforward and give strong evidence that this market is highly concentrated. Four-firm concentration is 82 percent and the HHI is 2,106.

If Wakefern is driven out of business, who would pick up its wholesale market shares? To the extent that Ahold-owned chains (Stop & Shop and Super G), Pathmark, and Grand Union capture share at retail, most of the wholesale business would be captured by their supplier in the region, C&S. Since these are leading retail supermarket chains in the region, the Ahold/Pathmark proposed acquisition of Big V promises major market share gains at wholesale for C&S, and increased wholesaler concentration.

If all of Wakefern's wholesale business is captured by C&S, the wholesale grocery HHI increases 1,667 points to 3,773. Since C&S customers would capture the lion's share of ShopRite® sales, the wholesale grocery HHI would most certainly increase more than 100 points with the weakening and possible demise of

Wakefern. Thus the Big V acquisition clearly violates the merger guidelines. Resulting concentration is above 1,800 and the increase in the HHI is above 100 points.

The grocery concentration ratios reported in Table 2 include non-supermarket grocery stores (shares with sales of less than \$4.16 million annually, convenience stores, limited assortment stores and wholesale club stores). To obtain a more accurate reading of market concentration for the supermarket segment of the grocery industry, we define supermarket wholesale market share by excluding those wholesalers where less than 10 percent of their stores supplied are superstores. If superstores account for less than 10 percent of a wholesaler's stores, that firm is focusing on small supermarkets and other grocery stores. This means that they are not set up to compete with wholesalers such as Wakefern and C&S.

Table 2 indicates that the greater New York City wholesale market for supermarkets is even more concentrated than the grocery wholesale market. There are effectively only 3 wholesalers that focus upon WFC/ShopRite® has the supplying supermarkets. largest market share at 39.9%. C&S is second at 34.5%, White Rose is a distant third at 22.4%, and SUPERVALU completes the supply chain with a miniscule 3.2%. Four-firm concentration is 100% and the HHI is 3,294. If Wakefern fails and C&S captures all of its wholesale business, the HHI increases 2,751 points to 6,045. Although this is a worst-case scenario in the event of a Wakefern failure, given the strong positions of C&S large chain customers, it is not implausible.

Table 3 reports similar market share data for the greater Philadelphia area. Grocery and supermarket wholesale shares are identical because no wholesalers in this market focuses exclusively on smaller grocery stores. SUPERVALU and Fleming are important and the market is effectively split four ways between Wakefern, C&S, and the other two. Nonetheless, market concentration is extremely high with CR₄=100% and the HHI=2,545. The demise of Wakefern would only increase concentration further. Again as Royal Ahold, Pathmark and other C&S supplied chains capture ShopRite®'s share at retail, the C&S share expands. If C&S captured all of Wakefern sales in this area, the HHI would increase 1,498 points to 4,043.

Table 4 examines the greater Hartford market area (Connecticut, western Massachusetts and southern Vermont). Here, we discuss only supermarket concentration. C&S has a dominant position with 55.6 percent of the market. The only other competitors are SUPERVALU (25.28%) and WFC/ShopRite® (19.1%). Concentration is high and the demise of

WFC/ShopRite® would force it higher. If C&S captured all of the Wakefern business in this area, the HHI would increase 2,123 points to 6,222.

4. Competitive Effects: A Vertical Squeeze Play on Independents and Local Chains

The existing vertical strategic alliances in the region between C&S and leading supermarket chains augurs ill for competition at the retail and wholesale level. Again, we stress the fact that voluntary wholesalers traditionally have competed against leading supermarket chains via independent and small chain retailers. C&S is different; it is allied with leading chains.

The benefits to C&S from increased share and wholesale market concentration are intertwined with the benefits that its retail partners capture. The elimination of Wakefern means that C&S is the primary remaining supplier of independent and regional or local chain superstore operators. If C&S refuses to supply these operators or supplies them at a higher cost (Robinson Patman is assumed dead here), then its retail partners face less competition and can elevate prices. Other barriers to entry at the retail level also contribute to retail price elevation. If the retail members of the strategic alliance stay with C&S, then C&S faces no substantial competition at wholesale. There is a positive feedback loop for vertical cooperation. The strategic alliance between the dominant wholesaler and leading retail chains in the region ensures the market positions of both and enables them to jointly exercise market power to increase prices and profits. Independents, regional, and local chains that would compete in retail markets are precluded from doing so, and consequently, consumers suffer.

5. The Predatory Impact of the Ahold/Pathmark Move on Retail Markets, It's Impact on Consumers, and It's Payoff for Ahold/Pathmark

In this section, we analyze the completion of the Big V acquisition as envisioned by Ahold and Pathmark. Again, assume that this strategic move forces Wakefern-ShopRite out of business. In the next section, we will analyze this assumption and document that it is valid. As outlined in the introduction, conduct that raises rivals costs can force them out of a market. Consequently, market concentration and consumer prices may increase. It is that impact that we address here. Also, since Ahold and Pathmark operate in many markets where this occurs, they may be able to recoup their "investment" via higher prices in this predatory game that they are playing.

The ceiling on Ahold and Pathmark's investment to destroy Wakefern/ShopRite is the difference between the Ahold \$255 million offer and the \$155 million that Wakefern is willing to pay for Big V. To the extent that increases in Ahold's and Pathmark's horizontal market power within the Big V territory increase their profits, this gain would offset at least some of the \$100 million investment that Ahold and Pathmark are making to destroy the Wakefern/ShopRite® supermarket group elsewhere. Therefore \$100 million is the upper bound of Ahold/Pathmark's investment to destroy Wakefern/ShopRite in other markets.

Now let us analyze how Ahold and Pathmark can recoup their investment. The impact on consumers is an intermediate step. We start with a detailed and extensive county database that is derived from Spectra® storelevel sales data that Wakefern has provided us. We compute the county market area market shares for supermarket operators (including ShopRite®) in all of the counties in the Northeast outside of the Big V territory where ShopRite competes with Ahold and/or Pathmark.

