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Guaranteeing a Market and the Contracts of Bargaining Cooperatives

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Articles

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One important function of bargaining cooperatives is alleged to be guaranteeing a market for their members. We characterize this function as deterring opportunistic behavior by producers and processors operating under forward contracts. We then examine actual contracts of bargaining cooperatives and argue that certain clauses in these contracts serve to guarantee the market. These clauses are those that provide for mechanical or third-party grading, liquidated damages, and most-favored-customer treatment.

Members describe the functions of bargaining cooperatives as being two-fold (Lang, pp. 130–31). They enable producers to receive higher prices, and they assist in guaranteeing a market for members' output. Much has been written about the first function (Helmberger and Hoos 1963, 1965; Youde and Helmberger; Ladd). The second has received less attention. No clear definition of "guaranteeing a market" has been offered. Nor has it been explained why this function is particularly important to members of bargaining cooperatives, nor how cooperatives are able to accomplish the task. The present paper seeks to do this. First, we use some recent advances in the theory of contracts to suggest a meaning for "guaranteeing a market" and to explain why it is of such value to the members of bargaining cooperatives and to the processors with which they deal. Specifically, we define guaranteeing a market as deterring postcontractual opportunistic behavior by processors and growers. Second, we examine the contracts of bargaining cooperatives for evidence of the ways in which cooperatives accomplish the task of deterring such behavior.

Postcontractual opportunistic behavior may occur when "new" opportunities arise after a contract is formed. One reason is the discovery of a better offer from another party, in which case opportunism takes the form of default. Another reason is that parties tailor (specialize) their activities to the requirements of their contractual partner. This leaves them in a position similar to bilateral monopolists since the competition (for trading

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partners) that disciplined their behavior during contract negotiations is now (partially) absent. The "new" opportunity here is the chance to take advantage of the current monopoly position, and the form of opportunism is an attempt to force a renegotiation of contract terms or what we characterize as a "hold up."

A characteristic of the markets where bargaining cooperatives exist makes the possibility of postcontractual opportunistic behavior particularly important. Nearly all transactions are made using forward contracts. Spot markets are relatively unimportant.[1] Because of this, default on a forward contract by the processor can leave a producer with only very inferior alternatives, and the threat of default may be used to induce a renegotiation of price unfavorable to the producer. A symmetric situation exists with regard to producer default.[2]

Action by a cooperative to reduce or eliminate this behavior guarantees the market. Three alternatives exist to deter opportunistic (unreliable) behavior by contracting parties. Vertical integration is one possibility (Klein, Crawford, and Alchian; Williamson), and the use of reputation or a brand name is another (Klein and Leffler). Finally, contracts may be devised to reduce or eliminate the incentive to engage in opportunistic behavior (Knoeber). The last possibility is the focus of this paper. We look only to contracts for mechanisms that enhance contractual reliability. This is not to say that cooperatives do not employ the other methods. Processing cooperatives (vertical integration) sometimes exist alongside bargaining cooperatives, and it is likely that reputations for performance developed by both processors and cooperatives (goodwill) also play a role in ensuring contractual performance. The particular method employed or the mix of methods depends both on the relative effectiveness of the methods and their relative costs.

In the first section, we use notions devised by Klein, Crawford, and Alchian and by Williamson to examine the problem of opportunistic behavior in the context of markets for processing fruits and vegetables. The second section begins by suggesting why opportunism will be a particularly important problem for the commodities "handled" by bargaining cooperatives and proceeds to an examination of actual contracts of these cooperatives to discover mechanisms that reduce the scope for opportunism or guarantee the market. The contract clauses that we find important are mechanical or third-party grading clauses, liquidated damages clauses, and most-favored-customer clauses.

The Problem of Opportunistic Behavior

The use of forward contracts to organize the flow of produce from farmer to processor makes each party's fortune depend upon performance by the other. If one party is unreliable and fails to perform, the other party suffers a loss. We call this loss contractual quasirent. Its size is the difference between the value of a performed contract and the value of a defaulted one. Besides measuring the loss to a defaulted party, contractual quasirent also measures the potential gain from using the threat of nonperformance to extract a renegotiation of contract terms (a hold up). Such a ploy can succeed only if the renegotiation involves a loss no greater than the qua-

sirent. With the use of forward contracts, then, comes the possibility of two sorts of opportunistic behavior—defaults and hold ups. Both become more onerous as quasirent rises, and the second may also become more likely. The importance of guaranteeing a market or deterring opportunism, then, will be greater where contractual quasirent is large.

