CHOICES
The magazine of food, farm, and resource issues
4th Quarter 2006 • 21(4)
A publication of the American Agricultural Economics Association

Fresh Produce Intermediaries: Impacts of Change in Away-from-Home Food Markets and Trade Practices

by Suzanne Thornsbury, Roger Hinson, Lourdes Martinez, and Dixie Watts Reaves

JEL Classification: L14, L20, L81

The markets and channels that supply fresh produce are among the most dynamic in the food system. Fresh fruits and vegetables, as a group, benefit from trends in consumer preferences. A stream of evidence from the scientific community confirms the health benefits of fresh produce in a world of concerns about health issues. Convenience is essential to many time-starved consumers, encouraging product development and advances in packaging. Most, if not all, fresh produce items are available year-round, and the variety of products has continued to grow. Consumption is dramatically affected by safety issues, as illustrated by the recent illnesses from *E. Coli* on spinach. Continuing consolidation at retail affects supply chain relationships, as efficiencies in that area are thought to be a sustainable competitive advantage. Another dynamic is the emergence of large distributors serving the retail grocery and foodservice segments, placing additional pressure on small- and mid-size companies in the areas of market access and supply chain efficiencies.

Food away from home, or the foodservice sector, represents an increasing share of food purchases in the United States. Expenditures on meals eaten outside the home increased dramatically over the last six decades (Figure 1). Rising incomes, changing demographics (smaller households, busier lives), and other factors have encouraged consumers to expect conveniences from food providers. In this article, we address the food away-from-home segment of the produce industry and the impacts of changes on wholesalers and other intermediary businesses that serve the segment, with implications for firms across the size spectrum. The implications of changing trade practices are also highlighted.

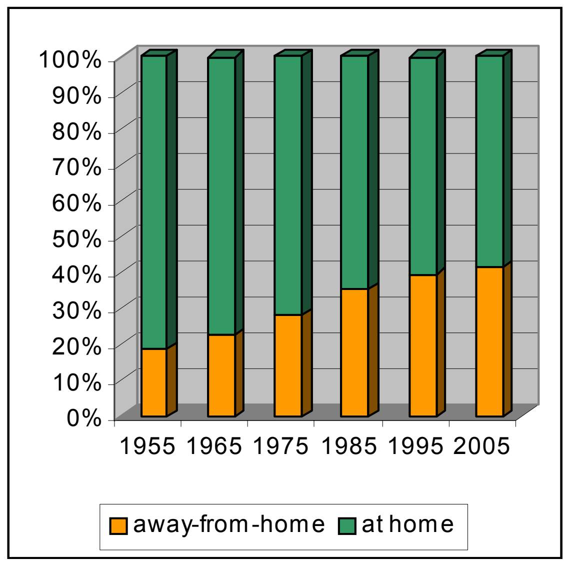

Figure 1. Food away-from-home share increases in the United States.
Source: USDA 2006.

Wholesale and distribution businesses are intermediate stage operations that provide services related to product sale. Historically, a 'wholesaler' operated from a warehouse often in central markets, and usually received and sold goods. A much greater variety of services and functions now characterize this sector.[1] We use the inclusive term "intermediary" to describe agents who (i) take title to product, such as wholesale merchants, distributors,

