

CHAPTER 5

ISSUES IN USDA PROCUREMENT POLICIES

Introduction

FSA sets precise requirements for the commodities that it buys for food assistance programs. Those requirements include product specifications (such as nutritional guidelines), packaging and labeling standards, and rules for product testing and onsite product inspection to ensure compliance with specifications. From those processors who are willing to offer products that meet FSA requirements, the agency then chooses vendors by using a bidding process, as outlined in chapter 4, that is designed to use competition to purchase products at the lowest feasible prices.

When FSA chooses a specific bidding process, it makes several other choices. It specifies the timing of the process: FSA decides when invitations to bid will be announced, when they will be closed, how quickly the award will be made upon closure, and how quickly the product must be delivered upon award. In defining the award and the bidding process, FSA also specifies any transportation requirements, plans solicitation of potential bidders, formulates procedures for aiding small businesses, sets damages for noncompliance with award requirements, and sets policies for cancellation of an invitation if bids appear to be noncompetitive.

Most awards are for precisely defined quantities (say, 42,800 pounds) of a precisely defined product (all-purpose bleached wheat flour in 50-pound bags) to be delivered to a precise location (a warehouse in Omaha, Nebraska) during a set time (between November 1 and

November 15). But in principle, the award could also be for the delivery of an indefinite quantity (with, for example, a minimum of 1 million pounds and a maximum of 25 million) throughout a year. In other words, FSA can also choose the duration and quantity of the award at bid.

FSA acts on behalf of other clients, such as State distributing agencies. When it designs the bidding process, FSA must also specify the timing that clients must follow to place orders. That is, client agencies must deliver food orders to FSA 55 days prior to the delivery month in order to be included in an invitation order to receive delivery in a specified time window. FSA's policy choices for order, auction, and delivery timing ultimately drive one dimension of service quality—temporal responsiveness to client orders.

These are all policy choices. FSA could choose other product requirements or other auction designs; alternative choices could affect processor costs, product prices, product quality, and FSA service quality. Actual choices often can involve a tradeoff of a gain in one dimension of performance against a loss in another (McAfee and McMillan, 1987; Laffont and Tirole, 1993; Wolfstetter, 1996). Key FSA decisions revolve around four interlinked areas: product packaging and labeling requirements, inspection requirements, the timing of order, bid, and delivery stages, and the design of procurement auctions. We discuss the issues surrounding these areas in this chapter, and begin by showing why we say these issues are interlinked.

Labels Require Inspection: The Need for Quality Certification in USDA Procurement

FSA food procurement procedures are not unique, but they do differ in important ways from those used by commercial buyers, as well as some other government agencies. For example, some private firms (such as national fast food chains, retail supermarket firms, or wholesalers arranging for private-label products) will select a small set of qualified suppliers through an intense search. Once selected, a qualified supplier will receive a large volume of orders from the firm, at relatively profitable prices. Because the status of qualified supplier is so important to a supplier's profits, the supplier will have strong incentives to maintain agreed levels of quality and therefore to retain qualified supplier status. Firms using that procurement strategy, which is quite similar to prime vendor programs, trade off higher product prices to gain greater supplier efforts to maintain product quality and to provide timely service.

FSA uses auctions to procure food commodities, and the auctions are designed to get favorable prices for FSA clients by relying on price competition among bidders. That is, FSA does not form long-term relations with suppliers. Moreover, FSA generally does not purchase products with commercial labels (that is, common supermarket brands). Instead, USDA requires that all USDA products be packaged according to specific USDA directions and carry USDA labels. While the procedure can generate strong price competition among bidders, resulting in lower FSA costs, it also provides bidders with incentives to reduce their own costs by delivering low-quality products. Since the products do not carry commercial labels, quality problems will not damage the reputations of vendors' commercially labeled products; instead, USDA and its client agencies bear the risks of poor product quality.