What determines the size of this quasirent? Consider first the quasirent of the grower. Because this is simply what the grower loses should the processor default on the forward contract, its size is determined by the alternatives open to the grower at the time of default. Three types of alternatives are important. First, the grower may be able to avoid some costs depending on the time of the default. If default occurs at time of delivery, there are virtually no avoidable costs and the entire contract price can be a quasirent. If default occurs earlier, say prior to harvest, there are avoidable costs. Second, a salvage value for the produce may exist. If this salvage value exceeds avoidable costs (is positive if default occurs upon delivery or is greater than harvesting costs if default occurs prior to harvest), contractual quasirent is reduced. Where an active spot market exists or when produce is easily storable, salvage value will be high and grower quasirent will be small. Third, default has a remedy at law. The grower may sue for damages. Contractual quasirent is reduced by the value of court-awarded damages (net of the cost of securing the award) for breach of contract.

The size of the processor quasirent is similarly determined. It will be less if costs can be avoided following default, as will be the case if processing workers can be temporarily laid off. Additionally, processing facilities may have alternative uses. If so, they have a salvage value. When this salvage value exceeds the processor's avoidable costs, quasirent is reduced. Again, an active spot market in produce or easily storable produce will increase the salvage value of the processing facilities. Should a grower default, replacement produce can be purchased in the spot market or drawn from inventories allowing processing to continue. Additionally, if processing facilities are not specialized to a particular crop, salvage value will be larger. Where several crops can be processed with the same equipment, default by the grower of one crop can be met by devoting equipment to processing a different crop. Finally, processor quasirent will be reduced by the amount of the damage award available to the processor should the grower default.

More formally, we can write

$$\text{Contractual Quasirent} = \min \begin{cases} \text{Contract Value} - \text{Avoidable Costs} - \text{Expected Damage Award} \\ \text{Contract Value} - \text{Salvage Value} - \text{Expected Damage Award} \end{cases}$$

For a grower, contract value is the payment received from the processor if the contract is performed. For a processor, contract value is expected receipts from the sale of the processed crop if the crop is delivered as contracted. Avoidable costs are partially a function of time remaining until the performance date. As this time decreases so too do avoidable costs. The expected damage award depends upon the probability distribution of possible dam-

age awards. It is worth noting that contract damage awards are intended to be fully compensatory, placing the nonbreaching party in the position he would have occupied had default not occurred. That is, if the nonbreaching party acts to mitigate damages (either by avoiding costs or by realizing the salvage value, whichever reduces the loss from default more), courts attempt to provide a damage award just sufficient to reduce contractual quasirent to zero. Importantly, however, damage awards will not always be fully compensatory. If default is difficult to prove or if excuses are available to the breaching party, the damage award may be zero. Even if breach is proven, the damage award is likely to be too small to eliminate quasirent. Recovery will not be allowed where damages are not "reasonably certain" (Farnsworth, Young, and Jones). Another limitation on damages is that they must have been reasonably foreseeable to the defaulting party at the time of default or else the injured party must have provided notice (Farnsworth, Young, and Jones). For all these reasons, the expected damage award will be insufficient to fully compensate the nonbreaching party or to make contractual quasirent equal to zero.

An important example in our case is when the contracted payment depends upon the quality of produce delivered. Here, a disguised default may be accomplished by misgrading the produce. If the produce is highly perishable, no evidence remains when litigation for default occurs. In such circumstances, both proving default and proving the extent of damages (a function of the quality of produce) will be difficult. As a consequence, the expected damage award for default will be small and contractual quasirent will be large.

Resolving the Problem: Contracts of Bargaining Cooperatives

Bargaining cooperatives are important only in the markets for processing fruits and vegetables, sugar beets, and milk. The principal function of these cooperatives is to negotiate forward contracts (marketing agreements) with processors on behalf of their members. Membership is voluntary, but members must sign a membership agreement with the cooperative that typically renews automatically unless the member provides notice of nonrenewal. We will be concerned with features of both marketing agreements and membership agreements.

