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

Hayden Stewart

Introduction

Farmers are receiving a smaller share of what consumers pay for many food products at retail. The market basket data series, maintained by USDA's Economic Research Service (ERS), shows that costs for marketing services—such as transportation, processing, and retailing—are growing more quickly than farm receipts for major commodity groupings. For example, in 1982, farmers[1] captured 34 percent and 33 percent of what consumers paid for fresh vegetables and fresh fruit, respectively, at retail foodstores; by 2004, these farm shares had declined to 19 percent for fresh vegetables and 20 percent for fresh fruit. However, like most data series, these estimates are sensitive to some methodological assumptions.

The market basket data series compares the retail price of a market (consumer) basket of foods with the revenues received by farmers for the contents of a corresponding agricultural basket. Estimates are provided for nine major commodity groups: meats, poultry, eggs, dairy products, fats and oils, fresh fruits, fresh vegetables, processed fruits and vegetables, and bakery and cereal products. Consumer baskets represent what a typical American household buys at a retail foodstore for at-home consumption. For example, the consumer basket for fats and oils contains a certain quantity of peanut butter. The corresponding agricultural basket contains enough peanuts to produce that same amount of peanut butter.

To make the challenge of calculating an annual data series less daunting, ERS researchers have continued to work with consumer baskets representative of what households bought between 1982 and 1984. Under this assumption, we only need to follow changes in farm and retail prices over time to estimate farm share in other years.

However, shopping and eating patterns have changed over the past few decades. For one thing, supermarkets tend to be larger and stock a greater variety of items (Kaufman). Food availability data (also known as disappearance data) further identify changes in the amounts of some commodities available for consumption. For example, there have been increases in the per capita supply of romaine lettuce and cheese. Commodities available in only the same or smaller quantities include head lettuce and beverage milk.

The market basket data series aims to inform both policymakers and the agricultural community about the costs of marketing commodities and how these costs compare with what farmers themselves earn (see box, "Objectives and History of the Market Basket Data Series"). The American Farm Bureau Federation, for example, has been concerned about agriculture's decreasing "portion" of the consumer's food dollar (e.g., Kleckner). Throughout this study, I use the words "contribution," "portion," and "share" interchangeably.

[1]For fresh fruits and fresh vegetables, farmers are defined to include grower-shippers, firms, or cooperatives that grow, pack, and ship produce, or pack and ship produce for other growers.

Objectives and History of the Market Basket Data Series

USDA's Economic Research Service seeks to inform policymakers, agriculture, and the general public about marketing costs for agricultural commodities. We also have a Congressional mandate to provide this information. A number of data products compare the prices paid by consumers for food with the prices received by farmers for their commodities. To keep this information useful and accurate, ERS must also undertake periodic reviews of these data products.

Included in the information provided by ERS are estimates of the farm share of individual foods. If a policymaker were interested in the cost of marketing wheat that is used to produce bread, for example, he or she might need an estimate of the farm share of a loaf of bread.

By themselves, estimates of the farm share of individual commodities are not always sufficient. A dairy cooperative, for example, might be less interested in the farm share of the retail price of cheese and yogurt, viewed as individual products, than in a composite estimate of the farm share of all dairy products.

Individual foods must be grouped into baskets in order to provide an estimate of the farm share of a commodity group such as dairy foods. For the market basket data series, ERS researchers have grouped foods into baskets according to what a typical American household buys at retail in 1 year's time. Estimates of farm share are then based on a comparison of the retail cost of these "market baskets" with the revenues received by farmers for a corresponding agricultural basket.

To identify agricultural baskets, we rely on conversion factors specifying the amounts of agricultural goods needed to produce specific retail foods. For fresh fruits and fresh vegetables, these conversion factors inflate the retail quantity by the amount necessary to compensate for waste and shrinkage that occurs as goods are prepared for presentation in retail stores. For example, ERS estimates that farmers must supply 1.031 pounds of carrots for marketers to provide 1 pound at retail. However, for more highly processed foods, the calculations can be complex and involve more than one commodity. For example, to manufacture some dairy products, sugar must be added to milk.

Estimates of farm shares are provided for nine major commodity groups: meats, poultry, eggs, dairy products, fats and oils, fresh fruits, fresh vegetables, processed fruits and vegetables, and bakery and cereal products.

A review of the market basket data series is now underway. For each commodity group, we will weigh the value of reporting estimates of the farm share of baskets relative to reporting estimates of the farm share of individual, illustrative foods. We will also consider the availability of conversion factors.

The market basket data series is available on the ERS website at http://www.ers.usda.gov/Briefing/FoodPriceSpreads/. ERS and its predecessor agencies have long produced data products comparing retail food prices with farm gate prices, including, for example, *The Margin Between Farm Prices and Retail Prices of Ten Foods* by Frederick V. Waugh, published in 1935.

In addition to the market basket data series, another ERS data series estimates the farm share of retail cuts of beef and pork. However, this series is not based on a basket of foods typically bought by households at retail. It is based on the cuts from a standard animal, cut up and retailed in a standard way.

Still another data series, the marketing bill, was introduced in the 1980s to provide an estimate of the farm share of all foods, including foods marketed for away-from-home consumption. It also breaks down the contribution of the food marketing system into the portions attributable to labor, packaging, transportation, and other major marketing inputs.

Two commodity groups—fresh fruits and fresh vegetables—serve as case studies for evaluating the ERS market basket data series. This evaluation begins with a brief examination of recent changes in shopping and eating patterns, which are likely to have influenced the mix of fresh fruits and fresh vegetables that households tend to buy at retail. Then, I updated the baskets to represent what households bought between 1999 and 2003 for each commodity group. Compared with the 1982-84 baskets, the updated baskets contain a greater variety of fresh fruits and fresh vegetables. Finally, I calculated new estimates of the farm share using the new baskets and compared them with existing estimates.