If the ShopRite® supermarkets go out of business, others in the market will capture their sales. We assume that the remaining firms in the market will capture ShopRite® sales in proportion to their current position in the market. For example, a ShopRite® owner has 20 percent of the market, firm A has 60 percent of the market, firm B has 20 percent of the market, and the ShopRite® is forced out of business by the With the symmetric capture Ahold/Pathmark move. assumption, firm A captures 75 percent and firm B captures 25 percent of the ShopRite® sales. Their postpredation market shares are 75 and 25 percent respectively. This symmetric-capture assumption is conservative given the aggressive expansion path of both Stop & Shop and Super G in the northeast. These Ahold chains would, in all likelihood, capture more than their proportional share of ShopRite® sales. Our wholesale level analysis suggests that would be the case because of the resulting dominant position of C&S Wholesale, their strategic partner. A repeat of the Grand Union sale to Ahold chains is a very plausible scenario. Also, Stop & Shop gained more than a proportional amount when the divestitures related to the Ahold/Edwards acquisition of Stop & Shop failed in the late 1990s (Cotterill, 1999).

Once we have the post-predation market shares for each remaining supermarket operator in a market, we compute the post-predation HHI of seller concentration. Then we compare post-predation HHI with the initial HHI, and compute the delta (absolute) change and the percent change in the HHI for the market. Using the estimated, significant, positive statistical relationship

between the HHI and the market price level for Royal Ahold supermarkets in the northeast coastal region (see Cotterill, 2002; Cotterill, 1999), we then compute the percent change in the markets' retail price level. In markets where the HHI increases, prices increase. However, for some markets where a ShopRite® owner is the market leader, the demise of that firm may cause the HHI to decrease. Consequently, the market price level decreases in those markets.

Table 5 summarizes our computations for the 37 counties, other than the 4 Big V counties, where ShopRite® owners compete against Ahold and/or Pathmark in the Northeast. As documented in Table 5, the exit of the ShopRite® competitors increases the HHI in 32 of the 37 county markets. The percent change in the HHI ranges from minus 39.7% to 133.5%. The former is Hunterdon County, New Jersey, where the Colalillo ShopRites (2 stores) account for approximately 56.5 percent of the market. If they fail, six other firms including Stop and Shop capture their market share (see attachments), however no firm has a market share near 56% so the HHI drops, and there is a corresponding 2.5% drop in the market price level (Table 5).

The maximum increase in the HHI occurs in Warren County, New Jersey. As reported in Attachment A, three different ShopRite owners compete in the county with 22%, 10%, and 30% shares of market. In the event of a Wakefern failure, the market goes from 6 to 3 competitors (Stop & Shop, A&P, and Acme) and the shares of these 3 firms increase dramatically. HHI increases from 2,224 to 5,193, a 133% increase. Predicted prices increase 8.4%.

Within the range of the predicted price increase (i.e. from -2.5% to +8.4%), there is an average price increase of 1.7%.

The last two columns of Table 5 make the price elevation percentages concrete. The next to the last column is the total annual supermarkets sales in millions of dollars for each county. Multiplying these current sales estimates by the percent price increase gives the dollar increase that consumers in each county pay for their groceries. If the firm's unit cost of selling groceries remains constant, this transfer of income from consumers directly increases the net operating profit of the supermarket operators that remain after ShopRite's demise. In the aggregate, the existence of the ShopRite cooperative supermarket system prevents consumers from paying an additional \$475 million (1.7% more for the region's \$28.01 billion in supermarket sales). Alternatively the demise of the ShopRite supermarkets means a substantial lessening of competition and consumers in these 37 markets pay an additional \$479 million (1.7 percent) annually for groceries.

Next, we examine how the Ahold and Pathmark chains benefit from the demise of Wakefern/ShopRite. Table 6 gives the number of stores that ShopRite owners, Ahold and Pathmark operate in each county. This table also gives the current and the post-predation market shares in each county for Ahold and Pathmark. As expected, these chains gain market share with the demise of ShopRite. The last two columns give the increase in market shares. On average, Ahold county share increases 7 percentage points from 16.94% to 23.94%. For Pathmark, the average county market share increases 7.72 percentage points from 15.21% to 22.93%.

Table 7 completes our analysis of the Ahold and Pathmark ability to recoup their \$100 million (or less) investment in Big V to destroy Wakefern. The first column gives the dollar sales increase that Ahold captures in each county. In total, Ahold increases its annual sales \$1.217 billion with the demise of Wakefern/ShopRite. Column 2 gives the corresponding information for Pathmark. That chain captures an additional \$1.442 billion in annual sales. Column 3 gives the dollar amount of Ahold share of the market price increase in millions of dollars. Assuming no change in unit costs, Royal Ahold's net profits increase Column 4 indicates that \$82 million each year. Pathmark's net profits increase \$103 million each year. Clearly these chains can recoup their \$100 million (or less) investment to drive Wakefern out of business, if the Big V move by itself is sufficient.

We would caution that these estimates are just that, estimates. They depend upon the definition of counties as relevant geographic markets. They depend on the existence of exogenous or strategic barriers to entry that preclude the arrival of new firms at wholesale and retail (see Cotterill 2002 for evidence on retail barriers to entry). Our results also depend on the estimated statistical relationship between the HHI and market prices levels. If we used the relationships between concentration and price from other research studies, the number would change, however we fully expect qualitatively that the results would be the same. Consumers will play hundreds of millions of dollars more for groceries. The outcome of the story does not change, just the numbers change.

6. But will Wakefern/ShopRite® be Forced out of Business?

The impact analysis of the last three sections depend on the assumption that Wakefern Food Corporation and its cooperative group of ShopRite® supermarkets will be forced out of business. In this section we present evidence on this point.

The bankruptcy of Twin County Cooperative after Ahold acquired its two largest members establishes a reasonable prior that a similar set of moves would topple Wakefern ShopRites®. Table 8 chronicles the demise of Twin County. In 1994, this cooperative wholesaler located in Edison, N.J. supplied 165 stores and sold \$1.1 billion at wholesale. By 1998 it was out of business.