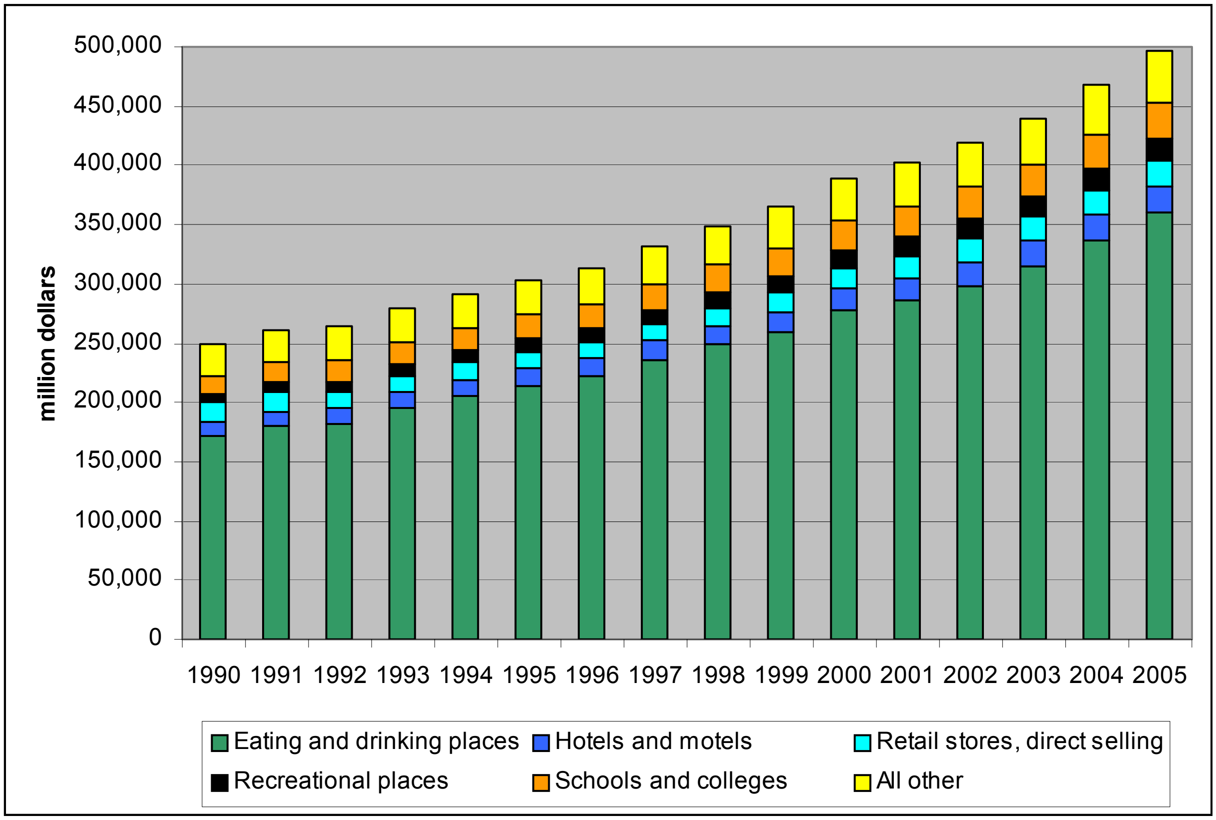

Figure 2. Total expenditures on food away-from-home by type of outlet, 1990-2005.
Source USDA, 2006

import/export merchants, and sales branches; (ii) charge a fee but do not take title, such as brokers and commission merchants; and (iii) provide services such as sorting, packaging, and labeling. Also, there is a common distinction between *broadline wholesalers,* who sell a wide variety of products, and *specialty wholesalers,* who deal with a limited product line, such as fresh produce or dairy products. In terms of distribution of sales in 2002, the four-firm concentration ratio for general line grocery merchant wholesalers was 40%, compared to just under 10% for fresh fruit and vegetable merchant wholesalers (U.S. Department of Commerce, 2005). Since large retail grocers are self-distributors, they are not included in this analysis.

Intermediaries in Food Service

Not only has the proportion of away-from-home food sales grown in the United States, but there have been important shifts among outlets within this broad category (Figure 2). Away-from-home foods normally include restaurant sales (eating and drinking places; hotels and motels), take-away (or ready-to-eat) foods such as prepared food from counters at grocery stores, and institutional foodservice, including schools, military, and retirement institutions. The remaining away-from-home food sales are provided by recreation places, bars, and vending machines. Historically, food away-from-home sales of produce were lower when compared with sales of other food products. This is no longer true. Perosio et al. (2003) estimated that approximately 45% of fresh produce is sold through foodservice channels.

