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Recent Changes in Marketing and Trade Practices in the U.S. Lettuce and Fresh-Cut Vegetable Industries

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Abstract

Fifteen lettuce and bagged salad shippers were interviewed as part of a larger study on changes in produce marketing. Retail consolidation, changes in technology, and increased consumer demand for convenience, product diversity, and year-round availability have all influenced shipper-retailer relations. The interviewed firms provided more fees and services to retail buyers in 1999 than 1994. Most of the bagged salad shippers paid slotting fees, while none of the lettuce shippers were currently doing so. Bagged salad firms tended to offer services to their customers, while lettuce firms generally complied with the service requests made by retailers.

Keywords: lettuce, fresh-cut, bagged salads, fees, services, marketing

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Note: Use of brand or firm names in this publication does not imply endorsement by the U.S. Department of Agriculture.

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Introduction

In the past year, produce shippers have expressed concern about the recent wave of supermarket mergers and the adverse effects of new industry marketing and trade practices, such as slotting fees and electronic data interchange (EDI). Yet, there is a lack of information on the incidence and magnitude of these new practices and how they affect shippers, retailers, and consumers. This report is part of a larger research study on changes in produce marketing, *U.S. Fresh Fruit and Vegetable Marketing: Emerging Trade Practices, Trends, and Issues* (Calvin et al.), and will focus exclusively on the marketing experiences of California shippers of lettuce, mixed vegetables, and fresh-cut vegetable products.[2] This report reviews the evolving nature of the industry, predominant marketing channels, and the terms under which products are sold.

California and Arizona Lettuce

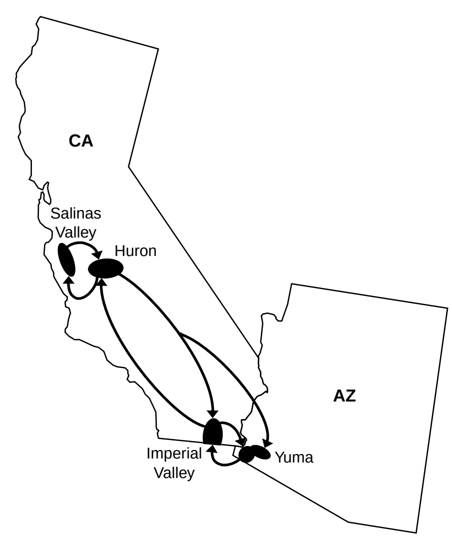
Nearly 100 percent of the lettuce consumed in the United States is produced domestically (tables 1 and 2). The vast majority of domestic production takes place in just two States: California and Arizona. Harvested area of head, leaf, and romaine lettuce in California and Arizona averaged 195,988 acres, 41,538 acres, and 29,213 acres, respectively, during 1992-99 and accounted for over 94 percent of U.S. acreage on average (USDA, NASS). The States' share of production was slightly higher, averaging 96 percent for head and romaine lettuce and 98 percent for leaf lettuce.

A relatively small number of firms coordinate the growing, processing, and transport of lettuce. Nearly all the major shippers have headquarters and year-round sales offices in the Salinas, California, area. Because of this geographic concentration, California-based shippers constitute virtually the entire population of lettuce shippers supplying the domestic U.S. market.

Domestic production throughout the year is facilitated by precise sequencing of production within and across major producing areas (Wilson et al.). One typical sequence of production for iceberg lettuce starts in the Salinas Valley from April through October, then moves to Huron, California, as an interlude before production begins in the desert areas of Yuma, Arizona, from November through March. Huron provides another brief production bridge between the desert and the Salinas Valley in March and April (fig. 1). Leaf lettuce may follow a slightly different sequence of growing regions that could include the Santa Maria, Coachella, and Imperial Valleys in California. Regardless of the geographic sequence, shippers need to control the sequence of production to ensure that no gaps occur in their year-round supply. Control can be achieved by many methods, ranging from handshake agreements, leasing, and contracts with various risk positions to outright ownership.

Figure 1

Production sequence for iceberg lettuce in California and Arizona



Source: Paul N. Wilson, Gary D. Thompson, and Roberta L. Cook, "Mother Nature, Business Strategy, and the Fresh Produce Industry," *Choices*, First Quarter 1997, p. 21.

[2]Many of the firms that market fresh vegetables, such as lettuce, are also involved in production. These firms are often referred to as grower-shippers because growing and shipping operations are frequently integrated or coordinated.

Shippers Offer Broad Product Mix

Most shippers of iceberg, leaf, and romaine lettuce are diversified mixed-vegetable shippers with product lines of as many as 75 commodities, including broccoli, cauliflower, celery, and green onions. Most of these Salinas-based shippers carry such wide product lines in order to offer their customers one-stop shopping. Some of these same shippers also specialize in particular commodities that have thinner markets. Such specialty items could include organic vegetables, artichokes, cactus pears, and rappini.

Many lettuce shippers engage in some degree of processing. Industry participants categorize their products into roughly three groups: commodity, value-added, and fresh-cut or fresh-processed. These three groups are distinguished foremost by the degree of processing required.

Table 1

U.S. fresh head lettuce: Supply, utilization, and price, 1970-2001

Year	Supply (Million pounds)			Utilization (Million pounds)			Season average price ($/cwt)	
	Production[1]	Imports[2]	Total	Exports[2]	Total[3]	Per capita use (Pounds)	Current dollars[1]	Constant 1996 dollars[4]
1970	4,836.5	2.3	4,838.8	250.5	4,588.3	22.4	4.75	16.22
1971	4,936.7	4.5	4,941.2	292.8	4,648.4	22.4	6.31	20.47
1972	5,047.0	1.2	5,048.2	338.3	4,710.0	22.4	5.73	17.81
1974	5,323.1	3.3	5,326.4	300.6	5,025.8	23.5	6.93	18.76
1975	5,410.8	2.2	5,413.0	329.6	5,083.4	23.5	6.71	16.62
1976	5,640.0	3.0	5,643.0	360.8	5,282.2	24.2	8.26	19.31
1977	6,043.2	3.8	6,047.0	359.5	5,687.5	25.8	6.94	15.23
1978	6,052.8	5.7	6,058.5	459.9	5,579.9	25.1	9.90	20.31
1979	6,143.9	13.0	6,156.9	480.6	5,648.5	25.1	9.20	17.46
1980	6,336.3	15.1	6,351.4	488.5	5,836.9	25.6	8.91	15.53
1981	6,268.2	11.4	6,279.6	523.9	5,728.6	24.9	10.90	17.38
1982	6,294.9	14.6	6,309.5	499.3	5,789.9	24.9	12.10	18.19
1983	5,775.5	21.4	5,796.9	519.2	5,258.6	22.4	12.30	17.77
1985	6,133.4	37.8	6,171.2	507.4	5,644.9	23.7	10.80	14.58
1986	5,829.0	20.8	5,849.8	553.6	5,279.2	21.9	12.00	15.86
1987	6,787.7	18.3	6,806.0	542.5	6,242.2	25.7	14.70	18.88
1988	7,050.5	37.4	7,087.9	431.3	6,625.4	27.0	14.70	18.27
1989	7,523.1	35.6	7,558.7	463.6	7,095.1	28.7	12.60	15.08
1990	7,320.1	17.2	7,337.3	396.9	6,940.4	27.8	11.50	13.29
1991	7,077.8	21.1	7,098.9	496.7	6,602.2	26.1	11.40	12.71
1992	7,081.0	21.2	7,102.2	476.8	6,625.4	25.9	12.50	13.61
1993	6,781.1	32.7	6,813.8	463.6	6,350.3	24.6	16.00	17.01
1994	7,005.8	20.6	7,026.4	438.8	6,587.7	25.3	13.30	13.85
1995	6,234.9	51.8	6,286.7	377.9	5,908.8	22.5	23.50	23.96
1996	6,207.2	28.3	6,235.5	417.5	5,818.1	21.9	14.70	14.70
1997	6,879.4	39.3	6,918.7	395.7	6,523.0	24.3	17.50	17.17
1998	6,340.1	22.9	6,363.0	404.7	5,958.3	22.0	16.10	15.61
1999r	7,032.1	28.9	7,061.0	390.9	6,670.1	24.4	13.30	12.71
2000	7,202.3	31.9	7,234.2	374.0	6,860.2	24.9	17.50	16.37
2001f	7,250.0	34.0	7,284.0	395.0	6,889.0	24.8	--	--

-- = Not available. r = Revised. f = Forecast. updated 2/27/01

[1]Source: USDA, National Agricultural Statistics Service (NASS). Production data was adjusted by ERS for 1970-81 to account for States not included in NASS estimates.

