

Rural Retail Redux:
Supermarket Pricing in Rural Central New York

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INTRODUCTION

Food is a central concern of all humans, and not surprisingly grocery shopping is a central activity in a community's economy. As late as the 1960s, most rural communities had a grocery store as an anchor of the local economy. As the twentieth century wore on, supermarkets came into existence that collected many retail functions under one roof. Whereas in the distant past a consumer might be required to stop at a butcher shop, a bakery, and a general store in order to scarp together the evening meal, supermarkets combined these functions in building. As the 1970s and 1980s continued, competition among supermarkets led to larger and larger stores, often in larger markets, with the loss of less competitive stores in many smaller communities. Even today, capital investment in supermarkets is generally in larger markets, while residents of smaller communities are increasingly required to travel elsewhere for the grocery needs.

This study examines the pricing of supermarkets in rural central New York in order to ascertain the degree to which such conditions as discussed above continue to exist. By collecting price data from supermarkets in four rural counties – Otsego, Delaware, Schoharie, and Chenango Counties – this question can be addressed.

PAST RESEARCH

Rural communities have witnessed a dramatic restructuring since 1970 (Thomas, 2003). Such changes have not been spread evenly throughout rural communities, but rather some have gained while others have fallen farther behind (Lyson & Falk, 1993). Communities near larger cities and those with access to interstate highways have typically fared better than those without these accoutrements (Aronoff, 1997; Lichter &

Fuguitt, 1980). Larger towns and those with urban institutions have, as a result, grown faster than smaller villages (Brown et al, 1996). For many of the smallest villages, this restructuring has resulted in such a loss of economic functionality that their continued existence is possible only because of the ability of residents to drive elsewhere for basic goods and services (cf. Thomas, 1999; 2005).

One important aspect of community health – both economically and socially – is grocery shopping. Based as it is on the provision of basic retail items such as food and hygiene products, grocery shopping is strongly tied to the maintenance of social networks within a community (Miller et al, 1998). This is because stores act as sites of social interaction where residents reinforce community norms, values, and beliefs (Thomas, 2003). Not surprisingly, satisfaction with the local shopping experience not only leads to more shopping in the community, but strengthens residents' feelings of attachment to the community as well.

In the local area, past research has indicated a general agreement with national trends. For instance, a 2001 survey of Hartwick residents found that community attachment was lowest among those most likely to use mail order catalogs and the internet for shopping (Thomas et al, 2002). This was particularly true of younger consumers, who are both more likely to shop outside the local area and feel lower levels of attachment for the community. In addition,

There was some variation among who reported buying groceries in which community. Occupation offered little significance, although professionals were more likely to report buying in Hartwick Seminary and those with low skill occupations were more likely to buy in Cooperstown. Every respondent with a high level of community attachment bought in either Hartwick Seminary (64.3 %) or Cooperstown (35.7 %). In contrast, 38.2 percent of those reporting low levels of community attachment shopped in the Oneonta area. There was no significant difference in regard to the age of the respondent. (Thomas et al, 2002, 5)

This is a potentially troublesome local trend. For many central New York communities, the economic base is being increasingly centralized in larger communities, leaving the smaller communities without a significant base of their own (Thomas, 1999). Some communities have successfully navigated through such changes. For instance, in 1979, 78 percent of businesses located in downtown Cooperstown were oriented toward the local market (Thomas et al, 2003). As structural changes began to reduce their share to only 56 percent in 2003 during the 1980s and 1990s, Cooperstown could look to tourism to fill storefronts. This was mirrored by a general “suburbanization” pattern as well (Thomas & Cardona, 2002). The most obvious increase was baseball-related retail, rising from only 4 percent of downtown businesses in 1979 to 22 percent by 2003. That year, 24 percent of downtown businesses referred to either baseball or the baseball creation myth in the business name (Thomas et al, 2003).