Several characteristics of the markets in which bargaining cooperatives operate are important. First, in these markets virtually all transactions are via forward contracts; spot markets are thin or nonexistent. Second, most of the commodities are quite perishable and so storage or maintaining inventories is very costly. Indeed, for most commodities even very slight delays in processing may cause serious deterioration. Third, quality is variable and a significant determinant of the value of produce. These characteristics imply that contractual quasirent will be large for both processors and producers because salvage values will be low (lack of spot markets and perishability) and because expected damage awards will be low (it will be difficult to prove and fix damages for default by misgrading). Because quasirent is large in these markets, opportunistic behavior presents a serious problem to both sellers and buyers. This explains the importance attached to guaranteeing a market.

We turn now to an examination of bargaining cooperative contracts in search of ways that these cooperatives assist in guaranteeing the market.[3] The contracts examined include both membership agreements and marketing agreements. In total, we examined 29 membership agreements and 17 marketing agreements, almost all of which dealt with fruits and vegetables for processing. The contracts were in force during the 1970s.[4] Table 1 details the products bargained for by these cooperatives. All but four of the marketing agreements and all but six of the membership agreements were for highly perishable commodities.

Consider first the possibility of disguised default by misgrading produce. Eliminating this possibility can be thought of as increasing expected damage awards for breach of contract, thereby lowering contractual quasirent and so deterring opportunism. Two sorts of clauses contained in the marketing agreements negotiated by bargaining cooperatives deter this disguised default. One requires mechanical grading such as use of a tenderometer, which measures the force required to crush a sample of peas. Clauses requiring mechanical grading were found in six of the thirteen marketing agreements for perishable commodities but in none of the agreements for nonperishables. The second requires a third-party arbitrator to determine quality if a dispute arises. Such clauses were found in the other seven marketing agreements for perishables and two of the four agreements for nonperishables. In each market where produce is perishable, contracts of bargaining cooperatives include clauses which reduce the possibility of disguised default by misgrading.

Still, there remains the possibility of overt default. When court-awarded damages for default are insufficient to eliminate quasirent, growers and processors can post performance bonds. One variant of such bonds is a liquidated damage clause written into the contract. The effect is to reduce the gain to the defaulting party and, thereby, the incentive to default. For example, a forward contract between a tomato grower and processor may include a clause providing ten cents per pound in liquidated damages to the processor if the grower defaults and does not deliver the tomatoes. If the delivery time spot price for tomatoes is higher than the contract price (by less than ten cents per pound), the grower has no incentive to default. The liquidated damages clause deters producer default. A difficulty with such a clause, though, is the incentive it creates for the processor. Since the liquidated damages go to the processor, the processor's contractual quasirent is reduced by their value. Indeed, this quasirent may become negative and so make it in the processors' interest to induce default. In our example, if the delivery time spot price for tomatoes is less than the contract price (or even slightly greater), the processor may gain by inducing default and collecting the liquidated damages (Clarkson, Miller, and Muris).[5] This difficulty is eliminated if the performance bond is paid by the grower to some third party instead of to the processor (Knoeber). Of the 29 membership agreements between bargaining cooperatives and producers detailed in table 1, all but one contained such third-party performance bonds. Each of these agreements had a clause awarding liquidated damages to the cooperative (not the processor) if the grower sells his crop in contravention to the marketing agreement negotiated by the cooperative with processors.[6]

Table 1.—Frequency of Certain Clauses in Contracts Between Cooperatives, Producers, and Processors

Product (Number of Cooperatives)	Marketing Agreements					Membership Agreements	
	Number	Mechanical Grading	Grade Arbitration	Most-Favored-Customer Cooperative	Most-Favored-Customer Processor	Number	Liquidated Damages
Perishable Group							
Apricots (1)	1		1	1	1	1	1
Asparagus (1)						1	1
Cherries (2)						2	2
Grapes (1)						1	1
Green Bush Beans (1)	1	1					
Peaches (2)	1		1	1	1	2	2
Pears (3)	2		2	2	2	3	3
Peas (3)	3	3		2	1	2	2
Prunes (1)						1	1
Plums (1)						1	1
Raisins (1)	1		1	1	1	1	1
Raspberries (1)	1		1	1	1	1	1
Sugar Beets (3)	2	2				3	3
Sweet Corn (1)	1		1	1			
Tomatoes (1)						1	1
Vegetables (3)	—	—	—	—	—	3	3
Subtotal (24)[a]	13	6 (46%)	7 (54%)	9 (69%)	7 (54%)	23	23 (100%)
Less Perishable Group							
Beef (1)	1					1	1
Filbert Nuts (1)	1				1	1	0[b]
Popcorn (1)						1	1
Potatoes (3)	1		1			2	2
Soybeans (2)	1	—	1	—	—	1	1
Subtotal (8)	1	0 (0%)	2 (50%)	0 (0%)	1 (25%)	6	5 (83%)
Total (32)	17	6	9	9	8	29	28

[a]Some cooperatives represent their members for more than one product.
[b]In the marketing agreement there was a liquidated damages clause for sales in contravention of the contract.

