

Food Marketing Policy Center

**An Antitrust Economic Analysis of the
Proposed Acquisition of Supermarkets General
Holdings Corporation by Ahold Acquisition Inc.**

By Ronald W. Cotterill

Food Marketing Policy Center
Research Report No. 46
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University of Connecticut
Department of Agricultural and Resource Economics

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Preface

This report was presented in April, 1999 to Federal Trade Commission staff attorneys and economists working on the Royal Ahold/Pathmark merger. In May, it was also presented to antitrust attorneys in the New York and New Jersey Attorney General Offices. A second report, *Post Merger Conduct: A Case Study of Pricing in Connecticut Markets After the 1996 Royal Ahold/Stop & Shop Merger* was provided to the same antitrust authorities in October. That report is published as Research Report Number 47 in this series. In December 1999, Royal Ahold withdrew its tender offer citing a new and tougher level of enforcement by the Federal Trade Commission. Piecemeal divestitures that sought to preserve competition in local market areas are now recognized as inadequate. The momentum of acquirers in local markets and concerns for buying power disparities that disadvantage "smaller" chains, as well as food manufacturers and farmers, now clearly seem to be on the antitrust agenda. For more general comments on these topics, see Cotterill, 1999a and 1999b.

1. Introduction

On March 9, 1999, Royal Ahold N.V., a Netherlands based global retailer, announced a cash tender offer that, if consummated, will enable it to acquire the Pathmark Supermarket chain, a subsidiary of the Supermarkets General Holdings Corporation. Royal Ahold is offering \$250 million for all outstanding shares. The acquirer will also assume all of the indebtedness of Pathmark, amounting to approximately \$1.5 billion. Thus the total price for Pathmark is \$1.75 billion (Royal Ahold press release). Recently, the expiration date on the offer was extended from April 9, 1999 to May 21, 1999.

Pathmark's 1998 sales in its 132 stores totaled \$3.7 billion (Reidy, 1999). Pathmark stores are located on Long Island (25), in New York City (18), Westchester/Rockland (7), Northern and Central New Jersey (52), southern New Jersey (10), eastern Pennsylvania (16), and Delaware (4). These stores have a total selling area of 5.1 million square feet and average 38,600 square feet of selling space each. Pathmark's average annual sales per square foot, a key store level efficiency measure, is \$720, among the highest in the country (Royal Ahold press release).¹

Royal Ahold holds a 28 percent national market share in its home country, the Netherlands, and in addition to business in the U.S., operates in Portugal, Spain, the Czech Republic, Poland, Latin America, and the Asian Pacific. The company operates more than 3,600 stores globally with 1998 sales of over \$30 billion. In the U.S., Royal Ahold is the leading supermarket operator along the eastern seaboard with over 1,000 stores. Royal Ahold currently owns five companies: Stop & Shop, Giant-Landover, Md. (Super G stores), Giant-Carlisle, PA including the Edwards chain, Tops Markets in western New York state including Finast in Cleveland, and BI-LO in the Carolinas. The Royal Ahold U.S. companies generated 1998 sales of \$16.2 billion with operating profits of \$714 million.

For the reasons set forth below, I conclude that Royal Ahold's proposed acquisition of Pathmark is likely to reduce competition substantially in numerous local markets. There is considerable overlap between the existing and planned operations of Pathmark and Royal Ahold's chains at the county and store level. If this transaction is allowed, concentration levels will increase significantly and retail prices are virtually certain to rise, particularly given the relatively weak

remaining competition in many of these areas. Divestiture is not a viable solution here, as best evidenced by the past divestitures made by Royal Ahold itself.

2. Royal Ahold Expansion in the U.S. via Acquisition

Appendix II of an extensive report on Royal Ahold that was issued June 19, 1998 by Information Clearinghouse is a time line that identifies key events in Royal Ahold's expansion in the U.S. Royal Ahold began operations in the U.S. in 1977 by acquiring the BI-LO chain in the southeast. In 1981, it acquired a chain that had dominant and very profitable positions in many smaller Pennsylvania cities and towns, Giant of Carlisle Pa. In 1988, it acquired First National supermarkets (Edwards and Finast chains) in Ohio, southern New York, and southern New England. In 1991, Royal Ahold acquired Tops, a leading chain in Buffalo, Rochester, and smaller central and western New York state cities. All of these acquisitions were essentially in unrelated areas of the country. Royal Ahold is generally credited with aggressively managing, improving, and expanding these chains.

Royal Ahold's next acquisition in 1996 was very different. The target firm, Stop & Shop, was a leading firm in several southern New England markets where a Royal Ahold chain, Edwards, was often the number two firm. The merger was approved only after divestiture of 32 stores with more than \$600 million in sales.

In 1998, Royal Ahold again acquired a strong regional chain with dominant market shares in Washington D.C. and Baltimore, Giant Food Stores, Landover, Md. This merger also engendered divestiture in smaller Pennsylvania markets where Giant of Landover competed directly with Royal Ahold's Giant of Carlisle Pa. chain.

Royal Ahold has clearly linked a set of leading firm market share positions in local food markets from the Carolinas to Cleveland, Ohio to Boston, and now seeks to complete its dominance of the east coast by adding the metro New York area via the Pathmark acquisition.² Royal Ahold's strategy has become bolder in its recent acquisitions. It acquires horizontal competitors, and then negotiates with the antitrust authorities giving up just enough to secure approval of the acquisition.

² Royal Ahold has often claimed that the assembly of these regional chains is generating vertical efficiencies in its distribution channels, and horizontal efficiencies in its retail operations. The absence of any tangible data to support these assertions will be examined in section 8 below.

¹ This level of patronage also clearly indicates that Pathmark supermarkets are well run and highly regarded by consumers.

Moreover, Royal Ahold and others are not done acquiring competitors and/or potential competitors in the food retailing industry. Many industry observers expect that absent rigorous antitrust enforcement, we will soon see the emergence of four or five chains with over 60 percent of all supermarket sales in the U.S. in the near future (Mathews, 1999; Goch, 1998; A. Anderson, 1999). This consolidation wave raises real questions concerning competition versus upstream suppliers all the way back to the farm level, real questions concerning the elimination of horizontal competition in local food markets and real questions concerning the elimination of potential entrants and the elevation of barriers to entry in local food markets. It is clearly time to place large retailers such as Royal Ahold under closer scrutiny, especially when they seek to expand via acquisition.³

3. Why This Acquisition Should be Stopped

There is a pervasive overlap between Royal Ahold's current operation, most notably Edwards, and Pathmark, at the county and individual store level. See Points 4 and 5 below. For Edwards, 62 of its 67 stores, and for Pathmark, 104 of its 132 stores, are located in 18 overlap counties. Twenty supermarkets from other Royal Ahold chains are also located in these counties. At the store level, 45 of Edwards 67 stores have a Pathmark store as a direct geographic competitor. In addition 9 Edwards sites or stores under construction will compete with Pathmark. Two Stop & Shops, 6 Giant (Carlisle, Pa.) and 1 Super G (Landover, Md.) supermarkets also are in direct geographic competition with a Pathmark store. In addition, 1 Stop and Shop and 1 Giant site will compete with Pathmark.

Research on changes in market concentration of the magnitude observed for this acquisition indicate that consumers will face higher prices due to the exercise of coordinated as well as unilateral market power. See Point 4 below. In that regard, it is noteworthy that two of the other leading chains in the metro New York area, A&P/Waldbaum and Grand Union, are "soft competitors," who do not aggressively compete on price. They are precisely the type of firms that will tend to follow and validate any reduction in the vigor of

competition effected by the elimination of competition between Edwards and Pathmark. See Point 6 below.

Recent price checks for Stop & Shop and Giant (Carlisle, Pa) indicate that these Royal Ahold chains price strategically depending upon the degree of competition they face in local market areas. When competition is limited, prices are higher. See Point 7 below.

Unsubstantiated claims of the existence of merger specific efficiencies, and consumer benefits allegedly flowing therefrom, can no longer be regarded as sufficient for approval of a Royal Ahold acquisition. They must now conclusively document such efficiencies and their salutary impact on consumers for the 1996 Stop & Shop and the 1998 Giant (Landover, Md) acquisitions. After two bites at the efficiency apple, a third must be disallowed absent proof of pro consumer performance, i.e. the lowering of prices to consumers to pass on efficiencies (Baker, 1998, and Ashenfelter and Ashmore, 1998). See Point 8 below.

It is well documented that barriers to entry exist in many local food markets. The consolidation of two of the most dynamic competitors in the New York Metro area will elevate strategic barriers to entry. Royal Ahold's reputation and size will also likely deter potential entrants. See Point 9 below.

Finally, history has now shown that the antitrust authorities overwhelming preference for a "fix it first" conciliatory approach to mergers in this industry has produced a series of ineffectual divestitures that have rationalized the positions of leading chains, often enabling them to expand share in the post merger period, thereby resulting in increased rather than lower concentration. See Point 10 below.

4. County Level Analysis of Market Positions, Concentration and Competitive Effect

Royal Ahold currently owns several east coast supermarket chains that compete with Pathmark supermarkets in one or more geographic markets. These chains are Edwards, Stop & Shop, Giant of Carlisle, PA (Giants Stores), and Giant Food Stores Inc. of Landover, MD (Super G stores). A major and extensive horizontal overlap exists between the targeted Pathmark chain and many Royal Ahold stores, especially the Edwards supermarket chain. Both Pathmark and Edwards operate supermarkets, the relevant product market, and both operate in the same area of the country. Their overlap includes geographic expansion plans as well as current operations. Other Royal Ahold chains, Stop & Shop, Giant, and Super G, also compete with Pathmark in

³ On the first point reflecting farmer concerns about retail level consolidation, Senator Grassley, Iowa, recently introduced a bill to override the Illinois Brick decision for selected food industries so that farmers would have standing to sue not only the first handler of their products, but also others down the distribution chain, including supermarkets for anticompetitive behavior.

“fringe” markets beyond their core markets where they currently have dominant market share positions. Dominance in these markets means that these chains are very strong enterprises. As these chains expand geographically, competition would, but for this merger, increase in Pathmark's markets.

Table 1 lists the 18 counties (5 New York, 10 New Jersey, 2 Pennsylvania, and 1 Delaware) where Pathmark and Royal Ahold subsidiary chains compete. Counties are not necessarily antitrust markets as depicted by the federal merger guidelines (<http://www.usdoj.gov/atr/public/guidelines>) and the relevant geographic markets here are most likely smaller than county areas due to constraints in physical and urban economic geography and observed consumer switching among supermarkets. Thus the Herfindahl (HHI) values reported in Table 1 and the underlying market share data appended as Appendix A are most likely understated, especially for the first two counties in Table 1, Kings (Brooklyn) and Queens, which are boroughs of New York City.

In the other 16 counties listed in Table 1, the premerger HHI is above 1000 points, and in 13 counties the increase in the HHI, the delta, is above 100 points. The delta for the 16 counties outside of New York city averages 264.5. Therefore, this proposed merger between Royal Ahold and Pathmark satisfies the threshold standard for potential competitive problems set forth in the Federal Merger Guidelines, i.e. the premerger HHI is above 1000 with a delta above 100 points. Six counties have an HHI above 1800 and of those 5 have deltas above 50. As noted, a more refined definition of relevant antitrust markets within counties will in all likelihood increase market shares and competitive concerns. Very high deltas in the following counties raise very significant questions about the competitive impacts of this proposed merger: Nassau (597), Middlesex (542), Camden (389), Suffolk (375), Union (357), Somerset (339), Hudson (289), Bucks (247), New Castle (207) and Delaware (205).

Perhaps the most direct way of assessing the degree of current and potential horizontal competition between Edwards, the primary Royal Ahold chain in this analysis, and Pathmark, is to note that 62 of Edwards 67 supermarkets are located in the horizontal overlap counties. For Pathmark, 104 of 132 stores are located in the horizontal overlap counties.

