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How Low Has the Farm Share of Retail Food Prices Really Fallen?

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Abstract

For the commodities they sell, farmers have been receiving a decreasing share of what consumers pay for food at retail stores for some time, but the extent of this decrease has been overstated for at least a few commodity groups. Current estimates of farm share are based on baskets of foods representative of what households bought between 1982 and 1984. Using updated baskets based on what American households bought for at-home consumption between 1999 and 2003, this report estimates farm share for two major commodity groups—fresh fruits and fresh vegetables. Using this approach, this report found that farmers are capturing more of the consumer's food dollar than current estimates suggest. The methodology behind the market basket data series is also detailed.

Keywords: marketing margin, farm share, farm-retail price spread, food prices, fruits, vegetables

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Summary

The Economic Research Service estimates the share of retail food prices that farmers earn for producing various commodities. Estimates are based on baskets of foods representative of what a typical American household buys at a retail foodstore for at-home consumption during 1 year, compared with the revenues earned by farmers for a corresponding basket of agricultural commodities. In recent decades, the farm share of consumer food expenditures has been shrinking.

What Is the Issue?

To facilitate the calculation of an annual market basket data series, ERS works with the same consumer baskets that have been used since 1982-84. Researchers working with these baskets need only to follow changes in farm and retail prices over time. The value of the consumer baskets is updated using measures of retail price inflation supplied by the Bureau of Labor Statistics (BLS), and the value of the farm baskets is updated using prices received by farmers for their commodities. Although working with fixed baskets makes calculating the data series easier, it does not allow researchers to account for changes in shopping patterns, such as increased purchases of fresh fruits and vegetables over the past few decades.

What would the farm share for these commodity groups look like if the consumer baskets were updated to reflect what American households bought at retail in more recent years? To answer the question, this study identified the contents of more recent fresh fruit and fresh vegetable consumer baskets (1999-2003) and used the information to estimate farm share for both commodity groups for the years 1997 through 2004.

What Did the Study Find?

Using the updated market basket data for fresh fruits and fresh vegetables, ERS confirmed a general trend: that the farm share of consumer food expenditures has been shrinking. But the study also found that the farm share for these two commodity groups has decreased less than previously believed.

The updated estimates show a larger farm share than the current, unadjusted data series. The unadjusted data series estimates the 2004 farm share at 19 and 20 percent for fresh vegetables and fresh fruits, respectively; the updated consumer baskets yield farm shares of 23.5 percent for fresh vegetables and 26.6 percent for fresh fruit. While the updated estimates are lower than the farm share estimates for 1982 (34 percent for fresh vegetables and 33 percent for fresh fruit), they do suggest that the existing (unadjusted) series has overstated the decrease in farm share.

The unadjusted and updated consumer baskets differ in important ways. The updated basket includes greater quantities of high-value fresh vegetables, such as asparagus (with a relatively high farm value in 2004 of \$1.22/lb), bell peppers (\$0.34/lb), broccoli (\$0.33/lb), agaricus mushrooms (\$1.14/lb), and romaine lettuce (\$0.19/lb). By contrast, celery (\$0.15/lb), corn on the cob (\$0.21/lb), iceberg lettuce (\$0.17/lb), and onions (\$0.11/lb)



are included in the updated basket in smaller quantities than in the 1982-84 consumer basket.

These results apply only to fresh fruits and fresh vegetables. Separate analyses are needed for other commodity groups included in the market basket data series. In addition to fresh fruits and fresh vegetables, the market basket data series provides estimates of consumer expenditures for meats, poultry, eggs, dairy products, fats and oils, processed fruits and vegetables, and bakery and cereal products.

How Was the Study Conducted?

The study constructed consumer baskets representative of what households bought at retail in 1999-2003 and used them to estimate farm shares.

The updated market baskets were constructed using data from BLS on food spending by American households in conjunction with data from ACNielsen on the shopping habits of American households. In 1999, on average, households spent \$148.51 for fresh vegetables, including \$18.92 for lettuce, \$26.91 for tomatoes, \$28.35 for potatoes, and \$74.33 for other fresh vegetables. Quantities were inferred from these expenditures using the ACNielsen data. For example, head lettuce (primarily iceberg) accounts for about 62 percent of the value of all lettuce purchased by the ACNielsen sample, and iceberg lettuce can be used to represent all purchases of head lettuce. Romaine can likewise be used to represent all purchases of romaine and leafy lettuce, implying that a representative household split its lettuce expenditures of \$18.92 into \$11.73 for iceberg and \$7.19 for romaine. Using ACNielsen national average prices and these values yielded estimates of physical quantities. For example, with iceberg lettuce averaging \$0.78 per pound in 1999, a representative household bought about 15 pounds with its \$11.73.

This same procedure was repeated using data for 2003. The final market basket was constructed by averaging the contents of the 1999 and 2003 baskets.

The values of the two consumer baskets (fresh fruits and fresh vegetables) were then updated using BLS measures of retail price inflation, and the values of the corresponding farm baskets were updated using prices received by farmers for their commodities.

At the time the study was conducted, 1999 and 2003 were the earliest and most recent years, respectively, for which both BLS and ACNielsen data were available.