FSA aims to control those risks by setting precise product specifications, by requiring the presence of USDA inspectors on site during production of USDA products, and by performing laboratory tests of product samples, to ensure that delivered products adhere to contract specifications. In short, FSA's inspection requirements follow from the use of USDA labeling requirements and a competitive bidding process.

Critics note four potential problems with current USDA product requirements. They may increase costs, both to

processors and to USDA, compared with commercial practices that realize the same quality goals. They may erode one dimension of service quality—the timeliness with which commodities are delivered to the warehouses designated by States, and ultimately to client agencies. They may limit competition for USDA awards, and thereby raise bidder prices, if some processors decide not to participate because of the requirements. Finally, they may limit the range of products available to school lunch programs and other USDA clients.

Some consumers associate the USDA label with low product quality, but in fact, FSA typically sets relatively high product specifications (for example, apples must be grade A, and rice must be U.S. No. 1). Actual quality problems rarely stem from poor product specifications or from lax inspection standards. Problems occasionally arise from poor vendor compliance with product specifications, and from inspector failures to immediately detect noncompliance. More often, quality problems can arise in the distribution channel. FSA's responsibility for product quality ends when commodities are delivered to warehouses; from there, responsibility for products falls to States and school districts. After being held in warehouses, products may be shipped to schools (using a variety of different forms of transportation) or they may be shipped to other plants for further processing before being shipped to school districts. At a district, products may be held in inventory and then prepared into meals at schools, or they may be prepared at a district's central kitchens before meals are transported to schools. Once meals are at a school cafeteria line, they may be on a serving line for a significant period of time before consumption. Product quality can deteriorate at each stage. Because of the time lags at each stage of delivery, unacceptable quality in a package of cheese or a can of peanut butter may not be detected until opened at a cafeteria. By then, several weeks or even months may have passed from the date the product was shipped from the manufacturer. In many cases, this sort of lag makes it difficult to assign accountability for quality problems.

USDA Inspection Requirements

The Agency maintains a distinctive and relatively demanding set of inspection requirements. Contracts call for USDA inspectors to be on site at the plant during production runs for USDA commodities. Vendors must arrange for inspection by personnel from the Food and Drug Administration (FDA) for infant formula,

AMS (peanut and dairy products and salad dressing), or GIPSA (all other items), and must generally time production runs for their presence. Inspectors monitor production processes, assemble product samples for lab tests, and may perform some onsite tests. They certify product type, quality, and weight, and also certify that packaging meets contract standards for strength, information, and sanitary requirements.

Contracts also require that product samples be sent to USDA labs, or USDA-approved labs, for testing. Required tests vary with the product. For example, USDA aims for certain nutritional goals in cheese purchases, and also prefers a product that will melt properly when cooked, while stretching across a pizza or hamburger. Precise lab tests for cheese include tests of fat, moisture, salt, and acid content. Vendors pay fees for inspection and lab tests, fees that are ultimately recovered in product prices at auctions. Because USDA's tests are unique (some would not be done except for USDA requirements), they can increase bid prices by amounts ranging from 0.5 percent to 2.0 percent.

Inspection also can impose indirect costs on the programs. Some vendors, typically small plants in more remote locations, complain of problems in getting inspectors to come to the plant on a timely basis to inspect the USDA production run. Other vendors complain of lags in performing tests at USDA labs and reporting results back in a timely fashion. Some complain that specific required tests are not reliable or not useful. Such indirect costs show up as delays in delivery of products to State warehouses, and as reductions in the number of firms participating in FSA auctions.

Inspection is closely tied to USDA labeling; USDA labels place risks on the Department for product quality failures. A shift to more commercial labeling would also likely imply a shift to vendor certification of quality, with an attendant shift of responsibility to the vendor. That would not imply a cessation of USDA quality control activities, but rather a shift toward more random inspection of products, with a schedule of penalties and increased probabilities of inspection for noncompliant plants.