Research has directly related the level of concentration to the general price level and a firm's market share to its price level in differentiated product markets such as food retailing. Cotterill (1993 Chapter 1), Martin (1993 p. 544-547), and Haller (1994) present

theoretical models that relate prices to market structure. Froeb and Werden (1991) evaluate the econometrics of these models. Levy and Reitzes (1993) maintain that spatial differentiation facilitates collusion in markets where it may not fully enable unilateral market power. Baker and Ashenfelter (1998) presented an econometric study in the Staples, Office Depot matter that documents that firms have higher prices in markets where they have higher market shares (fewer competing stores). An extensive line of empirical studies (Marion et al. 1979, Weiss 1989; Cotterill 1986, 1993, 1999; Cotterill et al. 1999; Cotterill and Putsis 1999) document the exertion of market power via strategies that require the tacit cooperation of other firms in the market, i.e. coordinated market power as well as the exertion of unilateral market power. Moreover, according to this research, changes in the level of market concentration and shares observed in the county level market areas presented here are sufficient to have impacts upon consumer prices. Coordinated market power is a real possibility and can be effective in food retailing markets. Leading firms in concentrated markets zone price and follow each other's lead to higher prices.

5. Store Level Analysis of Competition and Competitive Effects

In recent years, the antitrust agencies have focused, (too often at the expense of coordinated effects), upon unilateral effects analysis of mergers in spatially differentiated industries such as food retailing. Shapiro (1995) states:

In fact, it is fair to say that economic analysis of differentiated-products mergers at the Division typically focuses on unilateral effects, unless there are structural factors facilitating collusion following merger, or unless there is a history of collusion in the industry. This emphasis represents a significant shift in a fairly short period of time. (Shapiro, 1995, p.6)

For retailing, a unilateral effects analysis involves identifying geographic locations where one or more supermarkets operated by the acquirer compete directly with one or more nearby supermarkets operated by the acquired firm. Customers located between the acquiring and acquired supermarkets will, absent divestiture, have reduced choice after merger. Both theoretical (Deneckere and Davidson 1985, Levy and Reitzes 1993) and empirical research (Cotterill and Haller 1997, Cotterill 1994, Hausman et al. 1994, Werden as quoted in Shapiro 1995) have demonstrated that the exercise of unilateral market power raises prices.

Tables 2a and 2b present a store level, unilateral power analysis of the proposed merger between Pathmark and Royal Ahold. The first table lists the Pathmark stores that compete with a nearby operating or planned Royal Ahold store. For each Pathmark, the competing Royal Ahold store is identified and the distance between the two stores is given. The square footage and weekly sales of each store is also provided to give an indication of the relative drawing power of each store.

Table 2a contains 72 pairs of competing stores. Figure 1 indicates that 21 of the competing pairs are within 1 mile of each other, another 30 pairs are between 1 and 2 miles of each other, 12 competing pairs are between 2 and 3 miles of each other, 9 competing pairs are between 3 and 5 miles of each other. In dense urban and semi-urban areas such as nearly all of these counties, very few customers travel more than five miles to do their primary grocery shopping. In fact, most suburban customers shop within three miles of their residence.

Table 2b summarizes the degree of overlap at the store level. For Pathmark, 60 of its 132 stores have a Royal Ahold store as a direct competitor. The sales of 59 of those stores (one is under construction) total \$1.743 billion, 47.1 percent of Pathmark's 1998 sales of \$3.7 billion (Reidy). For the Edwards chain, 45 of its 67 stores, and 9 of its sites or stores under construction, compete directly with a Pathmark. The 45 operating stores 1998 annual sales are estimated to be \$941.5 million. When the 9 other operating Royal Ahold stores from Stop and Shop, Super G and Giant are included, the estimated 1998 annual sales of the impacted stores is \$1.128 billion. The overlap is extensive and poses a very significant threat to competition.

Each of the pairs reported in Table 2a are plotted on county maps that accompanied this report. While these store pairs often have other supermarkets operating within three miles, it is axiomatic that not all supermarkets are equal. Pathmark and Edwards operate very large modern superstores, whereas many of the other supermarkets identified are smaller, older, and generally less attractive. These other supermarkets may inhibit the exercise of unilateral market power, but not likely to any significant extent. Moreover, coordinated market power effects will likely occur in these areas. For example, assume three supermarkets are spaced 3 miles apart in a row on a major road and the two end stores are a Pathmark and an Edwards. The middle store is a competitor. Intuition might suggest that after the merger, the Pathmark and Edwards would not be able to unilaterally raise prices because of the competitor's intervening store. However, if the competitor cooperates

and follows the price lead by the stores on each side, then all firms increase profits at the higher price level. Alternatively, as discussed in more detail later, the dominant retailer could choose to lower price until the intervening competitor store shuts down. In short, a powerful market position gives a retailer options, and strategic pricing does occur in retail food markets.

6. Competitive Effects: Soft Competition

The ability of the merged firm to elevate prices in the metro New York area is enhanced by the presence of two large chains that are weak competitors, commonly referred to as soft competition. Soft competitors tend to follow the price level of others and prefer higher to lower prices. Soft competitors tend to be slow to commit capital to open new stores, preferring instead to harvest profits from their older, stable store base. It is widely recognized in the industry that A&P/Waldbaum and the Grand Union chain are soft competitors. Grand Union, under the benign neglect of several different owners, (including corporate raider Sir James Goldsmith and Penn Traffic's Gary Hirsch) has fallen on particularly hard times.

Pathmark has a progressive reputation and developed a strong portfolio of superstores that follow a hi-low merchandising strategy but it also may have developed a preference for soft competition. As a leveraged buyout (LBO) firm, it has been saddled with a very high debt load that demanded a high cash flow to service debt. Research on supermarkets that were highly leveraged via LBOs or in response to LBO threats in the 1980's indicates that they had to be soft competitors and have higher prices than non-leveraged firms (Chevalier, 1995a, 1995b, Cotterill 1993). Royal Ahold is assuming all of the debt loaded upon Pathmark when it went LBO. Edwards, heretofore an every-day-low-pricing (EDLP) chain, is scheduled to be converted to Pathmark stores. The reduction in competition due to this acquisition will aid in covering Pathmark's debt.

7. Competitive Effects: Pricing

As stated above, research on supermarket pricing has documented that firms with larger market shares and firms in more concentrated markets charge higher prices. To validate this point for Royal Ahold, I have analyzed the relationship between local market area concentration and the price levels in Royal Ahold supermarkets. Store level price indices are computed using price check data from Retail Data Services Incorporated. Six Stop & Shop and five Giants were selected from "more

competitive" markets. Four stores for each chain were selected from "less competitive" markets. The data were collected between March 15, and March 26, 1999. The check covers a 100 item grocery basket from the grocery, dairy, frozen foods, meat, produce, and the health and beauty and consumer departments.

Using maps and store location information, the local market area where each of these stores sells food was defined. Appendix B contains the local market data. For each market, it lists the major supermarket competitors, and for each operator, it gives the number of stores, estimated sales, and estimated market share. The Herfindahl-Hirschman index (HHI) for each market are also computed.

Tables 3 and 4 summarize the price and market structure data. Each table provides department level shares of sales as well as the dollar outlay for items checked in each department. A department share weighted average price index is computed with the lowest priced store in the sample (Allentown, PA) indexed at a value of 100. Each table also reports the HHI for each market. Using the price index and HHI data, we can test for a positive relationship between them.

Table 3a presents results for Giant stores in more competitive areas. The all item price index for these five stores ranges from 100 to 107.05. These more competitive stores have a mean index value of 102.76.

Table 3b computes the all item index for Giant stores in less competitive markets. The index ranges from 108.9 to 114.55 with mean value 112.34. The price level for Giant stores in less competitive markets is, on average, 9.3 percent higher than in more competitive markets.

Table 4a presents the results for the Stop & Shop stores in more competitive areas. The all item price index for these six Stop & Shop stores ranges from 110.90 to 115.26. These more competitive Stop & Shop stores have mean index value of 112.35.

Table 4b computes the all item price index for Stop & Shop stores located in less competitive markets. The index ranges from 115.67 to 120.55, with mean value, 118. The price level for Stop & Shop stores in the less competitive markets is, on average, 5 percent higher than the price level for Stop & Shop stores in the more competitive markets. Note also that all Stop & Shop stores in the less competitive areas have price indices above any index observed in the more competitive areas.

Figure 2 is a plot of the all item price index and the HHI for these stores. Clearly there is a positive relationship between market concentration and price level. Using multiple linear regression with a

logarithmic functional form, the line that best fits the data is drawn in Figure 2. The underlying regression output is in Appendix C. For this logarithmic model, variation in the HHI explains 60.55 percent of the variation in the price level. A 10 percent increase in the HHI produces a .72 percent increase in the price level. Statistically, this increase is highly significant (one percent level).

Returning to Figure 2, note that the Stop & Shop stores tend to have higher prices than the Giant Stores. This in itself is interesting because the 1996 Stop & Shop/Edwards merger reputedly generated significant economies of scale that should be captured by Stop & Shop and not Giant. (Royal Ahold press release). If those cost savings were passed on to consumers, one would expect to see lower, not higher prices around the trend line for Stop & Shop⁴.

Stop & Shop may have higher prices than Giant because it faces higher input prices. Cost of goods sold and wage rates are most important and typically account for over 85 percent of costs. Alternatively, Stop & Shop prices are higher because it has been able to differentiate itself from the competition (its dominant positions in many local markets) so that it can get a higher "yield" from a given increase in the HHI. For either reason, today Stop & Shop can and does charge more than Giant for the same set of products.

We reran our regression model with a binary variable to identify the Stop & Shop stores (second regression in Appendix C). The HHI still has a highly significant but slightly lower impact on price. A 10 percent increase in the HHI generates a .63 percent increase in the price level. This two variable (HHI and Stop & Shop) model explains 88 percent of the observed variation in price, up from 60.55 percent for the single (HHI) model.

Using the county level HHI data from Table 1, we can estimate how much the proposed merger will increase prices in each county. Table 5, column 4 predicts price increases for the single variable logarithmic model. Price increases are highest in Nassau County, 3.56%, Suffolk County, 2.22%, and Middlesex County, 2.21%. Column 5 in Table 5 gives predicted percent change in price due to changes in the HHI controlling for Stop & Shop's price differential. These are slightly lower than those reported for the single variable model, however, they remain substantial for

⁴ A more robust test of the impact of the merger on price would include an examination of Stop & Shop prices before and after merger.

many counties. The highest predicted price increases are 3.13% for the Nassau county, 1.96% for Suffolk county and 1.95% for Middlesex county.

The two variable model predicted price increases would be most accurate if Stop & Shop's higher prices are due to higher input prices; but, at this juncture, we do not know if this is in fact the case. Absent more information, one probably should give consumers the benefit of the doubt and choose the higher price impact estimate. Another fact also suggests using the higher estimates. The HHI used in this analysis are based for well defined market areas that in all cases are less than county wide. As pointed out earlier, the county, market share data are provisional. More precise definitions of market areas will probably in most cases produce a higher percent change in the HHI. This would increase the predicted price impacts due to the merger.

8. Competitive Effects: Merger Specific Efficiency Effects

The LBOs of the 1980's in food retailing have been followed by a wave of horizontal mergers in the 1990's. While many of the earlier mergers were for market extension purposes, more recent transactions involve significant overlap. A common reason often cited in the popular and trade press for both types of mergers is the pursuit of synergies and economies of scale and scope. However, it is important to appreciate these are often pecuniary (financial) economies rather than real economies. Yet, all are lumped together under the general rubric "efficiencies".

The federal merger guidelines carefully sort through general claims of efficiency when considering whether they more than offset any increase in market power thereby making a merger or acquisition consumer friendly. Quoting from the guidelines:

Efficiencies generated through merger can enhance the merged firm's ability and incentive to compete, which may result in lower prices, improved quality, enhanced service, or new products.

