EYE ON ECONOMICS

Three Part Series: Fundamental Forces Affecting Growers and Marketers

Part 1: Size, proximity and category management for fresh produce

BY ROBERTA COOK

The U.S. fresh fruit and vegetable industry is very diverse, including over 300 products, each with its own structure at the production and first handler (e.g., shipper, packer) marketing levels. Despite this diversity, virtually all fresh produce shares two fundamental attributes: perishability and seasonality. Weather factors can always undo the best-laid plans by unexpectedly shifting short-run supply or demand. Perishability limits storage and the ability to adjust to short-run disequilibria in supply and demand, other than through price, making markets volatile.

In this article, the first of three on fundamental economic forces affecting growers and marketers of fresh produce, we examine the basic structure of the produce supply chain, including factors causing underlying tension and subtle shifts within this structure.

VALUE CHAIN BASICS

Industry Size and the Benefits of International Trade

In the United States, the final value of fresh produce sold through all marketing channels is estimated at over $122.7 billion. There were 3.2 million acres of harvested fruits and vegetables (excluding processed) in 2010 producing 99.9 billion pounds with a farm gate value of $21.8 billion. Consumption of fresh fruit and vegetables was 313 pounds per capita in 2010, up 27 percent since 1976, due to growing awareness of the health benefits of consuming fresh produce.

Fresh produce imports reached $12.3 billion in 2010, with imports almost quadrupling since 1994 in response to growth in consumer demand and the inability to produce many fresh fruits and vegetables year-round in the United States. Exports doubled over the same period, reaching $6.1 billion in 2010; the fresh produce trade deficit grew to $6.2 billion according to General Agreement on Trade in Services (GATS) and U.S. Department of Agriculture (USDA) Foreign Agricultural Service figures. In addition, USDA Economic Research Service (ERS) findings showed the import share of consumption was 24.1 percent for fresh vegetables and melons in 2010 and 30.4 percent for fruit, excluding bananas, in 2009.

Market integration within the North American Free Trade Agreement (NAFTA) region has also increased: Canada is the U.S.'s leading fresh produce export market, followed by Mexico. Most fresh vegetables are traded intra-NAFTA with Mexico usually supplying about two-thirds of U.S. imports, while fresh fruit involves more diverse sources and export markets. Since most international trade is driven by seasonal production deficits rather than lower prices for imports, proximity to market is key not only due to perishability but transportation costs, so the advantage of any country generally lies with its in-season domestic production.

Marketing Arrangements: Shippers Gain Ground

There are many types of intermediaries in the fresh produce industry, such as

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importers, wholesalers, and brokers, yet mounting pressure to streamline the supply chain and drive out nonvalue-adding costs has downplayed their role and increased the value of shippers. Based in key production regions, most are actually grower-shippers, handling marketing production for themselves and others. In this way, supply is assembled in greater volume and comes closer to matching the scale of the fewer, larger buyers that exist today, allowing growers of all sizes to gain access to major domestic and export markets.

To meet retail and foodservice demand, shippers offer year-round availability (importing during the off-season when necessary) and are able to reduce sourcing transaction costs for buyers. The high level of risk and price volatility at the grower and shipper levels does not encourage dominance by publicly traded companies concerned with quarterly profits; with the exception of multinationals anchored in the banana industry and Dole in particular (the only multinational wide-line fresh fruit/vegetable shipper operating in the U.S. market), a sizable portion of first-handler produce sales remains in the hands of relatively specialized, usually family-controlled grower-shippers.

Most are based in California and Florida except for apple, pear, and cherry production, based predominately in Washington state. In 2010 California produced 49 percent of U.S. fresh vegetable volume, followed by Florida with 14 percent and Arizona with 8 percent (USDA National Agricultural Statistics Service). Most of Arizona’s volume is marketed by California shippers, who have relationships with Arizona growers. California also produces roughly half the U.S. fresh fruit volume.

Short-season growers, located outside primary growing regions, produce and sell more to retailers and restaurants as part of “local” buying programs. Though they are gaining a small but growing share of the fresh produce market, this trend impacts the supply chain at the margin, mainly during the summer months. In addition, there are also direct-to-consumer markets in many areas including over 7,100 farmers markets nationwide. Direct-to-consumer sellers tend to be smaller growers; the total value of this marketing channel, despite its growth, likely does not exceed two percent of the final value of the fresh produce supply chain.