[2]Source: U.S. Department of Commerce, Bureau of the Census. Prior to 1989, trade includes leaf lettuce. From 1978-89, exports were adjusted using Canadian import data.

[3]Includes shipments to U.S. territories from 1978-88.

[4]Constant dollar prices were calculated using the GDP implicit price deflator, 1996=100.

Source: USDA, ERS.

Table 2

U.S. fresh romaine and leaf lettuce: supply, utilization, and price, 1985-2001[1]

Year	Supply (Million pounds)			Utilization (Million pounds)			Season average price[4] ($/cwt)	
	Production[2]	Imports[3]	Total	Exports[3]	Total	Per capita use (Pounds)	Current dollars	Constant 1996 dollars
1985	778.7	--	778.7	--	778.7	3.3	--	--
1986	571.2	--	571.2	--	571.2	2.4	--	--
1987	613.0	--	613.0	--	613.0	2.5	--	--
1988	784.2	--	784.2	--	784.2	3.2	--	--
1989	915.8	23.5	939.3	57.9	881.4	3.6	--	--
1990	1,061.6	12.1	1,073.7	130.6	943.1	3.8	--	--
1991	1,157.5	8.3	1,165.8	152.7	1,013.1	4.0	--	--
1992	1,388.7	5.9	1,394.6	195.0	1,199.6	4.7	20.66	22.50
1993	1,535.5	6.8	1,542.3	230.2	1,312.1	5.1	25.35	26.95
1994	1,710.0	8.9	1,718.9	223.1	1,495.8	5.7	23.92	24.91
1995	1,787.4	11.7	1,799.1	227.9	1,571.2	6.0	30.10	30.68
1996	1,775.6	16.6	1,792.2	223.4	1,568.8	5.9	23.00	23.00
1997	2,024.5	28.6	2,053.1	253.3	1,799.8	6.7	24.21	23.76
1998	2,097.4	32.0	2,129.4	282.3	1,847.1	6.8	25.36	24.60
1999r	2,421.0	28.4	2,449.4	301.3	2,148.1	7.9	20.23	19.34
2000	2,607.5	32.7	2,640.2	367.3	2,272.9	8.3	22.94	21.46
2001f	2,700.0	34.0	2,734.0	375.0	2,359.0	8.5	--	--

-- = Not available. r = Revised. f = Forecast.

updated 2/27/01

[1]Includes romaine and leaf lettuce. Excludes head lettuce.
[2]Source: USDA, NASS for 1992-2001 and ERS estimates for 1985-91 based on State-supplied data and USDA, Agricultural Marketing Service shipments.
[3]Source: U.S. Department of Commerce, Bureau of the Census. Includes romaine and other leaf lettuce.
[4]Leaf and romaine crop value divided by leaf and romaine production. Constant dollar prices were calculated using the GDP implicit price deflator, 1996=100.

Source: USDA, ERS.

Commodities are typically the least differentiated products. Although they may be branded—cello-wrapped heads of iceberg lettuce, for example—most brands are typically not recognized by consumers. The amount of processing required is minimal and often may be performed in field-pack operations. Generally, products sold in bulk, whether to retail or foodservice, are sold through commodity channels. This includes products like bulk spring mix (a mixture of various types of whole leaf lettuce), even though some value is added by combining different lettuce types into a single product.

Value-added products encompass a wide variety of fresh products such as hearts of romaine, cello-packed spinach, and cauliflower florets. These value-added products typically require less processing than fresh-cut products, and require less investment in fixed assets. Many processing operations can be performed in modified packing sheds with less expensive processing equipment. While broccoli crowns or leaf lettuce sold in bulk are considered commodity products, broccoli florets that are sold washed and in 16-ounce packages, ready to serve or cook, are value-added. Whereas bagged salads require sophisticated films, most value-added products are bagged in simple cello packs. They may or may not bear universal product codes (UPC); they often have PLU (price lookup) codes that are not scanned but entered by hand at retail. Data on retail sales of value-added products are limited.[3] Sales of cello spinach in mainstream supermarkets increased from $24 million in 1995 to $37 million in 1999, according to scanner data from Information Resources, Inc. (IRI).

Bagged salads require substantial capital investments in plants and machinery, in excess of $20 million for a central or regional processing plant. Significant barriers to entry exist due to the high cost of building or acquiring processing facilities, which contain different

[3]USDA has purchased scanner data on sales of fresh-cut, lettuce-based salads and prepared salads, which include bagged spinach, coleslaw, and other vegetable salads.

types of fixed assets with relatively limited use other than processing salad ingredients. In addition, bagged salads require sophisticated packaging films to manage product transpiration and respiration rates and extend shelf life. Investment in research and development for new films continues constantly. The final product is highly differentiated, branded, and possesses a UPC code that is scanned at retail. Specific procedures are followed to maintain the cold chain from processing to retail display case and reduce delivery times from regional processing plants. In addition, sophisticated strategies are used for merchandising and category management at retail. From a marketing perspective, bagged salads are more like packaged goods than produce.

In 1993, 55 firms sold 197 fresh-cut salad items in mainstream supermarkets with sales totaling $197 million, according to IRI scanner data.[4] In 1999, 54 firms sold 459 items with sales of $1.3 billion. However, largely because of the barriers to entry in the bagged salad market, only a few firms have vied for a major share of the national retail market. Competition for regional and national market shares has been intense. From 1993 to 1999, the top two firms increased their joint market share from about two-thirds to three-quarters of national sales (fig. 2). The remaining top national and regional firms saw their collective market share drop from 27 percent of sales in 1993 to 14 percent in 1999. Some of these firms have apparently shifted from producing branded products to private label (Harvey, Rosselle), which has grown from 5 percent to 10 percent of sales during the period. The number of competitors outside the top 10 peaked at 53 in 1994 and declined to 43 in 1999, while their joint market share also shrank to less than 1 percent of total dollar sales.