The largest sector of away-from-home food sales remains eating and drinking places, which can be further analyzed by type of outlet. In 2002, sales through full-service and fast food restaurants were almost 80% of the total dollars spent on away-from-home foods (Stewart et al., 2004). Share of sales in fast-food restaurants grew steadily from 29% in the 1980s to 38% in the mid-1990s. The share for full service restaurants declined

1. *Due to the diversity and number of services provided by intermediaries, consistent definition and categorization of firms is difficult. See U.S. Department of Commerce (2005); Harris et al. (2002); and McLaughlin, Park, and Perosio (1997).*

over the same period, from 42% to 38%. Consumer spending in both of these outlets is projected to increase between 2000 and 2020, by 18% at full-service restaurants and by six percent at fast-food restaurants. Even within these two categories there are important distinctions such as the "fast-casual" segment, an important area of fast-food growth (Perosio, McLaughlin, & Cuellar, 2003). Unlike full-service restaurants, fast-casual outlets offer an atmosphere targeted primarily to adults and often feature fresh, high-quality ingredients, including produce.

Chain restaurants (fast-food or upscale establishments) have multiple outlets and often have wide geographic reach. These firms demand high volumes and require consistency, portion control, and other product characteristics across time and outlets. This is the dominant market for broadliners, who reported that about 95% of their sales were made to these buyers (Perosio, McLaughlin, & Cuellar, 2003). In addition to food, broadliners may supply equipment, packaging, uniforms, and other items to foodservice customers.

In contrast to large chain restaurants and the documented concentration of the food retail/grocery segment, most establishments in the foodservice industry remain small-or medium-sized. These businesses include local fast-food, fast-casual, up-scale fine dining, and hotel foodservice, where purchasing is handled by local buyers or chefs. A cross-section of these outlets is prevalent in all geographic regions, a pattern expected to continue in the foreseeable future. Small foodservice establishments often demand smaller volumes of a range of fresh produce, with a product mix that may vary across seasons. They are important and active customers for produce intermediaries. In a study that included both small- and mid-sized broadliners and produce wholesalers, differentiation strategies emphasized high levels of service and product quality, strong specialty product availability, freshness, and daily (or very frequent) service (Hinson, Sinoha, & Reaves, 2006)

The dichotomy in size among foodservice outlets provides opportunities for a greater number of intermediaries to be active in the supply chain when compared with retail food sales. While growth and additional volume in the overall market are one opportunity, changes in the venue, where the food dollar is spent, represent valuable opportunities for produce suppliers.

Trade Practices and Enabling Technologies

Trade practices are the services provided and the overall structure of transactions between intermediaries, their customers, and their suppliers. Evolving trade practices include increased emphasis on product characteristics, chain management, and commitment-based relationships such as strategic alliances. Successful intermediaries (both small and large firms) have been able to adapt and adopt new trade practices to serve different fresh produce customers, including those in away-from-home food markets. Understanding evolving trade practices and their enabling technologies is fundamental for intermediaries who want to gain or maintain market share, or to re-position themselves, within the away-from-home market.

Trade practices based on consumer concerns. Fresh produce intermediaries are aware of the growing concern about health and safety. These concerns include farm-based and handler-based issues such as the use of 'good agricultural practices' to reduce microbial contamination and pesticide residue risks, validation of claims such as organic, and other credence attributes. Preferences regarding origin can be important. Some consumers feel that locally produced fruits and vegetables are fresher and that statements such as 'organic' are more credible from local farmers. The possibility of regulation to require ability to trace a product to its origin has already established traceability as a channel requirement in many cases. Intermediaries often supply these assurances through third-party certification that all parties in the chain, including themselves, are following the rules. Compared with 2000, increased buyer demand for third-party certification and traceability were reported in 2005, with further increases expected by 2010 (Martinez & Thornsbury, 2006). Intermediaries may meet special requests applicable to packaging and organic/environmentally friendly products in multiple ways, including coordination with their suppliers to make product or service adjustments (Hinson, Sinoha, & Reaves, 2006).

Trade practices based on service requirements. For the large number of small- and mid-size foodservice outlets, produce intermediaries provide extensive services to customers. Examples include the willingness to break cases to assemble the mix of products and sizes ordered, delivery of less-than-truck-load quantities, and the ability to adjust orders on short notice. Although some large intermediaries that supply large foodservice establishments (for example, Sysco and Gordon Food Service) also service these small firms, many small foodservice establishments remain highly reliant on local intermediaries.