MARKETING AS A DIMENSION OF COMPETITION

Category Analysis and Fresh Produce

Historically, produce was excluded from the category analysis applied to consumer packaged goods (CPG), in part, because seasonality and insufficient volume precluded a particular shipper’s product from being in any given retailer’s stores on a consistent basis. In addition, most produce is sold in bulk on a random-weight basis versus with scannable UPC bar codes, and until widespread adoption of produce price-lookup codes (PLUs), much less data was available.

The gradual application of the CPG model to fresh produce departments was led by bagged salads whose packages contain UPC codes. These products tend to have dedicated, year-round shelf space and are sold by large branded suppliers, thereby more closely fitting the CPG model. Today’s fewer, larger buyers increasingly expect commodity shippers to come closer to the CPG model of providing marketing and promotional support, despite the challenges posed by perishability and weather variability. (For a related article on category management see page 36 in this issue.)

The theory is that if suppliers can assist retailers to better target the right consumers in the right stores for the right product with the right price at the right time, both retailers and suppliers will benefit. Development of the marketing capacity to offer this type of service takes capital, information technology, analytical capacity, retailer cooperation, and a medium- to long-term time horizon—and commitment must be strong on both sides for the investment to be worthwhile. Retailers must commit to sharing data and to consistently sourcing predictable volume from a supplier, assuring its product shelf-space, while shippers must move toward becoming marketing- versus production-oriented firms.

Consumer Research & Differentiation

Whereas in the past, shippers knew little about the customers purchasing their products, it has become more common to conduct consumer research and purchase data of various types. For example, some suppliers use Nielsen Spectra data, which shows household purchases of specific products derived from Nielsen’s Homescan household panel data, Census, and other data mapped across sixty consumer segments.

Suppliers and retailers are also attempting to gain a better understanding of the shrink
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associated with given products as well as the variation across a retailer’s banners. The aim of all these programs is for suppliers and retailers to develop retail best-practice recommendations by product category, thereby increasing quantity sold and turnover rates, reducing shrink, and improving net profits. If progress is achieved toward these goals, reciprocal buyer and seller loyalty should increase and the supply chain may eventually become more efficient at all levels from field to fork.

However, despite supplier efforts to differentiate themselves using marketing services, with perishability always a given, shippers are still primarily in the commodity business. Shippers whose offerings include the product of affiliated growers (the majority) are always mindful of the net returns they pay to growers. Grower relationships with shippers are mainly based on marketing agreements rather than price contracts, and these agreements are often short-term. The net return to the grower is the residual of the market price for product minus pick, pack, haul to shed, cooling, palletization, marketing, and other shipper charges. Shippers control these functions to standardize their offerings across growers, supporting a consistent trade label.

Most of these charges are to carry out immediate physical functions; yet the purpose of marketing charges may seem more nebulous to growers. Growers may view charges for special promotions or other marketing services as merely cents off the net return per box rather than as stimulating shipper-buyer relationships, sales volume, and pricing over the longer run. This may create a horizon problem, and if dissatisfied with short-term net returns, growers are prone to change handlers accordingly, attempting to maximize current returns rather than investing in potentially higher future returns with a shipper seeking to develop innovative marketing strategies. Thus suppliers engaging in the customer/consumer marketing arena are proceeding with caution, recognizing that investment in differentiation strategies is constrained by the competitive realities of commodity markets.

CONCLUDING THOUGHTS

The twenty-first century U.S. fresh fruit and vegetable marketing system has strengthened its focus on adding value and decreasing costs by streamlining distribution and understanding customer/consumer needs. The economic downturn is emphasizing the need for further gains in efficiency and has increased the speed of change. Some firms are adapting more quickly than others, causing rapid changes in relative competitiveness and firm-level positioning strategies.

With regulatory, food safety, technological, new product, and marketing requirements often raising fixed costs, fresh produce suppliers are compelled to generate higher volumes to cover these costs. Therefore, there are strong incentives for further supply side consolidation and increasing barriers to entry and exit. Retailers will continue to face channel blurring and margin pressure, while the need for closer collaboration between suppliers and buyers will be increasingly recognized as an important component of firm-level strategy.

The second installment in this series, a thorough analysis of Harvard Business School economist Michael E. Porter’s Five Forces competition theory and its application to the produce industry, will be in the April issue’s Eye on Economics department.

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