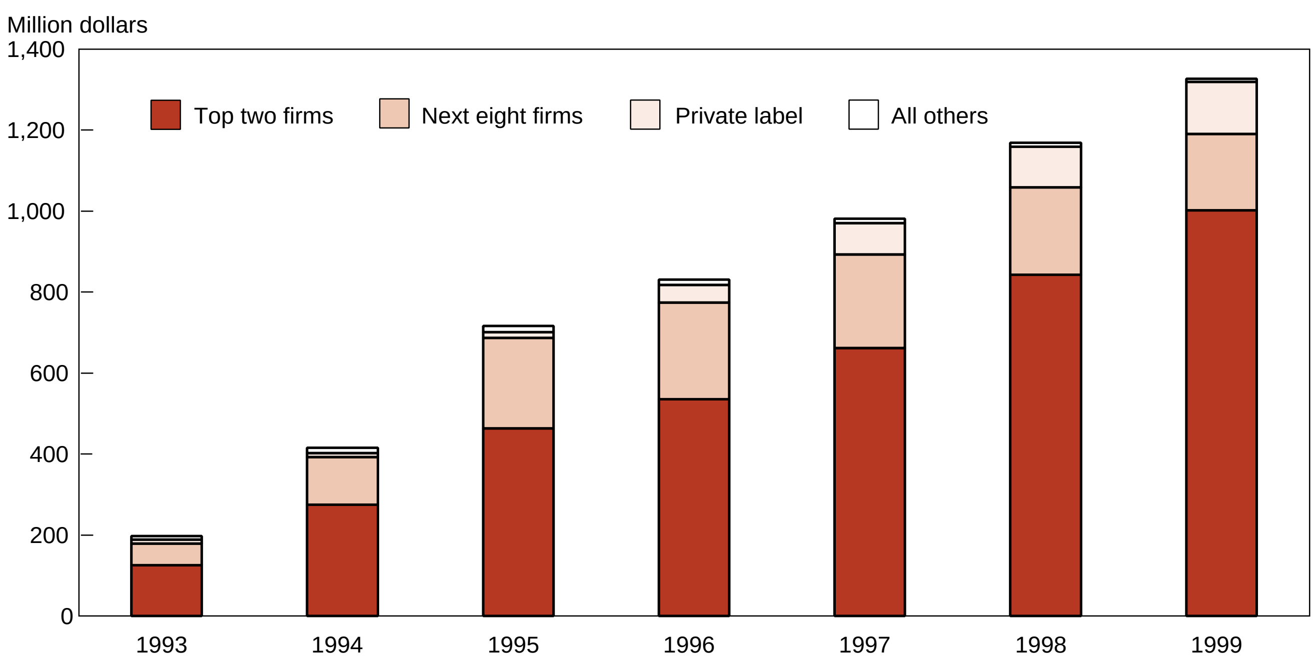
Firms Interviewed

Because there are no public data on transactions between produce shippers and retailers, ERS and university researchers conducted a small number of personal interviews with fresh fruit and vegetable shippers to better understand the evolving nature of marketing and trade practices. Given the limited number of interviews—15 California/Arizona lettuce and

[4]Sales of lettuce-based blends and salad kits; does not include sales of bagged spinach, coleslaw, and other fresh-cut items.

Figure 2

U.S. sales of fresh-cut salad in mainstream supermarkets



Source: Information Resources, Inc.

bagged salad shippers, the findings should be interpreted with caution. In particular, the quantitative results should be viewed as indicative of industry practices rather than a precise accounting. Nevertheless, the information is a first step in understanding recent changes in the produce industry. The interviews concentrated on two main aspects of the business relationship between shippers and retailers:

- The types and characteristics of sales and marketing arrangements
- The types of fees and services that shippers are being asked to provide, or are offering, to retailers and mass merchandisers

Eight of the 15 interviewed shippers sold commodity lettuce, along with a wide range of mixed fresh vegetables. The firms offered an average of 24 commodities to their clients, with iceberg as the dominant type of lettuce sold, followed by romaine and green and red leaf lettuce. Five of the eight firms were involved only in commodity sales, while three shippers offered a few fresh-cut and value-added items, such as broccoli and cauliflower florets. Seven of the 15 interviewed shippers sold either bagged salads exclusively or offered an extensive line of bagged salads and other value-added products in addition to their commodity sales.

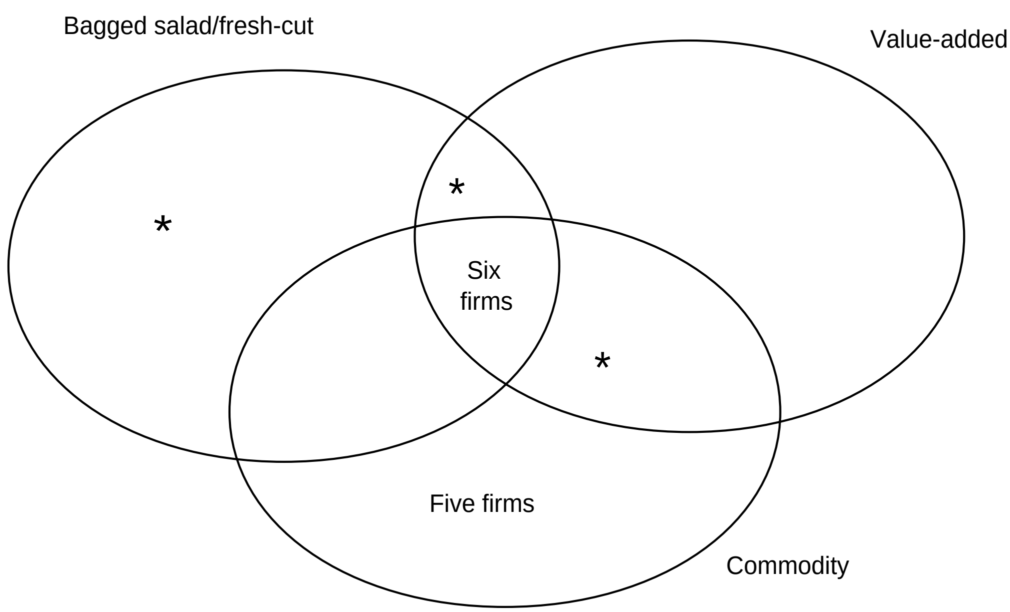
The combinations of fresh-cut, value-added, and commodity items varied significantly from firm to firm (fig. 3). Categorizing the interviewed firms is complicated, because some firms engage in copacking and joint venture agreements, whereby firms specialize in growing certain commodities that are processed and marketed by another firm.

Firms were asked specifically about their lettuce or bagged salad buyers, marketing practices, and sales. However, because of their broad product lines, many firms were unable to be that specific. Thus, the results presented here apply predominantly to lettuce and bagged salads, but also may encompass other vegetables and value-added products.

The interviewed shippers had sales that ranged from over $200 million to $100 million or less in 1999

Figure 3

Product mix of interviewed firms



* Product mix of four firms not disclosed.

Source: USDA, ERS, Produce Marketing Study interviews, 1999-2000.

(table 3). Although there are exceptions, the bagged salad firms tended to have the highest annual sales, while the firms specializing only in commodities tended to have the lowest.

Table 3

Size distribution of interviewed firms

Sales, 1999 ($ Millions)	Number of firms	Types of products sold
Over 200	4	Mostly fresh-cut, some value-added and commodity
Over 100 to 200	6	Fresh-cut, value-added, and commodity
100 or less	5	Mostly commodity, some value-added and fresh-cut

Source: USDA, ERS, Produce Marketing Study interviews, 1999-2000.

Marketing Channels

Shippers typically market their products to a wide array of customers: retail supermarkets, foodservice firms, mass merchandise stores[5], wholesale markets, brokers, and others. The nature of demand for fresh produce varies considerably across these markets. Foodservice can be the most stable market, in which fixed menus and prices can translate into consistent demand for products week to week. Demand for products at retail and wholesale markets, on the other hand, can vary substantially from one week to the next. While some fresh products like lettuce are expected to be available year-round at consistent quality, other products, such as watermelons, are not always available year-round, and many consumers do not buy them in the winter. Prices and volumes may be more volatile for seasonal products, such as watermelons, as demand varies and supplies fluctuate.

Most shippers sell to the full range of market channels. While some specialize with particular types of customers, others consciously diversify across channels. Ten of the interviewed firms provided information on the marketing channels they used for selling lettuce in 1999. Grocery retailers[6] accounted for 59 percent of lettuce sales at the median, but sales ranged from 34 percent to 70 percent (fig. 4). At median values, foodservice was the next most important marketing channel, followed by produce wholesalers, mass merchandisers, brokers, and exporters.