The Agency will consider only those efficiencies likely to be accomplished with the proposed merger and unlikely to be accomplished in the absence of ... the proposed merger ... These are termed merger specific efficiencies.

... the merging firms must substantiate efficiency claims so that the Agency can verify by reasonable means the likelihood and magnitude of each asserted efficiency, how and when each would be achieved (and any costs of doing so), how each

would enhance the merged firm's ability and incentive to compete, and why each would be merger-specific.

The Agency will not challenge a merger if ... cognizable efficiencies likely would be sufficient to reverse the merger's potential to harm consumers in the relevant market, e.g., by preventing price increases in the market.

Turning now to Royal Ahold, Robert Tobin, President and CEO, Royal Ahold USA, clearly claims the proposed acquisition and the previous acquisitions of Stop & Shop and Giant, Landover, Md. generate substantial efficiencies that benefit consumers. He states:

The acquisition of Pathmark provides Ahold with a large number of high quality locations in an attractive market where our position left room for improvement. This is now going to change. ... We have various positive contributions in mind and expect considerable synergies from the integration with our sister operations. We have already gained quite a lot of experience in generating synergies following our other successful acquisitions. We have shown this recently after the fourth quarter 1998 acquisition of Giant-Landover and earlier in 1996 with Ahold's acquisition of Stop & Shop. In particular, the exchange of best practices, the restructuring of the Pathmark balance sheet and the integration of certain administrative functions will positively impact on cost and *benefit the bottom line significantly* (emphasis added). We also see important advantages for local Pathmark customers as we offer them the upgrading of their favorite stores and the continuity of shopping in a well-stocked supermarket where they can count on quality service. (Royal Ahold press release)

James Donald, CEO of Pathmark, likewise advances this position declaring:

We are excited about the opportunity to benefit from Ahold's economies of scale and synergy benefits to step up our services in the local communities and improve the company's results.

First note, Royal Ahold intends to carry efficiency gains to the bottom line (profits), not the top line (increased sales via lower prices). Moreover, these efficiency claims need to be carefully documented within the context of the merger guidelines. Are they merger specific? They are not. The exchange or transfer of "best practices" can be done without acquiring a firm. Trade associations, trade shows, and consultants routinely showcase best practices for all to adopt. The restructuring of Pathmark's balance sheet is a pecuniary

economy that generates no real gain for society, and represents a financial change that can be accomplished by other means. Only the "integration of certain administrative functions" seems to be merger specific, but this advantage would occur if a different chain with no horizontal overlap acquired Pathmark. More important, the claim of significant administrative savings is very questionable. A Morgan Stanley Dean Witter analyses writes:

We expect that there will be minimal overhead savings as Edwards, part of AHOLD's Giant of Carlisle division, operates with only a small administrative office. [Levin et al. 1999]

Information Clearinghouse, when discussing the Royal Ahold/Giant merger, cites efficiencies in private label procurement as justification for the merger.

Ahold is ... placing greater emphasis on its growing private label program. This is one area where the Company believes it can gain large efficiencies through common buying programs. [Information Clearinghouse, Inc.]

Again, one must question whether this increase in buying power, a pecuniary economy, is merger specific, and whether it will benefit consumers or the bottom line.

At this juncture, the antitrust agencies can and should be far more rigorous in their review of alleged efficiencies when offered as a justification for mergers in food retailing. Royal Ahold has had two bites at the efficiency apple, Stop & Shop and Giant. Royal Ahold USA President Tobin claims that efficiencies were achieved after both acquisitions. Before allowing a third bite at the apple (the Big Apple!), Royal Ahold should be required to provide the FTC with hard evidence of reduced costs resulting from the past transactions, hard evidence that these costs reductions could not have been achieved via other means, and hard evidence that consumers have benefited, through lower prices. General assertions that efficiencies benefit consumers via increased services, upgraded stores, or "continuity of shopping in a well-stocked supermarket" are not sufficient. In an FTC working paper, Ashenfelter and Ashmore (1998) present analysis of cost pass through rates. It is not always the case that efficiencies, especially merger specific efficiencies, are passed on to consumers.⁵

⁵ On this point, Joseph Brodley, Professor of Law and Economics at Boston University has suggested that antitrust enforcement be extended to ex post evaluation of ex ante claims of efficiency. If today, Royal Ahold can't substantiate the pro forma efficiency claims it made at the time of the Stop & Shop and Giant acquisitions, then Brodley would have the

9. Entry Conditions

It is well known to industry participants that entry by supermarket chains into the greater New York/Philadelphia area, the most densely populated region of the country, is not easy. In the words of the merger guidelines, entry is not timely, likely, or sufficient to defeat a price increase due to the exertion of coordinated and unilateral market power. Entry is defined as the addition of new stores by a new operator in a 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 that leads to opening of stores at new locations.

DeNovo entry in these markets is not timely. (Appendix D). The political and administrative procedures required to procure a site and develop a store routinely take years. The lack of open land sites makes it necessary to assemble parcels, often for shopping plazas, rather than free standing stores. This too can take years. Locating and converting existing buildings or sites for supermarkets is also a timely and difficult process.

DeNovo entry into these markets is not likely even when market power is being exercised. 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 of the merger guidelines. Price increases of this level can double after-tax returns on equity. Moreover, price increases of this magnitude often go undetected by consumers who struggle to recall the prices for the 30-40,000 items in a typical modern supermarket. Competitors and potential competitors, however, can measure such price changes but they find themselves facing the chain store paradox (Scherer and Ross 1990, p.387; Cotterill and Haller, 1992). They know incumbent firms have raised prices, but incumbents can also strategically lower prices to levels that destroy an actual entrant. The threat of this conduct discourages potential entrants, especially where, as here, incumbents such as Royal Ahold enjoy a credible reputation for toughness.

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

antitrust agencies reopen these matters today and "administer appropriate relief to restore competitive conditions" (Brodley, 1996. p.1).

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, these stores for which data were 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, Landover, Md.

When discussing de novo entry into food retailing, the expansion of Wal-Mart and K-Mart Super Centers is often mistakenly cited to support the claim that entry is easy and sufficient to discipline leading chains so that prices are at competitive levels. It is noteworthy that, Wal-Mart and K-Mart have been trying for several years to enter the metro New York area and as yet have no Super Centers in the 18 overlap counties identified in Table 1. In fact, there are no Wal-Mart or K-Mart Super Centers in any of the counties where Pathmark operates.

Moreover, entry by these mass merchandisers in any large urban food market will never be sufficient to discipline market leaders. One can't put several Wal-Mart or K-Mart Supercenters in a local food market. Wal-Mart is planning to launch a chain of supermarkets to fill in the "spaces" between their supercenters in local markets areas; however, their appearance and its 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.

Perhaps the most telling evidence of the lack of entry is Royal Ahold's own entry and expansion conduct. Ahold entered Nassau and Suffolk counties by acquiring First National (Edwards) and, substantially increased their position with the acquisition of Stop & Shop which had previously entered the Long Island area. Stop & Shop entered by acquiring a leading local (Nassau and Suffolk counties) chain, Mel Weitz. Recently, a senior Royal Ahold executive explained that securing Pathmark's "beautiful store locations" is a major reason for the current acquisition.

"We found out with the Edwards chain (which Ahold also owns) 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]

10. Evaluation of the 1996 Royal Ahold/Stop & Shop and the 1998 Royal Ahold/Super G Divestitures and the Implications for the Current Proposed Royal Ahold/Pathmark Merger.

Antitrust authorities have often taken a "fix it first" approach to supermarket mergers during the 1990's. Partch (1997), an industry analyst, and others, have been critical of the divestiture approach, finding that too often the remedy has proved to be weak and inadequate. The most aggressive divestiture in recent times was the consent decree negotiated in the Stop and Shop matter by the FTC and Attorneys General of Connecticut, Rhode Island and Massachusetts in 1996. I served as expert economist for the states and worked with the FTC in structuring that divestiture. It is very interesting to look today at the Stop & Shop/Edwards divestitures/and the more recent Royal Ahold/Giant Food Stores (Landover, Md.) divestiture to examine more closely the impact of these "solutions". Table 6, parts a, b, and c, list the divested stores and changes in sales of those stores pre and post divestiture for Connecticut, Rhode Island, and Pennsylvania respectively. For the first two states, we are also able to provide an assessment of the sales impact on neighboring Royal Ahold/Stop & Shop supermarkets.

For Connecticut (Table 6a), two divested stores have already closed. Sales by the divested stores dropped 26.1 percent from premerger levels. Nearby Stop & Shops increased sales 11.8 percent. In greater Rhode Island (Table 6b), divested stores lost 13.5 percent of sales and Stop & Shop gained 6 percent when one deletes the Cranston store.⁶

Table 6c reports that the Super G stores divested to SuperValu and now operated as "Shop n Save" supermarkets have suffered a 37.8 percent drop in sales.

⁶ This was done because Cranston was a new Edwards that had just been opened and was not up to rated capacity. The store, as a Ro Jacks, is now doing only 60 to 80 percent of what Edwards projected for its normal sales volume. As such, it is actually the biggest Ro Jacks failure rather than a success.

The evidence from Table 6 clearly documents that the stores divested have suffered major sales declines, but that the stores retained by the Royal Ahold have made major gains. The incontrovertible conclusion is that a dollar of divested sales is not equal to a dollar of retained sales. Accordingly, where divestiture is appropriate at all, antitrust enforcement agencies must be more aggressive in determining which stores are divested as well as to whom they are sold. Merging firms must not be allowed to cherry pick the stores, thereby divesting the least desirable store in each impacted location. Nor should the merging firms be allowed to divest to weak competitors from whom they can recapture a substantial portion of the divested sales.⁷ If antitrust authorities cannot locate strong competitors for piecemeal divestiture then the entire merger should be stopped.

Table 7 confirms the weak and plainly inadequate divestiture program in the Royal Ahold/Stop&Shop matter by documenting that seller concentration at the Metropolitan Statistical Area (MSA) level has increased in all areas except one after the divestiture. In Bridgeport, the premerger HHI in 1995 was 1354. By 1998, the HHI increased 383 points to 1738. In Hartford, the premerger HHI in 1995 was 1731. By 1998, the HHI increased 186 points to 1917. In New Haven the HHI actually decreased a token 15 points but it remains above 2300 points, an extremely concentrated market.

Providence, the biggest failure, was predicted by the Rhode Island Assistant Attorney General for Antitrust who unsuccessfully lobbied for a more extensive divestiture and sale to a tougher competitor than Ro-Jacks. At the time of negotiations, Ro-jacks was aggressively backed by SuperValu who wanted to enter Southern New England. They regarded this deal as a signal to other small independents that could demonstrate SuperValu's ability to help them grow. Ro-Jacks, a local operator of 6 small supermarkets in the

⁷ On this point, Partch writing on the failure of the Schnucks divestiture: "... the real fault lies, obviously, in not demanding that Schnucks have a buyer for the stores it was forced to divest before the merger was permitted to be completed ... Schnucks was simply to sell of 18 Nationals and six of its own stores, and permitted to take nine months to do it. Who could be expected to play nice guy to potential competitors for that long?" (Partch, 1997) Partch and others (the buyers) claim that Schnucks ran the stores down during the nine months before selling them. The merger approval process disadvantages consumers when a deal is struck and after the deal the antitrust agency must find or "approve" buyers for the divested stores.

greater Providence area, resold three stores to Shaw's. This increased the market share of Shaws, the number two firm. More damning is the fact that Stop&Shop, the leading firm was able to significantly increase its market share and that increase accounted for 90 percent of the increase in the HHI. The HHI increased by 709 points from 1864 in 1995 to 2573 in 1998.