Commercial Labeling of USDA Products

Reliance on USDA labels creates several kinds of costs to the system. USDA packages and labels are not free,

and there is some direct cost associated with them. But for regular participants in USDA programs, these do not necessarily increase final product costs compared with the use of commercial packaging and labeling. However, several types of indirect costs may be relevant. First, specific USDA packaging requirements can sometimes raise product costs if production lines are not designed for USDA packages. Second, firms that do not typically sell large volumes to USDA may have to place special orders for USDA packaging and labels, and that may either slow their delivery times or limit their participation in FSA bidding. Third, reliance on commodities that are USDA labeled prevents the Department from accessing excess inventories of commercially branded product that from time to time become available at low prices. Most important, reliance on USDA brands means that USDA bears the onus for poor quality control. Hence USDA labeling creates the need for reliance on government inspection for quality control, and that reliance does impose significant costs.

Our empirical research (described more fully in chapter 7) shows that FSA attracts only a few bidders for low-volume products. That is, more firms bid in auctions for flour in 10-pound packages (the most common type and the most common FSA flour purchase) than in auctions for flour in 50- or 100-pound packages, and more bid in auctions for bleached than for unbleached flour. Fewer bid in pasta auctions for rotini than for spaghetti, and fewer firms bid in auctions for low-fat peanut butter than for other kinds. Now, there may simply be fewer firms producing relatively unusual items, but the indirect costs of USDA requirements (the need to arrange for USDA labels and packaging, and to time runs for the presence of inspectors) may be more onerous for distinctive products, and may therefore limit the number of potential bidders. In turn, few bidders mean higher bid prices (also shown in chapter 7), thus limiting FSA's price advantage over other forms of procurement. If FSA's advantage is smallest in unusual and low-volume products, then FSA will be unable to offer a wide variety of products economically.

Proponents of restrictions on commercial labels advance three reasons for relying exclusively on USDA packaging and labeling. First, they assert that commercial labels can induce brand loyalty on the part of USDA clients. If clients insist on particular brands, then FSA buying power will be eroded as commodity volumes are split among brands, and FSA and its clients

will ultimately pay more for food. Second, most States now route USDA shipments through commercial warehouses before distribution to schools. Some argue that commercial warehouses with ties to particular brands will offer poor service on rival brands, or will refuse to carry them. Third, they argue that firms will be unwilling to offer their branded products at substantial discounts compared with normal commercial prices, and hence reliance on commercial brands will result in higher prices to FSA.

The third objection becomes irrelevant if processors are given the option of providing either commercial or USDA brands. The second objection should apply only in States in which a commercial warehouse has market power and the State has limited warehousing and distribution alternatives. With alternatives, States can simply cancel contracts for poor performers and shift to warehouses who are willing to earn money by distributing the State's products. Warehousing is not generally thought of as a market activity where firms can maintain monopoly power; hence, all States should be able to develop alternatives to poor performers. As a result, the important issues for commercial labeling come down to brand loyalty.

Brand loyalty is an important issue. Research by ERS shows that leading branded food products in supermarkets often sell at prices that are substantially higher than corresponding nonbranded products, by over 30 percent, on average, for a sample of 30 staple products, such as rice, spaghetti, peanut butter, and flour—all products purchased by FSA (Kaufman et al., 1997). Given the price advantages held by strong brands, many firms will want to sell branded products to schools in hopes of developing brand loyalties that will persist as school children grow into adults.

USDA officials (as well as producers of nonbranded products) may react in a different way to the same data. They argue that USDA purchase policies should demonstrate wise shopping practices to schoolchildren by ignoring product differences based solely on image and aggressively seeking high-quality products at low prices. Bans on commercial labels would be the primary demonstration of that strategy, but not the only demonstration. USDA could alternatively pursue the purchase of private-label products generally produced for wholesalers and retailers, but under USDA specifications.

It is important to recognize that brand loyalty can mean different things for different FSA products, and it is possible that decisionmakers can improve program performance by a more discriminating use of commercial labels. For most FSA products, clients are not ultimate consumers, such as schoolchildren in school lunch programs, but rather school lunch administrators and cooks who prepare foods using USDA commodities. FSA's ultimate consumers see the package for only a few products. Moreover, only some products carry the distinctive flavoring or advertising images that create brand loyalty. In short, only some products carry the risk that use of commercially labeled product may induce later brand loyalty on the part of schoolchildren.