Seven of the 10 firms also reported on their marketing channels for lettuce in 1994. The median percentage of sales going to retail buyers declined slightly from 1994 to 1999, while the share to foodservice increased (fig. 5). Several small- and medium-sized lettuce shippers said they made a strategic decision to actively pursue more foodservice business—either in response to retail consolidation or as a diversification strategy. Over the same period, the median share of sales to wholesalers and brokers, which are market intermediaries, declined. Sales to mass merchandisers and exporters are new since 1994.

For bagged salads and value-added products, the share of products sold through marketing channels differs from lettuce. The four firms reporting value-added sales by buyer type in 1999 sold almost exclusively to retailers and foodservice firms (fig. 6). Although the median percentage of sales to grocery retailers is the same for lettuce and value-added products (59 percent), the range is wider for value-added products (31 percent to 85 percent). The share of value-added sales going to foodservice ranged from 15 percent to 53 percent, with a median of 33 percent. Not enough information was gathered on value-added marketing channels in 1994 to make a comparison with 1999.

Sales and Marketing Arrangements

The market for commodities is traditionally price-competitive, emphasizing daily sales and short-term pricing arrangements. Volumes sold and prices in wholesale and retail markets typically experience significant intra- and interyear price variation, with most sales finalized on a daily or weekly basis. Quality or brand reputation can provide some negotiating strength in the commodity market, allowing some firms to receive a premium over market price. However, even for these price leaders, the base price still fluctuates with the

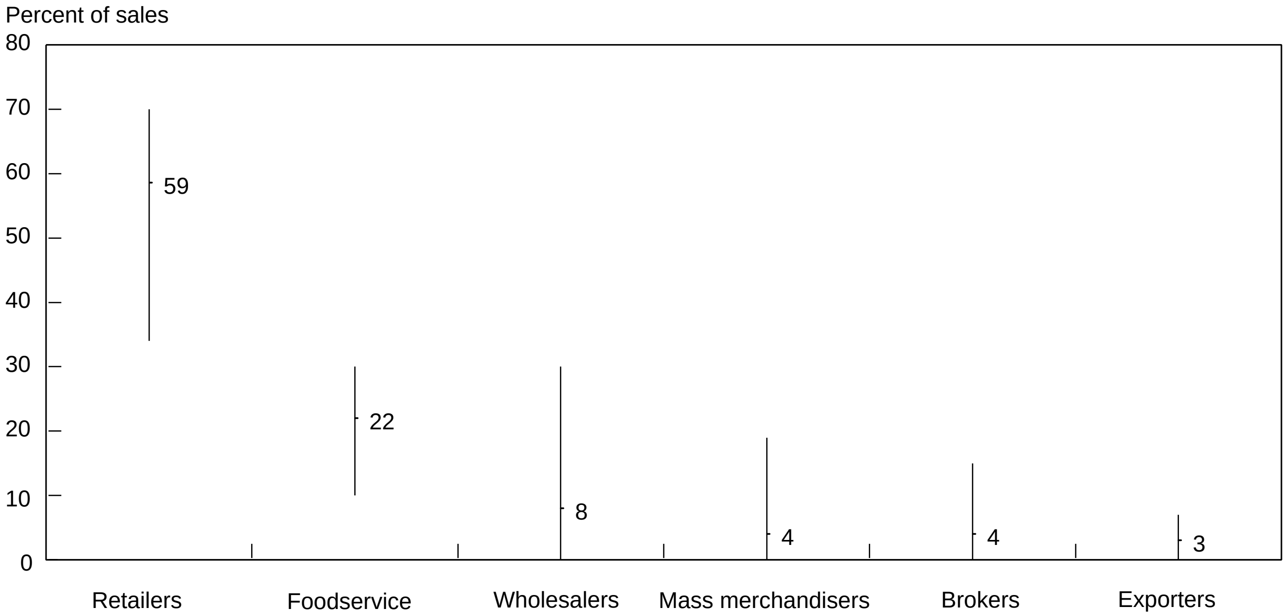
[5]Mass merchandise stores are supercenters (large general merchandise discount stores with grocery departments) and club stores (membership wholesale clubs).

[6]Grocery retailers include corporate chains such as Kroger or Safeway, voluntary chains such as Super-Valu and Fleming, and retail cooperatives like Associated Grocers and Certified Grocers of California.

Figure 4

Share of lettuce sales by market channel, 1999

(Median, minimum, and maximum, 10 firms reporting)

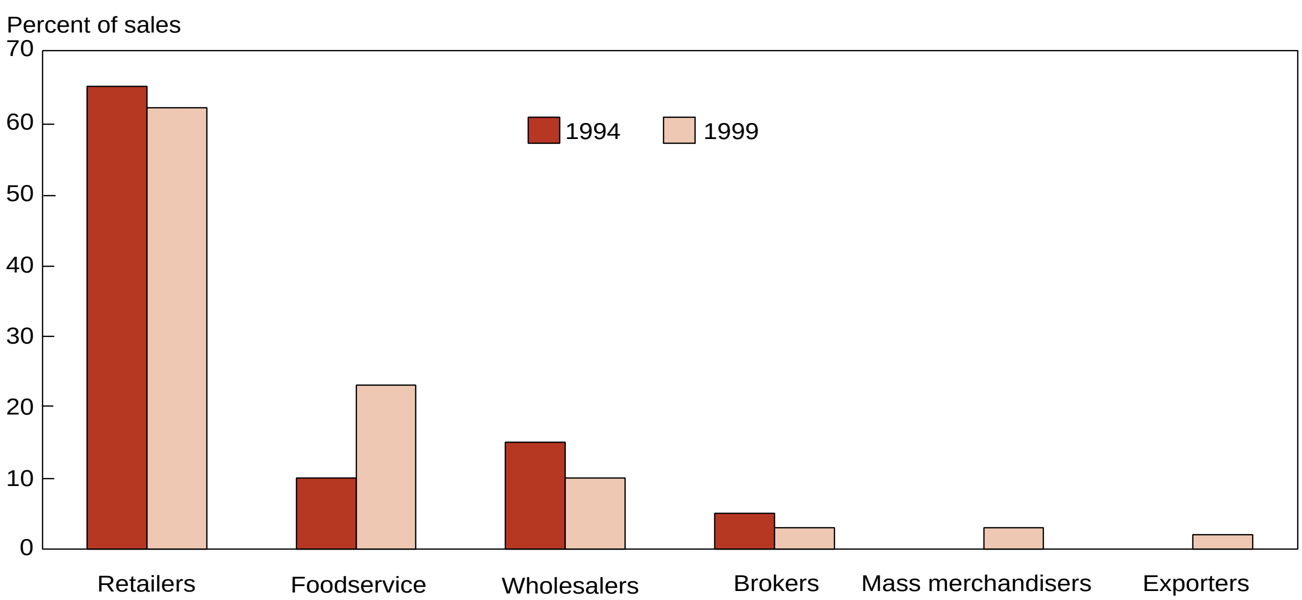


Source: USDA, ERS, Produce Marketing Study interviews, 1999-2000.