Springfield Massachusetts produced an odd divestiture. One Edwards store was sold to Big Y, the market leader. Big Y's share increased from 36.3 percent in 1993 to 39.5 percent in 1998 and the HHI increased 174 points from 2596 in 1995 to 2770 in 1998. Politics and the hometown chain's wishes trumped economics in this market.

Worcester, Massachusetts had one Edwards store and there was no divestiture. Consequently this relatively unconcentrated area found its HHI increasing 136 points from 968 in 1995 to 1104 in 1998.

This analysis of actual changes in concentration in southern New England markets affected by the Royal Ahold Stop & Shop merger indicates that divestitures did not preserve premerger market structures, nor did they create aggressive competitors that were able to lower market concentration. Given the pervasive ability of the merged firm to increase sales and market share via merger and via postmerger conduct, it is now certain that premerger market shares understated the ultimate impact of the merger on consumers.

11. Conclusions

The analysis set forth here indicates that the Pathmark acquisition should be challenged and stopped. The "fix it first" approach in this industry has produced divestitures orders that have not protected consumers from increased concentration and the exercise of market power.

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Table 1. County Market Concentration and Merging Store Data Sorted by Premerger HHI

County	Premerger HHI	Delta	Post Merger HHI	No. of Pathmark Stores	No. of Edwards Stores	No. of Giant Stores ¹	No. of Stop&Shop Stores
1. Kings, NY	847	168	1015	6	2		
2. Queens, NY	912	58	970	3	3		
3. Westchester, NY	1069	174	1242	5			5
4. Bucks, PA	1075	247	1322	4		7	
5. Nassau, NY	1204	597	1800	12	16		
6. Suffolk, NY	1211	375	1586	13	13		
7. Union, NJ	1344	357	1701	4	4		
8. Monmouth, NJ	1426	45	1472	7	1		
9. New Castle, Del.	1511	207	1718	4		2 ²	
10. Morris, NJ	1618	149	1767	6	3		
11. Hudson, NJ	1661	289	1950	5	2		
12. Middlesex, NJ	1760	542	2302	8	8		
13. Somerset, NJ	1801	339	2140	2	3		
14. Camden, NJ	1889	389	2277	3		4 ²	
15. Bergen, NJ	1890	44	1934	6	3		
16. Essex, NJ	1913	87	2001	8	1		
17. Ocean, NJ	1945	186	2131	3	3		
18. Delaware, PA	2076	205	2281	5		2	
Total Stores				104	62	15	5

Source: County Tables, Information Clearinghouse, Inc.

¹ Giant Stores based in Carlisle, Pa.

² These are Super G Stores, Giant Food Stores Inc., Landover, Md.

³ The first two columns don't add to the third due to rounding.

Table 2a. Locations where Pathmark and Royal Ahold are Direct Geographic Competitors

MAP						WEEKLY	MAP		NEAREST	EST.	WEEKLY	
CODE	LOCATION	COUNTY	ST	CHAIN NAME	SIZE	SALES	CODE	SISTER STORE	DIST. IN MILES	CHAIN NAME	SIZE	SALES
1	HACKENSACK	BERGEN	NJ	PATHMARK	40,200	\$650,000	2	LODI U/C	1.0	EDWARDS	N/A	N/A
3	N. HACKENSACK	BERGEN	NJ	PATHMARK	48,000	\$550,000	4	TEANECK	1.5	EDWARDS	33,800	\$300,000
120	BERGENFIELD	BERGEN	NJ	PATHMARK	40,700	\$800,000	4	TEANECK	1.5	EDWARDS	33,800	\$300,000
5	LAWNSIDE	CAMDEN	NJ	PATHMARK	41,900	\$600,000	6	CHERRY HILL - BRACE RD.	2.1	SUPER G	45,600	\$400,000
7	BELLEVILLE	ESSEX	NJ	PATHMARK	32,800	\$525,000	8	LYNDHURST	0.6	EDWARDS	21,200	\$280,000
7	BELLEVILLE	ESSEX	NJ	PATHMARK	32,800	\$525,000	113	LYNDHURST U/C	1.2	EDWARDS	N/A	N/A
9	BELMONT AVE.	ESSEX	NJ	PATHMARK	37,900	\$760,000	10	BLOOMFIELD/REPL. SITE	0.6	EDWARDS	17,900	\$400,000
7	BELLEVILLE	ESSEX	NJ	PATHMARK	32,800	\$525,000	11	CLIFTON U/C	1.6	EDWARDS	N/A	N/A
12	WEEHAWKIN	HUDSON	NJ	PATHMARK	47,700	\$660,000	13	SECAUCUS	1.4	EDWARDS	32,500	\$405,000
14	KEARNY	HUDSON	NJ	PATHMARK	48,000	\$500,000	15	N. ARLINGTON	2.0	EDWARDS	14,500	\$215,000
16	S. PLAINFIELD	MIDDLESEX	NJ	PATHMARK	35,200	\$425,000	17	S. PLAINFIELD	0.4	EDWARDS	45,000	\$400,000
18	E. BRUNSWICK	MIDDLESEX	NJ	PATHMARK	45,000	\$650,000	19	E. BRUNSWICK	1.2	EDWARDS	24,400	\$300,000
20	EDISON	MIDDLESEX	NJ	PATHMARK	43,500	\$685,000	21	HIGHLAND PARK	1.5	EDWARDS	16,400	\$290,000
18	E. BRUNSWICK	MIDDLESEX	NJ	PATHMARK	45,000	\$650,000	22	MILLTOWN U/C	2.0	EDWARDS	N/A	N/A
20	EDISON	MIDDLESEX	NJ	PATHMARK	43,500	\$685,000	114	EDISON U/C	2.3	EDWARDS	N/A	N/A
23	HAZLET	MONMOUTH	NJ	PATHMARK	36,500	\$650,000	24	KEYPORT	1.2	EDWARDS	45,000	\$320,000
111	HOWELL	MONMOUTH	NJ	PATHMARK	33,800	\$485,000	112	JACKSON	2.7	EDWARDS	33,700	\$600,000
25	E. HANOVER	MORRIS	NJ	PATHMARK	34,600	\$475,000	26	MADISON	4.2	EDWARDS	31,000	\$535,000
27	PARSIPPANY	MORRIS	NJ	PATHMARK	46,800	\$600,000	28	MORRIS PLAINS	4.4	EDWARDS	50,000	\$550,000
125	TOMS RIVER	OCEAN	NJ	PATHMARK	44,700	\$625,000	126	LAKEWOOD	4.2	EDWARDS	33,700	\$365,000
29	SOMERVILLE	SOMERSET	NJ	PATHMARK	41,700	\$650,000	30	RARITAN	0.4	EDWARDS	36,100	\$615,000
115	NORTH PLAINFIELD	SOMERSET	NJ	PATHMARK	43,800	\$400,000	116	WATCHUNG SITE	3.0	EDWARDS	N/A	N/A
31	LINDEN	UNION	NJ	PATHMARK	48,000	\$750,000	32	LINDEN	1.2	EDWARDS	38,800	\$290,000
33	GARWOOD	UNION	NJ	PATHMARK	37,800	\$700,000	34	WESTFIELD	1.3	EDWARDS	16,900	\$430,000
35	ELIZABETH	UNION	NJ	PATHMARK	37,000	\$550,000	36	ELIZABETH	1.6	EDWARDS	35,000	\$355,000
37	UNION	UNION	NJ	PATHMARK	39,200	\$550,000	38	UNION	1.6	EDWARDS	13,700	\$290,000
35	ELIZABETH	UNION	NJ	PATHMARK	37,000	\$550,000	118	ELIZABETH U/C	1.9	EDWARDS	N/A	N/A
37	UNION	UNION	NJ	PATHMARK	39,200	\$550,000	119	MILLBURN SITE	2.2	EDWARDS	N/A	N/A
39	LYONS AVE.	UNION	NJ	PATHMARK	35,200	\$765,000	38	UNION	2.5	EDWARDS	13,700	\$290,000
127	NOSTRAND AV U/C	KINGS	NY	PATHMARK	N/A	N/A	45	AVENUE Y	0.7	EDWARDS	44,800	\$835,000
42	ALBANY AVE.	KINGS	NY	PATHMARK	28,000	\$600,000	43	FLATBUSH	1.3	EDWARDS	37,500	\$355,000
44	CROSEY AVE.	KINGS	NY	PATHMARK	31,400	\$600,000	45	AVENUE Y	1.8	EDWARDS	44,800	\$835,000
46	WOODBURY	NASSAU	NY	PATHMARK	38,300	\$525,000	47	WOODBURY	0.2	EDWARDS	23,800	\$290,000
48	E. ROCKAWAY	NASSAU	NY	PATHMARK	23,100	\$335,000	49	E. ROCKAWAY	0.5	EDWARDS	10,600	\$210,000
50	LEVITTOWN	NASSAU	NY	PATHMARK	34,100	\$530,000	51	BETHPAGE	0.6	EDWARDS	29,800	\$435,000

