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Store Selection by Food Stamp Households*

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A recent study in this review indicated that less than half of food stamp recipients used supermarkets as a major source of groceries. More than 53 percent stated that store location was a primary reason for their store selection. However, the area surveyed was a single community so no conclusions could be drawn for the Nation.

Since store location appears to be important in influencing where food stamp recipients shop, it becomes relevant to determine the socioeconomic characteristics of trading areas in which particular kinds of grocery stores are located.

Analysis of data from USDA's Food and Nutrition Service and the Claritas Corporation showed major differences in the characteristics of trading areas where chain grocery stores predominate and areas where independents are located.¹ Fifty-one percent of the chains are located in areas populated by a majority of white collar workers versus only 22 percent for independents. Chains also are underrepresented in minority areas. In predominately black areas, chains accounted for 5.7 percent of grocery establishments; independents, 94.3 percent. In predominately Hispanic areas, chains made up 11.3 percent of stores; independents, 88.7 percent.

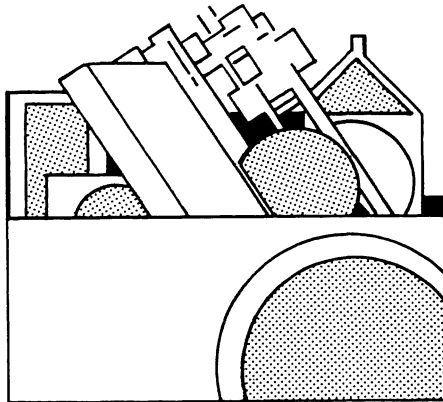
Chain stores also avoided low-income areas—95.3 percent of stores in areas with median household income below \$5,000 were independents. Eighty-nine percent of chains were located in areas where at least 75 percent of households had regular access to a car; only 70 percent of independents were so located.

Store Selection

In this study, the type of store in a trading area patronized by food stamp recipients was measured by the ratio of the areas food stamp redemptions to total food sales receipts. For fiscal 1978 that ratio was 8.24 percent for stores with annual sales under \$250,000; 6.07 percent for stores with annual sales between \$250,000 and \$1

*Based on a forthcoming report, *Food Stamp Redemptions: Their Impact on Food Sales by Region, Size, and Kind of Participating Foodstores—An Update*.

¹ Census data aggregated by zip code area by Claritas Corp., Arlington, Va. A store's zip code area was used to approximate its immediate trading area.



million; and 5.16 percent for stores with annual sales in excess of \$1 million.

Several socioeconomic and demographic characteristics of a store's trading areas were used to explain differences in the ratio of food stamp redemption to total food sales ratios (food stamp share). Two income variables were chosen; percent of households with incomes of less than \$5,000 and percent of households with incomes between \$5,000 and \$9,999. These income categories, depending on family size, should contain practically all households eligible for food stamps and should be positively related to the food stamp share. Since large households are eligible for larger allotments, a third variable, the percentage of households with six or more persons was included. It was expected that the number of large families would positively influence both food stamp participation and the food stamp share. The white/blue collar ratio was included both as a measure of income and employment stability. Since white collar workers, as a group, earn more than blue collar workers and typically are unemployed less frequently and for shorter time periods, it was hypothesized that this variable should be inversely related to the food stamp share.

The percentage of households in the trading area without regular access to a car was included to measure the influence of mobility on store choice. It was expected that this variable should be positively related to a trading area's food stamp share.

Studies have shown that there are economies of size in food retailing. Stores with higher volume tend to have lower costs and lower prices. The data indicated that smaller stores predominated in areas likely populated with the most food stamp recipients. If food stamp recipients are "locked-in" by habit, transportation difficulties, or other factors, one would expect the store

size variable and food stamp share to be inversely related. Also, the effect of store size on the food stamp share should be "large" relative to other factors. The existence of a supermarket in the area and the apparent willingness of food stamp recipients to shop a supermarket would be another test of the "locked-in" hypothesis. A dummy variable was used to capture this effect.

As expected, the two income variables were positively and significantly related to food stamp share, as was the family size variable. The white/blue collar ratio was inversely related, and also significant. The other three variables had the expected effect on food stamp share, and taken as a group, have some interesting implications on the "locked-in" hypothesis. The larger the percentage of households without access to a car, the higher was the food stamp redemption share. And, relative to other explanatory variables, the effect of nonaccess to a car was "large." But there is an indication that the effects of immobility may have been overstated by earlier studies.

The relationship between average store size and the food stamp share was negative and significant. However, the effect was quite small relative to other factors influencing the food stamp share. This, and the positive and significant effect of the existence of a supermarket in the trading area suggests that food stamp recipients find ways to shop in supermarkets in trading areas in addition to the one in which they reside. The data indicate that most low-income households are not located within walking distance of supermarkets. However, supermarkets received nearly 76 percent of total food stamp redemptions nationwide, suggesting that patronage flowed to supermarkets from beyond their immediate trading areas. ■

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