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Food Marketing Policy Center

An Antitrust Economic Analysis of Stop & Shop's Proposed Acquisition of the Big V Shop Rite Supermarket Chain

by Ronald W. Cotterill

Food Marketing Policy Center
Research Report No. 63
February 2002

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University of Connecticut
Department of Agricultural and Resource Economics

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Affiliation

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Preface

In early 2002, the Royal Ahold subsidiary, Stop & Shop Supermarkets, offered to purchase the Big V supermarket chain, which was in bankruptcy court after three successive, unsuccessful leveraged buyouts over the past ten years. At a later date, Pathmark Supermarkets joined the offer to purchase. Big V was Wakefern Food Corporation's largest member. The acquisition was a horizontal merger in at least three local markets, Newburgh NJ, Poughkeepsie NY, and Trenton NJ.

This research was conducted for the Wakefern Food Corporation who provided much of the underlying data and information. We presented this report to the Bureau of Competition, Federal Trade Commission in March 2002 and to the New Jersey and New York Attorney Generals, Antitrust Section in April 2002. Thereafter, the Federal Trade Commission issued a second request in its merger review, and the bankruptcy judge ruled against the Stop & Shop/Pathmark offer. Big V subsequently was purchased by Wakefern and remains in the Shop Rite supermarket cooperative system.

Key words: horizontal merger, market power, predation

Executive Summary

- Starwood Ceruzzi purchased three Big V Shop Rite stores in the Poughkeepsie New York market (Dutchess County) in February 2001. Starwood Ceruzzi closed one of the three stores and it is vacant, across the street from a Stop & Shop. The remaining two are operated as Stop & Shops. This sale removed the three stores from the Wakefern Cooperative system, violating the Wakefern Stockholders Agreement and thus triggered payments required under the Stockholders Agreement that have not yet been paid.
- In February 2002, Royal Ahold/Stop & Shop offered to purchase 27 of the remaining 31 Big V Shop Rite stores for \$255 million.
- Many of the Big V stores are run down due to the lack of remodeling or expansion because the triple LBOed Big V was forced to funnel cash flow to debt holders.
- At an average price of \$9.44 million per store, the Royal Ahold/Stop & Shop offer is paying for more than bricks and mortar. It is buying Big V Shop Rite's consumer franchise, its store sites, its market share, and the attendant increase in market price (ability to raise prices) when Big V Shop Rite is converted and combined with the Stop & Shop franchise.
- The conversion of Big V Shop Rites to Stop & Shops will actually raise the wholesaling charges that these supermarkets pay. C&S Wholesale Supply is higher priced than Wakefern. This fact was documented and relied upon in a recent bankruptcy court decision (Big V Supermarkets et al. v. Wakefern Food Corp., 267 B.R. 71 at 19).
- An examination of the impact of the 27 store acquisition at the trade area level indicates that for 11 of these stores, the combination with Stop & Shop or Super G (Royal Ahold in Trenton) results in Royal Ahold's merged entity controlling more than 50 percent of trade area sales, or being the sole remaining competitor where the leader has 65 percent of trade area sales (one store).
- An unhealthy symmetry also exists in many of these merged trade areas. In the Trenton, Newburgh, or Poughkeepsie market areas and in Westchester County, for nearly all impacted stores within one of these areas, the number two firm is identical, and in most the number three firm is also identical. For example, in the Trenton market, each merged Super G Big V duo faces Acme as a distant number two and Super Fresh (A&P) as an even more distant number three firm. This symmetric arrangement facilitates and significantly enhances the likelihood of tacit collusion.
- There are four other trade area markets where the impact of the merger is questionable and may raise consumer prices.
- One is able to define relevant geographic markets for supermarket sales (the product market) for Poughkeepsie, Newburgh, and Trenton. Using the Metro Market Studies annual trade publications one can examine the trend in seller concentration for Poughkeepsie, Newburgh, and Trenton. From 1994 to 2000 the HHI increased slightly from 2301 to 2326 in Poughkeepsie and decreased from 3446 to 2688 in Newburgh. In spite of the disintegration of Grand Union and Big V and the entry of Wal-Mart, concentration remains extremely high, well above the 1800 point "challenge likely" cutoff, in these New York Markets. The HHI increased from 1308 to 1614 in Trenton.
- Using current (February 2002) store level data, one can compute the HHI and the change in HHI for the Poughkeepsie, Newburgh, and Trenton markets if Stop & Shop acquires the 27 stores.
- If the sales of the Wappinger Falls Big V Shop Rite, a store that is not being acquired because it will be forced to close, are captured by other stores in the area in proportion to their sales volumes, then the HHI for the Poughkeepsie market increases 794 points from 2020 to 2814. Stop & Shop's post acquisition market share is 49.3 percent.
- Alternatively, if the antitrust agencies block the current acquisition and undo the January 2000 acquisition of the Big V Shop Rites by returning them to Big V, then the HHI in the Poughkeepsie market drops 382 points from 2020 to 1638. This moves the HHI to a level below the Merger Guideline's 1800 point "challenge likely" threshold.

- In the Newburgh New York market, the proposed Royal Ahold acquisition increases the HHI 1501 points from 3090 to 4591. The combined market share of Stop & Shop and Big V gives the Stop & Shop chain a 65.5 percent post acquisition market share.
- In the Trenton New Jersey market, the proposed Royal Ahold acquisition increases the HHI 722 points from 2240 to 2962. Royal Ahold/Super G market share after the Mayfair acquisition in the mid 1990's and the proposed acquisition of Big V is 45.6 percent. They are the market leader via acquisition rather than by *de novo* entry (new store construction).
- Analysis of entry conditions indicates that entry barriers exist in the southern New York and Trenton New Jersey supermarket industry. Royal Ahold conduct in real estate markets, including lawsuits to prevent the entry of competitors, creates mobility barriers as well as entry barriers in New York and New Jersey markets. Entry would not be likely, timely or sufficient to defeat a nontransitory price increase due to the exercise of market power, post acquisition.
- Competitive effects analysis corroborates and sustains the structural analysis at the trade and market area level.
- Supermarkets in more concentrated markets charge higher prices. Recent analysis of Stop & Shop milk pricing in New England indicates Stop & Shop exercised price leadership and market power on this most important product in supermarkets, raising its prices above those of other smaller supermarkets after the 1996 Stop & Shop/Edwards merger in the Hartford and Providence IRI market areas.
- Prior analysis of Stop & Shop/Super G pricing indicate that they zone price and that prices are higher in a statistically significant fashion in more concentrated markets.
- Using the documented statistical relationship between the HHI and Stop & Shop prices, the increase in the HHI increases Stop & Shop retail prices 2.5 percent in Poughkeepsie.
- If Stop & Shop returns to Big V the two operating supermarkets that Starwood Ceruzzi bought and sold to Stop & Shop, the HHI in Poughkeepsie drops 18.9 percent. Stop & Shop retail prices would decline 1.2 percent.
- The 48.6 percent increase in the HHI in the Newburgh, New York market increases Stop & Shop retail prices 3.1 percent.
- The 32 percent increase in the HHI in the Trenton N.J. market increases Super G prices 2 percent.
- Wakefern Food Corporation estimates that the loss of Big V Shop Rite, their largest member, will reduce their volume 13 percent. They estimate that this will increase charges to cover fixed overhead \$212,000 for each supermarket in the cooperative system. Thus, the Royal Ahold acquisitions, if unchallenged, will raise a leading rival's costs thereby allowing Royal Ahold to raise prices to cover the cost of these acquisitions and also elevate their profits.
- In his opinion in the recent bankruptcy court case, the judge found that the impact comes perilously close to triggering financial covenants in Wakefern Food Corporation debt structure, the result of which would place Wakefern Food Corporation in Chapter 11. Thus, these strategic moves by Royal Ahold may ultimately be predatory because they may result in the destruction of a competitor by raising its costs to a level that forces the competition out of the region's market.
- Trade area analysis indicates that Royal Ahold should be required to divest 11 stores. These stores have annual sales of \$332 million, which is 38.1 percent of the 27 store total sales in the offer.
- Market level analysis indicates that Royal Ahold should be prohibited from acquiring all Big V Shop Rites in Poughkeepsie, Newburgh, and Trenton. When combined with the impacted trade area stores in Westchester County, Royal Ahold should be prohibited from acquiring 17 stores with \$523 million in sales that account for 59.8 percent of the 27 proposed acquisition stores sales estimate.
- Prior research on divestitures and post divestiture performance of stores shed by Royal Ahold to obtain approval of the Royal Ahold/Edwards acquisition of Stop & Shop indicate that divestiture is not a viable enforcement strategy. On this point, the six store divestiture to Ro-Jacks in Providence resulted in the bankruptcy of that chain.

- Divestiture in this case would be perverse. Wakefern would have to obtain approval of the antitrust agencies to buy back its member's stores. From an antitrust and cooperative economics perspective, the burden is on the wrong party. Competitors should not be allowed to use the antitrust process to severely weaken or destroy a cooperative. In this case, such action severely weakens or destroys the procompetitive impacts of the nation's largest wholesale grocery cooperative. The costs of its wholesaling services to Big V are lower than those of the alternative supplier to Big V, C&S Wholesale. Due to this fact and other reasons, the independent Shop Rite supermarket operators are tough competitors in the Northeast.
- For all of the reasons given in this report, I conclude that the current Royal Ahold offer to buy 27 Big V Shop Rite stores should be blocked and its prior purchase of the three Big V Shop Rites in the Poughkeepsie market should be undone. If further information becomes available, it might alter some of the analysis and intermediate conclusions in this report, however, I seriously doubt that any forthcoming information would alter my final conclusions. This is one of the most anticompetitive acquisitions that I have seen in the supermarket industry in 25 years.

1. Introduction

Wakefern Food Corporation ("Wakefern") is a wholesale grocery cooperative that services its 41 members—Wakefern stockholders—who own and operate Shop Rite supermarkets in New Jersey, New York, Connecticut, Pennsylvania and Delaware. Many of Wakefern's members are small businessmen who own only one or two ShopRite supermarkets. Although Wakefern provides a variety of financial, promotional, technological and other services to its members, the cooperative's most important function is to purchase food and non-food items in enormous volume for resale to its members who, in turn, sell the goods in ShopRite supermarkets. Big V Supermarkets, Inc. ("Big V") is the largest member of Wakefern.

Two transactions are examined in this report. Unless blocked by the Federal Trade Commission ("FTC"), both of these transactions will further The Stop & Shop Supermarkets Company's ("Stop & Shop") continuing rise to dominance via acquisition in the northeast United States. The largest transaction in question is Stop & Shop's February, 2002 proposal to acquire 27 of the remaining 31 Big V stores. The second transaction at issue is Stop & Shop's acquisition or lease of two former Big V Stores. In particular, a real estate developer that in the past has developed stores for Stop & Shop, Starwood Ceruzzi, purchased three Big V stores, and in February 2001 sold or leased two of them to Stop & Shop. The third, located across the street from an existing Stop & Shop supermarket, has remained without a tenant for over one year. As discussed later in this report (see Section 7), Starwood Ceruzzi's failure or refusal to lease this site is an example of yet another anti-competitive tactic ("land banking") being employed by Stop & Shop and its corporate parent, Royal Ahold, to eliminate competition. Through its relationship with Starwood Ceruzzi, Ahold/Stop & Shop are effectively obtaining control of shopping centers and other sites suitable for a supermarket in areas where Ahold or Stop & Shop operate, but are refusing to lease such sites to Stop & Shop competitors.

This report analyzes, among other things, the impact of these transactions on retail grocery prices in the lower Hudson Valley region¹ and Trenton, New Jersey, where Big V operates; whether consumers will have to pay higher prices or will receive less product variety as a result of diminishing competition among supermarket chains if the antitrust authorities do not challenge these transactions; and the consequences of these two

transactions in other markets (i.e., besides the Hudson Valley and Trenton markets) where chains owned by Royal Ahold (such as Stop & Shop, Giant, and Super G) and Wakefern members other than Big V compete.

The analyses and opinions offered in this report are based upon the following:

- Business documents provided by Wakefern, as cited.
- Store location maps prepared under my direction by Wakefern.
- Information from trade publications, including various annual issues of Metro Market Studies' ("MMS") *Grocery Distribution Analysis and Guide*.
- Industrial organization and cooperative economics research literature, as cited.
- My prior research on and expert economic analysis of Stop & Shop and the Ahold's acquisition of Stop & Shop in 1996, Ahold's attempted acquisition of Pathmark Supermarkets in 1999, and the Suiza Foods acquisition of the Stop & Shop milk processing plant in 2001. I performed the first and last analyses for Attorneys General for several New England states in connection with their antitrust review of these transactions.
- My research and expert economic analysis on behalf of a shopping mall owner in Milltown, New Jersey who was unsuccessfully sued by Royal Ahold for alleged violations of a contract to sell a store site to Ahold.
- My research and expert economic testimony in 1999 for Royal Ahold in its suit against Penn Traffic/Quality Foods Inc. The Royal Ahold claim was that Penn Traffic/Quality Foods Inc. attempted to and did monopolize the Jamestown, New York market.
- My research on retail milk pricing in New York and New England, including Stop & Shop pricing in IRI market areas.
- My research over 25 years on the market structure, conduct, and performance of the United States food industry, including the roles of cooperatives and supermarket chains.
- Discussions with Wakefern executives and others in the grocery industry and academia about the current matter.