52	WOODMERE	NASSAU	NY	PATHMARK	38,600	\$465,000	53	INWOOD	0.7	EDWARDS	39,400	\$575,000
54	EAST MEADOW	NASSAU	NY	PATHMARK	42,000	\$700,000	55	EAST MEADOW	0.8	EDWARDS	37,100	\$550,000
48	E. ROCKAWAY	NASSAU	NY	PATHMARK	23,100	\$335,000	56	OCEANSIDE	1.1	EDWARDS	12,000	\$215,000
57	NEW HYDE PARK	NASSAU	NY	PATHMARK	45,000	\$750,000	58	NEW HYDE PARK	1.1	EDWARDS	50,000	\$775,000
59	GARDEN CITY	NASSAU	NY	PATHMARK	36,000	\$600,000	58	NEW HYDE PARK	1.4	EDWARDS	50,000	\$775,000
52	WOODMERE	NASSAU	NY	PATHMARK	38,600	\$465,000	60	HEWLETT	1.6	EDWARDS	19,500	\$275,000
61	SEAFORD	NASSAU	NY	PATHMARK	23,500	\$455,000	62	MASSAPEQUA PK.	1.7	EDWARDS	36,000	\$440,000
63	FRANKLIN SQ.	NASSAU	NY	PATHMARK	29,500	\$700,000	64	W. HEMPSTEAD	1.9	EDWARDS	21,800	\$225,000
65	BALDWIN	NASSAU	NY	PATHMARK	32,500	\$560,000	66	FREEPORT	2.2	EDWARDS	37,800	\$390,000
67	GREENVALE	NASSAU	NY	PATHMARK	36,600	\$600,000	68	GLEN COVE	4.5	EDWARDS	20,800	\$245,000
69	LI CITY	QUEENS	NY	PATHMARK	41,800	\$650,000	70	LONG ISLAND CITY	0.3	EDWARDS	48,500	\$405,000
123	NANUET	ROCKLAND	NY	PATHMARK	38,300	\$550,000	124	NANUET SITE	0.2	STOP & SHOP	N/A	N/A
71	W. BABYLON	SUFFOLK	NY	PATHMARK	35,900	\$600,000	72	W. BABYLON	0.2	EDWARDS	45,000	\$440,000
73	PORT JEFFERSON	SUFFOLK	NY	PATHMARK	26,200	\$420,000	74	PORT JEFFERSON	0.5	EDWARDS	40,400	\$380,000
75	HOLBROOK	SUFFOLK	NY	PATHMARK	34,200	\$550,000	76	HOLBROOK	0.6	EDWARDS	41,900	\$425,000
77	BAYSHORE	SUFFOLK	NY	PATHMARK	32,200	\$300,000	78	BAYSHORE	0.7	EDWARDS	30,100	\$300,000
79	N. BABYLON	SUFFOLK	NY	PATHMARK	39,200	\$600,000	80	N. BABYLON	0.8	EDWARDS	35,000	\$290,000
81	COMMACK	SUFFOLK	NY	PATHMARK	33,400	\$645,000	82	NORTHPORT	0.8	EDWARDS	32,400	\$415,000
88	CENTEREACH	SUFFOLK	NY	PATHMARK	48,000	\$600,000	117	SOUTH SETAUKET SITE	1.1	EDWARDS	N/A	N/A
83	ISLIP	SUFFOLK	NY	PATHMARK	27,100	\$400,000	84	E. ISLIP	1.2	EDWARDS	50,000	\$505,000
85	COPAIGUE	SUFFOLK	NY	PATHMARK	33,400	\$425,000	86	AMITYVILLE	1.9	EDWARDS	33,200	\$385,000
87	DIX HILLS	SUFFOLK	NY	PATHMARK	31,400	\$585,000	82	NORTHPORT	2.1	EDWARDS	32,400	\$415,000
88	CENTEREACH	SUFFOLK	NY	PATHMARK	48,000	\$600,000	89	LAKE GROVE	2.5	EDWARDS	41,200	\$360,000
90	PATCHOGUE	SUFFOLK	NY	PATHMARK	45,000	\$515,000	91	FARMINGVILLE	3.4	EDWARDS	48,900	\$520,000
73	PORT JEFFERSON	SUFFOLK	NY	PATHMARK	26,200	\$420,000	92	SETAUKET	3.5	EDWARDS	45,000	\$545,000
90	PATCHOGUE	SUFFOLK	NY	PATHMARK	45,000	\$515,000	93	MEDFORD	3.7	EDWARDS	41,400	\$380,000
94	SHIRLEY	SUFFOLK	NY	PATHMARK	32,500	\$550,000	93	MEDFORD	4.6	EDWARDS	41,400	\$380,000
95	MOUNT VERNON	WESTCHESTER	NY	PATHMARK	43,500	\$400,000	96	YONKERS/REPL. SITE	1.6	STOP & SHOP	16,000	\$240,000
97	HARTSDALE	WESTCHESTER	NY	PATHMARK	27,500	\$545,000	98	WHITE PLAINS	2.1	STOP & SHOP	34,000	\$475,000
99	YONKERS	WESTCHESTER	NY	PATHMARK	29,900	\$520,000	96	YONKERS/REPL. SITE	2.4	STOP & SHOP	16,000	\$240,000
100	WARMINSTER	BUCKS	PA	PATHMARK	42,500	\$350,000	101	WARMINSTER	0.4	GIANT	44,000	\$300,000
121	BENSALEM	BUCKS	PA	PATHMARK	33,400	\$500,000	122	BENSALEM SITE	0.5	GIANT	N/A	N/A
102	BRISTOL	BUCKS	PA	PATHMARK	44,000	\$485,000	103	LEVITTOWN	0.7	GIANT	28,000	\$425,000
104	FAIRLESS HILLS	BUCKS	PA	PATHMARK	46,200	\$575,000	105	MORRISVILLE	1.1	GIANT	48,000	\$335,000
104	FAIRLESS HILLS	BUCKS	PA	PATHMARK	46,200	\$575,000	106	FAIRLESS HILLS	1.4	GIANT	40,900	\$440,000
107	BROOKHAVEN	DELAWARE	PA	PATHMARK	37,000	\$580,000	108	BROOKHAVEN	0.4	GIANT	27,000	\$410,000
109	GLENOLDEN	DELAWARE	PA	PATHMARK	39,000	\$750,000	110	ALDAN	1.0	GIANT	40,900	\$570,000

Table 2b. Summary Statistics

	Total Sq. ft.	Total Sales		Total Sq. Ft.	Total Sales
60 Pathmarks	2,220,200	\$33,520,000	54 Edwards	1,493,500	\$18,105,000
			1 Super G	45,600	\$400,000
			7 Giant	228,800	\$2,480,000
			3 Stop&Shop	50,000	\$715,000
			Royal Ahold Grand Total	1,817,900	\$21,700,000
			Annualized Edwards		\$941,460,000
			Annualized Super G		\$20,800,000
			Annualized Giant		\$128,960,000
			Annualized Stop & Shop		\$37,180,000
			Annualized Royal Ahold Grand Total		\$1,128,400,000

ANNUALIZED \$1,743,040,000

Table 3a Price Levels in Giant Stores: More Competitive Markets.

Grocery Basket Outlays by Department	Department Share of Sales (%)	No. of Items Checked	Allentown \$ cost	Trexlertown \$ cost	Bethlehem \$ cost	Easton \$ cost	Pottstown \$ cost
Grocery	33.87	37	60.72	62.52	60.53	64.43	66.39
Grocery/NonFood	12.20	13	34.23	34.71	35.84	34.72	35.08
Dairy	7.99	13	23.71	24.47	23.72	26.12	24.23
Frozen	7.05	11	17.38	15.82	18.04	16.24	20.38
HBA	5.77	10	25.02	25.67	25.02	25.64	26.40
Produce	18.61	6	7.24	7.74	8.04	7.54	7.14
Meat	14.52	10	21.56	19.96	21.96	20.56	21.86
Totals	100.00	100	189.86	190.89	193.15	195.25	201.48
Weighted Price Index, (weighted by dept. share) Allentown, PA = 100			100.00	101.53	101.14	104.07	107.05
Local Market Area Herfindahl-Hirschman Index (HHI)			1154	1245	2086	1796	

Table 3b Price Levels in Giant Stores: Less Competitive Markets

Grocery Basket Outlays by Department	Department Share of Sales (%)	New Hope \$ cost	Wind Gap \$ cost	Rising Sun \$ cost	Waynesboro \$ cost
Grocery	33.87	70.44	66.04	70.89	68.16
Grocery/NonFood	12.20	43.30	40.72	43.56	42.27
Dairy	7.99	24.76	24.53	24.81	24.94
Frozen	7.05	19.68	18.03	19.33	18.87
HBA	5.77	26.43	25.68	25.99	25.89
Produce	18.61	8.64	7.64	8.24	8.24
Meat	14.52	21.06	20.95	20.57	20.88
Totals	100.00	214.31	203.59	213.39	209.25
Weighted Price Index, (weighted by dept. share) Allentown, PA = 100		114.55	108.09	114.53	111.38
Local Market Area Herfindahl-Hirschman Index (HHI)		5171	5360	5868	3825

Table 4a Price Levels in Stop & Shop Stores: More Competitive Markets

<i>Grocery Basket Outlays by Department</i>	<i>Department Share of Sales (%)</i>	<i>Bristol \$ cost</i>	<i>Farmington \$ cost</i>	<i>Newington \$ cost</i>	<i>Vernon/ Rockville \$ cost</i>	<i>Orange \$ cost</i>	<i>Norwich \$ cost</i>
Grocery	33.87	65.60	65.80	65.69	66.95	65.80	68.84
Grocery/NonFood	12.20	38.08	38.08	38.08	38.09	38.08	38.55
Dairy	7.99	26.78	26.68	26.58	26.58	26.68	27.04
Frozen	7.05	18.16	18.16	18.16	18.16	18.16	18.47
HBA	5.77	27.60	27.60	27.10	27.10	27.60	27.60
Produce	18.61	8.25	8.25	9.24	9.34	9.24	8.95
Meat	14.52	27.90	29.90	27.70	28.90	28.90	28.90
Totals	100.00	212.37	214.47	212.55	215.12	214.46	218.35
Weighted Price Index, (weighted by dept. share) Allentown, PA = 100		110.90	111.94	111.32	113.16	112.05	115.26
Local Market Area Herfindahl-Hirschman Index (HHI)		1858	1858	2859	2116	2836	2589

Table 4b Price Levels in Stop & Shop Stores: Less Competitive Markets

<i>Grocery Basket Outlays by Department</i>	<i>Department Share of Sales (%)</i>	<i>Winsted \$ cost</i>	<i>Putnam \$ cost</i>	<i>Old Saybrook \$ cost</i>	<i>Colchester \$ cost</i>
Grocery	33.87	73.10	72.93	69.09	69.09
Grocery/NonFood	12.20	39.21	39.14	38.54	38.55
Dairy	7.99	26.98	27.48	26.64	27.04
Frozen	7.05	20.99	19.86	18.57	18.58
HBA	5.77	27.46	27.10	27.10	27.46
Produce	18.61	9.24	9.54	9.54	9.34
Meat	14.52	27.90	29.70	28.90	29.20
Totals	100.00	224.88	225.75	218.38	219.26
Weighted Price Index, (weighted by dept. share) Allentown, PA = 100		119.94	120.55	115.67	115.85
Local Market Area Herfindahl-Hirschman Index (HHI)		8116	8472	3570	5131

Table 5. Impact of the Proposed Royal Ahold Acquisition of Pathmark on Price

County	1 Premerger HHI	2 Delta	3 % Change in HHI ¹	4 First Predicted % Change in Prices ²	5 Second Predicted Change in Prices ³
1. Kings, NY	847	168	19.83	1.42	1.25
2. Queens, NY	912	58	6.36	0.46	0.40
3. Westchester, NY	1069	174	16.28	1.17	1.03
4. Bucks, PA	1075	247	22.98	1.65	1.45
5. Nassau, NY	1204	597	49.58	3.56	3.13
6. Suffolk, NY	1211	375	30.97	2.22	1.96
7. Union, NJ	1344	357	26.56	1.90	1.68
8. Monmouth, NJ	1426	45	3.16	0.23	0.20
9. New Castle, Del.	1511	207	13.70	0.98	0.87
10. Morris, NJ	1618	149	9.21	0.66	0.58
11. Hudson, NJ	1661	289	17.40	1.25	1.10
12. Middlesex, NJ	1760	542	30.80	2.21	1.95
13. Somerset, NJ	1801	339	18.82	1.35	1.19
14. Camden, NJ	1889	389	20.59	1.48	1.30
15. Bergen, NJ	1890	44	2.33	0.17	0.15
16. Essex, NJ	1913	87	4.55	0.33	0.29
17. Ocean, NJ	1945	186	9.56	0.69	0.60
18. Delaware, PA	2076	205	9.87	0.71	0.62

Source: Table 1 and Computed Regression (Appendix C).

¹ Computed as col 2 /col 1*100.

² Computed as col 3 * .0717 (the coefficient for the single variable, HHI model attached in Appendix C).

³ Computed as col 3 * .0632 (the coefficient for the two variable, HHI and Stop & Shop, model attached in Appendix C).