Table 8 lists the largest members of Twin County. On July 1, 1995, Ahold, via its Stop & Shop subsidiary, acquired Twin County's largest member, Mayfair Supermarkets, a New Jersey chain, with \$600 million in retail sales. Its 29 stores accounted for 17.5 percent of Twin County's stores and 33% of its wholesale sales volume in 1994. On January 1, 1996, Stop & Shop moved again acquiring the Long Island member of Twin County, Melmarkets, Inc., a chain with \$400 million retail sales. Its 16 stores accounted for 9.7% of Twin County's 1994 store count and 22% of Twin County's 1994 sales level.²

These two acquisitions captured 29 of the 38 superstores that Twin County supplied; its wholesale sales volume dropped 45% from 1994 to 1996. The cooperative never recovered and went out of business in 1997. What happened to Twin County's other members? D'Agostino, Food Circus, Norkus, Francis, Nicholas, Manyfoods and P.S.K. Supermarkets switched to White Rose, SuperValue or Buzzuto's. Note that these chains operated almost no superstores. In 2000, they operated 47 stores but only 2 were superstores. Three independents, Vitale Foodtown, Management, and Francis Market disappear from the Marketing Guidebook suggesting that they went out of business or were acquired by others. Nine of their 18 stores were superstores.

What conclusions can we make from the Twin County demise that are pertinent to the Wakefern situation? 1) If a cooperative wholesaler loses 40-50 percent of its wholesale sales volume, it goes out of business. A lesser volume may suffice. 2) Stop & Shop will make repeated moves to acquire cooperative members with superstores in the New York and New Jersey area. 3) Most supermarkets operators not acquired by Stop & Shop operated small supermarkets. They were able to switch to another wholesaler, however, these smaller stores do not compete effectively against superstores.³

In conclusion, the Twin County demise is suggestive, but in no way does it provide conclusive evidence that Stop & Shop's move on Big V will result in the demise of Wakefern ShopRite.

Next, let us explain the impact of a Big V exit from Wakefern Food Corporation on Wakefern's wholesaling charges to its members. This is the first step towards determining how many ShopRite supermarkets may be forced out of business or into a sale to Stop & Shop or Pathmark via the bankruptcy route if their acquisition of Big V is vetted as a legal strategy. Wakefern did a very extensive and thorough analysis of the cost impact of a Big V exit in December 1997. At that time, top Wakefern executives realized that Big V was in trouble and might attempt to leave the cooperative. The resulting cost impact study was not prepared for litigation.

According to Wakefern executive Douglas Willy who was in charge of the study, it took five to six weeks to complete. Every division vice president was involved and impacts were built up from line items in Wakefern's budget. The detail of its method attests to its accuracy. It was done in-house with several executives who know their specific operations. This bottom up assembly procedure would not introduce a systematic bias absent an explicit directive from the top of Wakefern. Wakefern executives assure me that no such directive, for example, to come in with a high impact estimate was ever given to line staff that did this study. For these reasons its estimated impact as of December 1997 are unbiased.

Wakefern estimates that the exit of Big V would increase the assessment on each member .48% of the member's retail sales. It would increase the wholesaler's markups an amount equal to .33% of a members retail sales. The combined impact equals .81% of member retail sales (Wakefern Food Corporation Impact Study, Fiscal 1997/1998). This means that all measures of performance below the wholesale cost lines, including net before tax profits would be reduced .81% of sales. This reduction is not a one shot impact. It continues over several years.

Wakefern updated the 1997 study in October 2000. According to Mr. Willy, the update was not as extensive as the first assessment. It took about a week to run new, more recent data through the parameters and guidelines established in the prior study. The exit of Big V increases the wholesaler assessment on each retailer an amount equal to .57% of the retailer's sales. It increases the wholesale markup on each retailer an amount equal

² These acquisitions introduced Stop & Shop supermarkets to New Jersey and Long Island.

³ This is especially true for D'Agostino which is located in Manhattan, a market unto itself with very few superstores.

⁴ Information conveyed by Mr. Willy in a telephone conference with him, Kenneth Jasinkiewicz and James Watson, April 18, 2002.

to .32% of the retailer's sales. Thus, the total impact is now estimated to be .89% of retail sales (Wakefern Food Corporation, Big V Impact Study, Fiscal 00/01).

How serious is a .89% reduction in net profits? The Food Marketing Institute recently reported, "over the last decade, supermarket industry net after tax profits have averaged .89 percent a year" (Food Marketing Institute). If ShopRite supermarkets are "average," and their effective corporate tax rate is low, the Big V impact wipes out nearly all of their net profits. ⁵

Returning to the domino effect, this leads us to the critical question; How many ShopRite stores and what percent of wholesale volume would be forced into bankruptcy or liquidation by a .89% of retail sales reduction in before tax net profits? To answer this question we would need profit and financial leverage data for each store or Wakefern member. Wakefern has not supplied such data on its members; however, it estimates that 20 stores would be forced into bankruptcy. Figure 1 is a frequency chart that orders all ShopRite stores, excluding Big V stores by annual sales volume. The average ShopRite sells \$42.6 million annually. If the 20 impacted stores are average sized stores, the lost sales impact on Wakefern Food Corporation would be \$852 million. If the 20 impacted stores are the smallest in Wakefern Food Corporation, the lost sales volume would be \$405.6 million. These lost volume estimates constitute 13% and 6.2% of Wakefern's pre Big V wholesale volume (\$3.95 billion). Recall that the loss of Big V is 13% of Wakefern volume. Thus, the cumulative first round (Big V) and second round effect (loss of another 20 stores) would be a minimum 19.2% and quite possibly as high as 26%. Clearly, the assessment and markups after round 2 would be ratchet up and pull more ShopRite stores down. The domino effect is real and would cause the cooperative to implode.

This analysis is driven only by higher wholesaling costs, however, predatory moves on the demand side are also very real. Table 9 identifies the largest ShopRite members. If the Big V bankruptcy strategy to exit the cooperative is vetted, then Ahold/Pathmark will be targeting possibly with price or promotion wars, chains such as Foodarama, Village Supermarkets, and Inserra Supermarkets, the big 3 after Big V.

