

Contracts

Both buyers and sellers face risks when forward contracting in markets with volatile prices. The fresh produce industry has begun to experiment with contracting provisions that meet both buyer and seller needs. This process appears to be led by mass merchandisers rather than conventional retailers, although foodservice users are also becoming more involved.

Given the growth in contracts and its implications for the coordination of supply and demand, contracts were explored in more detail. For the most part, the percentage of sales under contract with any given buyer is quite low. Short- and long-term contracts together averaged 18 percent of total sales in 1999 for grapes, oranges, grapefruit, and tomatoes, and 14 percent for lettuce (table 8). While contracts for most fresh produce items are relatively new, a broad range of shippers already use them. When we asked firms detailed questions about contracts with all types of buyers, 44 percent of grape shippers, 89 percent of orange shippers, 50 percent of grapefruit shippers, 80 percent of California tomato shippers, 33 percent of Florida tomato shippers, and 88 percent of lettuce shippers reported having at least one contract. California tomato repackers use contracts for a much larger percentage of their sales than tomato shippers, since they are the final service providers to large foodservice and retail buyers. Data are not available for bagged salads, but industry experts estimate that about 95 percent of the volume sold to retail is under contract.

Shippers have many reasons for contracting (table 9). Across all commodities (excluding lettuce and bagged salads, which had inadequate data), shippers reported three main factors influencing their decision to enter into retail contracts: to ensure the market or sale, to maintain future relationships with buyers, and to achieve stable prices. While some shippers actively seek contract business with their customers, most providing contracts indicated that it was in response to buyer requests.

Designing efficient contracts from the standpoint of both buyers and sellers is a challenge for perishable crops where prices may fluctuate significantly due to exogenous supply and demand shocks, beyond more predictable seasonal factors. If a product is in short supply, buyers will be protected from high prices via contracts but shippers will lose the opportunity to benefit from high spot market prices. With large supply, shippers may benefit from either a higher contract price or greater assurance that they will sell their produce, even at the prevailing market price, while buyers risk overpaying relative to competitors not using contracts. Fluctuations in volume, as well as price, pose problems for both shippers and retailers. Shippers must have a sufficiently large supply to be able to commit a particular volume to a buyer. Buyers may want to limit their risk exposure, reluctant to be locked in to purchasing from a supplier who may experience inconsistencies in quality, sizing, and volume.

Shippers may be further constrained in their decisions regarding contracting by their relationships with the

Table 9—Importance of various factors in shippers' decisions to use contracts¹

Item	Average degree of importance (1 = not important, 5 = very important)						
	Grapes	Oranges	Grapefruit	California tomatoes	Florida tomatoes	Lettuce/ bagged salads	All products
Assured market or sale	4.4	4.4	4.2	4.5	4.0	n.a.	4.3
Maintenance of future relationship with buyers	4.2	4.5	4.2	4.5	4.0	n.a.	4.3
Price stability	3.6	3.8	4.4	3.5	4.5	n.a.	3.8
Pressure from retailers and their repackers	2.8	2.9	4.0	3.2	2.5	n.a.	3.1
Superior price	3.4	3.0	3.4	2.8	1.5	n.a.	3.0
Incentives provided by retailers	2.6	2.1	2.6	2.3	1.0	n.a.	2.3
Reduction in cost of sales and marketing	3.0	1.6	2.6	2.5	1.0	n.a.	2.2
Reduction in cost of distribution	3.0	1.4	2.8	2.0	1.0	n.a.	2.0
Pressure from growers	2.6	1.6	2.2	1.7	3.0	n.a.	2.0
Prior experience with foodservice contracts	1.8	1.1	1.0	3.0	3.5	n.a.	1.8

n.a. = Not available.

¹ Results are based on a limited number of observations and must be interpreted with caution.

Source: Economic Research Service, Produce Marketing Study interviews, 1999-2000, USDA.

growers for whom they market. Product is usually marketed by shippers on a fixed fee per box or commission basis rather than purchased outright from growers. During periods of high prices, growers may expect the market price rather than a lower contract price, making some shippers reluctant to contract for volume provided by their affiliated growers as opposed to their own production.