Table 6a. Analysis of the Royal Ahold/Stop & Shop Divestiture in Connecticut, 1996

LOCATION	SALES AREA	WEEKLY	WEEKLY	WEEKLY	WEEKLY	% CHANGE	STOP & SHOP		% CHANGE
		SALES AS EDWARD'S	SALES AS SHAW'S	SALES AS ADAM'S	SALES AS BIG Y		ESTIMATED SALES VOLUME PRIOR	ESTIMATED SALES VOLUME CURRENT	
1 AVON, CT ¹	25,100	\$330,000			\$330,000	0.0%	\$750,000	\$750,000	0.0%
2 CHICOPEE, MA	47,160	\$510,000			\$375,000	-26.5%	\$390,000	\$525,000	34.6%
3 CLINTON, CT	18,200	\$265,000	\$225,000			-15.1%	\$550,000	\$590,000	7.3%
4 DEEP RIVER, CT	10,800	\$140,000		\$140,000		0.0%			
5 EAST HARTFORD, CT	44,900	\$440,000			\$400,000	-9.1%	\$545,000	\$560,000	2.8%
6 ENFIELD, CT	35,100	\$575,000	\$450,000			-21.7%	\$590,000	\$635,000	7.6%
7 FAIRFIELD, CT	28,000	\$700,000	\$500,000			-28.6%	\$250,000	\$300,000	20.0%
8 GLASTONBURY, CT ²	26,400	\$450,000	\$240,000			-46.7%	\$650,000	\$825,000	26.9%
9 GUILFORD, CT ³	25,000	\$410,000			\$350,000	-14.6%	\$375,000	\$395,000	5.3%
10 NEW BRITAIN, CT ⁴	34,500	\$270,000		\$250,000		-7.4%	\$385,000	\$385,000	0.0%
11 NEW LONDON, CT ⁵	15,200	\$190,000		\$150,000		-21.1%	\$880,000	\$800,000	-9.1%
12 NIAN TIC, CT	11,800	\$150,000		\$130,000		-13.3%	"	"	
13 NEW MILFORD, CT	26,400	\$460,000			\$400,000	-13.0%	\$480,000	\$510,000	6.3%
14 ORANGE, CT ⁶	50,000	\$465,000	closed			-100.0%	\$200,000	\$700,000	250.0%
15 SHELTON, CT	46,200	\$530,000	\$475,000			-10.4%	\$940,000	\$995,000	5.9%
16 SOUTHINGTON, CT	42,300	\$490,000		\$400,000		-18.4%	\$575,000	\$605,000	5.2%
17 STRATFORD, CT ⁷	20,400	\$390,000	\$300,000			-23.1%	\$1,050,000	\$1,050,000	0.0%
18 VERNON, CT ⁸	34,700	\$605,000		\$475,000		-21.5%	\$380,000	\$575,000	51.3%
19 WALLINGFORD, CT	29,800	\$360,000	\$275,000			-23.6%	\$1,020,000	\$1,105,000	8.3%
20 WATERBURY, CT ⁹	32,700	\$375,000	closed			-100.0%	\$840,000	\$875,000	4.2%
21 WATERTOWN, CT	19,500	\$425,000		\$400,000		-5.9%	"	"	
22 HARTFORD, CT ¹⁰	12,800	\$145,000		\$125,000		-13.8%	\$490,000	\$550,000	12.2%
23 WEST HARTFORD, CT	53,600	\$550,000	\$375,000			-31.8%	"	"	
24 WEST HARTFORD, CT	38,000	\$490,000		\$375,000		-23.5%	"	"	
25 WILLIMANTIC, CT	34,300	\$325,000	\$275,000			-15.4%	\$650,000	\$675,000	3.8%
TOTALS		\$10,040,000	\$3,115,000	\$2,445,000	\$1,855,000	-26.1%	\$11,990,000	\$13,405,000	11.8%

Source: Wakefern Food Corporation, Inc.

¹ Three other Stop & Shop stores in the area also picked up approximately \$50,000 weekly.

² This was a former Stop & Shop that was sold to Shaw's.

³ two other Stop & Shop stores in the area also picked up approximately \$20,000 weekly.

⁴ Shaw's opened a new 65,000 total sqft unit in New Britain.

⁵ Shaw's opened a new 60,00 total sqft unit in Waterford averaging \$400,000 per week.

⁶ Shaw's replaced this unit in Orange. The new store is averaging approximately \$300,00 per week.

⁷ The opening of a new Shaw's in Bridgeport and the Bridgeport PriceRite have affected this market.

⁸ Stop & Shop replaced their store in Vernon.

⁹ Stop & Shop sales increases in Waterbury came primarily from the Watertown divestiture because the Watertown store is closer to the Stop & Shop (and on the same side of the river). The Shaw's store closed due to a new Stop & Shop unit on Scott Road and the upgrade of ShopRite.

¹⁰ Stop & Shop sale increases reflects the conversions of the two West Hartford Edward's and Hartford.

Table 6b. Analysis of Royal Ahold/Stop & Shop Divestiture 1996, (Greater Rhode Island Stores)

	LOCATION	SALES AREA	WEEKLY SALES AS EDWARD'S	WEEKLY SALES AS SHAW'S	WEEKLY SALES AS ROJACK'S	% CHANGE	STOP & SHOP ESTIMATED SALES VOLUME		% CHANGE
							PRIOR	CURRENT	
1	PAWTUCKET, RI	37,700	\$400,000	\$350,000		-12.5%	\$690,000	\$710,000	2.9%
2	PROVIDENCE, RI	47,200	\$590,000		\$485,000	-17.8%	(A)	(A)	
3	CRANSTON, RI	33,600	\$290,000		\$395,000	36.2%	\$670,000	\$630,000	-6.0%
4	WAKEFIELD, RI	21,400	\$300,000	\$275,000		-8.3%	\$725,000	\$770,000	6.2%
5	WARWICK, RI	47,200	\$440,000		\$375,000	-14.8%	\$800,000	\$860,000	7.5%
6	EAST GREENWICH, RI	46,300	\$260,000		\$225,000	-13.5%	(B)	(B)	
7	SEEKONK, MA	38,800	\$450,000	\$400,000		-11.1%	\$450,000	\$485,000	7.8%
	TOTALS	272,200	\$2,730,000	\$1,025,000	\$1,480,000	-8.2%	\$3,335,000	\$3,455,000	3.6%
	TOTAL W/O Cranston	238,600	\$2,440,000	\$1,025,000	\$1,085,000	-13.5%	\$2,665,000	\$2,825,000	6.0%

Source: Wakefern Food Corporation

(A) - NO STORE IN PROVIDENCE, PART OF THE CRANSTON & WARWICK MARKETS

(B) - NO STORE IN EAST GREENWICH, PART OF THE WAKEFIELD MARKET

Table 6c. Analysis of Royal Ahold/Super G Divestiture, 1998 (Pennsylvania Stores)¹

	LOCATION	SALES AREA	WEEKLY SALES AS SUPER G	WEEKLY SALES AS SHOP N SAVE	% CHANGE
1	LOWER MAKEFIELD, PA	43,706	\$393,000	\$240,000	-38.9%
2	LOWER PROVIDENCE, PA	43,366	\$310,000	\$210,000	-32.3%
3	WARMINSTER, PA	47,151	\$347,000	\$200,000	-42.4%
4	EAST NORRITON, PA	39,656	\$363,000	\$240,000	-33.9%
5	HILLTOWN, PA	47,250	\$340,000	\$200,000	-41.2%
	TOTALS		\$1,753,000	\$1,090,000	-37.8%

Source: Wakefern Food Corporation

¹ These were divested to SuperValue. Shop N Save is the format chosen by SuperValue for the Super G units.

Table 7. Impact of Ahold/Edwards, Stop & Shop Merger on MSA Concentration

Bridgeport, MSA				Actual 1998 Market Position: After Divestiture*		
Market Position Before Merger				# of Units	Share	HHI 98
Chain	# of Units	Share	HHI 95			
Stop&Shop	13	29.70%	882	18	36.20%	1310
Edwards	5	8.40%	71			
Grand Union	13	12.60%	159	11	9.90%	98
A&P/W	14	11.00%	121	10	10.90%	119
S. Leonards	2	8.60%	74	2	8.10%	66
Shaw's				4	6.60%	44
Pathmark	2	4.20%	18			
Big Y	1	2.10%	4	2	2.90%	8
Shop Rite	1	2.10%	4	5	8.70%	76
all others @ 1%		21.30%	21.3		16.70%	17
		100.00%	1354		100.00%	1738
Delta			499		Delta _{95,98}	383
Post merger HHI			1853	*3 units divested to Shaws		

Hartford, MSA				Actual 1998 Market Position: After Divestiture*		
Market Position Before Merger				# of Units	Share	HHI 98
Chain	# of Units	Share	HHI 95			
Stop&Shop	18	33.00%	1089	24	37.3%	1391
Edwards	19	20.50%	420			
A&P/W	16	11.40%	130	12	10.1%	102
Big Y	5	6.30%	40	10	12.4%	154
Shaws	2	4.20%	18	11	15.3%	234
Shop Rite	4	3.60%	13	3	3.8%	14
all others @ 1%		21.00%	21		21.10%	21
		100.00%	1731		100.0%	1917
delta			1353		Delta _{95,98}	186
Post merger HHI			3084	* 13 units divested 6 to Shaw's 5 to Bozzuto 2 to Big Y		

(continues)

Table 7. Continued

New Haven, MSA						
Market Position Before Merger				Actual 1998 Market Position: After Divestiture*		
Chain	# of Units	Share	HHI 95	# of Units	Share	HHI 98
Stop&Shop	15	45.00%	2025	17	44.60%	1989
Edwards	5	9.20%	85			
Shaws				5	9.40%	88
A&P/W	8	9.20%	85	7	9.90%	98
Big Y	2	4.00%	16	3	6.70%	45
Pathmark	2	3.10%	10			
Super Kmart	1	4.80%	23	2	4.80%	23
Grand Union			0	2	2.80%	8
Everybodys	3	3.20%	10			
Shop Rite, NY	2	3.90%	61	1	1.90%	4
Shop Rite, NJ	2	3.90%		3	6.70%	45
all others @ 1%		13.70%	13.7		13.20%	13.2
		100.00%	2328		100.00%	2313
Delta			828		Delta _{95,98}	-15
Post merger HHI			3080	*4 units divested 3 to Shaw's 1 to Big Y		
Providence, MSA						
Market Position Before Merger				Actual 1998 Market Position: After Divestiture*		
Chain	# of Units	Share	HHI 95	# of Units	Share	HHI 98
Stop&Shop	21	34.00%	1156	29	42.30%	1789
Edwards	9	7.50%	56			
Shaws	17	21.80%	475	22	25.40%	645
Ro Jacks	6	4.10%	17	13	10.80%	117
New Almacs	25	11.80%	139			
all others @ 1%		20.80%	20.8		21.50%	21.5
		100.00%	1864		100.00%	2573
Delta			510		Delta _{95,98}	708
Post merger HHI			2354	*7 units divested 4 sold to Ro Jacks all subsequently sold to Shaw's		
Springfield, MSA						
Market Position Before Merger				Actual 1998 Market Position: After Divestiture*		
Chain	# of Units	Share	HHI 95	# of Units	Share	HHI 98
Big Y	18	36.30%	1318	18	39.50%	1560
Stop&Shop	9	31.60%	999	11	31.60%	999
Edwards	3	7.50%	56			
A&P/W	11	14.60%	213	6	14.00%	196
all others @ 1%		10.00%	10		14.90%	14.9
		100.00%	2596		100.00%	2770
Delta			474		Delta _{95,98}	174
Post merger HHI			3070	*1 unit divested to Big Y		

(continues)

Table 7. Continued

Worcester, MSA						
Market Position Before Merger				Actual 1998 Market Position: After Divestiture		
Chain	# of Units	Share	HHI 95	# of Units	Share	HHI 98
Shaws	10	22.30%	497	11	23.20%	538
Price Chopper	9	14.40%	207	7	11.10%	123
Stop&Shop	3	10.60%	112	6	15.90%	253
Edwards	1	3.10%	10			
Big Y	2	5.20%	27	4	10.00%	100
Market Basket	3	8.90%	79	3	7.60%	58
all others @ 1%		35.50%	35.5		32.20%	32
		100.00%	968		100.00%	1104
Delta			66		Delta _{95,98}	136
Post merger HHI			1034	no divestiture		

Source: Trade Dimensions Market Scope, 1996, 1999, Danbury, Ct.