There are two possible mitigating factors, however, they do not prevent the domino effect. First is the fact that if Big V is sold to Ahold/Pathmark, Wakefern will receive approximately \$75 million as a one-time

payment (the bankruptcy discounted withdrawal fee). However, Wakefern must pay taxes on it and it maintains, credibly, that the net amount would quickly be consumed in price wars that they see coming from Ahold/Pathmark because those chains know the ShopRite system is vulnerable to collapse without Big V. Second is the idea that Wakefern could purchase its bankrupt stores at severely discounted prices effectively shifting the burden of higher costs onto its failing members and their creditors. This argument, however, ignores the Big V precedent. Ahold, Pathmark and any other large competitor including C&S Wholesale, who would benefit from the demise of the ShopRite group would be willing to pay much more for the bankrupt stores than a weakened Wakefern would be able to pay. Recall that the payoff to Ahold and Pathmark for the complete demise of the ShopRite system as \$186 million each year (Table 7) and their investment in Big V to capture this payoff was at most \$100 million. Ahold and Pathmark can spend several million dollars picking off other Wakefern ShopRite® stores and still recoup their investment.

7. The Outside Buyer Option

If Big V is purchased by an outside buyer, the same disastrous cost elevation cycle could destroy Wakefern/ShopRite®. However, the critical question is, would an outside buyer be willing to pay more for Big V than Wakefern/ShopRite®? An outside buyer is someone who operates no stores in the Wakefern/ShopRite® sales region and who chooses to not join Wakefern/ShopRite®. Such a buyer would not be willing to pay \$255 million for the 27 Big V ShopRites® for two very important reasons. First, an outside buyer would not benefit from increased market share and increased pricing power in the Big V market and trade areas. Second, an outside buyer would not benefit from the implosion of Wakefern/ShopRite® in other market areas because it is not already operating supermarkets in those areas.

An outside buyer would only be willing to pay an amount for the Big V chain that reflects a "discount" for the amount of investment needed to upgrade the stores to competitive parity, and the earnings /cash flow potential of those stores in the markets where they compete. Under these circumstances, an outside buyer could not rationally pay a price for the Big V stores that is greater than the price that Wakefern/ShopRite® would be willing to pay to retain Big V's stores and their contribution to the cooperative's volume. Unlike Ahold and Pathmark, the outside buyer could not recoup any additional investment.

⁵ If their effective tax rate is t, 0#t#1, and the after tax profits B_A =(1-t) B_B where B_B =before tax profits. If B_B decreases .89% of sales, then B_A decreases (1-t).89% of sales.

References

- Big V Supermarkets et al. v. Wakefern Food Corp., 267 B.R. 71.
- Cotterill, Ronald W., and Associates. 2002. An Antitrust Economic Analysis of Stop & Shop Proposed Acquisition of the Big V Shop Rite Supermarket Chain.
- Food Institute. 1995. Food Institute Report. October, 16:2.
- Food Marketing Institute. *Competition and Profit*. http://www.fmi.org.
- Murray, Shanon. 2002. Stop & Shop Would Sell Big V Stores to Pathmark. *The Daily Deal*, March 4.
- SEC 1999. An Antitrust Economic Analysis of the Proposed Acquisition of Supermarkets General Holdings Corporation by Ahold Acquisition Inc. Food Marketing Policy Center Research Report No. 46. University of Connecticut, Storrs, CT.
- Trade Dimensions. *Marketing Guidebook*, Interactive Market System, Wilton CT, various years 1995-2002.
- Wakefern Food Corporation. Impact Study, Fiscal 1997/1998.Wakefern Food Corporation. Big V Impact Study, Fiscal 2000/2001.

Table 1. Leading Wholesalers in the Northeast Coastal Region¹

	Total No.	Total No.	
	Stores	Superstores	%
	Supplied	Supplied	Superstores
Wakefern	205	195	95.1
C&S Wholesale	615	415	67.5
White Rose	340	50	14.7
Buzzuto's	195	13	6.7
SuperValu	629	212	33.7
Fleming	216	45	20.8
Associated Food Stores	195	0	0.0
General Trading	170	0	0.0
Key Foods	115	5	4.3
Krasdale	275	10	3.6

¹ The northeast coastal region is defined to include the Boston, Hartford, New York, Baltimore/Washington, and Philadelphia *Marketing Guidebook*, 2002 market areas.

Source: Trade Dimensions, Marketing Guidebook, 2002. Interactive Market Systems, Wilton, CT.

Table 2. Wholesale Market Positions in the Greater New York Market Area

	Grocery	Supermarket
	Wholesale	Wholesale
	Store	Market
	Market	Share ¹
	Share	
Wakefern	31.07	39.92
C&S Wholesale	26.83	34.47
White Rose	17.43	22.4
Krasdale	6.84	
Key Foods	4.94	
Associated Food Stores	4.64	
General Trading	3.58	
SuperValu	2.50	3.21
Buzzuto's	2.18	
CR4	82.17	100.00
HHI	2106	3294
HHI if C&S captures all Wakefern	3773	6045
Increase in HHI	1667	2751

¹ Includes only those wholesalers where superstore (sales greater than \$12 Million) account for more than 10 percent of store implied (Table 1).

Source: Trade Dimensions, Marketing Guidebook, 2002. Interactive Market Systems, Wilton, CT.

Table 3. Wholesale Market Positions in the Greater Philadelphia Market Area

	Grocery Store	Superstore
	Wholesale	Wholesale
	Market	Market
	Share	Share ¹
Wakefern	28.85	28.85
C&S Wholesale	25.97	25.97
SuperValu	25.59	25.59
Fleming	19.59	19.59
CR4	100.00	100.00
ННІ	2545	2545
HHI if C&S captures all Wakefern sales	4043	4043
Increase in HHI	1498	1498

¹ Includes only those wholesalers where superstore (sales greater than \$12 Million) account for more than 10 percent of store implied (Table 1).

Source: Trade Dimensions, Marketing Guidebook, 2002. Interactive Market Systems, Wilton, CT.

Table 4. Wholesale Market Positions in the Greater Hartford Market Area

	Grocery Store Wholesale	Supermarket Wholesale
	Market	Market
	Share	Share ¹
C&S Wholesale	47.46	55.63
SuperValu	21.57	25.28
Wakefern	16.28	19.08
Buzzuto's	14.69	
CR4	100.00	100.00
ННІ	3199	4099
HHI if C&S captures all Wakefern sales	4744	6222
Increase in HHI	1545	2123

¹ The northeast coastal region is defined to include the Boston, Hartford, New York, Baltimore/Washington, and Philadelphia *Marketing Guidebook*, 2002 market areas.