2. Product Market Definition

The relevant product market for evaluating the competitive impact of the proposed Stop & Shop transactions is total retail sales (within a given geographic market) by supermarkets as defined in this section. Specifically, both Stop & Shop and Big V operate conventional supermarkets that primarily are superstores. Supermarkets and superstores are defined by *Progressive Grocer*, a leading trade publication, as:

¹ Here the lower Hudson Valley region is defined to include all counties where Big V operates including Westchester and Sullivan Counties.

Conventional Supermarket: Any full-line, self service grocery store generating a sales volume of \$2 million or more annually.

Superstore: A supermarket with at least 30,000 square feet, generating \$12 million or more annually and offering an expanded selection of non-food items. Specialty departments and extensive services are offered (Progressive Grocer, 2001, p. 13).

These stores routinely compete against other supermarkets for the primary patronage of consumers in the retail food market. The Progressive Grocer definition of a supermarket as a store with sales of more than \$2 million per year was established in the early 1980's. In its report, the USDA (Harris et al., 2002), adjusting only for inflation, redefined a supermarket as a store with year 2000 sales of \$4.18 million (\$80,000 per week). The expanded product line found in today's much larger supermarkets could justify further increasing the minimum sales requirement and initiating a minimum square foot requirement to qualify as a supermarket. Chevalier, in a work published in 1995, defines a supermarket as a store with more than 9,000 of selling floor space square feet and annual sales of at least \$2.0 million. In this report, I define a supermarket as a grocery store that offers a full array of food products (fresh meat, dairy, fresh produce, bakery, packaged grocery products) plus some non-food items (paper products, pet foods, household cleaners), with sales of at least \$80,000 per week (\$4.2 million per year). Sales by all stores that fit this definition of a supermarket contribute to the overall product market (i.e. retail supermarket sales) within a given geographic market or trade area.

3. Trade Area Analysis

Shifting now to trade area analysis, competition or the lack thereof among supermarkets can occur at the store level. An individual store may occupy such that powerful geographic position that even if the overall market area is competitive, an operator of a store can raise prices. Supermarket chains routinely use zone pricing (i.e., stores in different areas charge different prices) based upon, among other things, the competitive conditions confronting that store.

A supermarket's trade area is defined as that geographic space from which it draws most of its customers. The traditional trade area radius is three miles. In this study, I analyzed both three- and five-mile radius circles around each Big V store that Stop & Shop

proposes to acquire. For one Big V store (#209) in the very densely populated urban area of Yonkers, New York, I also examined supermarkets within a two-mile radius. All supermarkets located within a Big V store's trade area (as defined above) are included in my analysis of the competitive effects of Stop & Shop's proposed acquisition.²

A supermarket operator's pricing decisions depend upon a number of factors within a given trade area, including its share of sales in the trade area, the concentration of supermarkets in the area, the degree of enterprise differentiation (i.e., the extent to which different supermarkets in a trade area target consumers with different demographic profiles), and the "toughness" of competition from other supermarkets in the trade area. Each of these factors is discussed below and then applied to the proposed Stop & Shop/Big V combination.

First, a supermarket's share of sales in a trade area is significant because unilateral pricing tends to occur where a supermarket occupies a dominant position in the market and consumers have relatively few nearby alternatives. In the industrial organization literature and the antitrust case law, a common threshold for dominance (and the incipient exercise of unilateral market power) is a share of area sales above 40 percent with other firms having substantially lower shares of area sales (Scherer and Ross, p. 221).³

Second, the degree of enterprise differentiation is another important determinant of unilateral market power (Levy and Reitzes; Caves and Porter). To the extent that different supermarkets target different segments of the consuming public, they are not strong substitutes for one another.⁴ This allows each supermarket to elevate price because few consumers will switch stores in response to such a price increase. In the

² In trade area analysis, examining a larger trade area typically translates into a company or store having a lower share of area sales because more supermarkets are included in the analysis. In the current matter, however, this is not true. An analysis of three-mile trade areas identified seven stores where the proposed Stop & Shop acquisition increases the combined company's share of sales in the trade area to more than 50 percent. In an analysis of five-mile trade areas, the acquisition creates anti-competitive effects (as discussed below) in the trade areas of these seven stores and six additional stores, for a total of thirteen stores, because the Big V and Royal Ahold chains in combination saturate the geographic markets examined.

³ Greer (p. 493) uses a 30 percent share cutoff.

⁴ Industrial organization studies of the food retailing industry have documented the importance of market segmentation and mobility barriers to competition in food retailing (Marion 1987; Cotterill, 1999 and 1993).

current matter, enterprise differentiation is an important factor in Stop & Shop's ability to engage in unilateral pricing because potential competitors such as Wal-Mart Supercenters clearly target the lower half of the consumer income distribution (Franklin), whereas other supermarkets, including Stop & Shop, Super G and Shop Rite, do not target that demographic group. Therefore, elimination of Shop Rite in a trade area served by a store such as Wal-Mart and one other chain supermarket enhances market segmentation and the ability of the surviving chain to raise prices.

Third, eliminating Big V and thereby expanding the Stop & Shop franchise reduces the variety of products and shopping options available to the consumer. For instance, an inspection of selected Shop Rite and Stop & Shop supermarkets revealed that Shop Rite offered superior selection and a range of prices for ethnic food, and that product and price selection of ethnic food varied depending on the demographic profile of the consumers frequenting the store. In one Shop Rite, the store had an attractive floor-to-case-top designated segment in its wall mounted refrigerated case for many different brands and package sizes of lox, smoked fish, and all related condiments for Jewish and other cured fish aficionados. A nearby Stop & Shop of the same size offered only a very limited assortment of cured fish in a pile along with many other products in an open top refrigerated case. The in-store bakery, deli counter, and produce section of the Shop Rite also offered more variety and superior presentation. I conclude that Shop Rite is more skilled at merchandising food in the metropolitan New York area, whereas Stop & Shop offers a distinctly New England selection of products. As a result, eliminating Big V will reduce product variety in the area.

Finally, the "toughness" or effectiveness of competition is relevant to a store's ability to engage in unilateral pricing. Chevalier has developed an economic model of product and capital market interaction which predicts that "liquidity constrained" supermarkets are not "tough" competitors (Chevalier, p. 1098). Likewise, competitors who are bankrupt (Kmart) or the left-over remnants of the carve-up and sale of supermarkets from a chain that was bankrupted by financial mismanagement (such as the Grand Union stores now operated by C&S Wholesale Grocers, Inc. ("C & S")) are not tough competitors. The A&P Company, with its stores under the A&P, Food Emporium, and Super Fresh logos, also has a reputation as a soft competitor.

More generally, firms that pay in excess of the capitalized value of the competitive rate of return for supermarkets (including, as discussed below, Stop & Shop by virtue of its proposed purchase of Big V) must elevate prices in order to earn a return on their

investment. Similarly, at the height of the leveraged buy-out ("LBO") movement, Erivan Haupt, CEO of A&P's parent German company Tengelmann, recognized that:

Through leveraged buyouts and takeovers, A&P's competitors are becoming loaded with debt... They will pass along the cost of serving this debt by raising prices (Furhman).

To increase their own profits, unleveraged competitors tend to follow the lead of leveraged competitors with large market share in raising prices (see Cotterill, 1993 at 177 for empirical evidence in addition to Chevalier on this point). In this case, Stop & Shop is paying \$255 million, or \$9.44 million on average, for each of the 27 Big V supermarkets that it seeks to purchase. In comparison, in 1996, it sold five modern supermarkets and one not-so-modern supermarket in the Providence market to Ro-Jacks for less than \$20 million. Not only is Stop & Shop paying an inflated price to acquire Big V, but Big V is the victim of three LBO's.⁵ Many of its stores are worn out and sorely in need of capital investment because the LBO's have siphoned cash that otherwise would have been invested in the stores into debt payment and finance charges. By Wakefern's estimate, the investment required in order to restore the Big V stores to competitive parity totals \$52.3 million. Stop & Shop will attempt to recoup the high purchase price it is paying and the capital investments it will be required to make by using its post-acquisition position as the dominant firm in these trade areas to elevate prices.

In contrast to the soft or over-leveraged competition discussed above, most Shop Rite supermarkets, backed by the Wakefern cooperative system, are tough competitors. The cooperative structure insures that retail members receive goods and services at cost (Cotterill, 1987 and 1997). Rogers and Petraglia, and Haller, document that cooperatives in food manufacturing industries are competitive yardsticks that effectively reduce prices and margins. The Wakefern cooperative is doing the same in the Northeast wholesale grocery market. The wholesale prices it charges to Big V are lower than the prices charged by C&S (*Big V Supermarkets, Inc. v. Wakefern Food Corp.*, 267 B.R.

⁵ According to Kenneth Jasinkiewicz, Chief Financial Officer, Wakefern Food Cooperative, the first LBO was in 1987 by CS First Boston. The second was in 1990 by T.H. Lee and Prudential. The third was in 1993 when \$35 million of public debt was used to buy out Prudential (communication with author 2/25/2002).

71), the leading proprietary wholesaler in the region. Lower wholesale prices, of course, translate to lower costs for supermarket retailers and lower prices to consumers (whereas soft competition, or competitors that overpay in making acquisitions, tend to raise prices).

Moreover, independent retailers, who often live in the community that they serve, work together in the cooperative system to reap the benefits of the Shop Rite franchise, including its private label, advertising, and promotion programs. A Shop Rite member benefits from the entire cooperative's joint purchasing and marketing programs, while retaining the traditional independent's advantage of being well attuned to the local market. Again, this makes Shop Rite operators tough competitors. If the Shop & Stop acquisition is consummated, however, the Shop Rite system will become a liquidity-constrained, higher-cost operation (as discussed below), and thus a softer competitor, which translates into higher prices for the consumer.

Based upon this review of factors that affect supermarket pricing in a trade area, I define an "impacted" trade area (i.e., an area where the proposed Stop & Shop/Big V transaction will have anti-competitive effects) as one where the proposed transaction: (i) gives Stop & Shop more than 40% of sales in the area, or (ii) reduces the number of competitors in the trade area to two supermarkets (including Stop & Shop), with the other chain having in excess of 60 percent of sales in the area. Dominant firm pricing or strong price leader-followship (leading to higher consumer prices) is likely to exist in such impacted trade areas. Enterprise differentiation and soft competition also routinely occur in such impacted trade areas, likewise leading to higher retail prices.

Tables 1 and 2 identify 17 Big V stores where pricing power in a trade area may be substantially enhanced by the proposed Stop & Shop transaction. Table 1 identifies twelve Big V supermarkets where the post-acquisition share of sales captured by Stop & Shop is above 40 percent. In fact, it is above 50 percent in these twelve areas. As for the thirteenth store, Big V store #211 in Bedford N.Y., A&P/Food Emporium, a soft competitor, has 65.5 percent of the trade area volume and the proposed acquisition combines the number two and number three chains, producing a duopoly in the Bedford Hills N.Y. area. The trade areas for each of these thirteen Big V stores is discussed below.

The Trenton market exhibits very strong symmetry in competition. With respect to each of the three "impacted" Trenton-area Big V stores, Acme is the number two rival and Super Fresh (A&P) is the number three rival. In these three Trenton trade areas, these

three chains have 93.38 percent (store #534), 89.1 percent (store #536), and 90.4 percent (store #540) of supermarket sales in the area, respectively. In addition to only three effective competitors in these trade areas, this symmetry in market players enhances the likelihood of tacit collusion to elevate prices to consumers.

A similar situation exists in the Newburgh, New York market. Four of the five impacted Big V stores in Newburgh have Price Chopper as their primary competitor. Of these four, two have Hannaford and the other two have Weiss as the third most important competitor in the market. The combined post-acquisition market share of the top three competitors in the trade areas of those four Big V stores is 88.4 percent (store #265), 88.4 percent (store #210), 91.6 percent (store #243), and 96.5 percent (store #248). In addition to Stop & Shop's unilateral pricing power, the other stores in these trade areas may follow each other to elevate prices to consumers that live and shop in these areas.⁶

The fifth impacted Big V store in Newburgh is Big V Shop Rite store #232 in Monroe, New York. As a result of the proposed acquisition, Royal Ahold/Stop & Shop would capture 67.9 percent of supermarket sales in the trade area. Moreover, it will have only one competitor, a Wal-Mart. Given that Stop & Shop and Wal-Mart target different segments of the consumer population based on income levels (i.e., Stop & Shop targets upper income and Wal-Mart targets lower income consumers), price elevation is virtually assured.