Figure 1. Number of Locations where Direct Geographic Competition Occurs Classified by Distance between Competing Store Pairs

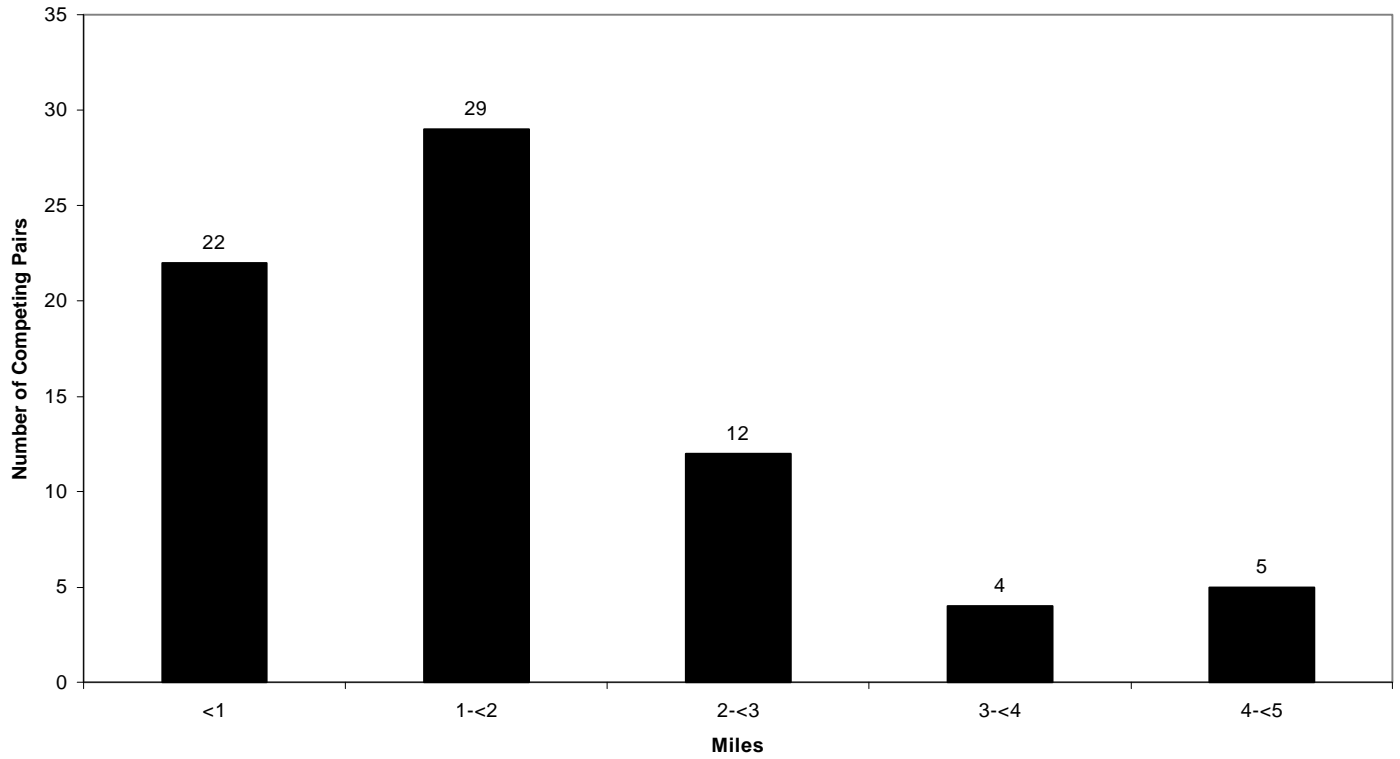
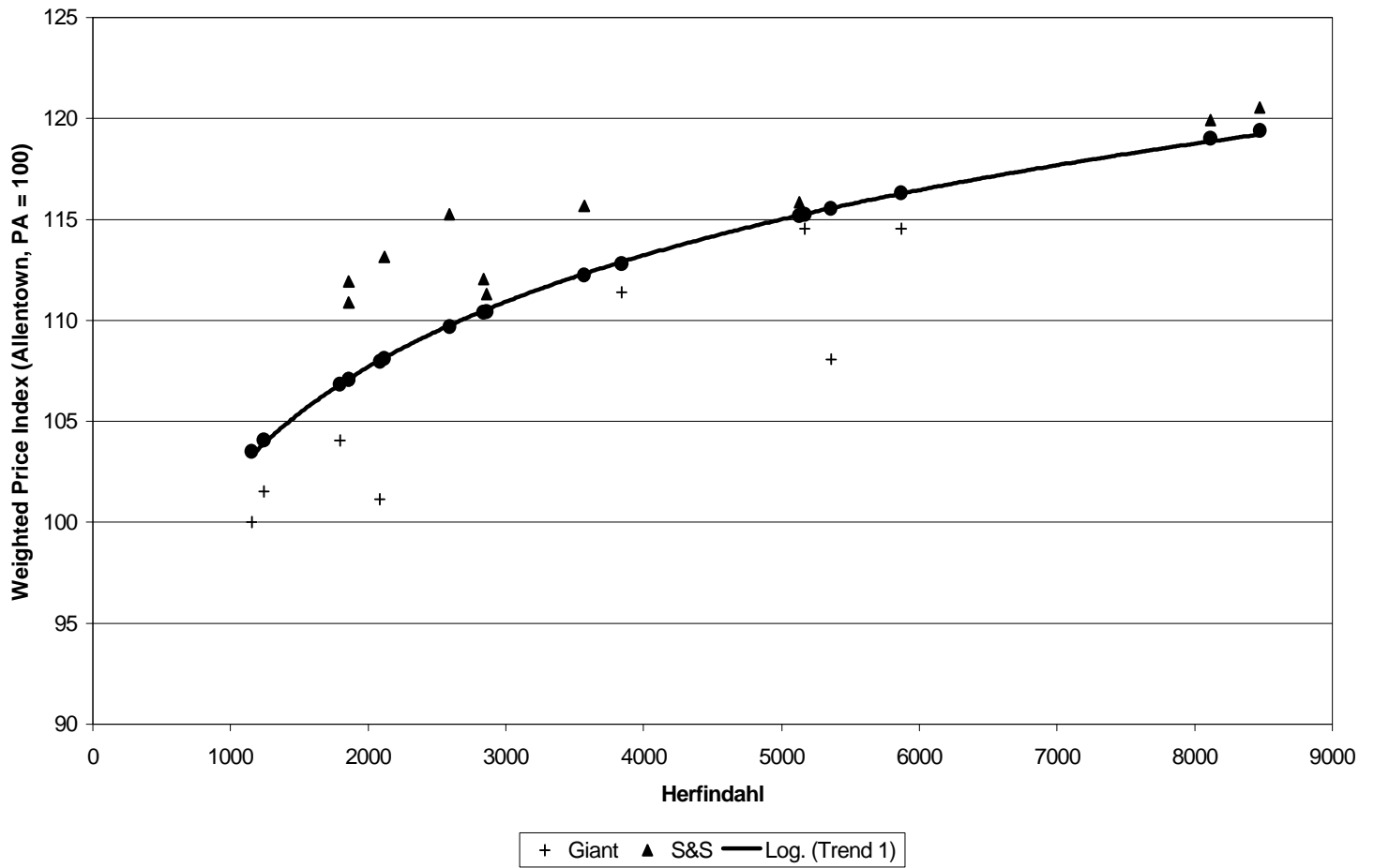


Figure 2. The Relationship Between Market Concentration (HHI) and Price for Royal Ahold Stores: Giant and Stop&Shop



Appendix A

Share of Sales and HHI Analysis by State and County

Chain Name	# of Units	Aggregate Sales	Share of Sales	HHI	Delta
New York					
Westchester					
A & P	19	\$4,850,000	20.08%	403	
ShopRite	7	\$4,017,300	16.63%	277	
Pathmark	5	\$2,425,000	10.04%	101	
Food Emporium	10	\$2,275,000	9.42%	89	
Stop & Shop	5	\$2,090,000	8.65%	75	
Grand Union	9	\$1,875,000	7.76%	60	
Waldbaums	6	\$1,600,000	6.62%	44	
Others	25	\$5,025,000	20.80%	20	
Total	86	\$24,157,300	100.00%	1,069	174
				1,242	
Queens					
Key Food	42	\$6,125,000	21.07%	444	
Waldbaums	14	\$4,750,000	16.34%	267	
Pathmark	3	\$2,224,000	7.65%	59	
C Town	15	\$2,050,000	7.05%	50	
Associated	8	\$1,400,000	4.82%	23	
Western Beef	4	\$1,350,000	4.64%	22	
Edwards	3	\$1,100,000	3.78%	14	
Others	56	\$10,075,000	34.65%	34	
Total	145	\$29,074,000	100.00%	912	58
				970	
Kings					
Key Food	29	\$4,375,000	18.70%	350	
Pathmark	6	\$4,175,000	17.84%	318	
Waldbaums	10	\$2,225,000	9.51%	90	
Edwards	2	\$1,100,000	4.70%	22	
Met Food	9	\$1,075,000	4.59%	21	
Others	53	\$10,450,000	44.66%	45	
Total	109	\$23,400,000	100.00%	847	168
				1,015	

New York continued.

	Chain Name	# of Units	Aggregate Sales	Share of Sales	HHI	Delta
Nassau						
	Waldbaums	25	\$7,675,000	19.79%	392	
	Edwards	16	\$6,925,000	17.86%	319	
	Pathmark	12	\$6,475,000	16.70%	279	
	King Kullen	14	\$4,350,000	11.22%	126	
	ShopRite	4	\$3,048,100	7.86%	62	
	Others	42	\$10,300,000	26.56%	27	
	Total	113	\$38,773,100	100.00%	1,204	597
					1,800	
Suffolk						
	King Kullen	33	\$10,350,000	22.47%	505	
	Waldbaums	26	\$7,350,000	15.96%	255	
	Pathmark	13	\$7,175,000	15.58%	243	
	Edwards	13	\$5,550,000	12.05%	145	
	Grand Union	8	\$2,525,000	5.48%	30	
	A & P	7	\$1,450,000	3.15%	10	
	Others	26	\$11,655,500	25.31%	23	
	Total	126	\$46,055,500	100.00%	1,211	375
					1,586	

New Jersey

Bergen

	ShopRite	15	\$11,503,100	34.71%	1205	
	A & P	19	\$5,765,000	17.40%	303	
	Grand Union	18	\$5,245,000	15.83%	251	
	Pathmark	6	\$3,200,000	9.66%	93	
	Kings	4	\$1,400,000	4.22%	18	
	Edwards	3	\$750,000	2.26%	5	
	Others	21	\$5,275,000	15.92%	16	
	Total	86	\$33,138,100	100.00%	1,890	44
					1,934	

Essex

	ShopRite	8	\$5,660,400	33.42%	1117	
	Pathmark	8	\$4,025,000	23.77%	565	
	Kings	5	\$1,950,000	11.51%	133	
	A & P	6	\$1,200,000	7.09%	50	
	Foodtown	4	\$900,000	5.31%	28	
	Edwards	1	\$310,000	1.83%	3	
	Others	20	\$2,890,000	17.06%	17	
	Total	52	\$16,935,400	100.00%	1,913	87
					2,001	

New Jersey, Continued

	Chain Name	# of Units	Aggregate Sales	Share of Sales	HHI	Delta
Hudson						
	ShopRite	5	\$3,588,200	29.56%	874	
	Pathmark	5	\$2,750,000	22.66%	513	
	A & P	4	\$1,675,000	13.80%	190	
	Edwards	2	\$775,000	6.38%	41	
	Foodtown	2	\$550,000	4.53%	21	
	Others	13	\$2,800,000	23.07%	22	
	Total	31	\$12,138,200	100.00%	1,661	289
					1,950	
Morris						
	ShopRite	9	\$7,148,100	34.74%	1207	
	Pathmark	6	\$2,875,000	13.97%	195	
	A & P	10	\$2,300,000	11.18%	125	
	Kings	4	\$1,175,000	5.71%	33	
	Edwards	3	\$1,100,000	5.35%	29	
	Others	18	\$5,975,000	29.04%	29	
	Total	50	\$20,573,100	100.00%	1,618	149
					1,767	
Union						
	ShopRite	5	\$3,861,600	26.56%	705	
	Pathmark	4	\$2,695,000	18.53%	343	
	A & P	6	\$1,900,000	13.07%	171	
	Edwards	4	\$1,400,000	9.63%	93	
	Others	20	\$4,685,000	32.22%	32	
	Total	39	\$14,541,600	100.00%	1,344	357
					1,701	
Middlesex						
	ShopRite	10	\$7,454,900	32.33%	1045	
	Pathmark	8	\$4,500,000	19.51%	381	
	Edwards	8	\$3,200,000	13.88%	193	
	A & P	8	\$2,515,000	10.91%	119	
	Others	20	\$5,390,000	23.37%	23	
	Total	54	\$23,059,900	100.00%	1,760	542
					2,302	