Source: Trade Dimensions, Marketing Guidebook, 2002. Interactive Market Systems, Wilton, CT

Table 5. Consumer Impact of the Ahold/Pathmark Predatory Move on Wakefern/ShopRite

							Annual Total County	Annual Dollar Impact
		Pre-merger	Post-merger		% Change	% Change	Supermarket	of Price Change on
County	State	HHI	HHI	Delta	HHI	Price	Sales (x000)	Consumers (x000)
Fairfield	CT	2762	3461	699	25.3	1.6	1,366,560	21,857.4
Hartford	CT	2508	2741	233	9.3	0.6	1,321,060	7,756.5
New Haven	СТ	3299	4078	779	23.6	1.5	1,233,960	18,415.1
New London	СТ	2636	3479	843	32.0	2.0	324,220	6,553.0
total CT							4,245,800	54,582
New Castle	DE	1811	2205	394	21.8	1.4_	782,600	10,760.6
total DE							782,600	10,761
Atlantic	NJ	3227	2639	-588	-18.2	-1.2	330,980	-3,811.5
Bergen	NJ	1721	2312	591	34.3	2.2	1,726,400	37,468.4
Burlington	NJ	1846	3278	1432	77.6	4.9	540,800	26,513.4
Camden	NJ	1435	2289	854	59.5	3.8	513,500	19,313.6
Cape May	NJ	3901	5288	1387	35.6	2.2	236,600	5,316.6
Cumberland	NJ	2349	3837	1488	63.3	4.0	203,580	8,150.3
Essex	NJ	1302	2285	983	75.5	4.8	959,660	45,790.7
Gloucester	NJ	2987	4464	1477	49.4	3.1	333,580	10,424.7
Hudson	NJ	1630	2020	390	23.9	1.5	612,040	9,254.9
Hunterdon	NJ	3601	2173	-1428	-39.7	-2.5	221,000	-5,538.8
Middlesex	NJ	1456	2350	894	61.4	3.9	1,177,800	45,705.1
Monmouth	NJ	1831	1779	-52	-2.8	-0.2	1,147,900	-2,060.3
Morris	NJ	1043	1850	807	77.4	4.9	976,300	47,740.8
Ocean	NJ	1669	1474	-195	-11.7	-0.7	916,500	-6,767.5
Passaic	NJ	1344	1936	592	44.0	2.8	608,400	16,936.7
Salem	NJ	3421	4285	864	25.3	1.6	70,980	1,133.0
Somerset	NJ	1653	1749	96	5.8	0.4	560,300	2,056.5
Sussex	NJ	4280	2896	-1384	-32.3	-2.0	250,900	-5,127.6
Union	NJ	1444	1681	237	16.4	1.0	614,380	6,372.9
Warren	NJ	2224	5193	2969	133.5	8.4_	213,200	17,987.9
total NJ							12,214,800	276,860
Kings	NY	770	824	54	7.0	0.4	1,310,400	5,808.0
Nassau	NY	1489	1700	211	14.2	0.9	1,780,480	15,945.6
Richmond	NY	2476	3206	730	29.5	1.9	479,440	8,933.5
Rockland	NY	1951	2596	645	33.1	2.1	383,500	8,012.8
Suffolk	NY	1880	2048	168	8.9	0.6_	1,816,100	10,256.7
total NY							5,769,920	48,957
Bucks	PA	1146	1253	107	9.3	0.6	953,160	5,624.5
Chester	PA	1883	2085	202	10.7	0.7	600,600	4,072.0
Lehigh	PA	1193	1295	102	8.5	0.5	487,500	2,634.2
Monroe	PA	2137	3247	1110	51.9	3.3	247,000	8,108.4
Montgomery	PA	1550	1627	77	5.0	0.3	1,055,600	3,314.2
Northampton	PA	1591	1851	260	16.3	1.0	338,884	3,500.0
Philadelphia	PA	1093	1850	757	69.3	4.4	1,314,560	57,540.4
total PA						_	4,997,304	84,794
grand total						_	28,010,424	475,952

Table 6. Analysis of the Interaction of Wakfern/ShopRite, Ahold, and Pathmark and the Market Share Gains for the Latter Two Firms if Wakefern/ShopRite Fails.

				Store Numbers		Share (%)		Predation : Share (%)	Increase in Share	
County	St	ShopRite	Ahold	Pathmark	Ahold	Pathmark	Ahold	Pathmark	Ahold	Pathmark
Fairfield	CT	5	16	0	48.14		55.85		7.71	
Hartford	CT	2	17	0	45.76		47.93		2.17	
New Haven	CT	4	19	0	55.94		62.46		6.52	
New London	CT	2	6	0	44.91		55.72		10.81	
New Castle	DE	3	2	4	5.81	14.62	6.94	17.46	1.13	2.84
Atlantic	NJ	4	0	1		6.68		13.60		6.92
Bergen	NJ	15	12	7	14.98	12.05	26.58	21.37	11.60	9.32
Burlington	NJ	5	2	1	7.45	5.29	11.23	7.97	3.78	2.68
Camden	NJ	4	4	3	16.71	13.92	25.58	21.32	8.87	7.40
Cape May	NJ	1	0	0						
Cumberland	NJ	3	0	1		10.86		23.74		12.88
Essex	NJ	7	1	9	2.44	24.52	4.07	40.89	1.63	16.37
Gloucester	NJ	4	1	1	4.29	7.40	8.09	13.97	3.80	6.57
Hudson	NJ	5	2	5	4.89	26.13	7.62	40.76	2.73	14.63
Hunterdon	NJ	2	1	0	7.65		17.57		9.92	
Middlesex	NJ	12	7	8	12.25	18.76	21.81	33.40	9.56	14.64
Monmouth	NJ	9	5	7	8.61	15.52	12.58	22.68	3.97	7.16
Morris	NJ	10	3	7	6.66	16.11	12.25	29.66	5.59	13.55
Ocean	NJ	7	6	3	11.06	10.50	20.10	19.07	9.04	8.57
Passaic	NJ	5	3	5	10.26	19.44	15.84	30.03	5.58	10.59
Salem	NJ	1	0	0						
Somerset	NJ	6	4	2	13.92	9.28	26.55	17.70	12.63	8.42
Sussex	NJ	3	1	0	10.88		28.77		17.89	
Union	NJ	5	5	4	14.60	20.31	20.26	28.19	5.66	7.88
Warren	NJ	3	1	0	8.54		22.58		14.04	
Kings	NY	1	2	7	6.55	17.76	6.88	18.67	0.33	0.91
Nassau	NY	3	15	13	19.57	19.57	21.14	21.14	1.57	1.57
Richmond	NY	3	0	4		31.45		45.17		13.72
Rockland	NY	5	4	2	22.37	12.20	40.00	21.82	17.63	9.62
Suffolk	NY	2	16	14	19.26	20.26	20.15	21.20	0.89	0.94
Bucks	PA	2	0	4		11.18		11.86		0.68
Chester	PA	1	0	0						
Lehigh	PA	1	0	0						
Monroe	PA	2	0	0						
Montgomery	PA	1	0	1		3.69		3.79		0.10
Northampton	PA	1	0	0						
Philadelphia	PA	11	0	8		17.60		24.92		7.32
Average			_		16.94	15.21	23.94	22.93	7.00	7.72
Total		160	155	118						