Figure 5

Median share of lettuce sales by market channel, 1994 and 1999

(Seven firms reporting)

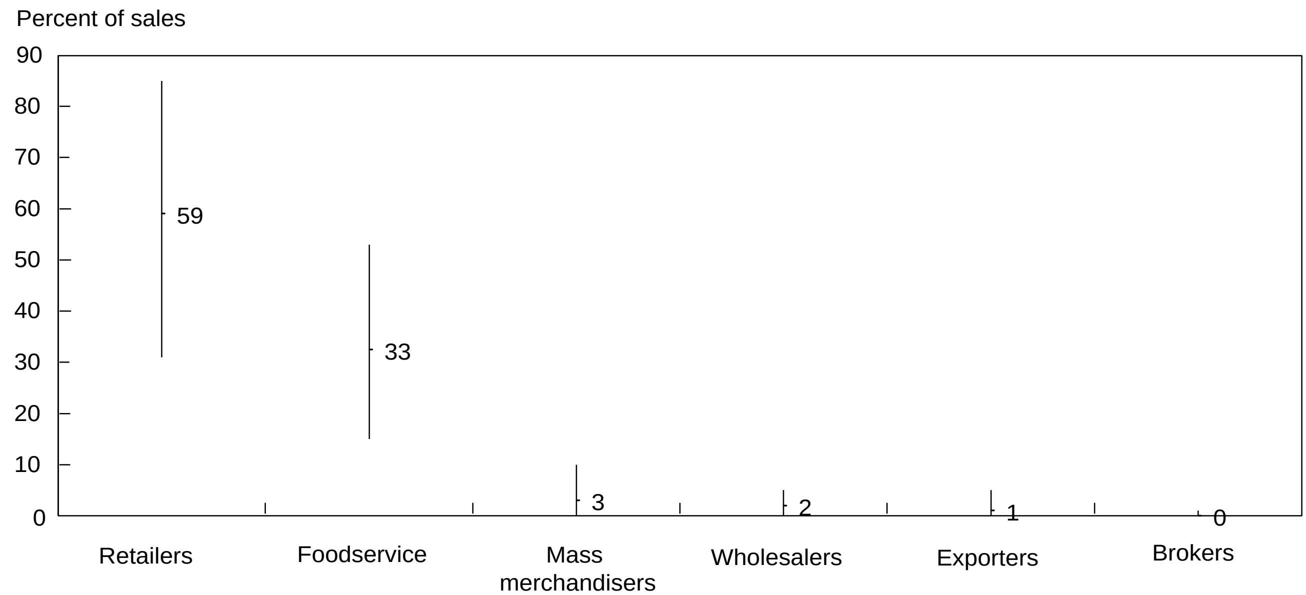


Source: USDA, ERS, Produce Marketing Study interviews, 1999-2000.

Figure 6

Share of bagged salad and value-added sales by market channel, 1999

(Median, minimum, and maximum, four firms reporting)



Source: USDA, ERS, Produce Marketing Study interviews, 1999-2000.

market, which is largely driven by weather conditions in production areas. The majority of commodity shippers are simply price-takers. Retail sales information for commodities with PLUs is not as accurate as scanned data and has only recently been collected on a limited basis by commercial data firms. This lack of information on retail sales means that most shippers of commodities have little idea of retail volume and dollar sales.

Among the interviewed lettuce firms, daily sales were the most frequent mechanism used to sell commodities to produce wholesalers and grocery retailers (table 4). Advance pricing[7] and daily sales were commonly used for foodservice buyers. All of the sales going to mass merchandisers were based on annual contracts. Mass merchandisers generally have different procurement methods than other retail buyers, relying on a limited number of preferred suppliers for automatic inventory replenishment. Based on the interview results, lettuce firms negotiated these marketing arrangements on an annual basis. A small portion of sales to grocery retailers and foodservice buyers was also via annual contracts.

The bagged salad market much more closely resembles markets for traditional packaged products. Daily sales are extremely rare. Most firms negotiate sales arrangements to cover at least a year. Ninety-three percent of the sales to grocery retailers and 100 percent of the sales to mass merchandisers were via annual and multiyear contracts (table 4). Shippers tend to specify a set list price and offer it to all retailers for the length of the agreement. This can be negotiated across accounts, but once agreed upon, it tends not to vary over the course of a contract. Negotiations to secure a long-term sales commitment with a retailer generally focus on various fees and services provided by the shipper. Because bagged salads are scanned, retail firms, scanner data companies, and bagged salad firms can accurately track sales.

Value-added products are sold and marketed with perhaps less reliance on contracts than bagged salads, but with more sophistication than the spot market that typifies most commodities. If these products have UPC codes and are scanned at retail, shippers may be able to track retail sales more reliably than if the products possess only a PLU code.

[7]Typically, advance pricing agreements specify the price for some period in advance for an estimated volume but without a formal purchase commitment.

Table 4

Average percent of sales to each marketing channel by sales mechanism type, 1999[1]

Shipper type and marketing channel	Type of sales mechanism (Percent[2]) Daily sales	Advance pricing	Annual contracts	Multi-year contracts
Lettuce/commodity shippers[3]				
Grocery retailers	56	34	10	0
Mass merchandisers	0	0	100	0
Produce wholesalers and distributors	94	6	0	0
Foodservice buyers	36	48	16	0
Brokers	n.a.	n.a.	n.a.	n.a.
Bagged salad/value-added shippers[4]				
Grocery retailers	7	0	64	29
Mass merchandisers	0	0	100	0
Foodservice buyers	0	33	62	5

n.a. = Not available.

[1]Results are based on a limited number of observations and must be interpreted with caution.
[2]Average of percentages reported by each firm; figures are not weighted by total firm sales.
[3]The number of firms reporting about lettuce sales ranges from four to eight, depending on the number of marketing channels used by each firm.
[4]The number reporting on value-added sales ranges from two to four, depending on the number of marketing channels used by each firm. Clearly, contracts are an important sales mechanism for bagged salads in all marketing channels. However, due to the small number of firms responding, the percentages for daily sales and advanced pricing may not represent general industry practices.

Source: USDA, ERS, Produce Marketing Study interviews, 1999-2000.

Contracts

Interviewed firms were asked about the types of contracts they had with various customers. In the study, contracts were defined rather loosely to include both written and verbally negotiated sales arrangements, covering multiple sales transactions and ongoing relationships. This includes preferred supplier relationships, partnerships, and programs between sellers and buyers. The idea was to gather information about ongoing sales and marketing agreements rather than single-shipment sales.

Seven of the eight lettuce shippers said they had contracts with retail buyers, including mass merchandisers. Contracts were both verbal and written and usually negotiated on an annual basis. A few firms used shorter duration contracts—for 3, 6, or 9 months, while one had a multiyear contract.

Several shippers indicated their contracts with retail buyers had list prices with flexible volume commitments. Some shippers used "high-low" pricing, i.e. free-on-board (f.o.b.) pricing, within a specified price band. For example, when f.o.b. shipping point prices for iceberg lettuce in California (as published by USDA's Market New Service) exceed the high price in the contract by a predetermined amount, say $4 per carton, the highest price allowed under the contract ratchets up $1. A few other shippers mentioned that they had a variety of contracts, some with fixed pricing and some with high-low pricing. Sometimes the pricing mechanism was a result of buyer preferences or was a provision only offered to the firm's best customers.

Provisions for ad promotions are sometimes included in contracts. Of the few shippers that mentioned using this provision, some said they expected a higher volume commitment from the buyer in return for the lower ad price, while others did not. A number of the lettuce firms said they have procedures in place to track sales—comparing actual sales to the volume commitments specified in the contract.

Only a few lettuce shippers indicated having contracts with foodservice buyers, although several mentioned the stable, ongoing relationships they had with many foodservice firms. Contract provisions ranged from flexible, with price and quantity determined on a weekly basis, to a fixed price with a specified volume. Instead of being a set duration, contract terms were often renegotiated only when necessary. Bagged salad firms tend to have annual and multi-year contracts with their customers.

Fees and Services

Requests for fees and services from retailers to produce shippers have reportedly been on the rise in recent years. The study asked interviewed shippers to focus on their experiences with retail and mass merchandiser buyers when discussing a list of possible fees and services. The intent was to sort out which fees and services have become standard industry practices, which are new or increasing, whether they are retailer or supplier induced, whether the costs of providing these fees and services are significant, whether failure to provide requested fees and services frequently leads to loss of accounts, and whether firms benefit or lose.