This study seeks to expand the knowledge of the regional economy by studying grocery store pricing in rural central New York. Based on past research, it should be anticipated that smaller communities, due to their relative lack of economies of scale, will command higher price structures than larger communities. In addition, the relative lack of competition in smaller markets allows operators of those stores to charge higher prices.

METHOD

This study examined item prices at 26 supermarkets in Otsego, Schoharie, Delaware, and Chenango Counties. Given the differing marketing approaches and intended customer base of convenience and warehouse stores, these types of businesses were excluded from the sample.

A list of 38 commonly bought supermarket items was constructed by the research team. This process included additional research designed to ascertain common product sizes or quantities and name brands. After compilation of the list, two researchers consulted with one another in order to avoid problems with intercoder reliability, and then traveled to each of the 26 stores (13 each), collecting price data on name brand and generic pricing. All of the prices were collected during the first weekend of November 2004.

The data was entered and analyzed using a “smart shopper strategy.” prices of the most common name brands were collected, but alternative brands (including generics) were substituted when not available in order to simulate actual shopping behavior. Items that were not available in each of the 26 stores were excluded, resulting in a list of 32 items on which final analysis was based.

FINDINGS

The results for the overall shopping list are shown in figure one. The total list price was correlated with population of the market, the percentage of the population who had completed a 4 year college degree, the average commute time, the average mileage to the next nearest supermarket, and the amount of competition in the market. Specifically, the strongest correlation with the total list price was with the community’s population in 2000 ($R=-0.534$, $p<.05$), meaning that the stores with the lowest list prices were in larger markets. These communities also have more supermarkets and thus more competition, translating into a correlation between the number of competitors and total list price ($R=-0.471$, $p<.05$). Larger communities also have a higher percentage of college graduates

Figure 1: Total List Costs at each Supermarket

Wal-Mart	Cobleskill	49.56
Hannaford	Oneonta	50.17
Wal-Mart	Oneonta	50.18
Big M	Walton	53.23
Tops	Norwich	53.34
Great American	Unadilla	53.85
Tops	Sidney	54.14
Great American	Greene	54.85
P & C	Cooperstown	54.97
Price Chopper	Oneonta	54.99
Great American	Afton	55.53
Great American	Sidney	55.54
Great American	Richfield Springs	55.99
Big M	Sherburne	56.28
Great American	Delhi	56.57
Big M	Morris	56.74
Great American	Sherburne	56.87
Price Chopper	Cobleskill	58.17
Grand Union	Stamford	58.43
Great American	Cooperstown	58.69
Great American	Bainbridge	60.39
Price Chopper	Norwich	60.45
Grand Union	Middleburg	60.92
Grand Union	Hancock	61.18
A & P	Margaretville	61.59
Marquis Supermarket	New Berlin	62.08

($R=.564, p<.05$), also translating into a correlation between the percentage of college graduates and store prices ($R=-0.419, p<.05$). As larger communities are also typically centers for employment, the correlation between average resident commute times and mileage to work with total list price is similarly not surprising (respectively $R=.469, p<.05$; $R=.447, p<.05$). To summarize,

the four county region mirrors national trends in which communities with the advantages conferred by higher populations and an educated residential base that by and large works in the community also tend to have lower overall grocery bills.

This general trend is also evident upon examination of the communities in which the most and least expensive prices were found. The average total list cost of the five most expensive stores was \$61.24. The population of the zip code in which those stores were located averaged 5255 in 2000, down from 5495 in 1990 – a drop of 4.4 percent. The average commuter in these communities traveled 26.5 minutes to work an average of 14.4 miles away. Median family income averaged 40,139 in 1999, and about 14.8 of the population over age 25 had earned a Bachelor’s degree or higher. In contrast, the average

Figure 2: Average Characteristics of Five Most Expensive & Five Least Expensive Supermarket Communities