Trade practices – the personal relationship. Although the use of contracts has increased particularly among the larger firms, personal relationships with both suppliers and customers remain a cornerstone of exchange in foodservice. Many smaller suppliers maintain a very traditional personal contact approach. Results from a 2005 survey indicated that 31% of fresh produce intermediaries had maintained commercial relationships with their primary suppliers for six to ten years, while 12% had worked with their primary supplier more than 20 years. Long-term relationships are also predominant in intermediary relationships with customers. Over one-third of survey respondents indicated having worked with the same customers for more than six years (Martinez & Thornsbury, 2006).

Enabling technologies and innovations. Enabling technologies have the potential to increase efficiency across the supply chain and include the internet as a platform, hardware for data sources, and intellectual property software. For example, sharing of bar-code and radio frequency identification (RFID) scanner data provides information within firms and across firm boundaries to provide better customer service levels. They can facilitate efficient replenishment and category management. Studies report that produce wholesalers believe inventory management will be increasingly important. Produce distributors used electronic data interchange (EDI) and cross-docking technologies more than their broadline competitors, but lagged in continuous replenishment and automated purchase orders (Perosio, McLaughlin, & Cuellar, 2003). Ratings by small- and mid-size businesses indicated that partnerships and e-commerce would increase in importance, while lower-ranked issues were pallet bar-coding, RFID, returnable containers, and flow through/cross docking (Hinson, Sinoha, & Reaves, 2006).

In addition to electronic technology, long-term partnerships, alliances, and software-based property are knowledge-based innovations that enhance coordination. As an example, Collaborative Planning Forecasting and Replenishment (CPFR) allows firms to coordinate supply chains through sharing of retail-level demand forecasts, which are developed iteratively using a web-based procedure. When forecasts converge to pre-agreed limits, they become the order and the basis for production and replenishment plans (Fleidner, 2003).

While this level of technology and application may be less common among smaller intermediaries, customer and consumer demands are little different from those expected of their larger competitors. Gaining the benefits of these technologies requires both the acquisition cost of the technology and the learning curve associated with implementation. Benefits arise from widespread adoption. While large intermediaries can more easily absorb these costs, small- and mid-size companies are at a disadvantage. Outsourcing to third-party logistics providers is an increasingly important model that helps smaller firms acquire the benefits of technology. Development costs are spread across many customers by the third-party provider, and each intermediary is then able to provide services that in many ways mimic those offered by large firms.

Outlook for Fresh Produce Intermediaries

Demands from consumers are driving subtle and overt changes in fresh produce supply chain requirements and the firms that serve these markets. The dichotomy between large chain restaurants and the many smaller consumer outlets active in the away-from-home food market has provided opportunities for multiple success strategies among fresh produce intermediaries. All intermediaries continue to adapt their offerings to meet the needs of a marketplace increasingly driven by dollars spent on away-from-home foods and evolving trade practices. Large broadline companies generally target chain restaurants and more frequently use partnerships and alliances. They pursue growth goals through existing accounts, increasing market share through acquisitions, and entering smaller markets. More typical fresh produce intermediaries are small- and mid-size businesses with many small accounts. They compete by providing high service levels on items important to their customers, such as small order sizes, special deliveries, procurement of products appropriate to the customer base, and promotion, technology, and other customer support. As a part of chain management, electronic and software-enabling technologies including EDI, barcodes, RFID, and internet platforms have become the standard. Many smaller suppliers, however, maintain a very traditional personal contact approach.

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Suzanne Thornsbury (thornsbu-@msu.edu) is Assistant Professor, Department of Agricultural Economics, Michigan State University, East Lansing, MI. Roger Hinson (rhinson@agctr.lsu.edu) is Professor, Department of Agricultural Economics and Agribusiness, Louisiana State University, Baton Rouge, LA. Lourdes Martinez (marti617@msu.edu) is Research Specialist, Department of Agricultural Economics, Michigan State University, East Lansing, MI. Dixie Watts Reaves (dixie@vt.edu) is Associate Professor, Department of Agricultural and Applied Economics, Virginia Tech, Blacksburg, VA.