Genesis of Slotting Fees in Bagged Salads

Slotting fees, which were first used for manufactured grocery products in 1984 (Sullivan), and pay-to-stay fees have not traditionally been used in fresh produce departments.[8] However, branded fresh-cut and value-added produce is produced and marketed more like other manufactured products, requiring dedicated year-round shelf space. According to interviewed firms and other industry experts, one firm decided around 1997 that it could expand its market share in bagged salads by paying slotting fees to corporate or regional headquarters of some retail supermarket chains. Whether the retail chains, the firm, or both instigated the payment of fees is not clear, but other bagged salad firms perceived that the firm began using fees aggressively to gain market share. A common anecdote was that the firm offered one of the larger retail firms $1 million for the right to supply its stores. Competitors followed suit in some markets by countering with payment of fees.

A few bagged salad shippers said that, in their experience, retailers initiated slotting fees. Most of the bagged salad shippers paid slotting fees, either in response to retailer requests or to remain in the bidding with competitors (table 5). Two firms did not: one made an alternative arrangement, while the other, for whom bagged salads were a minor part of the business, lost the account. Interviewed bagged salad shippers would not reveal the exact amount of slotting fees paid by their firm, but several would talk about the general use of slotting fees in the sector. For example, shippers reported that slotting fees generally ranged from $10,000 to $20,000 for small retail accounts to $500,000 for a division of a multiregional chain, and up to $2 million, in some cases, to acquire the entire business of a large multiregional chain.

In the early 1990s, most firms sold bagged salads to retailers from price lists. Contracts were relatively rare and promotional fees were less frequently paid. Food merchandisers[9] played an important role in introducing bagged salads into many new markets. Merchandise fees represented as much as 5 percent of sales in a new market. Now that bagged salads are no longer a new product in most markets, the role of food merchandisers in obtaining shelf space may be less important. Payment of fees may allow bagged salad companies to bypass food merchandisers. Some of the interviewed shippers did mention, however, that food merchandisers persist in isolated markets as important intermediaries with produce buyers for selected chains.

Some firms characterized the fees as once-and-for-all or upfront payments, but contracts are typically renegotiated every year or, in a few cases, every 2 or 3 years. At renegotiation, competing shippers submit their proposals, which may include higher fees. The benefits firms receive for paying fees can vary substantially from proposal to proposal. Fees may cover category management, volume discounts, advertising allowances, rebates, and capital purchases. Some firms argue that the categories covered by fees have blurred, and many retailers have control over how fees are used. Most firms in the bagged salad industry are aware of their costs of production and typically design proposals to guarantee a certain profit margin regardless of the particulars. A couple of firms said they offer various proposals to some clients and allow them to choose the preferred arrangements.

One key point about renegotiation is that supermarket chains do not demonstrate much loyalty. Put differently, there appears to be considerable competition among branded salad firms at renegotiation. To the extent consolidation at retail has led to a reduction in the number of chains and buyers, losing a single contract

[8] A slotting fee is a lump-sum payment, from a supplier to a retailer, for introducing a new product to the supermarket shelf, while a pay-to-stay fee is a fixed payment made to keep a product on the shelf.

[9] Specialized brokers who assist manufacturers in obtaining shelf space, particularly for new items.

Table 5

Types of fees reported by interviewed lettuce and bagged salad shippers in 1999[1]

Fee type	Share of firms providing fee[2]	Share of firms with a fee request[3]	Share of requests where fee was new[4]	Share of requests complied with[5]	Share lost when request not complied with[6]
			Percent		
Lettuce/commodity shippers[7]					
Slotting fees	0	43	100	0	100
Pay-to-stay fees	0	0	0	0	0
Volume discounts	57	71	0	80	0
Advertising allowances	43	43	0	100	0
Other rebates	71	71	20	100	0
Free-product discounts	43	43	0	100	0
Buy-back unsold products or failure fees	43	43	0	100	0
E-commerce fees	14	29	100	50	0
Retail capital improvements	0	29	0	0	0
Bagged salad/value-added shippers[8]					
Slotting fees	67	100	100	67	50
Pay-to-stay fees	67	100	100	67	50
Volume discounts	67	67	0	100	0
Advertising allowances	83	83	0	100	0
Other rebates	83	83	0	100	0
Free-product discounts	67	67	0	100	0
Buy-back unsold products or failure fees	0	33	0	0	0
E-commerce fees	0	0	0	0	0
Retail capital improvements	50	50	0	100	0

[1]Fees to grocery retail and mass merchandise customers only. Results are based on a limited number of observations and must be interpreted with caution.
[2]Shippers were asked if they provided a type of fee to any of their retail accounts. Thus, these results indicate the share of firms paying fees to at least one retail account.
[3]Includes fees requested, whether complied with or not, and fees offered by shippers to at least one account.
[4]The type of fee was new since 1994.
[5]Includes retailer-requested and self- and competitor-initiated fees for at least one account.
[6]Firms reporting at least one account lost when they did not comply with at least one fee request.
[7]Seven firms reporting.
[8]Six firms reporting.

can represent substantial lost revenue. As some chains are now offering private-label salads, there is presumably private-label versus branded competition for shelf space and promotion.

An indication of retail bargaining power is the lack of commitment on space or volume sold once fees are paid. Bagged salad firms were not clear about what rights they obtain from paying fees. No firm mentioned slotting fees as a guarantee of a specified number of linear feet in refrigerated displays. A few mentioned that they use third-party scanner data (from ACNielsen or IRI) or the chain's scanner data to track sales after the contract had been negotiated and signed. But it was not clear what happens when volume does not meet expectations. In a few cases, when one retail chain was acquired by another, previous slotting fee agreements were not honored.

Not all retailers request or accept fees. Some focus on the efficiencies of handling relatively high-volume products, negotiating long-term agreements with suppliers, and then requiring those preferred suppliers to provide services such as automatic inventory replenishment, use of returnable containers, or other special packaging.

While consolidation at retail may have increased the negotiating power of a reduced number of buyers, consolidation also has resulted, in some cases, in poor coordination between central headquarters and regional offices. Acquisition of a chain with pre-existing buying offices, procedures, and a different corporate culture can result in less-than-perfect coordination between headquarters and regional offices. In one extreme case, accounts went unpaid for some time because receipts were actually lost as a result of acquisition. Whether by design or default, competition for regional accounts by shippers continues when regional buying offices make buying decisions. Opinions are mixed about how some chains will behave once they achieve a more unified buying strategy.

Consolidation at retail can lower the transaction costs of renegotiating proposals by replacing multiple regional buyers with a single centralized buyer. A few shippers with large volume actually prefer dealing with fewer buyers. However, the possibility of losing a single large account at the next contract renegotiation becomes a serious risk.

Fees for Lettuce and Mixed Vegetables

The use of slotting and pay-to-stay fees for bagged salads and other fresh-cut products has led to concerns by commodity shippers that they will soon become standard practice for commodities as well. However, only three lettuce shippers reported that they had been asked to pay slotting fees by one or more retail buyers. One of the three initially complied with the request, but it is unclear whether the slotting fee was for commodities or value-added products. The firm later evaluated the cost to the company and decided it was not worth it. All three firms lost the accounts.

Slotting fees paid by shippers for their branded bagged salads and other value-added products may have a negative indirect effect on commodity shippers. A few bagged salad firms also carry a broad product line of commodity products. Some shippers claimed that when such a firm negotiates a contract with retailers for its branded bagged salads and/or other value-added products, they may also negotiate terms favoring their commodity products. One lettuce shipper reported losing a retail account to another shipper that had negotiated a joint value-added/commodity contract. Other lettuce firms were concerned about being able to compete. One shipper redirected its marketing focus away from retail, due to retailers' tendency to purchase from shippers that offer both commodities and value-added products.

