Economic Research Service

December 2004

U.S. Department of Agriculture



Find the full report at www.ers.usda.gov/publications/aer839

Supermarket Characteristics and Operating Costs in Low-Income Areas

Robert P. King, Ephraim S. Leibtag, and Ajay Behl

Whether the poor pay more for food than other income groups is an important question in food price policy research. Much of the evidence indicates that shopping opportunities for the poor are more limited than they are for higher income consumers and that prices are slightly higher in stores where low-income consumers shop.

What Is the Issue?

Higher prices are often attributed to higher operating costs for stores that serve low-income house-holds. Higher costs could be due to older, less efficient store designs, outdated operating practices, weak organizational linkages with suppliers, high rates of labor turnover, and/or greater losses due to theft.

If store operating costs are higher in low-income areas, and if the reasons for these higher costs can be better understood, it may be possible to develop public- or private-sector initiatives that will improve operating efficiency.

What Did the Study Find?

This analysis shows that stores serving low-income shoppers-stores with high Food Stamp redemption rates-differ in important ways from other stores. Stores with more revenues from Food Stamps are generally smaller and older than stores serving moderate-income consumers, and are less likely to offer conveniences for shoppers such as bagging and carryout or pharmacy services. They derive a higher portion of sales from meat and dry groceries. Stores serving low-income customers generally have a higher rate of employee turnover, pay lower wages, are less likely to have a unionized work-force, are open for fewer hours, and are more likely to face competition from supercenters.

There are similarities, however. Nonmetro stores serving the poor do not differ significantly from other stores in the adoption of progressive supply chain and human resource practices. In metro locations, stores serving the lowest and highest income customers are more likely than other stores to be wholesaler supplied and less likely to be part of a large chain. Finally, stores with the highest Food Stamp redemption rates have a higher median cost of goods sold (lower sales margin) than stores serving higher income customers, but also have significantly lower payroll costs as a percentage of sales. Sales margins and payroll account for a major share of total store operating costs.

Overall, our results do not support the hypothesis that it costs more to operate supermarkets that serve low-income consumers. While stores with different rates of Food Stamp redemption have significantly different cost structures, their overall operating costs are essentially the same. If the poor do pay more, factors other than operating costs are likely to be the reason.

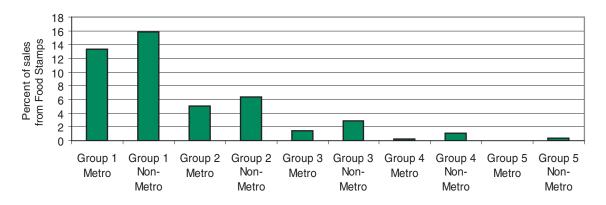
ERS is the main source of research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

How Was the Study Conducted?

This study uses a unique data set-the Food Industry Center's Supermarket Panel-to assess how supermarket characteristics and operating costs differ in relation to the percentage of sales derived from low-income consumers.

In this study we use the percentage of store sales attributable to Food Stamp redemption as a measure of the degree to which a store serves low-income shoppers. Average weekly store sales data, as reported by participating store managers in early 2002, are part of the Supermarket Panel database. Store-level data on Food Stamp redemption were based on a database compiled by USDA's Food and Nutrition Service. The share of sales from Food Stamp redemptions ranges from zero to over 30 percent, with a weighted average of 3.4 percent.

Although some stores are more likely to serve low-income customers...



...operating expenses are similar for all stores, regardless of location or clientele