Source: Data in Attachment A.

Table 7. Sales and Profit Impacts for Ahold and Pathmark if Wakefem/ShopRite Fails

		Increase Annual Sales			Annual Profits rice Increase (x000)
County	State	Ahold	Pathmark	Ahold	Pathmark
Fairfield	СТ	105,361.8	0.0	12,207.4	0.0
Hartford	СТ	28,667.0	0.0	3,717.7	0.0
New Haven	CT	80,454.2	0.0	11,502.1	0.0
New London	СТ	35,048.2	0.0	3,651.3	0.0
Total		249,531.2	0.0	31,078.5	0.0
New Castle	DE _	8,843.4	22,225.8	746.8	1,878.8
Total		8,843.4	22,225.8	746.8	1,878.8
Atlantic	NJ	0.0	22,903.8	0.0	-518.4
Bergen	NJ	200,262.4	160,900.5	9,959.1	8,007.0
Burlington	NJ	20,442.2	14,493.4	2,977.5	2,113.1
Camden	NJ	45,547.5	37,999.0	4,940.4	4,117.7
Cape May	NJ	0.0	0.0	0.0	0.0
Cumberland	NJ	0.0	26,221.1	0.0	1,934.9
Essex	NJ	15,642.5	157,096.3	1,863.7	18,723.8
Gloucester	NJ	12,676.0	21,916.2	843.4	1,456.3
Hudson	NJ	16,708.7	89,541.5	705.2	3,772.3
Hunterdon	NJ	21,923.2	0.0	-973.2	0.0
Middlesex	NJ	112,597.7	172,429.9	9,968.3	15,265.5
Monmouth	NJ	45,571.6	82,189.6	-259.2	-467.3
Morris	NJ	54,575.2	132,288.7	5,848.2	14,159.9
Ocean	NJ	82,851.6	78,544.1	-1,360.3	-1,290.6
Passaic	NJ	33,948.7	64,429.6	2,682.8	5,086.1
Salem	NJ	0.0	0.0	0.0	0.0
Somerset	NJ	70,765.9	47,177.3	546.0	364.0
Sussex	NJ	44,886.0	0.0	-1,475.2	0.0
Union	NJ	34,773.9	48,413.1	1,291.1	1,796.5
Warren	NJ _	29,933.3	0.0	4,061.7	0.0
Total		843,106.4	1,156,544.1	41,619.5	74,520.9
Kings	NY	4,324.3	11,924.6	399.6	1,084.3
Nassau	NY	27,953.5	27,953.5	3,370.9	3,370.9
Richmond	NY	0.0	65,779.2	0.0	4,035.3
Rockland	NY	67,611.1	36,892.7	3,205.1	1,748.4
Suffolk	NY _	16,163.3	17,071.3	2,066.7	2,174.4
Total		116,052.2	159,621.4	9,042.3	12,413.4
Bucks	PA	0.0	6,481.5	0.0	667.1
Chester	PA	0.0	0.0	0.0	0.0
Lehigh	PA	0.0	0.0	0.0	0.0
Monroe	PA	0.0	0.0	0.0	0.0
Montgomery	PA	0.0	1,055.6	0.0	125.6
Northampton	PA	0.0	0.0	0.0	0.0
Philadelphia	PA	0.0	96,225.8	0.0	14,339.1
Total		0.0	103,762.9	0.0	15,131.7
Grand Total		1,217,533.1	1,442,154.2	82,487.1	103,944.8

Table 8. Documentation of the Demise of Twin County Grocers Cooperative: Annual Sale's and Store Count Data for the Wholesale and Leading Members.

Wholesale and Leading Members.	1004	1007	1007	1007	1000	2000
T : C . C . T . I C	1994	1995	1996	1997	1998	2000
Twin County Grocers Total Company	1.65	120	110	105		
# stores	165	139	110	105		
Total Wholesale Sales (\$ Billion)	1.1	0.8^{2}	0.6	0.7		
Twin County Members ¹						
Mayfair Supermarkets						
Elizabeth, NJ						
# stores/# superstores	29/21					
Retail Sales (\$ Billion)	0.6					
% of Twin County	33.27					
Grocery Wholesaler	TC	TC				
Change of Ownership		S&S	S&S	S&S	S&S	S&S
Melmarkets Inc. ³						
Garden City, NJ						
# stores/# superstores	18/8	16/8				
Retail Sales (\$ Billion)	0.4	0.39				
% of Twin County	22.2	21.6				
Grocery Wholesaler	TC	TC				
Change of Ownership			S&S	S&S	S&S	S&S
Food Circus Supermarkets						
Middletown, NJ						
# stores/# superstores	12/2	12/8	12/8	12/8	11/5	11/5
Retail Sales (\$ Billion)	0.191	0.189	0.17	0.18	0.18	0.159
% of Twin County	10.6	10.5	17.3	15.7		
Grocery Wholesaler	TC	TC	TC	TC	WR	WR
Change of Ownership						
D'Agostino						
Larchmont, NY						
# stores/# superstores	26/0	26/0	25/0	25/0	25/0	24/0
Retail Sales (\$ Billion)	0.19	0.191	0.187	0.2	0.2	0.182
% of Twin County	10.5	10.6	19.0	17.4		
Grocery Wholesaler	TC	TC	TC	TC	SV	SV
Change of Ownership						
Vitale Foodtown, Old Tappan, NJ						
# stores/# superstores	12/7	10/6	10/6			
Retail Sales (\$ Billion)	0.12	0.1	0.1			
% of Twin County	6.7	5.5	10.2			
Grocery Wholesaler	TC	TC	TC			
Change of Ownership						

