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# How Much Lower Are Prices at Discount Stores? An Examination of Retail Food Prices <br> Ephraim Leibtag, Catherine Barker, and Paula Dutko 

## What Is the Issue?

Food prices vary across different parts of the United States. One factor that may lead to differences in food prices is the types of stores in a given market or neighborhood. Nontraditional discount food retailers, including supercenters, mass merchandisers, wholesale club stores, and dollar stores, have gained a substantial portion of the retail food market over the past 15 years. Previous studies have shown that prices for some items are lower in nontraditional than in traditional stores. But those earlier studies were generally limited in the number of items compared, the detail level of comparison, and the geographic areas studied. This study compares prices for a wide range of foods at a finer level of detail than earlier studies, at both the national and geographic market levels, in order to quantify the difference in food prices across store formats.

## What Are the Major Findings?

Nationally, 86 percent of broad food groups had lower prices in nontraditional stores than in traditional stores. Even after controlling for differences in brand and package size by comparing identical Universal Product Code (UPC) items, prices were lower for 82 percent of UPC products.

Expenditure-weighted average prices were 7.5 percent lower in nontraditional stores at the UPC level, with prices for individual food items ranging from 3 to 28 percent lower in nontraditional stores. This indicates that factors other than brand and package size, such as differences in store costs and pricing strategies, play a role in explaining price differences between store types.

At the market level, price differences between traditional and nontraditional stores were smaller and less frequent in areas with a high market share of nontraditional retailers. Atlanta and San Antonio - which are cities with a high share of nontraditional retailers-had the fewest products with significantly lower prices in nontraditional stores and an average price discount of just 5.3 percent, while cities with a low share of nontraditional retailers (Philadelphia and the New York City metro area) had an average price discount of 11.5 percent.

Smaller price differences between store types may be due to some higher priced traditional retailers' exiting markets in which nontraditional retailers gain a large market share, with the remaining traditional retailers' lowering their prices in response to increased competition. Such an outcome would result in a decrease in average prices in traditional stores. Alternatively, the smaller differences could be due to nontraditional retailers' raising prices once they have a large enough market share to do so.

Results for specific food groups and items include:

- Meat items had the largest average price discounts in nontraditional stores, while grain-based products had the greatest variation in price differences between nontraditional and traditional stores.
- All canned products were priced significantly lower in nontraditional stores, even at the UPC level.
- Private-label (store-brand) items had larger price differences between store types than did national-brand goods.


## How Was the Study Conducted?

The study analyzed 2004-06 Nielsen Homescan data, which includes all food-at-home purchases for about 40,000 households in 52 markets and selected nonmetropolitan areas. (Nielsen defines "nonmetropolitan areas" as areas outside the 52 largest metropolitan areas in the United States). The study compared price differences at the national and market level for four broad food groups-dairy, meat, fruits and vegetables, and grains. These food groups were divided into four levels of aggregation for each year with the most commonly purchased products compared at each aggregation level:

1. broad food categories, such as low-fat milk
2. products of the same brand or a narrower subgroup of the broad categories (for items that do not have national brands, such as most fresh fruit)
3. products with the same individual package sizes, such as 6 -ounce containers of yogurt
4. products with the same UPC

A linear regression model was used to control for other factors that may influence the average price for a given food item or group of foods, such as region and calendar quarter when purchased. When estimating food price differences between store types at the market level, we focused on six markets: Philadelphia and New York (with low shares of nontraditional retailers); Chicago and Baltimore/Washington (with medium shares of nontraditional retailers); and Atlanta and San Antonio (with high shares of nontraditional retailers).