There are two impacted trade areas in the Poughkeepsie market (Dutchess County). Stop & Shop has declined to purchase the Wappinger Falls Big V store because the store is losing share to Stop & Shop's new store in the area and will close without further action by Stop & Shop. This is direct evidence that Big V's highly leveraged condition has prevented it from investing capital to remain an effective competitor.

Big V store #256 in Fishkill is a different story. Here, the post-acquisition Stop & Shop share of supermarket sales increases to 59.1 percent and the second firm is Wal-Mart with only 25.7 percent. A very distant number three is A&P with 9.35 percent. The result is that, in this trade area, the only competitors to Stop & Shop will either target a different segment of the consumer population or constitute soft competition.

In the Westchester County market, there are three impacted Big V stores. The Croton on Hudson store (#206), when combined with Stop & Shop, will give

⁶ In its proposed acquisition, Stop & Shop has declined to purchase the North Plank Road Newburgh store (#243) because, according to the information I have obtained from Wakefern, it is not expandable.

Stop & Shop a 58.3 percent share of supermarket sales with only one competitor, A&P/Food Emporium (which, as noted above, is soft competition). In the Thornwood urban neighborhood, the proposed transaction gives Stop & Shop a 51.2 percent share of supermarket sales and only one competitor (albeit a soft one) of significant size, A&P/Food Emporium, with 34.1 percent share of supermarket sales.

The last impacted trade area in Westchester County surrounds the Big V Shop Rite (#211) in Bedford Hills. The proposed transaction reduces the number of supermarket operators from three to two, with A&P/Food Emporium capturing 65.5 percent and Stop & Shop 34.5 percent of area sales. Again, economic research and prior analysis of trade practices predict that the result will be higher prices for consumers who live and shop in this trade area.

Based on the foregoing analysis, I conclude that Stop & Shop unequivocally should be banned from purchasing all thirteen of these stores.

Table 2 identifies four other Big V stores in trade areas that may suffer anti-competitive effects if these stores are sold to Stop & Shop. They are not included in Table 1, the DO NOT SELL TO ROYAL AHOLD category, because these trade areas are not “impacted” (as defined above) by the proposed transaction since Stop & Shop's share of supermarket sales following an acquisition of Big V is below 40 percent. Nonetheless, these stores are located in densely populated urban areas, where the trade area was restricted to three miles (#271, #283) or two miles (#209). As drawn, these trade areas have a large number of competing supermarkets (between nine and eleven). More careful investigation of the demographics and shopping patterns in these areas might reveal that smaller trade areas exist for these Big V stores, which would enhance the anti-competitive impact of the proposed Stop & Shop acquisition. The fourth store, located in Pennington, New Jersey, is truly questionable. It faces competition from two independent supermarkets as well as two other operators including Acme.

4. Market Level Analysis

Although it is not possible given current available information to define the relevant geographic market for all Big V stores acquired or to be acquired by Stop & Shop, there are three identifiable markets that encompass many of these Big V stores. Those markets are Poughkeepsie and Newburgh, New York and Trenton, New Jersey.

The Poughkeepsie market is coextensive with Dutchess County. On the west it is delimited by the

Hudson River. On the east is the Taconic mountain range and, beyond that, predominantly rural northwestern Connecticut. For these reasons, travel in the County is primarily north-south rather than east-west. To the south is relatively rural Putnam County and then, further south, the upscale exurb of North Westchester County. North of Dutchess County is rural Columbia County, which has no large or middle-sized cities. MMS, in its *Grocery Distribution Analysis and Guide*, uses county wide information to compute market share.

The Newburgh, New York market is coextensive with Orange County, New York. To the east is the Hudson River. North is rural Ulster County. The southern portion of Orange County contains Harriman and Bear Mountain state parks, an extensive forested and mountainous barrier to more densely populated Rockland County. To the northwest are the Catskill Mountains in Sullivan County, with no significant retail venue until Monticello, New York, which is approximately twenty miles northwest of Middletown, New York—the last retail venue in Orange County as one travels Route 17. To the west is rural Pike County in northeastern Pennsylvania. This definition of the Newburgh market differs from the MMS definition, which includes Pike County in its Newburgh market.

The Trenton, New Jersey market area is only the western portion of Mercer County plus the Bordentown city area that is contiguous with Trenton and immediately south of western Mercer County. Eastern Mercer County is the very upscale area of Princeton, Princeton Junction and Hightstown. Consumers from the Princeton environs do not shop in Trenton and *vice versa*. This definition differs from the MMS definition, which relies upon county units, in this case Mercer County.

4a. Trends in Concentration in the Poughkeepsie, Newburgh, and Trenton Markets: 1994 to 2000.

When examining the impact of acquisitions on market structure, conduct and performance, it is instructive to examine changes in market concentration over time. Has concentration, as measured by the Herfindahl-Hirschman Index (HHI), increased, and to what level, over time?

The only source for information on HHI levels and trends over the recent past is contained in MMS' annual trade publications. Table 3 identifies all supermarket competitors, their market shares (based on supermarket sales in the relevant market), and the HHI for the Poughkeepsie, Newburgh, and Trenton markets as defined by MMS for 1994, 1997, and 2000. The Department of Justice Merger Guidelines indicate that a

challenge to a proposed merger is “likely” when HHI exceeds 1800 points.

For Poughkeepsie, the HHI throughout the 1994-2000 period has been approximately 2300. Stop & Shop's market share, however, has more than tripled from 12.9 to 39.4 percent over this period, in part due to its acquisition or lease of 2 Big V Shop Rites from Starwood Ceruzzi and the closing of the Poughkeepsie Big V store acquired by Starwood Ceruzzi. In this same period, Big V's share of supermarket sales in the Poughkeepsie market has been halved, from 33.4 percent in 1994 to 16.1 percent in 2000. Likewise, Grand Union's market share has decreased from 28.6 percent in 1994 to 11.5 percent in 2000. Despite Big V and Grand Union's decreased market share and the entry of Wal-Mart into the market, market concentration remains unchanged and very high at over 2300 points, well above the 1800 point “challenge likely” level established in the Merger Guidelines.

In the Newburgh market, HHI has increased from a very high 3446 in 1994 to 3861 in 1997 and then decreased to a still-very high level of 2688 in 2000. Thus, in 2000, market concentration remained well above the 1800 “challenge likely” level even after the entry of Wal-Mart and Hannaford into the market. Grand Union's market share has disintegrated from eight stores with 25.8 percent of the market to four stores and 6.0 percent of the market in 2000. In 1997, Grand Union operated 9 stores. It appears that Stop & Shop acquired four of these stores (and with them 18.2 percent of supermarket sales in this market), and Hannaford acquired another with a 4.9 percent share in 2000.⁷

In the Trenton market, as defined by Metro Market Studies, HHI increased from 1308 in 1994 to 1614 in 2000. Royal Ahold entered the market with the purchase of two Mayfair/Foodtown stores between 1994 and 1997. In 2000, these stores are named Giant (Super G). As discussed below, if Stop & Shop is allowed to acquire Big V, HHI will increase well above the 1800 level in the Trenton Market.

4b. Current Concentration Levels in the Poughkeepsie, Newburgh, and Trenton Markets and the Impact of the Royal Ahold Acquisition.

Poughkeepsie

Shifting now to current (February 2002) market

⁷ C&S purchased 185 Grand Union stores in late 2000 and subsequently sold 36 of these stores to Stop & Shop and 5 to Hannaford (Ogiste; AP Newswire). Metro Market Studies seems to have incorporated these transactions in its 2001 publication, which measures market share in the year 2000.

concentration conditions in the three relevant geographic markets identified above, information provided by Wakefern permits an evaluation of the impact of the proposed Stop & Shop transaction on market share and concentration in these markets. Table 4 provides store level detail on the competitors in the Poughkeepsie market. Currently, in terms of market share, Stop & Shop is number one with a 38.8 percent share of supermarket sales in the market (“share of market” or “SOM”). Big V is a very distant second with 13.5 percent SOM, followed by Price Chopper with 10.2 percent SOM, A&P with 9.2 percent SOM, C&S-owned Grand Union with 7.3 percent SOM, Wal-Mart with 7.0 percent SOM, and Hannaford with 5.1 percent SOM. Five independent operators, mostly small supermarkets in outlying niche areas of the market, account for the remaining 9.0 percent SOM.

The HHI for Poughkeepsie is currently 2020.⁸ If the proposed acquisition is consummated, and assuming that Stop & Shop captures all of the closed Wappinger Falls Shop Rite business, Stop & Shop's SOM increases from 38.8 to 52.3 percent, and HHI increases 1048 points from 2020 to 3068. Even if sales formerly captured by the Wappinger Falls store are split between Stop & Shop, Hannaford, and the nearby Price Chopper in proportion to their current sales, Stop & Shop's SOM increases 10.5 points to 49.3 percent, Hannaford's increases 1.5 points to 6.6 percent, and Price Chopper's increases 1.4 to 11.6 percent with the HHI increasing 794 points from 2020 to 2814.

Finally, if the antitrust authorities were to block the proposed acquisition and order Stop & Shop to divest the two Big V stores acquired from Starwood Ceruzzi, and assuming that the closed Wappinger Falls Shop Rite sales are captured proportionally by Stop & Shop, Hannaford, and Price Chopper, Stop & Shop's market share decreases 9.7 points to 29.1 percent. At the same time, Big V's SOM increases 6.7 points to 20.2 percent, Hannaford's SOM increases 1.5 points to 6.6 percent, Price Chopper's increases 1.4 to 6.6 percent. Meanwhile, HHI decreases 382 points from 2020 to 1638—a level below the 1800 point “challenge likely” threshold established in the merger guidelines.

Newburgh

Table 5 presents the current structural configuration (i.e., the SOM of firms in the market) of the Newburgh, New York (Orange County) geographic market. Big V

⁸ This is substantially below the MMS based computation for 2000 in Table 3 for two reasons. First is the disintegration of Grand Union. Second is the inclusion of several small single store operators that MMS apparently missed.

has the greatest market share with a 50.7 percent SOM. Stop & Shop is number two with 14.8 percent SOM. The proposed transaction, therefore, represents a merger between the top two firms in the market, resulting in a powerfully positioned dominant firm with 65.5 percent of the market. Among the remaining firms in this market are Price Chopper, Wal-Mart, Hannaford, and C&S-owned Grand Union with 14.0 percent, 8.0 percent, 4.4 percent, and 2.1 percent SOM, respectively.

If Stop & Shop is allowed to acquire Big V, the Newburgh market HHI increases a huge 1501 points from 3090 to 4591. Indeed, the proposed acquisition in Newburgh may raise concerns under Section 2 of the Sherman Act as well as the Clayton Act.

Trenton

Table 6 presents the current structural situation in the Trenton market area (western Mercer County plus Bordentown to the south). Big V has the greatest market share with 35.4 percent SOM. Royal Ahold's Super G Food and Drug subsidiary has two stores and ranks third with 10.2 percent SOM. It acquired these two stores when it acquired the Mayfair chain in the mid-1990's. An important and possibly prescient result of that transaction was that Royal Ahold captured the largest member of the Twin County cooperative grocery wholesaler, which ultimately went bankrupt and no longer exists.

Acme has the second largest market share in the Trenton market with 26.2 percent SOM, and the Super Fresh subsidiary of A&P has a 6.5 percent SOM. The rest of the market consists of independent operators, including Pennington Quality Market with a 9.7 percent SOM, Marrazzo's Thriftway with a 7.5 percent SOM, and three small supermarkets that capture the remaining 4.5 percent of the market.

If the proposed transaction occurs, Royal Ahold/Super G becomes the leading firm in Trenton solely due to two successive mergers that give it a 45.6 percent SOM. It has never built a supermarket in Trenton. The HHI increases from an already high level 2240 points to 2962 points, a 722 point increase well above the 1800 "challenge likely" level established by the Department of Justice.

Based upon the HHI in the three defined geographic markets and the trade area effects analysis described above, Stop & Shop should be prohibited from acquiring the following stores: all stores in Newburgh (9 stores including the North Plank street store Stop & Shop has disavowed), five stores in Trenton, two stores in the Poughkeepsie market (including the Wappinger Falls store that Stop & Shop has, disavowed) and three stores in Westchester County. Stop & Shop also should be required to divest the two stores acquired or leased from

Starwood Ceruzzi.

5. Competitive Effects: An Update On The Research Literature Concerning The Relationship Between Supermarket Concentration And Price Level In Local Retail Food Markets

This Section discusses recent literature addressing the topic of "competitive effects," or the relationship between market concentration and price level. Recently Paul Paulter of the Federal Trade Commission published a comprehensive review of the research that underpins merger enforcement in the United States (Paulter). In that report, he updates the research on concentration/price studies in the supermarket industry by adding studies by Marion (1998) and Cotterill (1999a).

Paulter states that: "[Marion] finds a positive correlation between changes in price and changes in concentration using 1997 to 1992 data for 25 cities after adjusting for cost changes and service quality (Paulter, p. 46)."