Since the fresh produce industry has tended in recent years toward excess supply more than excess demand, the incentives to contract would seem to be higher for shippers than for buyers. But since shippers may make their entire annual profit during brief periods of short supply when price spikes occur, many have been reluctant to forward contract. Since buyers most often initiate contracts, this implies that there are other benefits accruing to buyers such as reduced transaction costs or increased reliability of supplies.

For all contract types with any type of buyer, numerous options for managing price and volume are possible. Shippers were asked to describe the provisions of the most commonly used contract types. Hence, the information provided could apply to more than one contract of the same type, and some shippers described more than one type of contract. Price may be fixed, allowed to fluctuate with the f.o.b. price within a price band (with or without adjustments when the market price is outside the band), or—in the case of some inventory replenishment contracts—flexible. Table 10 provides information on grapes, oranges, grapefruit, and California and Florida tomatoes; lettuce and bagged salad contracts are discussed below. As shippers and retailers gain experience, the characteristics of contracts will continue to evolve.

The *fixed price and fixed volume* option was used in 14 percent of the contract types reported by shippers. Many may consider this least flexible option too risky. Most common in our interviews (29 percent) were *fixed price contracts with minimum volumes*. Indeed, shippers report that when forward contracting, the most important consideration is to establish a minimum volume. Otherwise, if prices are lower than the specified contract price, buyers will simply purchase on the spot market from other shippers. Most of the contracts discussed in the interviews had at least a minimum volume provision (if not a fixed volume or volume range provision), and even automatic inventory replenishment plans entail a commitment of sorts. Shippers used *fixed price with a volume range* for 23

Table 10—Characteristics of contracts for grape, orange, grapefruit, California tomato, and Florida tomato shippers, 1999¹

Contract characteristics and type	Percent of contract types ²
Type of price and quantity provision used in contract	
Fixed price/minimum volume	29
Fixed price/volume range	23
F.o.b. pricing with price band/minimum volume	17
Fixed price/fixed volume	14
Flexible price/inventory replenishment	11
Fixed price/inventory replenishment	3
None	3
Fees and services specified in contract	
Special packs	54
Special promotion programs	37
None	23
Category management	17
Third-party food safety certification	14
Electronic data interchange	11
Automatic inventory replenishment	11
Additional service personnel	6
Other	3
Form of contract	
Verbal	37
Written	63
Buyer commitments held up over the life of the contract	
Yes	83
No	17

¹ Results are based on a limited number of observations and must be interpreted with caution.

² Since provisions can vary from contract to contract, shippers were asked about the general types of contracts they have and the characteristics of those contracts.

Source: Economic Research Service, Produce Marketing Study interviews, 1999-2000, USDA.

percent of contract types. Orange and grapefruit shippers frequently used this type of contract. Once the greatest freeze risk passes, the supply of citrus for the upcoming season is known, since the fruit is stored on the tree and harvested as needed, which reduces risk.

California tomato shippers and repackers often used *f.o.b. price bands with minimum volumes* (17 percent of contract types overall). Price may be fixed within a band but more typically is simply the f.o.b. shipping price reported by Market News. The use of price bands may be due to the importance of joint-venture sourcing with growers for California tomato shippers and the resulting grower pressure to take advantage of price spikes. This way, once the price band is exceeded, if the minimum volume has been met, the shipper is free to charge the market price.

Clearly, price volatility in the produce industry continues to pose challenges in designing contracts beneficial to both buyers and sellers. Any of the above types of contracts may be designed with supplementary adjustment mechanisms. For example, when the f.o.b. price exceeds the high price in a contract by a predetermined amount, the high price may ratchet up a specified amount, but less than the market price. Hence, if market prices exceed the price band, shippers are still able to return a price to growers more reflective of the f.o.b. spot market. Likewise, when f.o.b. prices go below the minimum contract price, the price may adjust downward by a specified amount, allowing retailers to source at more competitive prices. The buyer might otherwise tend not to meet the minimum volume commitment, forcing the shipper to find another buyer in a depressed marketplace.