More traditional fees, such as rebates and volume discounts, were paid by a majority of interviewed lettuce shippers (table 5). Some retailers often, though not universally, charge a rebate (a per-unit fee) for all commodity products they purchase, effectively lowering the f.o.b. price by a fixed amount. Volume discounts offered by shippers, or negotiated between shippers and retailers, give retailers an incentive to maintain a long-term relationship with a particular shipper—as the retailer buys more cartons over time, costs per unit decline. Interviewed shippers reported that per-unit fees typically range from 10 cents to 25 cents per carton. Several firms also reported paying advertising allowances, providing free products (typically for new store openings), and buying back unsold products.

Shipper reactions to fees vary. Some simply pay and attempt to compete on price and non-price services. Others who pay are careful to ensure that all payments are accounted for on invoices so that growers and any other parties with financial interest in their operations will have complete records of payments. Some rely as much as possible on their reputations for quality and service to give them a competitive edge.

Some firms indicated that payments could be offset by charging higher prices to supermarket chains; they view fees and rebates as accounting tricks. However, there is some uncertainty as to the extent to which shippers can charge higher prices to retailers requesting fees. In a strong market, when prices are increasing, a firm's ability to offset payments is probably greater than in a declining price market.

For some organic products, payment of fees has only just now become more commonplace. The organic segment of the market has emerged in more mainstream supermarkets, and buying practices are becoming more like those of conventional products. Also, a number of conventional shippers have adopted organic products as part of their portfolio.

Most of the lettuce shippers have not yet paid e-commerce fees. However, many saw these fees—charged by e-commerce firms to sell products using their electronic exchanges—as a wave of the future. Firms were not excited about the prospect because, although e-commerce could provide a more seamless interface with buyers, the shippers pay the e-commerce fee.

Fees in Foodservice

As mentioned earlier, produce shippers sell to a variety of market channels of which grocery retailers and mass merchandisers are just a part. Per-carton fees on lettuce and other vegetables sold to foodservice firms are commonplace. Ability to negotiate these fees with foodservice firms may be even more constrained than with supermarket chains. Many shippers stated that one foodservice company charges a non-negotiable 48 cents per carton. Another foodservice firm billed its suppliers a flat fee of $200 per invoice to induce shippers to become EDI (electronic data interchange) compliant with them. Even with commodity items, foodservice firms typically contract with shippers, and fees are part of the terms of the contract.

For most shippers, the volume sold to foodservice buyers is proportionally larger than the value of foodservice sales, because foodservice pays less per unit than retail operations. Consolidation of foodservice firms may not be as contentious for shippers because foodservice demand is relatively stable year-round even at high or low prices. In economic terms, foodservice demand appears to be fairly inelastic[10] because of relatively fixed menus at fixed prices. Finally, for most firms, the percentage of sales to foodservice buyers has grown, but is still less than the percentage of sales to retail buyers.

Services

Lettuce and bagged salad shippers complied with most of the requested types of services (table 6). This high compliance rate has two components. First, some of the bagged salad firms offered services, such as EDI and category management, to their customers. Second, lettuce firms generally complied with the services requested by retailers. Product quality and timely services were often mentioned as a way to distinguish a

[10] A good is inelastic if a 1-percent change in price results in less than a 1-percent change in quantity demanded.

Table 6

Types of services reported by interviewed lettuce and bagged salad shippers in 1999[1]

Service type	Share of firms providing service[2]	Share of firms with a service request[3]	Share of requests where service was new[4]	Share of requests complied with[5]	Share lost when request not complied with[6]
			Percent		
Lettuce/commodity shippers[7]					
Third-party food safety certification	86	100	14	86	0
Electronic data interchange (EDI)	71	86	100	83	0
Private labels	57	57	75	100	0
Automatic inventory replenishment program	43	43	100	100	0
Category management services	14	14	100	100	0
Returnable containers	71	86	100	83	0
Special packs	57	57	50	100	0
Special merchandising displays	14	14	0	100	0
Bagged salad/value-added shippers[8]					
Third-party food safety certification	80	80	50	100	0
Electronic data interchange (EDI)	100	100	100	100	0
Private labels	60	80	25	75	0
Automatic inventory replenishment program	100	100	100	100	0
Category management services	80	80	100	100	0
Returnable containers	20	40	100	50	0
Special packs	20	20	100	100	0
Special merchandising displays	20	20	0	100	0

[1]Services to grocery retail and mass merchandise customers only. Results are based on a limited number of observations and must be interpreted with caution.
[2]Shippers were asked if they provided a type of service to any of their retail accounts. Thus, these results indicate the share of firms providing services to at least one retail account.
[3]Includes services requested, whether complied with or not, and services offered by shippers to at least one account.
[4]The type of service was new since 1994.
[5]Includes retailer-requested and self- and competitor-initiated services for at least one account.
[6]Firms reporting at least one account lost when they did not comply with at least one service request.
[7]Seven firms reporting.
[8]Five firms reporting.

Source: USDA, ERS, Produce Marketing Study Interviews, 1999-2000.

firm from its competition and to cement ongoing relationships.

Most, if not all, of the interviewed lettuce and bagged salad firms had requests from retailers for ***third-party food safety certification***. A few shippers already had been using third-party certification for a decade or more. Others had developed in-house food safety programs. Some of those with their own programs view third-party certification as redundant and unnecessary, particularly when the standards and suggested certifiers differed among retailers. Only one of the firms had not complied with requests for third-party certification. Opinions on the impact of third-party certification differed among shippers, six firms considered the impact as beneficial and three considered it harmful.

Ten lettuce and bagged salad firms used ***EDI***. A few of the bagged salad shippers indicated that they actively offered EDI to their customers, while the more commodity-oriented shippers waited for customers to ask for the service. All of the firms asked to use EDI complied with the request. A couple of lettuce firms were not yet using EDI, but were planning to do so by the end of 2000, because they wanted to be ready when customers asked. Firms generally viewed EDI's impact as either neutral or beneficial.

A couple of the bagged salad firms interviewed indicated a conscious shift from their own branded products to ***private label*** processing and sales—for both retail and foodservice. In metropolitan areas where incumbent bagged salad firms already enjoy relatively large retail market shares, a firm with a smaller market share may find that private labels are a lower cost alternative to introducing and promoting their own branded products. In addition, retail chains are usually more willing to devote some refrigerated space to their own private label. One firm expects that retail consolidation will contribute to further growth in private labels, as chains sell their private-label products not only in their original stores but also in their acquired divisions.

Several lettuce firms also indicated they supplied private-label commodities, such as iceberg lettuce, to some of their customers, including retail chains and foodservice firms. In some cases, production of private-label products was a significant portion of the firms' business. In others, shippers provided private-label services for one or two accounts.

Most value-added products sold by lettuce shippers and all bagged salads have UPC codes that are scanned at retail. Access to UPC-level scanner data either through national data suppliers, like ACNielsen and IRI, or through proprietary chain sources permits value-added shippers to track their retail sales. By contrast, PLU codes for variable-weight commodities, such as iceberg lettuce, are not firm-specific. Thus, commodity shippers usually have almost no information about prices or volumes of their products sold at retail. However, with ***automatic inventory replenishment*** systems implemented by some mass merchandisers, commodity shippers can monitor sales. Moreover, they have direct access to current sales information, whereas through scanner data, shippers usually must wait until sales are realized and data are assembled. In both cases, however, the shipper can make use of direct knowledge of product sales at retail. Eight lettuce and bagged salad firms indicated they were involved in automatic inventory replenishment programs, usually for mass merchandisers. Several of those firms did mention additional staff and equipment costs associated with inventory replenishment.