In my study, I likewise found that a positive concentration-price relationship exists even after controlling for economies of size at the store level and the Demsetz quality critique (Demsetz has hypothesized that larger share firms in concentrated markets have higher prices because they sell higher quality products). As Paulter notes, Kimmel also has suggested that firms in more concentrated markets have higher costs and thus charge higher retail prices. My study tests both of these hypotheses, rejects them, and supports the position that the positive correlation between prices charged and market concentration is due to the exercise of market power. My study also finds that pricing power tends to be more coordinated among firms in the market (as opposed to imposed unilaterally) because a firm's price level is more strongly related to HHI than its own market share.

Paulter's review of the supermarket research must be updated with a few other critical research efforts and some historical perspective. Paulter states that Anderson and Newmark provide evidence against the prevailing research, which indicates a positive concentration/price relationship (Paulter, p. 46). Cotterill (1993b), an edited compendium, contains the Anderson review of studies prior to 1993.⁹ That review was explicitly requested by Peter Rodino, chairman of the House Judiciary Committee, in 1988 after my testimony at a House hearing. My testimony criticized the FTC for not challenging the American Stores/Lucky merger and the

⁹ The author is providing a copy to the Federal Trade Commission.

Safeway/Vons merger.¹⁰ The 1993 compendium also contains "A Response to the Anderson Critique" by this author (Cotterill, 1993c). That chapter in the compendium, Marion (1987), and Cotterill (1999a), effectively rebut Anderson.

Concerning the Newmark study, in an article forthcoming in *Agribusiness*, Yu and Connor, among other things, find serious measurement errors in Newmark's computation of the dependent and explanatory variables (including local market concentration ratios). Once these errors are corrected, Newmark's negative results concerning a concentration/price relationship are destroyed, and in fact, there is a positive and significant relation between concentration and price.

A more recent study of the concentration-price relationship that uses an entirely different approach also documents a positive relationship. Using Information Resources Inc. (IRI) scanner data for 1991 and 1992, Cotterill et al. (2000) specify a structural model that estimates a linear approximate almost ideal demand system (AIDS) for national brand and private label grocery product prices. Following Kelton and Weiss, they specify a logarithmic first difference equation model that allows a comparison of the percent change in prices across different product categories. This avoids comparing the price or change in price of "apples" to "oranges." The model's supply side equations are derived within a generalized Bertrand oligopoly model. They capture oligopolistic price reactions among branded and private label competitors. The reaction equations contain the supermarket four-firm concentration ratio to test for elevation of branded and/or private label prices in more concentrated markets. The authors state:

prior empirical work on the concentration price relationship in grocery retailing suggests that the general level of the markup in a local area is related to local retailer concentration (Marion 1979; Cotterill 1986). We consequently postulate that the retailer markups (m^1 and m^2) should be influenced

by the local retailer's ability to raise price over (wholesale) cost and, accordingly, specify m^1 and m^2 to be a function of local retail concentration (Cotterill et al. 2000, p.118).

M^1 is the markup for branded products and m^2 is for private label.

Shifting to empirical results, in this cross section data set of branded and private label products for 125 product categories (e.g. milk) in each of 59 local markets, four-firm supermarket concentration (CR_4) is positively related to both private label and national brand prices and significant at the 1 percent and 5 percent level respectively. Although the study describes the variable as grocery CR_4 , it actually should be labeled supermarket four-firm concentration because it is in fact that. It is from the Progressive Grocer, *Market Scope*, IRI market area statistics for supermarket chains. The authors explain their empirical results:

There are two specific results from the cross-category analysis that should be addressed before we proceed to the intracategory analysis. First, in the price reaction equations, we find that the four-firm retail concentration has a significant and positive impact on both branded and private label prices. The coefficient is 50% higher for private label products (.057 vs. .028 for national brands), suggesting that the price differential between private labels and national brands narrows in more locally concentrated grocery markets. This is consistent with prior work on the relationship between concentration and price in grocery retailing (Marion 1979, Cotterill 1986), but it represents a significant advance due to the much larger number of categories and markets studied here. (Cotterill et al. 2000, p. 121)

Wall Street analysts have also clearly acknowledged the impact of concentration and share on prices and profits. Mark Husson, a leading Wall Street analyst of the industry, very bluntly states how supermarkets must continue to expand their gross and net margins by expanding their market power. He describes the exercise of power as the "gross-margin miracle":

...what has to happen (for stock prices to increase) is it has to become obvious to the (stock) market that supermarket retailers are developing pricing power inside their marketplaces and that there is a structural kind of seismic shift going on in this country in the whole of fast-moving consumer-goods distribution in favor of food retailers, because

¹⁰ Subsequently, as Paulter notes, the state of California, relying on the concentration-price and profit, share-price and profit research base and the expert testimony of professor Bruce Marion, among others, successfully challenged the American Stores/Lucky merger (*California v. American Stores Co.*, 697 F.Supp 1125 rev'd 872 F.2d 837 (9th Cir. 1989). American stores appealed to the U.S. Supreme Court on grounds that no state had the right to enforce the federal antitrust laws. The Supreme Court decided 9-0 in favor of the state of California and state antitrust enforcement as practiced today was born (*United States Supreme Court, California v. American Stores Co.* 492 U.S. 1301 (1989)).

that's the only way you're going to keep gross margin continuing to move forward.

If you can find that pricing power and define it somehow as maybe the manufacturer or the consumer losing power; with better organized, more rational competition and more rational pricing, ... and if the retailers are developing this pricing power from both sides, along with private brands—and taking control of categories is part of that—then I think there is still some real internal momentum inside the group, which despite the lack of inflation can keep this gross-margin miracle still moving forward." (*Supermarket News*, 1999).

6. Competitive Effects: Prior Research on the Royal Ahold Chains' Conduct in the Northeast

Research completed by me as part of an extensive analysis of the proposed Royal Ahold acquisition of Pathmark Supermarkets in 1999 provides evidence on the exercise of market power by Stop & Shop to raise prices, the presence of soft competition, the lack of any compelling efficiency in a Stop & Shop/Pathmark combination, the existence of barriers to entry in the relevant markets, and the ineffectiveness of divestiture in reducing the merged entity's power to raise prices. (Cotterill 1999b, and Cotterill et al. 1999). Nearly all of the analysis and evidence presented in those studies pertains to the proposed Stop & Shop acquisition of Big V and is incorporated into this report. Here I will only highlight the reasoning and key points of those reports as they apply here.

First, my analysis revealed that Royal Ahold chains zone prices, effectively setting higher prices in more concentrated markets. A statistical study of actual Stop & Shop and Super G pricing in eighteen stores in different areas yielded a significant and positive relationship between Stop & Shop's prices and the market HHI (see Cotterill 1999b, p. 10-13 and p. 34). A linear regression analysis performed to distinguish Stop & Shop from Super G revealed that Stop & Shop price levels are significantly higher compared to Super G.

Second, and as discussed above, soft competition exists in the northeast markets where Stop & Shop operates, including the market areas at issue now (which, again, tends to lead to higher consumer prices) (see Cotterill 1999b, p.10).

Third, merger specific efficiency effects, which typically translate to lower prices for consumers, have not been documented in connection with past Royal Ahold acquisitions (see Cotterill 1999b p. 14-16).

Fourth, divestitures have not offset the anti-competitive effects of past Ahold acquisitions. See

Cotterill (1999b p. 18-21). In fact, since my 1999 report, Ro-Jacks (which acquired certain stores divested by Royal Ahold in connection with a past acquisition) has declared bankruptcy, effectively fulfilling the prediction of an extensive non-public report that I wrote concerning the Ro-Jack divestiture for the Rhode Island Attorney General in the fall of 1999.

I also analyzed the post-merger performance of supermarkets that Royal Ahold divested in 1996 to obtain FTC, Connecticut, Rhode Island and Massachusetts' approval of the Royal Ahold/Edwards acquisition of Stop & Shop. See Cotterill et al. (1999). I served as expert economist for these states and met with FTC lawyers and economists to construct a consent decree. My analysis of post-merger price conduct found that divested firms charged lower prices than competitors in the market and attempted to compete on price for a few months; however, thereafter they followed Stop & Shop price leadership at higher price levels.

Further evidence of the ineffectiveness of divestitures in promoting post-merger competition is found in my recent analysis of milk prices in the Boston, Providence, and Hartford IRI markets following Ahold's acquisition of the Edwards supermarket chain. (Cotterill and Franklin, 2001a).¹¹ Figures 1 and 2 are from that study and Figure 3 compares Stop & Shop milk prices in Boston to the prices of all other chains. These charts document changes in milk pricing in the Hartford and Providence IRI markets after the Edwards/Stop & Shop combination. The Boston IRI market area serves as a control area because there were no Edwards stores in that area so the merger had no effect on prices charged there.

In the Hartford market, Stop & Shop milk prices were lower than the prices charged by all other chains until January 1997, which is roughly six months after the Edwards merger was consummated.¹² The same phenomenon that existed with respect to milk prices in Hartford also exists for the Providence market, except Stop & Shop raised prices three months later, in March 1997. This three-month difference may be due to the fact that the Rhode Island Attorney General continued negotiations on the Ro-Jacks divestiture well into the Fall before approving it, requiring Stop & Shop to delay

¹¹ See Cotterill and Franklin, 2001a or any recent edition of *Progressive Grocer Market Scope* for a definition of these market areas.

¹² The vertical line in the figure identifies when the Northeast Dairy Compact became effective and elevated raw milk prices. Independent of the Compact, Stop & Shop's prices persistently remain well above other chain prices post merger.

price increases in Providence.¹³

I conclude that Stop & Shop's milk pricing has become less competitive in Hartford and Providence relative to Boston. The Royal Ahold/Edwards merger and a continued rise in Stop & Shop's market share in these areas has allowed the chain to exercise more market power than prior to the merger.

7. Barriers to Entry in Local Geographic Markets and Royal Ahold's Conduct that Enhances Barriers to Entry

This section discusses barriers to competitors entering a market in which an Ahold chain operates a supermarket. As discussed below, research documents the existence of barriers to entry in food retailing. Moreover, in concentrated markets, entry is not timely, likely, or sufficient to defeat a nontransitory price increase. In addition, evidence demonstrates that the Royal Ahold chain continues its strategy of attempting to become the dominant chain in any market where it operates through the elimination or reduction of competition. Indeed, it appears that Ahold/Stop & Shop will employ virtually any means available to stifle competition, including by attempting to create and sustain entry barriers in local food markets in New York and New Jersey. A recent and egregious example of this strategy is Ahold's anti-competitive land-banking strategy, where Ahold or Starwood Ceruzzi acquire shopping centers near existing Ahold markets and with sites suitable for supermarkets, but refuse to lease the site to a competitor of an Ahold chain.

7a. Economic Research Documents the existence of Entry Barriers in Concentrated Local Markets

First, and perhaps most incontrovertible, research documents positive concentration-price and concentration-profit relationships in the supermarket industry and on the part of the Royal Ahold chain in particular. If there were no barriers to entry, these relationships would not exist.

¹³ Also, note that in the more concentrated Hartford and Providence market areas, other supermarket chains did not deviate from Stop & Shop's price leadership and price elevation after Compact implementation in 1997 and 1998. Not so in Boston. There, competitors did cheat and drop prices during the eighteen-month post Compact implementation period when the Compact held the raw price of milk constant at \$1.46 per gallon.

I am aware of only one study (by Cotterill and Haller) in the industrial organization literature that directly examines the hypothesis that the mere threat of competition keeps market pricing competitive, notwithstanding barriers to entry. This study rejects the hypothesis that the threat of entry keeps market pricing competitive. Instead, the study concludes that entry is distinctly less likely in more concentrated markets, i.e., entry barriers exist in such markets, and pricing is less competitive.

7b. Entry Barriers in Southern New York and New Jersey Local Market Areas and Royal Ahold Conduct that Enhances Entry Barriers

Turning now to the New York/New Jersey region, one of the most densely populated regions of the country, it is well known to industry participants that it is extremely difficult to "enter" this region. Entry is defined as the addition of new stores by an operator that is *new* to the market area. As such, it is often termed *de novo* entry. Acquisition of existing stores only constitutes "entry" if it is a toe-hold acquisition by a new operator that leads to opening additional stores at new locations.

De novo entry in the Westchester, Poughkeepsie, Newburgh, and Trenton markets is not timely. The political and administrative procedures required to procure a site and develop a store routinely take years. The lack of open land sites in locations with desirable trade flows makes it necessary to assemble parcels, often for shopping plazas, rather than obtain land for free standing stores. This too can require years of effort. Locating and converting existing buildings or sites for supermarkets is also a time consuming and difficult process.

