



ERS Research Briefs

U.S. Fresh Produce Markets: Marketing Channels, Trade Practices, and Retail Pricing Behavior

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Evolving Markets in the Produce Industry

U.S. markets for fresh fruits and vegetables have been transformed in the past decade. Consumers are purchasing more produce, more exotic varieties, and more convenient portions and packaging. The implications of consumer demand filter through the marketing chain. The foodservice sector has stepped up as buyers of fresh fruits and vegetables, while merchant wholesalers have declined in importance. Retail companies have grown larger, with mass merchandisers (e.g., Wal-Mart) more active in food marketing and supermarket chains undergoing mergers and pursuing acquisitions of new stores. Purchasing strategies have also changed, with retailers and wholesalers now asking grower-shippers to provide additional services and fees, including marketing fees and inventory services.

These new trade practices have raised concern among grower associations about whether the fees and services are the result of industry evolution or reflect the ability of larger retail companies to increase profits at the expense of growers. To address these concerns, the grower associations asked the U.S. Department of Agriculture to study produce market relationships, leading to a major study by the Economic Research Service. A new report, *U.S. Fresh Produce Markets: Marketing Channels, Trade Practices, and Retail Pricing Behavior*, synthesizes the publications from this research project, including two newly released technical reports by academic experts on market structure issues.

What Is the Issue? Given the broad changes occurring throughout the produce industry, analysis of market relationships at any one level requires consideration of the entire industry. The absence of data on new trade practices and on prices paid and received throughout the marketing chain helps explain the wide gap in perceptions among industry participants about the existence of market power. Recognizing the links across the industry and the gaps in data and information, the overall project had three major objectives:

- To develop a comprehensive overview of the produce industry, including consumption and retail sales trends, markets and market channels, and the changing structure of produce buyers.
- To identify and characterize the types of trade practices used in the produce industry, including fees and services, forward contracting, and marketing strategies.
- To analyze supplier-to-retail price margins for evidence of market power.



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Publications in the study...

Understanding the Dynamics of Produce Markets: Consumption and Consolidation Grow.

Agriculture Information Bulletin No. 758. 32 pp, August 2000

U.S. Fresh Fruit and Vegetable Marketing: Emerging Trade Practices, Trends, and Issues
Agricultural Economic Report No. 795. 56 pp, January 2001

Competition in Fresh Produce Markets: An Empirical Analysis of Channel Performance. By Timothy Richards and Paul Patterson. Cooperators and Contractors Report No. 1. September 2003.

Grocery Retailer Behavior in the Procurement and Sale of Perishable Fresh Produce Commodities. By Richard Sexton, Mingxia Zhang, and James Chalfant. Cooperators and Contractors Report No. 2. September 2003.

How Was the Project Conducted? To analyze, from farm to table, an industry as complex as today's produce industry, ERS consulted with experts in the economics of produce markets and market structure analysis. ERS worked with researchers at Cornell University to assess changing produce markets and market channels, per capita consumption and retail sales trends (including value-added produce), and retail consolidation trends between 1987 and 1997.

Limited public information challenged the study's second objective. (Most firms typically do not reveal the details of transactions between shippers and buyers.) As a result, ERS worked with collaborators from the University of California-Davis, University of Florida, and University of Arizona to interview and collect primary data from selected small-, medium-, and large-scale shippers of Florida grapefruit, California and Florida tomatoes, California and Arizona lettuce and bagged salad, California table grapes, and California oranges. Shippers were asked about the share of sales accounted for by the largest produce buyers, various pricing strategies, including fees, services, and contracts, and the extent of fees charged as a share of sales. Grocery wholesalers and retailers were interviewed about changes over the past 5 years in their use of fees and services and the number of employees in produce buying positions.

ERS contracted studies from the University of California-Davis and Arizona State University to assess the pricing by retailers for some fresh produce commodities in selected markets. Working with ERS, both research teams gained access to detailed data on retailer pricing and sales that underpin the statistical analysis. However, neither team had direct access to data on retailers' actual costs and fees. Instead, they applied economic theory and statistical methods to estimate costs. The techniques applied by both teams give a range of costs and, consequently, their estimates of the extent that retailers are exerting market power has lower and upper bounds.

What Did the Project Find? Per capita consumption of fresh produce increased 12 percent during 1987-97 and retailers have responded by increasing the size of their produce departments. Fresh-cut produce and prepackaged salad sales have grown rapidly and the number of nationally branded products is expanding. Largely since 1996, the share of grocery store sales accounted for by the top 4, 8, and 20 food retailers nationwide has increased through mergers, acquisitions, and internal growth.

Advance pricing arrangements, contracts, fees, and services are becoming more common. In 1999, short-term contracts accounted for 11 percent of total commodity sales (grapes, oranges, grapefruit, and tomatoes), and long-term (annual or multiyear) contracts for 7 percent. Lettuce sales mechanisms in 1999 were similar except that all contracts were long term. Bagged salad shippers indicated that annual or multiyear contracts are the standard for retail sales. Similar consolidations are occurring among wholesalers.

Volume discounts are the most commonly imposed fee. Slotting fees—paid by suppliers to ensure shelf space—are not used for bulk items such as tomatoes, lettuce, and oranges, but are used in the bagged salad industry. Requests for marketing services from produce shippers have increased, with 77 percent of requests reported as new between 1994 and 1999. According to shippers, the most common service requested is third-party food safety certification, followed by returnable plastic containers. Retailers cite the top three service requests as private-label produce items, category management, and electronic data interchange.

Across the products analyzed, a wide variety of pricing strategies were observed among retailers, indicating that retailers have some control over produce prices. However, there was no evidence of coordinated pricing or collusion among retailers. Analysis of retail and wholesale margins found that retailers do influence prices paid to fresh produce shippers and prices charged consumers for some commodities. Retailer ability to hold shipper prices below competitive prices was found for grapefruit, red delicious apples, and lettuce, but not for tomatoes, grapes and oranges. Consumer prices were estimated to be above competitive prices for red delicious apples, fresh oranges and grapes, tomatoes, and lettuce.