New Jersey. Continued

Camden

Chain Name	# of Units	Sales	Share of Sales	HHI	Delta
ShopRite	6	\$3,956,400	31.26%	977	
Acme	9	\$2,650,000	20.94%	438	
Super G	4	\$2,350,000	18.57%	345	
Pathmark	3	\$1,325,000	10.47%	110	
Others	15	\$2,375,000	18.77%	19	
Total	37	\$12,656,400	100.00%	1,889	389
				2,277	

Monmouth

ShopRite	9	\$5,063,000	23.81%	566	
Foodtown	13	\$4,315,000	20.28%	411	
Pathmark	7	\$3,430,000	16.13%	260	
A & P	7	\$2,125,000	9.99%	100	
Grand Union	4	\$1,455,000	6.84%	47	
Acme	6	\$1,005,000	4.73%	22	
Edwards	1	\$300,000	1.41%	2	
Other	11	\$3,575,000	16.81%	17	
Total	58	\$21,268,000	100.00%	1,426	45
				1,472	

Ocean

ShopRite	6	\$5,983,200	38.58%	1488	
Pathmark	3	\$1,825,000	11.77%	138	
Foodtown	5	\$1,675,000	10.80%	117	
A & P	6	\$1,475,000	9.51%	90	
Edwards	3	\$1,225,000	7.90%	62	
Grand Union	4	\$800,000	5.16%	27	
Acme	3	\$450,000	2.90%	8	
Other	8	2075000	13.38	13.4	
Total	38	15508200	100%	1944	185
				2130	

New Jersey. Continued

Somerset

Chain Name	# of Units	Sales	Share of Sales	HHI	Delta
ShopRite	6	\$3,531,000	34.51%	1191	
Edwards	3	\$1,775,000	17.35%	301	
Pathmark	2	\$1,000,000	9.77%	96	
Grand Union	3	\$875,000	8.55%	73	
Kings	3	\$800,000	7.82%	61	
A & P	3	\$825,000	8.06%	65	
Other	3	\$1,425,000	13.93%	14	
Total	23	\$10,231,000	100.00%	1801	339
				2140	

Pennsylvania

Bucks

Acme	14	\$5,070,000	23.55%	555	
Giant	7	\$2,825,000	13.12%	172	
Genuardi	6	\$2,190,000	10.17%	103	
Clemens	6	\$2,075,000	9.64%	93	
Pathmark	4	\$2,025,000	9.41%	88	
Super Fresh	5	\$1,285,000	5.97%	36	
Other	21	\$6,060,000	28.15%	28	
Total	63	\$21,530,000	100.00%	1075	247
				1322	

Delaware

Acme	16	\$5,410,000	35.53%	1262	
Pathmark	5	\$3,400,000	22.33%	498	
Genuardi	4	\$2,190,000	14.38%	206	
Super Fresh	4	\$1,290,000	8.47%	71	
Giant	2	\$700,000	4.59%	21	
Others	6	\$2,235,000	14.67%	14	
Total	37	\$15,225,000	100.00%	2075	205
				2281	

Delaware

New Castle

Chain Name	# of Units	Sales	Share of Sales	HHI	Delta
Acme	11	\$4,550,000	30.71%	943	
ShopRite	3	\$2,368,000	15.98%	255	
Pathmark	4	\$1,975,000	13.33%	177	
Super G	2	\$1,150,000	7.76%	60	
Super Fresh	4	\$1,030,000	6.95%	48	
Others	15	\$3,740,000	25.24%	25	
Total	39	\$14,813,000	100.00%	1510	207
				1717	

Appendix B

Giant Stores - Price Checked

Less Competitive					
Name	# of Units	Sales	Share of Sales	HHI	
New Hope, PA					
Giant	1	\$400,000	59.26%	3,512	
Thriftway	1	\$275,000	40.74%	1,660	
Totals	2	\$675,000	100.00%	5,171	
Wind Gap, PA					
Giant	1	\$390,000	63.41%	4,021	
Mr Zs	1	\$225,000	36.59%	1,338	
Totals	2	\$615,000	100.00%	5,360	
Rising Sun, MD					
Martin's(Giant)	1	\$425,000	70.83%	5,017	
Acme	1	\$175,000	29.17%	851	
Totals	2	\$600,000	100.00%	5,868	
Waynesboro, PA					
Martin's(Giant)	1	\$200,000	61.54%	3,787	
Others	2	\$125,000	38.46%	38	
Totals	3	\$325,000	100.00%	3,825	
More Competitive					
Trexlerstown, PA					
Giant	2	\$800,000	24.62%	606	
Wegmans	1	\$700,000	21.54%	464	
Redners	1	\$375,000	11.54%	133	
Others	5	\$1,375,000	42.31%	42	
Totals	9	\$3,250,000	100.00%	1,245	
Allentown/Whitehall, PA					
Giant	4	\$1,400,000	22.70%	515	
Redners	2	\$825,000	13.38%	179	
Weis	4	\$750,000	12.16%	148	
Wegman's	1	\$700,000	11.35%	129	
Acme	2	\$550,000	8.92%	80	
ShopRite	1	\$542,400	8.79%	77	
Others	7	\$1,400,000	22.70%	27	
Totals	21	\$6,167,400	100.00%	1,154	
Bethlehem/Nazareth, PA					
ShopRite	1	\$602,500	34.88%	1,216	
Giant	1	\$300,000	17.37%	302	
Weis	1	\$275,000	15.92%	253	
Acme	1	\$250,000	14.47%	209	
Valley Farm Market	1	\$125,000	7.24%	52	
Food Lane	1	\$100,000	5.79%	34	
Aldi Food Store	1	\$75,000	4.34%	19	
Totals	7	\$1,727,500	100.00%	2,086	

Easton, PA

Name	# of Units	Sales	Share of Sales	HHI
Redners	1	\$400,000	25.40%	645
TJ Barts	2	\$350,000	22.22%	494
Giant	1	\$250,000	15.87%	252
Acme	1	\$250,000	15.87%	252
Weis	1	\$150,000	9.52%	91
Food Lane	1	\$100,000	6.35%	40
Aldi Food Store	1	\$75,000	4.76%	23
Totals	8	\$1,575,000	100.00%	1,796

Stop & Shop Stores - Price Checked

Less Competitive

Winsted, CT

Stop & Shop	1	\$425,000	89.47%	8,006
Winsted IGA	1	\$50,000	10.53%	111
Totals	2	475000	100.00%	8,116

Putnam, CT - 5 mi

Stop & Shop	1	\$550,000	91.67%	8,403
Putnam Supermarket	1	\$50,000	8.33%	69
Totals	2	\$600,000	100.00%	8,472

Branford/Clinton/Guilford/Old Saybrook, CT

Stop & Shop	3	\$1,525,000	54.46%	2,966
Waldbaum's	1	\$425,000	15.18%	230
Shaw's	1	\$400,000	14.29%	204
Big Y	1	\$350,000	12.50%	156
Orchard Hill Market	1	\$100,000	3.57%	13
Totals	7	\$2,800,000	100.00%	3,570

Colchester, CT

Stop & Shop	1	\$500,000	71.43%	5,102
Others	2	\$200,000	28.57%	29
Totals	3	\$700,000	100.00%	5,131

More Competitive

Bristol/Farmington/Plainville/Southington, CT

Stop & Shop	2	\$1,400,000	32.07%	1,029
Shaws	2	\$900,000	20.62%	425
Big Y	1	\$525,000	12.03%	145
Waldbaum's	2	\$450,000	10.31%	106
ShopRite	1	\$439,800	10.08%	102
Highland Park Mkt.	1	\$200,000	4.58%	21
Gnazzos Market	1	\$175,000	4.01%	16
Adams	1	\$125,000	2.86%	8
Aldi Food Store	1	\$75,000	1.72%	3
Epicure Market	1	\$75,000	1.72%	3
Totals	13	\$4,364,800	100.00%	1,858

Vernon Rockville/Manchester, CT

Name	# of Units	Sales	Share of Sales	HHI
Stop & Shop	2	\$1,475,000	33.60%	1,129
Shaws	2	\$975,000	22.21%	493
Big Y	1	\$750,000	17.08%	292
ShopRite	1	\$440,000	10.02%	100
Waldbaum's	1	\$300,000	6.83%	47
Adams	1	\$275,000	6.26%	39
Highland Park Mkt.	1	\$175,000	3.99%	16
Totals	9	\$4,390,000	100.00%	2,116

Milford/Orange/West Haven, CT

Stop & Shop	2	\$1,675,000	41.56%	1,728
ShopRite	2	\$1,180,000	29.28%	857
Shaws	1	\$500,000	12.41%	154
Waldbaum's	2	\$350,000	8.68%	75
Gran Central	1	\$125,000	3.10%	10
C-Town	1	\$100,000	2.48%	6
Food World	1	\$100,000	2.48%	6
Totals	10	\$4,030,000	100.00%	2,836

Newington/Rocky Hill/Wethersfield, CT

Stop & Shop	3	\$1,725,000	46.68%	2,179
Waldbaum's	2	\$650,000	17.59%	309
Shaws	1	\$500,000	13.53%	183
Big Y	1	\$400,000	10.83%	117
PriceRite	1	\$270,000	7.31%	53
Westside Market	1	\$150,000	4.06%	16
Totals	9	\$3,695,000	100.00%	2,859

Norwich, CT

ShopRite	1	\$638,000	35.68%	1,273
Stop & Shop	1	\$525,000	29.36%	862
Big Y	1	\$375,000	20.97%	440
Others	3	\$250,000	13.98%	14
Totals	6	\$1,788,000	100.00%	2,589

Appendix C

Regression Results: Dependant Variable LWPI

	Constant	LHHI	STSH	R2	F	OBS
Model 1	4.1342 (4.955)**	0.0717 (35.48)**		0.6055	24.553	18
Model 2	4.1697 (63.35)**	0.0632 (7.655)**	0.0582 (5.963)**	0.8829	56.574	18

t-statistics in parenthesis.

** Significant at the 1% level.

Appendix D

DIFFICULTIES IN OPENING STORES IN THE NEW YORK, NEW JERSEY
PENNSYLVANIA MARKETPLACE

1. Lack of available land to build stores. Lack of available A-type locations left in the marketplace that meet our store volume and requirements.
2. Due to lack of land, developers must assemble different parcels to create enough acreage for a shopping center. Different parcels means negotiating price with multiple owners which can hold up the process.
3. Zoning Issues – Applying for rezoning or variances to allow for supermarket/shopping center use. Usually 9-18 month process.
4. Dealing with Neighborhood Civic Associations that request studies to be done for noise, pollution, and traffic that can delay a project from starting.
5. Environmental issues – Major expense and time delays to clean up sites to meet Federal and State Environmental Codes.
6. Negotiating economic terms as well as lease negotiations entail large legal bills and can take many months to conclude.
7. The need for approvals from the various State, Federal, County and Local government agencies are very time consuming and costly, (i.e. State Department of Transportation, Soil Conservation, Department of Environmental Protection).
8. Architectural Plans take a minimum of 120 days to prepare and it takes a minimum of 30 days for the tenant to review them for mistakes and the plans must go back to the architect to make the corrections and back to the tenant to confirm that the corrections have been made. This review and correction process can take another three months.
9. After securing all permits to start construction, there are weather related problems that can delay the project completion and create budget overruns.
10. Once the store is built the store must pass a series of inspections by the local municipality, (i.e. electrical, Health Department) which can also cause delays.

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