For example, several interviewees remarked that schoolchildren appeared to have strong taste preferences in some types of chicken products (nuggets, fingers): they wanted products to taste like those offered by leading fast food chains. Schoolchildren also clearly form strong preferences for different brands of ready-to-eat cereal. But many products do not carry strong brand attachments—for example, ground beef, pasta, flour, and many cheese products. FSA may need to identify those commodities where labeling and brand loyalty concerns are strongest, and discriminate between those and other commodities.

Issues of Timing and FSA Service Reliability

We can think of quality in two dimensions. The first is product quality, which concerns the taste, nutritional adequacy, and deterioration of the products that FSA purchases on behalf of school districts and other clients. The second is FSA service quality, which concerns the speed with which the agency can respond to client requests for food products, the reliability of FSA deliveries (that is, the extent to which deliveries arrive when they are supposed to arrive), and the variety of FSA product offerings.

In considering FSA service quality, recall the timing of order and delivery from the point of view of clients in school districts. In the spring (March and April), State coordinators release information to school districts for the following school year. Included in the information is the likely size of district entitlements as well as the range of allocation among cash, AMS (Group A) commodities, and FSA (Group B) commodities. Also included is a listing of likely FSA and AMS commodi-

ties, and projected prices for those commodities. Many coordinators also offer advice on the most effective ways to spend entitlement dollars, and work with districts to identify cooperative purchasing arrangements through private vendors. Armed with this information, along with additional information on other revenue flows, prices for non-USDA food products, and meal requirements, school district administrators begin to plan food purchases and to place monthly orders with FSA, AMS, and private vendors for deliveries to support meals beginning in September.

By the time administrators place orders, school district plans have become relatively inflexible. Districts have typically designed menus by that time, and have placed orders for non-USDA commodities on the assumption that they will be receiving known combinations of USDA commodities at known dates. Failure to receive timely deliveries means that districts will often have to replace the USDA commodity with the same product purchased under unfavorable conditions from a private vendor. Late deliveries, therefore, impose substantial costs on school districts, and are a primary source of school district complaints about FSA service reliability.

Deliveries can be late because a vendor failed to meet the contractual delivery date in the award. They can also be late because FSA canceled an auction because bids were too high. Typically, FSA will issue a supplemental invitation and attempt to purchase the product for the same delivery period at a lower price. If this is not successful, KCCO will place the order and award up for bid again in the following month, so that cancellation then works out to late delivery. In FSA's view, cancellation is an important tool because it provides a means to induce bidders to bid more aggressively (that is, a low bidder is not guaranteed an award), it serves as a tool to police possible collusion among bidders, and it allows FSA to shift purchases in response to unexpected increases in prices.

From the point of view of school districts, cancellations impose significant immediate costs on them in return for uncertain and hard-to-document future gains in prices. Moreover, to the extent that the gains arise from reduced collusion and more aggressive bidding, they are shared by all districts, while the costs are borne by those whose auctions were canceled. Because of the costs imposed, FSA needs to do more to identify the size of any benefits in order to justify this strategy.

Vendor failures can occur for several reasons. At peak production periods, vendors may win an award, and then receive an unexpected order from a higher paying client. The vendor may then choose to ignore the agreed delivery date and accept an FSA fine for late delivery. During fall harvest periods, transportation may at times be difficult to arrange, and during the winter, deliveries may be held up because of bad weather. Deliveries can also be late because vendors had difficulty arranging for inspectors, or because AMS labs were slow in performing tests.

Adjustments in the Bidding Process

Commodity volumes, competition, and seasonality all seem to affect bid prices. KCCO purchase strategies might be able to affect bid prices by influencing these factors.