Automatic inventory replenishment was used in 11 percent of the contract types with a flexible price and in 3 percent with a fixed price (table 10). Only for 3 percent of the contract types were there no price or volume provisions, meaning that the contract type merely reflected an ongoing preferred supplier relationship, specifying other arrangements such as packaging or other services.

As discussed earlier, contracts are a means for firms to better coordinate supply and demand, particularly for differentiated products. Many contract types include services that help tailor the product to retailer needs, such as provision of special packs (54 percent) and promotion programs (37 percent). That said, 23 percent of contract types specified no fees and services.

Contracts can still be informal unwritten deals consummated with a handshake. Nevertheless, in 1999, 63 per-

cent of contract types were written (table 10). As noted earlier, shippers commonly report that buyers do not always honor advance pricing, manifested as lid prices for advertisements. The types of contracts reported here are different because they reflect ongoing relationships and advance buying arrangements rather than just one-time advance prices without buying commitments. Shippers viewed these contracting arrangements favorably, reporting that 83 percent of contract types had held up over time (table 10). Orange shippers reported most of the failed contracts, perhaps the result of the freeze in the 1998/99 season that reduced total orange production by 48 percent from the previous season.

Use of contracts will likely continue, especially as larger buyers begin to adopt supply chain management practices that focus more on year-end rather than weekly results, as well as focusing more on net rather than gross returns. The shippers interviewed for this study were largely satisfied with the results of contracts. Actions required to meet contract requirements—most frequently assigning employees to the contract account and requiring employees to work overtime—appear to be manageable (table 11). Buying produce from others due to a production shortfall did not seem to be a serious problem. Grape and California tomato shippers mentioned the need to develop global sourcing to meet year-round or extended-season contract commitments.

Lettuce firms also used a range of contract types. Several shippers indicated that their contracts with retail buyers had fixed prices with volume ranges. Other shippers used f.o.b. pricing within a specified price band with price adjustments. A few other firms mentioned that they used a variety of contract types. Sometimes the type of contract depended on buyer

Table 11—Actions to meet contract requirements, 1999¹

Item	Average of frequency of actions (1 = never, 5 = often)						
	Grapes	Oranges	Grapefruit	California tomatoes	Florida tomatoes	Lettuce/bagged salads	All products
Assign employees to account	3.8	2.4	4.0	3.3	1.5	n.a.	3.1
Require employees to work overtime	2.8	2.9	3.2	3.2	1.5	n.a.	2.9
Buy produce from others	2.8	2.5	3.0	2.8	1.5	n.a.	2.7
Form joint ventures or strategic alliances	3.2	1.5	2.5	3.2	3.0	n.a.	2.5
Acquire additional transport and/or storage	3.0	2.0	2.8	2.8	1.5	n.a.	2.5
Redirect shipments from other customers	2.0	1.9	2.3	2.8	3.0	n.a.	2.3
Develop global sourcing opportunities	3.3	1.1	2.0	3.3	n.a.	n.a.	2.1

n.a. = Not available.

¹ Results are based on a limited number of observations and must be interpreted with caution.

Source: Economic Research Service, Produce Marketing Study interviews, 1999-2000.

preferences and sometimes the shipper only offered certain types of contracts to their best customers.

Provisions for advertisement promotions are sometimes included in lettuce contracts. Lower prices are specified, and sometimes a higher volume commitment. Lettuce contracts were both verbal and written and usually negotiated on an annual basis. A few firms used shorter contracts—for 3, 6, and 9 months—while one had a multiyear contract. Only a few lettuce firms indicated having contracts with foodservice buyers,

although several mentioned the stable, ongoing relationships they had with many foodservice buyers. Foodservice contract provisions ranged from the flexible, with price and quantity determined on a weekly basis, to a fixed price with a specified volume. Instead of a set duration, contract terms were often renegotiated only when necessary. Bagged salad contracts are written and specific about price, quantity, advertisement periods, fees, and services. They are usually annual or multiyear contracts.