Table 8. Continued

	1994	1995	1996	1997	1998	2000
Weisek Management Inc.						
Clifton, NJ						
# stores/# superstores	7/0	6/0				
Retail Sales (\$ Billion)	0.07	0.07				
% of Twin County	3.88	3.88				
Grocery Wholesaler	TC	TC				
Change of Ownership						
Norkus Enterprises						
Point Pleasant, NJ						
# stores/# superstores	5/0		4/0	4/0	4/0	6/0
Retail Sales (\$ Billion)	0.096		0.063	0.07	0.08	0.11
% of Twin County	5.3		6.4	6.1		
Grocery Wholesaler	TC		TC	TC	WR	WR
Change of Ownership						
Francis Market Ltd.						
Neptune City, NJ						
# stores/# superstores		2/0	2/0	2/0	2/0	
Retail Sales (\$ Billion)		0.05	0.05	0.044	0.054	
% of Twin County		2.8	5.1	3.8		
Grocery Wholesaler		TC	TC	TC	WR	
Change of Ownership	Norkus	Francis				
Nicholas						
Haledon, NJ	4/0	E /1	10/0	0/0	0/0	1/0
# stores/# superstores Retail Sales (\$ Billion)	4/0	5/1	10/0	9/0	9/0	4/0
	0.06	0.055 3.1	0.12 12.2	0.11 9.6	0.11	0.061
% of Twin County Grocery Wholesaler	3.3 TC	TC	TC	TC	Buz	Duz
Change of Ownership	TC	IC	IC	IC	Duz	Buz
Davidson Bros.						
East Brunswick, NJ						
# stores/# superstores	4/0	4/3	4/3	3/3		
Retail Sales (\$ Billion)	0.08	0.05	0.067	0.057		
% of Twin County	4.4	2.8	6.8	5.0		
Grocery Wholesaler	TC	TC	TC	TC		
Change of Ownership						
Manyfoods Inc, Whippany, NJ						
# stores/# superstores	3/0	3/0	2/0	2/2	2/2	2/2
Retail Sales (\$ Billion)	0.04	0.042	0.03	0.039	0.041	0.036
% of Twin County	2.2	2.3	3.1	3.4		
Grocery Wholesaler	TC	TC	TC	TC	WR	WR

Table 8. Continued.

	1994	1995	1996	1997	1998	2000
P.S.K. Supermarkets						
Mt. Vernon, NY						
# stores/# superstores			10/0	10/0	10/0	11/0
Retail Sales (\$ Billion)			0.08	0.088	0.055	0.071
% of Twin County			8.1	7.7		
Grocery Wholesaler			TC	TC	WR	WR
Change of Ownership						

Source: Trade Dimensions Marketing Guidebook, various years.

¹ Ranked by 1994 Sales

² Prorates Mayfair one half year since it was acquired by Royal Ahold, July 1, 1995 (Trade Dimensions, Marketing *Guidebook*, 1996.

³ Stop & Shop purchased Melmarkets at the end of 1995 (*Food Institute Report*, 10/16/1995.

S&S= Stop & Shop, WR=White Rose, TC=Twin County, SV=SuperValu, Buz=Buzzutto's

Table 9. Sales and Store Numbers for Wakefern Food Corporation and its Leading Members: 1994-2000.

	1994	1995	1996	1997	1998	2000
Wakefern Food Corporation Total Company						
# stores	175	181	189	189	195	205
Total Wholesale Sales (\$ Billion)	3.7	4.1	4.1	4	3.95	3.95
Wakefern Members ¹						
New York Market Area						
Big V, Florida, NY						
# stores/# superstores	31/31	32/32	31/31	32/32	32/32	32/32
Total Retail Sales (\$ Billion)	0.662	0.689	0.69	0.763	0.814	0.84
% WFC Sales ²	10.9	10.3	10.3	11.6	12.6	13.0
Village Super Market, Springfield, NJ						
# stores/# superstores	24/12		24/12	24/12	23/12	22/11
Total Retail Sales (\$ Billion)	0.695	0.677	0.689	0.689	0.704	NA
% WFC Sales	11.5	10.1	10.3	10.5	10.9	NA
Foodarama, Freehold, NJ						
# stores/# superstores	18/NA	18/NA	20/NA	20/NA	21/17	22/18
Total Retail Sales (\$ Billion)	0.607	0.54	0.601	0.637	0.697	0.886
% WFC Sales	10.0	8.0	8.9	9.7	10.8	13.7
Inserra Supermarkets, Mahwah, NJ						
# stores/# superstores	25/16	24/16	23/16	23/16	22/15	22/15
Total Retail Sales (\$ Billion)	0.5	0.5	0.5	0.5	0.575	0.71
% WFC Sales	8.2	7.4	7.4	7.6	8.9	11.0
Ronetco Supermarkets, Ledgewood, NJ						
# stores/# superstores	5/5	5/5	5/5	5/5	6/6	6/6
Total Retail Sales (\$ Billion)	0.132	0.181	0.161	0.204	0.232	0.268
% WFC Sales	2.2	2.7	2.4	3.1	3.6	4.1
Glass Gardens, Rochelle Park, NJ						
# stores/# superstores	6/6	6/6	6/6	6/6	7/7	7/7
Total Retail Sales (\$ Billion)	0.167	0.172	0.177	0.17	0.21	0.281
% WFC Sales	2.8	2.6	2.6	2.6	3.2	4.3
Perlmart, Toms River, NJ						
# stores/# superstores	5/5	4/4	4/4	4/4	4/4	5/5
Total Retail Sales (\$ Billion)	0.13	0.135	0.125	0.13	0.14	0.169
% WFC Sales	2.1	2.0	1.9	2.0	2.2	2.6

Source: Trade Dimensions *Marketing Guidebook*, various years. ¹ Ranked by size (1998 Sales) in each market area.