Of the lettuce and bagged salad firms asked to use ***returnable containers***, most complied with retailers' requests. While the impact of reusable containers was generally viewed as neutral to beneficial, several firms were unsure whether the benefits would outweigh the costs over the long term. A few firms mentioned inventory control problems as an issue. One was concerned about the dark colors of the containers affecting vegetable quality during field packing. Another firm speculated on what they would do if a load packed in returnable containers was rejected; terminal market wholesalers would not be interested in dealing with the reusable containers.

Evolving Relationships Among Shippers and Retailers

During the interviews, lettuce and bagged salad shippers were asked their opinions about possible changes that might have occurred in their sales and marketing relationships with retailers. They were also asked whether the change was a consequence of retail consolidation and whether the impact on the firm was beneficial, neutral, or harmful.

Eight shippers mentioned that the ***number of retail buyers*** had declined since 1994, and most of those pointed to retail consolidation as the reason. Four firms generally had the same number of retail accounts, while one had more customers. The relative size of individual accounts as a percentage of gross revenue is increasing for many shippers. Some firms have a rule of thumb that no single account should exceed 5 percent of gross revenues, but it is becoming increasingly difficult for some firms not to violate that guideline. Finally, acquisition of retail chains can lead to loss of pre-acquisition customers in some cases.

Seven shippers indicated that their ***negotiating strength*** with retail buyers had decreased, and the impact on the firm was harmful. Six of those seven cited retail consolidation as the reason. Two of the four firms that had no change in the number of accounts also reported no change in their negotiating power. Four lettuce shippers were more concerned about buyer reprisals than in 1994; all four cited retail consolidation and indicated that the impact was harmful. Two firms reported no change in reprisals, and one saw a decrease.

Load rejections were on the rise for five firms, while four reported no change. Several lettuce shippers mentioned that retailers seem to over-order and then reject what they do not need. Others saw a general lack of knowledge of the produce industry and lack of adequately trained people in purchasing and receiving as possible explanations. Most who reported more load rejections saw retail consolidation as the cause and the impact on the firm as harmful.

Ten shippers responded to a question about ***pressure for shipper consolidation***; all 10 had commodities as a significant portion of their product mix. Eight firms reported that they were feeling increased pressure, while two reported no change. Several shippers mentioned that retail consolidation was one of the contributing factors, but by no means the only one. The impact on the firms varied; four said the increased pressure was harmful, two said it was neutral, and two (one medium-sized and one large shipper) said it was beneficial.

Shippers differed in their opinions on the prospects for ***strategic alliances, joint ventures, and mergers*** as strategies to manage increased buyer consolidation (in retail and foodservice) and demands for greater volume requirements, broader product lines, and year-round availability. Several cited the independent nature of many firms involved in agricultural production. However, some in the produce industry have explored and used various business arrangements. A few types of strategies adopted by firms include:

Copacking arrangements. A few firms have copack arrangements that allow each firm to specialize in products in which they have an historical advantage. For specialty items with small absolute volumes like escarole or bok choy, for example, firms can achieve scale economies through copacking arrangements.

Consolidated sales. Other firms have consolidated their sales operations, thus providing larger volumes, a wider array of products, and/or a recognized brand label. Some smaller shippers have completely eliminated their sales operations to become growers for consolidated sales offices.

Shipper alliances. Some shippers have and are attempting to form alliances in order to boost their volume base. A few of these alliances have emphasized commodity production and sales, while producing significant volumes of bulk vegetables for fresh-cut firms.

Purchase of interest in other firms. Diversification of product line can be achieved by integration, coordination, and purchasing interest in other firms. Some firms are purchasing interest in other specialized companies, such as organic and value-added operations, in order to obtain a foothold in those markets.

Conclusions

Mixed-vegetable shippers and processors offer a diverse product mix and are involved in various marketing channels. In addition to iceberg, leaf, and romaine lettuce, commodity firms may sell as many as 75 commodities, including broccoli, cauliflower, celery, and green onions. Many see a market advantage in offering one-stop shopping to their customers. Many firms also engage in processing, which can range from small operations that minimally process the vegetables—resulting in cello-packed hearts of romaine and broccoli florets—to sophisticated processing plants that blend lettuce and other ingredients to produce salad blends and kits packaged in patented films. Shippers typically market their products to a wide array of buyers: retail supermarkets, mass merchandise stores, foodservice firms, wholesale markets, brokers, and exporters. While some firms specialize with particular types of customers, others consciously diversify across marketing channels.

The relationship between shippers and retailers has changed, but only partly due to retail consolidation. Changes in technology, such as the advent of EDI and bagged salad films, and increased consumer demand for convenience, product diversity, and year-round availability also have influenced shipper-retailer relations. In response to these and other changes, relationships are becoming more formalized. For example, buyers are developing preferred supplier arrangements with shippers, written contracts are more common, mass merchandisers are making shippers responsible for tracking sales and replenishing inventory, and shippers are providing category management. Shippers have developed internal business strategies and external arrangements with other shippers, such as copacking and consolidated marketing offices, in response to the changing nature of sales and marketing.

Fresh-cut salad processors and shippers have been at the forefront of changing relationships with retailers. Salads resemble packaged goods more than they do produce commodities, offering consumers the convenience of a uniform quality, fresh food item year-round. Although consumer demand for fresh-cut salads fluctuates seasonally (Thompson and Wilson), volumes shipped of fresh-cut salad are more stable from week to week than for many fresh produce items. Consequently, raw ingredients are processed continuously despite fluctuations in yields and production throughout the year. In this regard, processing resembles an industrial factory more than an agricultural enterprise, and capacity utilization is an important consideration.

One important consequence of fresh-cut sales is that processor/shippers effectively buffer retail prices from weather-induced shocks. Even if short supply situations would ordinarily lead to increases in f.o.b. prices for commodities, fresh-cut shippers tend to absorb those increases and keep packaged salad prices stable. Traditional commodity shippers, on the other hand, pass on weather-induced price increases to retail buyers through daily sales, advance pricing, and high-low pricing arrangements.

Shippers were asked about fees and services in 1999 and five years earlier. Interviewed lettuce and bagged salad firms provided more fees and services to retail buyers in 1999 than they did in 1994. Some of the fees, such as rebates and volume discounts, are long-standing trade practices, while others, such as slotting and pay-to-stay fees, are new since 1994. Most of the bagged salad shippers paid slotting fees, either in response to retailer requests or to remain in the bidding with other competitors. Three lettuce shippers reported that they had been asked to pay slotting fees by one or more retail buyers, and all three eventually lost the accounts when they refused to comply. These results are consistent with those found for other studied commodities (grapes, grapefruit, oranges, and tomatoes); some commodity shippers were asked to pay fees, none paid slotting or pay-to-stay fees in 1999, but some lost accounts as a result (Calvin et al.).

Slotting fees paid by shippers for fresh-cut and value-added products may have some spillover effects on commodity shippers. A few firms offer both commodity and fresh-cut products and, in negotiating a contract with retailers for fresh-cut, may be able to secure favorable terms for their commodity products. More traditional fees, such as rebates and volume discounts, were paid by a majority of interviewed lettuce shippers. Shippers were unwilling or unable to report on the annual costs of all these fees. However, even if the fees are a small share of shipper sales, given the low margins often experienced by produce shippers, they may determine whether a firm earns a profit or loses money.

Services were a less contentious topic than fees. Some of the bagged salad firms offer services, such as EDI and category management, to their customers. Lettuce firms generally complied with the services requested by retailers. Product quality and timely services were often mentioned as a way to distinguish a firm from its competition and to cement ongoing relationships.

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