De novo entry into these markets is not likely even when a chain exercises market power. A very profitable price increase in this high turnover industry can be as low as 1 or 2 percent, rather than the traditional 5 percent articulated in the DOJ merger guidelines. Price increases of 1 or 2 percent can double a company's after-tax return on equity. Moreover, price increases of this magnitude often go undetected by consumers, who are unable to recall the prices for the 30-40,000 items typically stocked in a modern supermarket. Competitors and potential competitors, however, can measure such price changes but they find themselves facing the following chain store paradox (Scherer and Ross p.387; Fisher; Cotterill and Haller): They know incumbent firms have raised prices, but incumbents, and especially large multi-market chains such as Royal Ahold, can undertake strategic actions to forestall entry by a potential lower priced competitor. The incumbents, for

instance, can strategically lower prices to levels that ruin an actual entrant. The mere threat of this conduct may discourage potential entrants.

Shop Rite's failed *de novo* entry into Washington D.C. is the classic example of such entry forestalling conduct by incumbents (FTC 1969 and 1971). Marion et al. (1979) write:

Entry barriers can also be magnified if firms already in the market engage in selective price cutting aimed at the stores of the new entrant. This occurred in Washington, D. C., in 1967, when Shop Rite (Foodarama), an aggressive discounter headquartered in New Jersey, attempted to enter the market. The stores of two leading chains located near the stores of the new entrant cut their prices substantially below those charged in the rest of the metropolitan area. In doing so, those stores for which data was available sustained substantial losses. This strategy of discouraging entry succeeded, and Shop Rite ultimately withdrew from the market. Such selective price cutting seriously raises entry barriers to would-be entrants, thereby protecting established firms from potential competition. (Marion et al. 1979, p. 143)

One of the chains that defeated Shop Rite was Giant Foods, which subsequently was acquired by Royal Ahold.

Royal Ahold also has attempted to eliminate competition via lawsuit. In the fall of 1999, I served as expert economist on behalf of a shopping mall owner in Milltown, New Jersey, who was sued by Royal Ahold for an alleged breach of contract (Mayfair Supermarkets Inc. v. Arisa Realty Co, LLC et al. No. MID-C-92-00). In that case, Royal Ahold entered into a contract (prior to its planned merger with Pathmark) with Arisa Realty to acquire a site for a supermarket in a shopping center. Ahold planned to close its nearby Edwards store and move a short distance to the new site. Subsequently, in anticipation of acquiring Pathmark and possibly to facilitate regulatory approval, Royal Ahold refused to honor its contract. Arisa Realty then leased the site to Acme Supermarkets and construction began on an Acme store. After the termination of the Pathmark transaction, Royal Ahold returned to Arisa Realty claiming that Ahold had never cancelled the contract and it sued to stop the Acme from opening a store on the site and to recover damages. Counsel for Arisa Realty obtained, via the Freedom of Information Act, Royal Ahold's Hart Scott Rodino filing (HSR) as it related to plans with respect to the Edwards store in question.

Paragraph 21 of the HSR requests information "for

any new supermarket that the company ... plans (or had plans) to open in each relevant area within the next 3 years." The key language in this quote is "plans (or had plans)." In its response (at 4) Royal Ahold lists Edwards store 220 but, significantly, there is no information concerning a proposed opening date. Thus, it appears that Edwards store 220 falls into the "had plans" category. If true, then Royal Ahold told the FTC, as it told Arisa Realty, that it had dropped plans to build a store on the Arisa site in order to obtain FTC approval. After the FTC blocked the transaction, however, Ahold sued Arisa Realty claiming that it never told Arisa that it no longer wanted the site. In summary, Ahold instituted a lawsuit based upon premises that it knew were false, to forestall the entry of a competitor, Acme, into Milltown, New Jersey. The lawsuit was settled at the start of trial on terms favorable to Arisa Realty and the Acme store is now open.

Another entry issue in this industry is Wal-Mart. (Since Kmart is currently bankrupt, I dismiss it as a potential or actual entrant into these markets.) Industry observers commonly opine that supermarket operators face intense competitive threats and actual competition from Wal-Mart in many local markets. It cannot be denied that Wal-Mart is an everyday low price operator and that it has had an impact upon firms that compete against it. Nonetheless, Wal-Mart's impact on competition is not pervasive. Franklin examined Wal-Mart's penetration into the food retailing industry. He found that supermarket sales are an integral part of the Wal-Mart Supercenter format, but account for only approximately 50,000 square feet in a 150,000 square foot store. These very large stores demand very large sites and draw their customers from the lower half of the income distribution (Franklin, p. 112). Many communities in New York, New Jersey and New England simply do not want a Wal-Mart Supercenter in their town or city. Consequently, Franklin reports that Wal-Mart's penetration into local geographic market areas is highest in other regions of the country.

Moreover, Franklin concludes that entry by these mass merchandisers in most food markets will never be sufficient to discipline market leaders because one cannot have an 180,000 square foot mass merchandiser with a superstore supermarket in every supermarket trade area of a city. Moreover, the fact that Wal-Mart targets less affluent consumers also means relatively few outlets will saturate local food markets. While Wal-Mart is testing "Neighborhood" supermarkets to fill in the "spaces" between their Supercenters in local markets areas, their appearance and impact upon competition in the area of the country affected by this proposed acquisition is so unlikely and speculative that it must be

completely dismissed.¹⁴

Perhaps the most telling evidence that *de novo* entry is not likely to occur is Ahold's own entry conduct. Ahold entered Washington D.C. by acquiring Giant. Ahold entered Long Island by acquiring First National (Edwards), and substantially increased their market share on Long Island by acquiring Stop & Shop (which had previously entered the Long Island area by acquiring a leading local chain, Mel Weitz). Ahold entered the Trenton market by acquiring two Mayfair stores when they acquired the entire Mayfair chain. Since this "toehold" acquisition, they have not effectively generated any competitive pressure by opening new stores in the market. Now they seek to acquire a dominant market position by merger.

Likewise, Ahold/Stop & Shop has assembled its current market share in the Newburgh and Poughkeepsie markets primarily by acquisition of existing chain supermarkets. According to the Metro Market Studies' *Grocery Distribution Analysis and Guide* for 2000 and 2001, at least three and possibly all four Stop & Shop stores in the Newburgh market are former Grand Union Stores. In Poughkeepsie, at least two of Stop & Shop's five stores were acquired from other operators and it acquired another store only to close it because it competed with a nearby Stop & Shop. (These three stores are the former Big V stores acquired by Starwood Ceruzzi). Ahold's conduct of expanding through acquisition of existing stores strongly suggests that *de novo* entry is not easy. (See Appendix A for more information on how Starwood Ceruzzi and Stop & Shop are consolidating Stop & Shop's power in the Newburgh market.)

A senior Ahold executive confirmed Ahold's strategy of avoiding *de novo* entry by explaining that securing Pathmark's existing "beautiful store locations" was a major reason for the attempted Pathmark acquisition:

"We found out with the Edwards chain ... that it takes quite some time before you can get the locations, because it is a very reticulated trade area where Pathmark and Edwards operate," says Hans Gobes, a senior vice president at Ahold's headquarters in The Netherlands. "That's why we like so much of the idea of becoming the owner of Pathmark. It has all of these beautiful locations." [Tosh, p33]

Similarly, Big V, in a Private Placement

Memorandum prepared in 2000 in connection with a possible sale of the company, touts its strong position in the lower Hudson River Valley:

Big V "has amassed a portfolio of prime store locations in the increasingly popular residential communities of its core market ... Stores are most often located in high traffic centers of each town and in many cases, [Big V] is the sole operator in towns which management believes require only one store" (Big V, Private Placement Memorandum p. 2-3).

Ahold/Stop & Shop's latest attempt to erect barriers to entry in the northeast United States involves its acquisition of shopping centers and other sites suitable for supermarkets not for the purpose of operating a supermarket, but so that a competing supermarket cannot operate on the site. For example, as noted above, Starwood Ceruzzi acquired a Big V store in Poughkeepsie, New York across the street from a Stop & Shop, and rather than lease the store to a Stop & Shop competitor, the site has remained without a tenant for over one year. In fact, I understand from Wakefern that Stop & Shop has acquired no fewer than ten shopping centers in the northeast, and that only one of these centers has a supermarket tenant. Moreover, Starwood Ceruzzi, which in the past has developed supermarkets for Stop & Shop and acquired supermarkets and then sold these stores to Stop & Shop, has purchased fourteen shopping centers. Not one of these fourteen centers has a supermarket tenant. This anti-competitive "land-banking" strategy is consistent with the conduct of Ahold/Stop & Shop described above—to erect and maintain barriers to entry and thereby acquire and maintain a dominant position in the regions where ShopRite competes. The impact of this conduct on reducing competition cannot be understated: as recognized by Thomas Infusino, Wakefern's Chairman, when he testified at trial as to entry barriers (*Big V Supermarkets, Inc. v. Wakefern Food Corp.*):

There are not many locations that are readily available today because the area is saturated with competitors, and it costs \$5 million and requires three-five years (due in part to the need to obtain necessary regulatory approvals) to open a new store (Infusino, 2001, p. 100:15-17, 101:1-13).

In fact, the Big V Private Placement Memorandum confirms that "potential competitors attempting to enter these markets find it difficult to secure attractive sites due to the lengthy permit and approval process involving complex and at times uncooperative environmental and

¹⁴ Wal-Mart's Neighborhood Markets are in "test mode." The company plans to open 185 new Supercenters but only 15-20 Neighborhood Markets in 2002 (Zwiebach, p1).

zoning organizations” (Big V, Private Placement Memorandum p. 3).

8. Competitive Effects: The Price Impact of Stop & Shop's Proposed Acquisition of Big V

Based on the documented, positive statistical relationship between the HHI and the prices charged by Ahold supermarkets (Stop & Shop and Super G), it is possible to predict the impact on prices of the proposed Stop & Shop acquisition and the completed acquisition of two former Big V stores from Starwood Ceruzzi in the three identified geographic market areas, Poughkeepsie, Newburgh, and Trenton. The percent change in Royal Ahold retail prices following those transactions can be estimated based on the following equation:¹⁵ Percent Change in Retail Prices = 0.0632 x Percent Change in HHI.

Using this equation, and as set forth in Table 7, the proposed Stop & Shop acquisition increases HHI 39.3 percent and Stop & Shop retail prices 2.5 percent in Poughkeepsie. If the acquisition is blocked and the two stores acquired from Starwood Ceruzzi are divested to Big V, the HHI drops 18.9 percent and Stop & Shop retail prices drop 1.2 percent.

In the Newburgh market, the proposed acquisition increases the HHI 48.6 percent and raises Stop & Shop retail prices 3.1. In the Trenton market, the acquisition of the Big V stores increases the HHI 32.2 percent and the prices in these stores will be 2.0 percent higher than prices prior to the merger.

9. Competitive Effects: Raising Rivals' Costs, the Potential Predatory Effect on Wakefern Food Corporation and Shop Rite Supermarket Retailers

This Section discusses another effect of a Stop & Shop acquisition of Big V: The acquisition, if permitted, will raise Wakefern and its members' costs, thereby potentially undercutting Wakefern's ability to provide low prices to the consumer. Salop and Scheffman have developed a theoretical analysis of how dominant firms in a market can raise a rival's costs so as to constrain the rival's ability to compete, thereby permitting the dominant firm to raise price and increase profits. In most cases, this cost-focused move against a rival is more profitable than lowering prices because the larger firm has a relative cost advantage. In the extreme

case, the dominant firm actually elevates a competitor's costs enough to force one or more competitors out of business.

The Big V situation represents a multimarket extension of the Salop and Scheffman model. Big V is the largest member of the Wakefern cooperative system. Recently it accounted for 13 percent of Wakefern's volume (*Big V Supermarkets, Inc. v. Wakefern Food Corp.*, 267 B.R. 71, at 7). I have made no quantitative assessment of the impact on Wakefern of losing 13 percent of its volume. Wakefern, however, has, and those analyses—which demonstrate that after cost-cutting by Wakefern, each member of Wakefern will have to bear approximately \$230,000 in increased costs per store if Big V is acquired—have been provided to the FTC by Wakefern (Wakefern 2000, 1997). Based on the economics of the industry, Wakefern's analysis is hardly surprising. This loss in volume must significantly elevate Wakefern's costs to supply other members of the Shop Rite cooperative. A quick calculation indicates that reducing volume 13 percent elevates other members' payments to cover fixed costs by $(100 - (100/1 - 0.13))$, or 14.9 percent. Moreover, the loss of Big V volume would likely increase fixed costs to an even greater degree due to increased financial costs. In its decision in *Big V Supermarkets, Inc. v. Wakefern Food Corp.*, the Court wrote:

Wakefern's loan agreements all have financial covenants requiring minimum tangible net worth, debt service capability, and fixed charge coverage ratio. If Big V were to leave, Wakefern would be perilously close to violating its loan covenants. If that were to happen, the lenders could accelerate \$285 million of debt, which Wakefern could not pay. That would force Wakefern into reorganization or liquidation (*Big V Supermarkets, Inc. v. Wakefern Food Corp.* p. 30).