KCCO argues that competition, measured by the number of bidders for an award, is an important determinant of prices. That view is supported by the economic theory of auctions, by a considerable amount of empirical research on procurement through auctions, and by our own analyses of auctions carried out by KCCO (chapter 7). KCCO also believes that the number of bidders is in turn influenced by the size of the contract—that is, the volume being purchased. Chapter 3 shows that KCCO volumes have fallen sharply in recent years. But ERS research suggests that monthly volumes have only small effects on bidder numbers and bid prices. We believe that product characteristics and expected capacity utilization in the industry have more important impacts on bidder numbers. Moreover, our analyses show that bidder numbers have large effects on prices only when the number of bidders is very small. In other words, losing a competitor has a much more important effect on price when there are only two competitors to begin with than when there are four or five.

KCCO does face tight oligopolies: for example, ready-to-eat cereals and infant formula are each produced by a very small number of firms. Moreover, government procurement is subject to collusive bid-rigging among participants, as well as more tacit (and legal) attempts by vendors to refrain from strong price competition (Brannman, 1996). This is more likely to occur when the same few bidders respond to the monthly invitations to bid. Some of the commodities that USDA purchases have strong seasonal demand patterns. For example,

retail sales of flour surge in the late fall, so flour mills operate near their production capacities in early and mid-fall, preparing to meet the seasonal increase in retail purchases. Mills will bid higher prices when they operate near capacity than when they have substantial excess capacity. Consequently, flour bids show a seasonal pattern of increases during the peak fall season and offpeak declines. KCCO thus realizes better prices and more competition for invitations during offpeak seasons.

KCCO has altered the bidding process for several commodities in hopes of reducing bid prices. For example, the contract duration for infant formula has been lengthened to a full year, from 3 months, at the same time that commercial labels for formula have been allowed. A longer duration contract increases the volume at stake in a bid; KCCO hopes that longer duration, higher volume contracts will induce more competitive bidding among the small number of formula vendors. Similarly, KCCO has lengthened contract durations for ready-to-eat cereal purchases as part of an experiment in purchasing commercially labeled products.

KCCO has altered the bidding process in another way for cheese purchases. It now issues rolling invitations, covering several months, for deliveries of cheese. For example, the office will offer an invitation in July to bid on deliveries of cheese in specified 2-week windows from September through December. The August invitation will then include any new school orders for October through January deliveries. In essence, the new cheese process adds certain elements of flexibility: firms can now place bids further in the future than they did under the prior system, and they can achieve more certainty in that they can commit to USDA production for a quarter of a year at a time instead of a month.

Under the cheese experiment, KCCO enters school cheese orders as they come in. Schools now have some reason to enter early orders, since KCCO will act upon them. These rolling contracts may also allow KCCO to improve timeliness in product delivery, by providing the office with the flexibility to reject contracts and reopen auctions while still meeting desired delivery dates. For other commodities, KCCO would like to encourage schools to shift the temporal pattern of their orders away from peak and toward offpeak periods to take advantage of seasonal price fluctuations. To expand this experiment, FSA and its clients may need changes in spending authority to shift expenditures from one fiscal year to another.

Longer contract durations, in which firms place bids on deliveries further in the future, will introduce some new risks into USDA procurement. When bidding on a short-duration contract (for example, bidding in October for the November delivery of flour), firms may be quite confident that input price risks are low; that is, vendors bid with firm knowledge of the likely level of wheat prices when placing bids to deliver flour. They may also be quite confident that capacity risks are low; that is, vendors bid with firm knowledge that plant capacity will be lightly utilized (in which case they will bid low) or heavily utilized (leading to a higher bid). With contracts of longer duration (bidding in October for March delivery), firms will have less certainty about input prices and capacity utilization well into the future. Because of greater uncertainty, longer contract durations could lead to higher prices for USDA commodities, even if the greater volumes in longer duration contracts attracted more bidders. USDA could reduce the risks from input price uncertainty, and could therefore induce lower bids, by allowing bids to be indexed to a measure of input prices.