Variable:	Communities Home to Five Most Expensive Stores	Communities Home to Five Least Expensive Stores
Total List Cost	\$61.24	\$51.29
1990 Population (by Zip Code)	5,495	13,294
2000 Population (by Zip Code)	5,255	14,182
Commute Time	26.5 minutes	20.3 minutes
Median Family Income	\$40,139.60	\$42,406.6
Median Housing Value	\$72,000	\$75,980
Population Change, 1990-2000	-4.41 %	3.24 %
Miles to nearest Supermarket	14.4	4.4
Number of Stores in Zip Code	1.2	2.2

total list cost for the five lowest cost stores was \$51.30. These stores were located in zip codes that averaged 14,182 residents in 2000, up from 13,294 in 1990 – an increase of 3.24 percent. The average commuter in these communities traveled 20 minutes to cover the 4.4 miles to work. Median family income in these communities averaged \$42,406 in 1999, and 23.3 percent of those over age 25 had earned a Bachelor’s degree or higher. Whereas only one of the five highest cost communities had more than one supermarket, all but one of the lowest cost communities had only one supermarket. Further comparison is shown in figure two.

CONCLUSION

Price data from around the region indicates the continued disadvantage faced by consumers in smaller communities when compared to those in larger markets. This is also indicative of competitive disadvantages facing smaller communities in finding and retaining their retail base. As supermarkets are often an anchor of a village’s economy, the loss of consumers for that store threaten not only the store itself but the wider economic base as well. This does not necessarily mean that higher priced supermarkets will eventually close, and it should be considered that there are other factors that

contribute to consumer choices as to where to shop. Convenience, quality of products, product selection, and other considerations often mitigate shopper's choices, and this can influence the ultimate fate of a business.

REFERENCES

- Aronoff, M. W. 1997. "Changing Rural Communities: Reconstructing the Local Economy of a Nonmetropolitan Community." In: Johnson, Nan E., & Wang, Ching-li; Eds; *Changing Rural Social Systems: Adaptation and Survival*. East Lansing, Mi.: Michigan State U. Press.
- Brown, R. B., Hudspeth, C. D., & Odom, J. S. 1996. Outshopping and the Viability of Rural Communities as Service/Trade Centers. *Journal of the Community Development Society*, 27, 1, 90-112.
- Lichter, D. T. & Fuguitt, G. V. 1980. Demographic Response to Transportation Innovation: The Case of the Interstate Highway. *Social Forces*, 59: 492-512.
- Lyson, T. A. & Falk, W. W. (Eds.). 1993. *Forgotten Places: Uneven Development in Rural America*. Lawrence, Ks.: U. Press Kansas.
- Miller, N., Kim, S. & Schofield-Tomschin, S. 1998. "Effects of activity and aging on rural community living and consuming." *Journal of Consumer Affairs*, 32(2): 343-368.
- Thomas, A. R. 1999. Untowning Hartwick: Restructuring a Rural Town. *Electronic Journal of Sociology*, 4, 1; <<http://www.sociology.org>>. [iucode: 100.4.1.4]
- _____. 2003. *In Gotham's Shadow: Globalization and Community Development in Central New York*. Albany, N. Y.: SUNY Press.

_____. 2005. *Gilboa: New York's Quest for Water and the Destruction of a Small Town*.
Lanham, Md.: UPA.

Thomas, A. R. & Cardona, L. A. 2002. *Retail in Greater Cooperstown: 1997 & 2001*.
Oneonta, N. Y.: SUNY Center for Social Science Research.

Thomas, A. R., Mansky, M., Frimer, D., & Natale, C. 2002. *Hartwick Retail Practices
Survey: General Report*. Oneonta, N. Y.: SUNY Center for Social Science
Research.

Thomas, A. R., Thalheimer, J., Cook, J., & Malfitani, P. 2003. *Economic Activity in
Downtown Cooperstown, 1979-2003*. Oneonta, N. Y.: SUNY Center for Social
Science Research.

U. S. Bureau of the Census. 2004. *Metropolitan and Micropolitan Statistical Areas*.
<http://www.census.gov/population/www/estimates/metroarea.html>.