Finally, Wakefern and its members' costs would increase due to a decrease in Wakefern's volume related discounts.

Kenneth Jasinkiewicz, Wakefern's Chief Financial Officer, testified at trial concerning the impact on the remaining Wakefern members (i.e., store operators) of Big V being acquired by Stop & Shop (using an estimate of increased costs of \$212,000 per store):

You'd have several impacts. First of all, dealing with the newer members who haven't had a chance to really build any type of equity in their business. Some of those members today are not making \$212,000 per year. So, that would put them into a

¹⁵ This equation comes from the statistical analysis reported in Cotterill, 1999b (p. 34, equation 2).

loss position. And if those members were to continue losing money, they could eventually be out of business. And you could have a domino effect because similar type of thing, if they go out of business, then those [costs] get passed on to the remaining membership.

As far as the members who have been around for a longer time, let me just give you by way of illustration. Let's take an average store that does \$600,000 a week, that's \$31 million a year. This is an industry that has very low margins. You know, one percent after tax has been used over the years. \$212,000 on 31 million is seven tenths pretax. Seven tenths is a lot of percentage of the profit. Take a chain that has 20 stores, \$212,000 is \$4.2 million a year. That may be enough to blow some of their [debt] covenants. It's going to restrict them as far as their capital expenditures going forward and growing their business. So, the short answer to your question, it could have a serious impact on the coop (Jasinkiewicz, 2001, p. 138:9-139:5).

10. Summary and Conclusions

Table 8 summarizes my trade and market area analysis, and identifies stores that Stop & Shop should not be permitted to acquire. (Table 8 also identifies all but one of the Big V stores that are currently operating and the 27 that Stop & Shop seeks to acquire.)¹⁶

Based upon my trade area analysis, Stop & Shop should be prohibited from buying 11 of the 27 stores in question. These 11 stores account for \$332 million, or 38.1 percent, of the proposed Stop & Shop acquisition. If I include the four questionable stores from the trade area analysis (identified in Table 2), Stop & Shop should be blocked from acquiring \$458 million in Big V annual sales, or 52.5 percent of the proposed acquisition.

Based on my market area analysis, Stop & Shop should be prohibited from acquiring an even greater number of stores—17 stores with \$523 million in annual sales, or 59.8 percent of the proposed acquisition. This divestiture is so large that the proposed transaction should simply be blocked. Moreover, the transaction should be blocked because it will significantly raise costs to the remaining Wakefern members, thereby damaging their ability to compete on price and inevitably resulting in increased prices to consumers throughout the region.

Divestiture in this case would be perverse. Wakefern would have to obtain approval of the antitrust agencies to buy back its member's stores. From an

antitrust and cooperative economics perspective, the burden is on the wrong party. Competitors should not be allowed to use the antitrust process to severely weaken or destroy a cooperative. Cooperatives generally act as competitive yardsticks in markets, lowering costs and prices and benefiting consumers (Cotterill, 1987, 1997; Rogers and Petraglia; Haller). In this case, the actions of Stop & Shop will severely weaken or destroy the pro-competitive impact of the nation's largest wholesale grocery cooperative. The costs of its wholesaling services to Big V are lower than those of the alternative supplier to Big V and Stop & Shop, C&S. Due to this fact and other reasons, the independent Shop Rite supermarket operators are tough competitors in the Northeast.

Based on the facts available to me at this time and my analysis, I conclude that the FTC and/or state antitrust authorities in New York and New Jersey should block the proposed transaction. They also should undo the Starwood Ceruzzi transaction to restore Big V as a competitor in the Poughkeepsie market. Force Ahold/Stop & Shop to compete with Big V on the merits. Let the bankruptcy court undo the damage of financial leverage at Big V and restore it to viable competitor status so that it too can compete on the merits.

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¹⁶ Table 8 does not include the Big V Shop Rite in Florida, N.Y.

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Table 1. Trade Area Analysis: Identification of Thirteen Shop Rite Stores that Should **NOT** be Sold to Stop & Shop.¹

Shop Rite Store	Address	Shop Rite Share	Stop & Shop Share	Combined Share	Other Competitor 1 (Share)	Other Competitor 2 (Share)	Other Competitor 3 (Share)	No. of other Competitors
Poughkeepsie Market								
#223	859 South Dr., Wappingers Falls	14.38	40.24	54.62	Price Chopper 27.40	Hannaford 13.70	Ferra's 4.28	3
#256	Highway 9, Fishkill	29.91	29.21	59.12	Wal-Mart 25.70	A&P ³ 9.35	Beacon 5.84	3
Newburgh Market								
#232	Highway 17, Monroe	54.45	13.46	67.91	Wal-Mart 32.09			1
#265	121 Dolson Ave., Middletown	44.12	11.56	55.68	Price Chopper 16.38	Hannaford 16.38	Redners 11.56	3
#210	400 Rt. 211E, Middletown	44.12	11.56	55.68	Price Chopper 16.38	Hannaford 16.38	Redners 11.56	3
#243	88 North Plank Rd. Newburgh	37.19	18.43	55.62	Price Chopper 30.99	Weis 5.03	Beacon 4.19	4
#248	Rt. 32, Vails Gate	39.15	19.40	58.55	Price Chopper 32.63	Weis 5.29	Gu Market 3.53	3
Westchester County								
#206	S. Riverside Ave., Croton on Hudson	31.67	26.67	58.34	A&P/Food Emporium 41.67			1
#211	747 Bedford Rd., Bedford Hills	26.44	8.05	34.49	A&P/Food Emporium 65.52			1
#274	960 Broadway, Thornwood	18.97	32.23	51.20	A&P 34.07	Key Food 11.05	Chappaqua 3.68	3
Trenton Market								
#534	1720 Nottingham, Trenton	34.80	17.98 ²	52.78	Acme 32.48	Super Fresh(A&P) 8.12	Risoldis 2.90	5
#536	1235 Rt. 32, Trenton	42.42	15.66 ²	58.08	Acme 24.38	Super Fresh(A&P) 6.64	Marrazzos 5.95	5
#540	622 Highway 206, Trenton	48.14	8.21 ²	56.35	Acme 26.55	Super Fresh(A&P) 7.54	Marrazzos 6.75	4

¹ Stop & Shop has agreed not to purchase stores #223 and #243. Based on a five-mile area radius, i.e. sales of all supermarkets within 5 miles of the Shop Rite are included when computing market shares.

² Super G stores share.

³ Future A&P store.

Source: Computed from Big V Five-mile Interaction Report, Appendix D.

Table 2. Trade Area Analysis: Identification of Shop Rite Stores that are Questionable Sales to Stop & Shop.

Shop Rite Store	Address	Shop Rite Share	Stop & Shop Share	Combined Share	Other Competitor 1 (Share)	Other Competitor 2 (Share)	Other Competitor 3 (Share)	No. of other Competitors
Westchester County								
#209 ¹	240 Sanford Blvd E., Mount Vernon	18.67	17.37	36.04	C Town 17.08	Pathmark 13.75	A&P 10.13	7
#271 ²	278 Tuckahoe, Yonkers	17.73	13.71	31.44	Stew Leonards 21.90	A&P 21.61	Pathmark 15.43	9
#283 ²	25-43 Prospect, Yonkers	22.58	11.29	33.87	Stew Leonards 28.69	Food Emp.(A&P) 24.27	Food Town 3.57	8
Trenton Market								
#542	2555 Pennington, Pennington	22.44	16.44 ³	38.88	Pennington 29.01	Acme 14.51	Marrazzos 11.03	4

¹ Trade Area is a two-mile radius.

² Trade Area is a three-mile radius.

³ Super G stores share.

Source: Computed from Big V Five-mile Interaction Report, Appendix D

Table 3. Number of Supermarkets, Supermarket Shares and Herfindahl-Hirschman Index for Metro Market Studies *Grocery Distribution Analysis and Guide* Defined Market Areas: 1994, 1997, and 2000.

	#	1994 Share	HHI	#	1997 Share	HHI	#	2000 Share	HHI
Poughkeepsie (Dutchess County)									
Stop & Shop	2	12.9	166	3	21.3	454	5	39.4	1552
Big V	5	33.4	1116	5	32.6	1063	2	16.1	259
A&P	4	11.4	130	3	8.8	77	3	14.2	201
Grand Union	11	28.6	818	12	30.2	912	6	11.5	132
Price Chopper	2	6.4	41	2	7.2	52	2	10.9	118
Wal-Mart							1	7.9	62
Edwards ²	1	5.0	25						
Great American	1	2.2	5						
	26	99.9	2301	25	100.1	2558	19	100.0	2326
Newburgh (Orange County N.Y., Pike County, PA)									
Big V	8	51.6	2663	9	55.8	3114	9	46.1	2125
Stop & Shop							4	18.2	331
Price Chopper	2	8.7	76	3	12.3	151	3	10.8	116
Grand Union	8	25.8	666	9	23.9	571	4	6.0	36
Wal-Mart							1	5.6	31
Hannaford							1	4.9	24
Lloyd's	1	4.1	17	1	3.9	15	1	3.3	10
Redner's							1	2.6	6
Weis	1	2.9	8	1	2.8	8	1	2.6	6
Great American	1	2.0	4	1	1.3	2			
A&P	1	2.7	7						
Food Town	1	2.2	5						
	23	100.0	3446	24	100.0	3861	25	100.0	2688
Trenton (Mercer County)									
Big V							4	25.2	635
Acme	5	20.8	432	5	27.5	756	5	21.1	445
Giant				2	12.7	161	2	12.6	158
Wegman's							1	9.1	132
A&P	4	14.8	219	2	9.0	81	3	10.9	118
Shop Rite	1	8.6	74	1	11.1	123	1	8.3	68
Shop Rite (Wakefern)							1	6.0	36
Pathmark	2	10.6	112	1	6.8	46	1	4.4	19
Shop N Bag	2	12.1	146	2	14.9	222			
Foodtown	2	7.5	56	3	12.3	151			
Mayfair/Foodtown ¹	2	9.5	90						
Thriftway	7	13.0	169	3	5.6	31			
Price Slasher	1	3.1	10						
	26	100.0	1308	19	99.9	1571	18	100.0	1614

¹ Royal Ahold acquired these Mayfair stores, converting them to Giant before 1997.² Became a Stop & Shop in 1996.Source: Calculated from Metro Market Studies, *Grocery Distribution Analysis and Guide*, 35th, 38th, 41st editions, 2001, 1998, 1995, Weston, MA, Tucson, AZ.

Table 4. Poughkeepsie N.Y. Market (Dutchess County): Current 2002 Estimates of Market Share and HHI

Store		Address	City	Selling Area	Weekly Volume	Share of Sales	Chain Share of Sales	HHI
Super Stop & Shop	514	Rte 9 & Saint Andrews Rd	Hyde Park	43,500	\$575,000	7.3	38.8	1504
Super Stop & Shop	517	727 Beekman Rd	Hopewell Junction	31,000	\$375,000	4.8		
Super Stop & Shop	538	6734 Hwy 9	Rhinebeck	27,000	\$225,000	2.9		
Super Stop & Shop	540	Plaza 44 Hwy 44	Poughkeepsie	41,000	\$700,000	8.9		
Super Stop & Shop	597	483 South Rd	Poughkeepsie	49,000	\$550,000	7.0		
Super Stop & Shop	598	1357 Hwy 9	Wappingers Falls	46,000	\$625,000	7.9		
ShopRite 223		859 South Rd & Hwy 9	Wappingers Falls	38,000	\$420,000	5.3	13.5	182
ShopRite 256		Hwy 9 & Commonwealth Dr	Fishkill	39,100	\$640,000	8.1		
Price Chopper Supermarket		838 South Rd	Poughkeepsie	52,000	\$375,000	4.8	10.2	103
Price Chopper Supermarket	12	432 South Rd	Poughkeepsie	55,000	\$425,000	5.4		
A & P Future Store	169	1227 St Hwy 52	Fishkill	27,000	\$200,000	2.5	9.2	85
A & P Sav A Center	94	Hwy 44 & North Ave	Pleasant Valley	27,000	\$250,000	3.2		
A & P Store	3	1115 Rt 82 & Taconic Pky	Lagrangeville	29,000	\$275,000	3.5		
Gu Market	1816	Main St & Hwy 44	Pleasant Valley	15,000	\$100,000	1.3	7.3	53
Gu Market	1874	Hwy 9 S & Albany Post Rd	Hyde Park	18,000	\$100,000	1.3		
Gu Market	1878	Hwy 22 & Mill St	Dover Plains	10,900	\$125,000	1.6		
Gu Market	1895	St Hwy 22 & Cascade Mtn Rd	Amenia	14,400	\$100,000	1.3		
Gu Market	1929	35 Hwy 44 E	Millerton	20,000	\$150,000	1.9		
Wal Mart Supercenter	1810	2400 Us Hwy 9	Fishkill	55,000	\$550,000	7.0	7.0	49
Hannaford		Rt 9 & 93	Wappinger Falls	50,000	\$400,000	5.1	5.1	26
Tiberios Redhook IGA Store		7568 N Broadway	Red Hook	28,000	\$225,000	2.9	2.9	8
Pawling Ag Market IGA		63 E Main St	Pawling	8,000	\$80,000	1.0	1.0	1
Adams Fair Acre Farm Market		765 Dutchess Tpke	Poughkeepsie	35,000	\$175,000	2.2	2.2	5
Beacon Market		451 Fishkill Ave	Beacon	17,000	\$125,000	1.6	1.6	3
Frankies Superette		Hwy 82	Hopewell Junction	11,000	\$100,000	1.3	1.3	2
					\$7,865,000	100.0	100.0	2020

Source: Wakefern Food Corporation

Conclusion 1: From this situation, as of February 2002, if Stop & Shop acquires Fishkill Big V Shop Rite and captures all of Wappinger Falls Shop Rite when it closes:

- Stop & Shop's market share increases from 38.8 percent to 52.3 percent.
- The HHI increases from 2020 to 3068.
- The increase in the HHI is 1048 points.