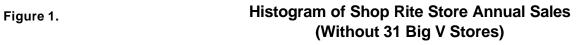
² Estimated by multiplying the ratio of a members retail sales to Wakefern wholesale sales by .61. This adjustment factor comes from the fact that Big V is 13% of Wakefern's wholesale business. In 2000, the ratio of Big V retail to Wakefern wholesale sales was 21.3%. To obtain the 13% figure, one must multiply 21.3 by .61. We have mad the same adjustment for all other firms.

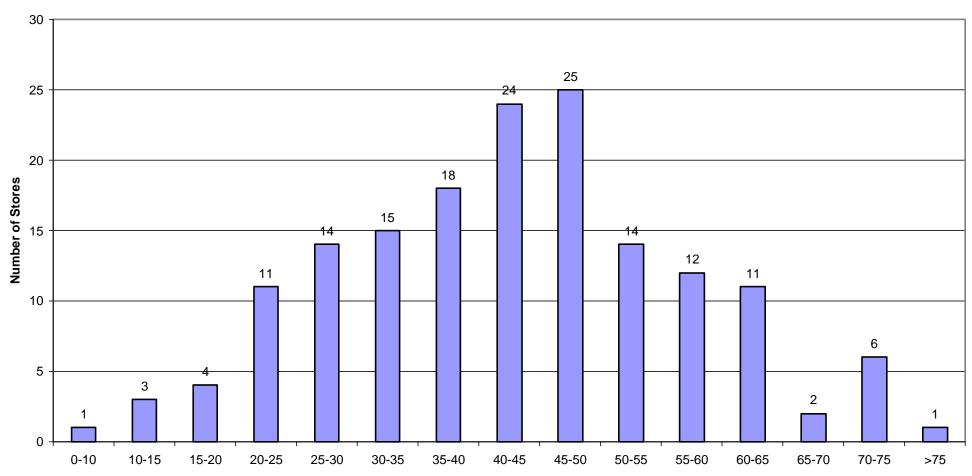
Table 9. Continued

Table 9. Continued	1994	1995	1996	1997	1998	2000
Colalillo Shoprite, Fleming, NJ						
# stores/# superstores					3/3	3/3
Total Retail Sales (\$ Billion)					0.063	0.11
% WFC Sales					1.0	1.7
ShopRite, Edison, N.J.						
# stores/# superstores					8/8	8/8
Total Retail Sales (\$ Billion)						
% WFC Sales						
Philadelphia Market Area						
Zallie Supermarkets						
Clementon, NJ						
# stores/# superstores	6/3	6/3	6/4	7/4	8/5	7/5
Total Retail Sales (\$ Billion)	0.185	0.15	0.17	0.187	0.23	0.275
% WFC Sales	3.1	2.2	2.5	2.9	3.6	4.2
Supermarkets of Cherry Hill						
Cherry Hill, NJ						
# stores/# superstores	7/0	7/4	6/4	4/4	4/4	4/4
Total Retail Sales (\$ Billion)	0.122	0.12	0.125	0.09	0.12	0.188
% WFC Sales	2.0	1.8	1.9	1.4	1.9	2.9
Shoprite of Pennington						
Trenton, NJ	7.10	7.10	5.00	5.10	7.10	
# stores/# superstores	5/0	5/0	5/0	5/0	5/0	
Total Retail Sales (\$ Billion)	0.099	0.105	0.105	0.101	0.106	
% WFC Sales	1.6	1.6	1.6	1.5	1.6	
Glazier Philadelphia, PA						
# stores/# superstores					3/3	
Total Retail Sales (\$ Billion)					0.045	
% WFC Sales					0.7	
Landis Supermarkets						
Telford, PA						
# stores/# superstores				2/2	2/2	2/2
Total Retail Sales (\$ Billion)				0.04	0.041	0.044
% WFC Sales				0.6	0.6	0.7
Delaware Supermarket Inc.						
Wilmington, DE						
# stores/# superstores				2/0	2/0	
Total Retail Sales (\$ Billion)				0.035	0.035	
% WFC Sales				0.5	0.5	

Table 9. Continued.

Shoprite	1994	1995	1996	1997	1998	2000
Philadelphia, PA						
# stores/# superstores			3/0	3/0	3/0	5/0
Total Retail Sales (\$ Billion)			0.035	0.03	0.032	0.11
% WFC Sales			0.5	0.5	0.5	1.7
Brown's Super Store Inc.						
Bellmawr, NJ						
# stores/# superstores						6/6
Total Retail Sales (\$ Billion)						0.15
% WFC Sales						2.3
Hartford Market Area						
Grade A Supermarkets						
Norwalk, CT						
# stores/# superstores	3/2	3/3	4/4	4/4	4/4	5/5
Total Retail Sales (\$ Billion)	0.101	0.11	0.105	0.108	0.122	0.182
% WFC Sales	1.7	1.6	1.6	1.6	1.9	2.8





Annual Sales (\$ Million)
Avg=\$42.6 Million StDev=\$14.1 Million N=161, Total sales of smallest 20 stores =\$405.6 Million
Source: Wakefern Food Corp. Store Level Data Base, March 2002, Attachment A

FOOD MARKETING POLICY CENTER RESEARCH REPORT SERIES

This series includes final reports for contract research conducted by Policy Center Staff. The series also contains research direction and policy analysis papers. Some of these reports have been commissioned by the Center and are authored by especially qualified individuals from other institutions. (A list of previous reports in the series is given on the inside back cover.) Other publications distributed by the Policy Center are the Working Paper Series, Journal Reprint Series for Regional Research Project NE-165: Private Strategies, Public Policies, and Food System Performance, and the Food Marketing Issue Paper Series. Food Marketing Policy Center staff contribute to these series. Individuals may receive a list of publications in these series and paper copies of older Research Reports are available for \$20.00 each, \$5.00 for students. Call or mail your request at the number or address below. Please make all checks payable to the University of Connecticut. Research Reports can be downloaded free of charge from our website given below.

> Food Marketing Policy Center 1376 Storrs Road, Unit 4021 University of Connecticut Storrs, CT 06269-4021

Tel: (860) 486-1927 FAX: (860) 486-2461 email: fmpc@uconn.edu http://www.are.uconn.edu/fmktc.html