Conclusion 2: If the sales of Big V Shop Rite #223, which will close, are prorated to the other two supermarkets in Wappinger Falls and the nearby Poughkeepsie Price Chopper, in proportion to their sales, then:

- Stop & Shop market share increases 10.5 points to 49.3 percent and Hannaford's share increases 1.5 points to 6.6 percent and Price Chopper's combined share increases 1.4 to 11.6.
- The HHI increases from 2020 to 2814.
- The increase in the HHI is 794 points.

Conclusion 3: Stop & Shop bought, in February 2001 from Starwood/Ceruzzi, a developer, 2 Shop Rite stores that the developer purchased from Big V in violation of Big V's Wakefern stockholder's agreement. If the FTC were to order Stop & Shop to divest these stores (Stop & Shop #514, Stop & Shop #517), and assuming closed store #223 sales are prorated to the Stop & Shop, Hannaford, and Price Chopper stores, the market impact would be:

- Stop & Shop's market share would drop to 29.1%.
- The HHI decreases from 2020 to 1638, below the merger guidelines 1800 point cutoff.
- The decrease is 382 points.

Table 5. Newburgh N.Y. Market (Orange County): Current 2002 Estimates of Market Share and HHI

Store		Address	City	Selling Area	Weekly Volume	Share of Sales	Chain Share of Sales	HHI
ShopRite 210		400 Rty 211 E	Middletown	35,400	\$550,000	5.7	50.7	2573
ShopRite 232		Hwy 17m	Monroe	46,600	\$675,000	7.0		
ShopRite 234		1 Hawkins Dr	Montgomery	42,000	\$525,000	5.4		
ShopRite 240		78 Brookside Ave	Chester	52,000	\$640,000	6.6		
ShopRite 243		88 N Plank Rd Ste 1	Newburgh	28,400	\$410,000	4.3		
ShopRite 248		Rt 32	Vails Gate	52,000	\$700,000	7.3		
ShopRite 252		153 Hwy 94 S & Moe Rd	Warwick	41,600	\$680,000	7.1		
ShopRite 265		125 Dolson Ave	Middletown	33,600	\$585,000	6.1		
ShopRite 277		176 N Main St	Florida	25,700	\$125,000	1.3		
Super Stop & Shop	523	Hwy 17 & Still Rd	Monroe	33,400	\$325,000	3.4	14.8	219
Super Stop & Shop	524	60 Brotherhood Plaza Dr	Washingtonville	26,600	\$250,000	2.6		
Super Stop & Shop	525	330 Hwy 211 E	Middletown	48,000	\$300,000	3.1		
Super Stop & Shop	528	1429 Hwy 300	Newburgh	40,000	\$550,000	5.7		
Price Chopper Supermarket	10	39 N Plank Rd	Newburgh	49,000	\$450,000	4.7	14.0	196
Price Chopper Supermarket	11	511 Schutte Rd Ext	Middletown	46,500	\$425,000	4.4		
Price Chopper Supermarket	14	115 Temple Hill Rd Ste D	New Windsor	51,000	\$475,000	4.9		
Wal Mart Supercenter	2637	288 Industrial Park Rd	Monroe	42,600	\$775,000	8.0	8.0	65
Hannaford Food & Drug	337	30 Tower Dr	Middletown	45,400	\$425,000	4.4	4.4	19
Redners Warehouse Market	1	156 Dolson Ave	Middletown	38,400	\$300,000	3.1	3.1	10
GU Market	3269	Quaker Ave	Cornwall	10,700	\$100,000	1.0	2.1	4
GU Market	3277	299 Main St & Benhaven Rd	Highland Falls	10,900	\$100,000	1.0		
Weis Market	411	1067 Union Ave	Newburgh	25,000	\$150,000	1.6	1.6	2
Valley Supreme Super Market		St Hwy 52	Pine Bush	14,000	\$125,000	1.3	1.3	2
					\$9,640,000	100.0	100.0	3090

Source: Wakefern Food Corporation

Conclusion

If Stop & Shop is allowed to acquire Big V Shop Rite:

- Stop & Shops market share increases from 14.8% to 65.5%.
- The HHI increases from 3090 to 4591.
- The increase is 1501 points.

Table 6. Trenton N.J. Market Area¹: Current 2002 Estimates of Market Share and HHI

Store		Address	City	Selling Area	Weekly Volume	Share of Sales	Chain Share of Sales	HHI
ShopRite 534 (Big V)		1720 Nottingham Way	Trenton	34,000	\$325,000	4.2	35.4	1250
ShopRite 536 (Big V)		1235 Rte 33	Hamilton Square	36,000	\$675,000	8.7		
ShopRite 540 (Big V)		622 Hwy 206 & Martin Ave	Bordentown	42,000	\$660,000	8.5		
ShopRite 542 (Big V)		2555 Pennington Rd	Pennington	27,200	\$580,000	7.5		
ShopRite 544 (Big V)		1750 White Horse Rd	Hamilton	32,000	\$500,000	6.5		
Acme Market	7919	953 Rte 33	Hamilton Square	41,000	\$530,000	6.8	26.2	686
Acme Market	7947	1 Sunnybrae Blvd	Yardville	39,400	\$600,000	7.7		
Acme Market	7957	1061 White Horse Ave	Hamilton	33,000	\$200,000	2.6		
Acme Market	7979	Rte 1 & Texas Ave	Lawrenceville	41,000	\$375,000	4.8		
Acme Market	7983	Farnsworth Ave & Hwy 130	Bordentown	31,000	\$325,000	4.2		
Super G Food & Drug	267	1556 N Olden Ave Ext	Trenton	48,000	\$425,000	5.5	10.2	104
Super G Food & Drug	268	635 S Clinton St	Trenton	35,200	\$365,000	4.7		
Pennington Quality Market		Delaware & Hwy 31	Pennington	33,000	\$750,000	9.7	9.7	94
Marrazzos Thriftway		1091 Washington Blvd	Trenton	36,000	\$300,000	3.9	7.5	57
Marrazzos Thriftway		1400 Pkwy Ave	Trenton	23,600	\$285,000	3.7		
Super Fresh (A&P)	42	2465 S Broad St	Hamilton	40,600	\$335,000	4.3	6.5	42
Super Fresh (A&P)	48	1300 Parkway Ave	Trenton	20,600	\$170,000	2.2		
Pabers Shop N Bag		1080 White Horse Ave	Trenton	15,000	\$125,000	1.6	1.6	3
Risoldis Thriftway		3100 Quakerbridge Rd	Mercerville	17,000	\$125,000	1.6	1.6	3
Fine Fare Supermarket		1605 Calhoun St	Trenton	23,000	\$100,000	1.3	1.3	2
					\$7,750,000	100.0	100.0	2240

Source: Wakefern Food Corporation

¹ The Market area is western Mercer County and Bordentown. (Eastern Mercer County stores in Princeton, Princeton Junction, and Hightstown are not in this market).

Conclusion

If Super G Food and Drug is allowed to acquire Big V Shop Rite:

- Super G Market share increases from 10.2% to 45.6%.
- The HHI increases from 2240 to 2962.
- The increase in the HHI is 722 points.

Table 7. Predicted Retail Price Impacts of the Proposed Royal Ahold/Stop & Shop Acquisition in Three Market Areas and the Return of Two Supermarkets in Poughkeepsie, New York.

Action	Initial HHI	Change in HHI	% Change in HHI	% Change in Retail Price
Poughkeepsie, NY Stop & Shop Acquires Big V	2020	794	39.3	2.5
Poughkeepsie, NY Stop & Shop returns two stores To Big V	2020	-382	-18.9	-1.2
Newburgh, NY	3090	1501	48.6	3.1
Trenton, NJ	2240	722	32.2	2.0

Source: Cotterill 1999b, p. 34 equation 2; and Tables 4, 5, 6.

Table 8. Summary Table of the Trade and Market Area Analysis Identifying Stores that Stop & Shop Should Not be Allowed to Buy

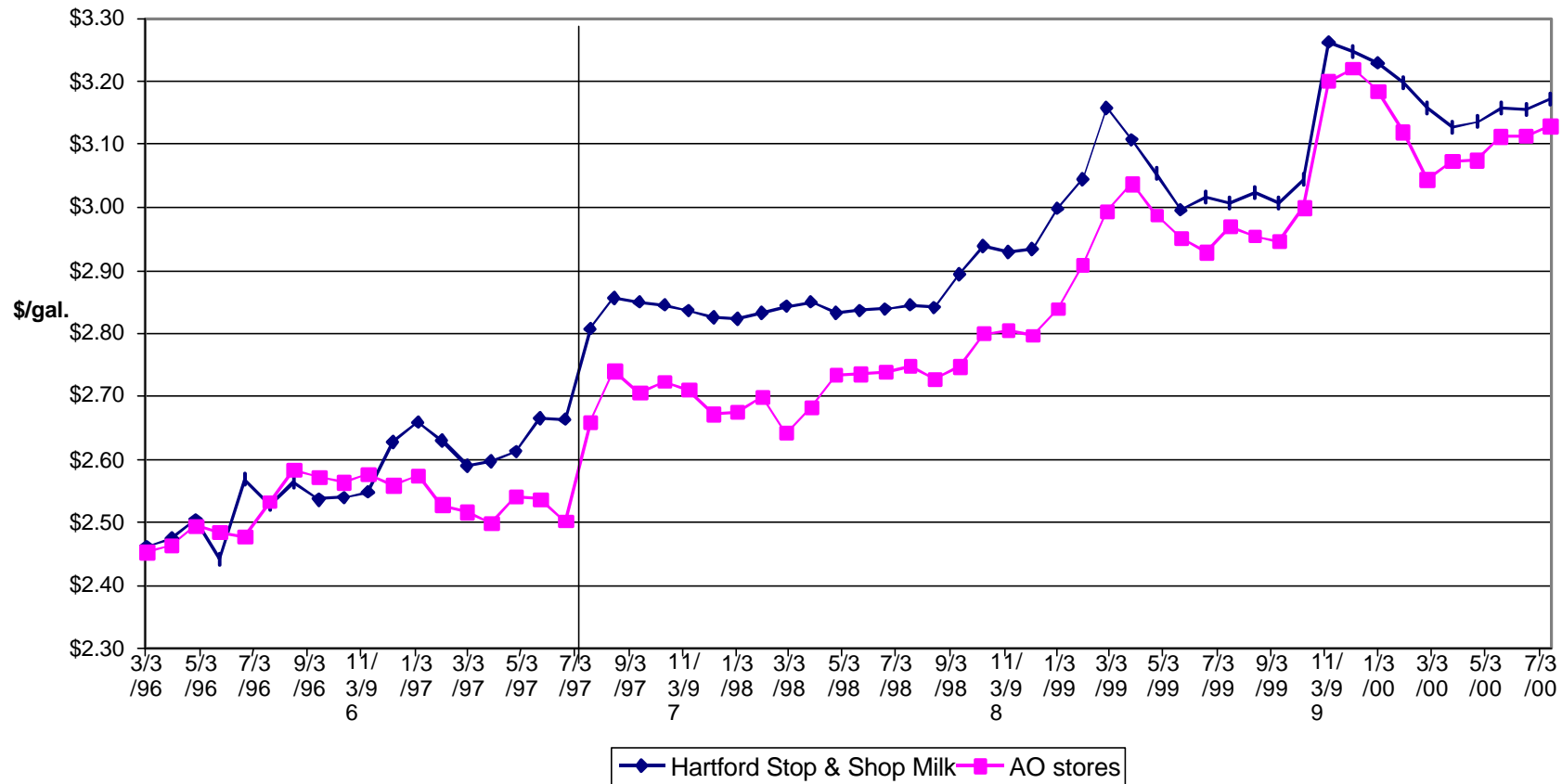
Store	Address	Big V Stores Annual Sales ¹	27 Stores Stop & Shop Wants to Buy	Stores Stop & Shop Should Not Buy		
				Trade Area Dominance	Market Area and Trade Area Dominance	Questionable Stores
Columbia County						
#258	Hudson	20,800				
Dutchess County						
#223	Wappingers Falls	21,840				
#256	Fishkill	33,280	33,280	33,280	33,280	
Orange County						
#210	Middletown	29,120	29,120	29,120	29,120	
#232	Monroe	35,100	35,100	35,100	35,100	
#234	Mongomery	27,300	27,300		27,300	
#240	Chester	33,280	33,280		33,280	
#243	Newburgh	21,320				
#244	Montague	40,300	40,300		40,300	
#248	Vails Gate	36,400	36,400	36,400	36,400	
#252	Warwick	35,360	35,360		35,360	
#265	Middletown	30,420	30,420	30,420	30,420	
Putnam County						
#230	Carmel	33,540	33,540			
Sullivan County						
#214	Monticello	21,580	21,580			
#249	Liberty	19,500	19,500			
Ulster County						
#236	Kingston	33,800	33,800			
#250	Ellenville	16,900	16,900			
#286	New Paltz	22,880	22,880			
Westchester County						
#206	Croton on Hudson	24,700	24,700	24,700	24,700	
#209	Mount Vernon	33,540	33,540			33,540
#211	Bedford Hills	29,900	29,900	29,900	29,900	
#271	Yonkers	39,000	39,000			39,000
#274	Thornwood	26,780	26,780	26,780	26,780	
#283	Yonkers	23,400	23,400			23,400
#289	Peekskill	40,300	40,300			
Trenton						
#534	Trenton	16,900	16,900	16,900	16,900	
#536	Hamilton Square	35,100	35,100	35,100	35,100	
#540	Bordentown	34,320	34,320	34,320	34,320	
#542	Pennington	30,160	30,160		30,160	30,160
#544	Hamilton	24,960	24,960		24,960	
total		871,780	807,820	332,020	523,380	126,100

¹ This column includes 30 Big V supermarkets. Big V operates one other supermarket at its corporate head quarters in Florida N.Y. Apparently that supermarket is part of the complex and not marketable.

Source: Wakefern Food Corporation

Figure 1.

Hartford
Stop & Shop vs All Other Supermarkets
Market Level Milk Price
March 1996 - July 2000

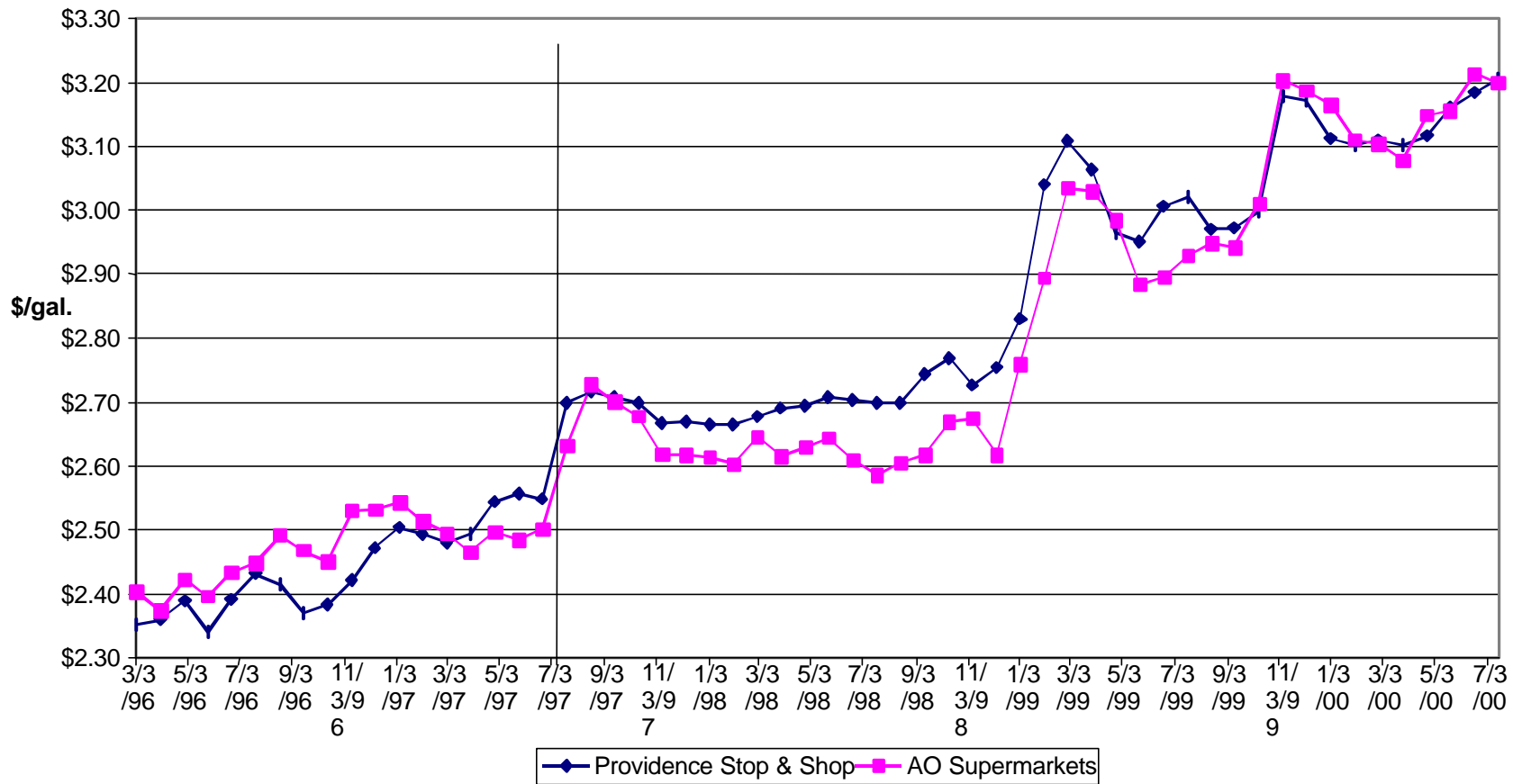


Source: Calculated from Food Marketing Policy Center IRI database.

Figure A2, Cotterill and Franklin 2001a.

Figure 2.

Providence
Stop & Shop vs All Other Supermarkets
Market Level Milk Price
March 1996 - July 2000

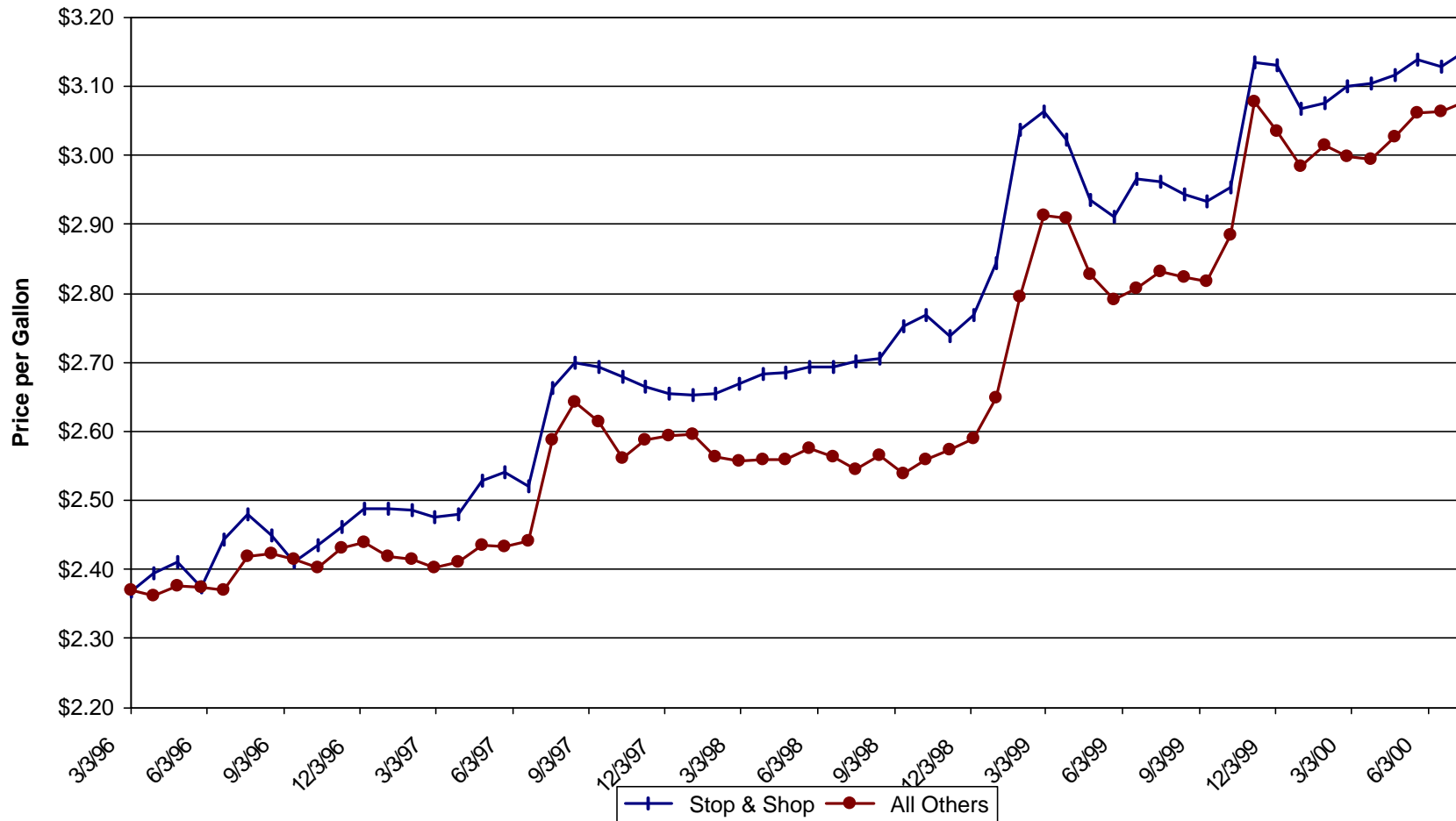


Source: Calculated from Food Marketing Policy Center IRI database.

Figure B2, Cotterill and Franklin 2001a

Figure 3.

**Boston Stop & Shop vs All Other Boston Supermarkets
Milk Price Per Gallon
February 1996- July 2000**



Source: Calculated from Food Marketing Policy Center Information Resources Inc. Database

Appendix A**Wakefern Strategic Assessment of Starwood Ceruzzi and Stop & Shop Moves to limit Entry by Competitors to Stop & Shop**

At present, Stop & Shop is seeking to increase its market share in the Hudson River Valley and Westchester County, both by acquisition of Big V Supermarkets, Inc. and by obtaining control of sites which might otherwise be used as competitive supermarkets. In February, 2001, Starwood Ceruzzi, a developer which develops and sells or leases supermarkets acquired three (3) ShopRite supermarkets from Big V. They were located in Hyde Park, New York; Beekman, New York; and Poughkeepsie, New York. The Beekman and Hyde Park stores are now operated as Stop & Shops, but the Poughkeepsie site, which was a free-standing site located directly across the street from a new Stop & Shop, remains dark a year after its acquisition.

More recently, Starwood Ceruzzi developed sites in Wilkes-Barre, Pennsylvania and Wyomissing, Pennsylvania on behalf of Big V. When Big V failed to open Wyomissing and rejected the Wilkes-Barre lease, the sites were converted to Stop & Shops. Starwood Ceruzzi has also acquired a site on Dolson Avenue in Middletown, New York where Big V had intended to develop a 85,000 sq. ft. replacement store for a ShopRite that is located less than one-quarter of a mile away, also on Dolson Avenue. Not only has Starwood

Ceruzzi acquired the site that Big V intended to develop, but it has also made an offer to buy the center where the current Dolson Avenue ShopRite is located. When the Shop Rite lease expires in August 2003, Stop & Shop will in effect be our landlord. It would be reasonable to believe that Stop & Shop would choose to operate one of the two Dolson Avenue sites and have Starwood Ceruzzi seek a nonsupermarket tenant for the other site. Given the actions of Starwood Ceruzzi and Stop & Shop with respect to the Poughkeepsie ShopRite, it is very unlikely that Starwood Ceruzzi would seek to put a supermarket into the Dolson Avenue site not occupied by Stop & Shop.

The same situation exists in the towns of New Paltz and Lloyd, New York. Starwood Ceruzzi has acquired the center in New Paltz where Big V currently operates a ShopRite of 32,000 sq. ft. The store is old and small and must be expanded or replaced in order to remain competitively viable. Big V had entered into negotiations to develop a site in Lloyd, New York, 1-1/4 miles from the New Paltz store. The developer has recently obtained the necessary approvals from the municipality to develop a supermarket on the site. Starwood Ceruzzi is now attempting to buy the site from the current developer so that again, it would be in a situation where it would control both the site where a ShopRite is located and the site where the ShopRite had sought to expand or relocate.

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