A typical example is clause 5 of the Washington-Oregon Berry Growers Association membership agreement, which reads:

> In the event Member shall sell, market or dispose of any berries of Member, contrary to the provisions of this Agreement, or shall sell, market or otherwise dispose of any signed berries other than through the Agency of the Association, such act will injure the Association in an amount that is and will be, impracticable and extremely difficult to determine and fix, and that is, therefore, fixed in an amount of twenty-five per cent (25%) of the market value of all berries that are sold, marketed or disposed of contrary to the provisions of this Agreement, and which amount Member so violating this Agreement agrees to pay, and shall pay, to the Association as liquidated damages and in default of payment thereof the Association upon demand, such damages may be recovered in any court of competent jurisdiction in the name of the Association. In case any action is brought against Member of the Association to recover from Member the damages above provided for, Member agrees to pay all costs, premiums for bonds, expenses and attorney's fees in such action.

Finally, there is the possibility of a hold up. A processor or grower may threaten default in an attempt to secure a renegotiation of contract terms. As with actual default, such behavior can be deterred by posting renegotiation bonds. But again if these bonds accrue to the other party, they create undesirable incentives. Here, contracting parties may seek a renegotiation in order to capture the bond. This incentive is not created, however, if the bond accrues to a third party should renegotiation occur. Most of the marketing agreements for perishable commodities detailed in table 1 contain such third-party renegotiation bonds in the form of most-favored-customer clauses. These ingenious clauses have been noted by others (see Helmberger and Hoos 1965, p. 47), but have escaped explanation until recently (Knoeber). A most-favored-customer clause provides that should the cooperative agree to a lower price (or more favorable nonprice conditions) with one processor, the cooperative will also accept this lower price from the other processors to whom it sells. A reciprocal clause by which the processor agrees that should it pay a higher price to one grower, it will also pay that higher price to the other growers from whom it buys is also often included in these contracts. An example of such clauses from the Washington-Oregon Canning Pear Association marketing agreement is:[7]

> 5. *PRICE DEVIATION BY ASSOCIATION*
>
> The Association hereby agrees that if during the 19_ _ season, it should sell to any other canner any of its members' pears at a price lower than the price established herein for pears of the same grade, under similar conditions of preparation for market and delivery and for the same use, then the Association shall pay Canner the difference between the price established hereunder and the lowest price at which the Association makes such sales to other canners. The Association assumes the responsibility of collecting from the Association member the amount of any overpayment which the Canner may have made to the Association member prior

to the time it is ascertained that the Association has sold to any other canner any of its members' pears at a price lower than the price established herein for such pears.

6. *PRICE DEVIATION BY CANNERS:*
If the Canner shall purchase or agree to purchase pears, during the 19__ season, from any grower, dealer, shipper or warehouseman in the State of Washington or in Hood River County, Oregon, at any higher prices than the prices specified herein for pears of the same grade and under like conditions of preparation and delivery for processing, the Canner shall pay to the Association member for the pears purchased from him hereunder, in addition to the prices stated herein, the difference between the prices stated herein and the highest price paid to such other grower, dealer, shipper or warehouseman.

Consider the effect of this clause. Assume a processor attempts to hold up the cooperative and secure a downward renegotiation of price. The cooperative, if it agrees to the renegotiation, must also lower its price to all the other processors to whom it sells. The cooperative has posted a renegotiation bond, forfeitable (if it agrees to an adverse renegotiation with one processor) to all the other processors (third parties) with which it deals. By so doing, the cooperative has placed itself in a position where it will generally refuse to acquiesce to a hold up. Knowing this, processors will likely not attempt hold ups. Similarly, the processor most-favored-customer clause implies that should the processor agree to one grower's demand to raise price, it must forfeit a third-party renegotiation bond (raise the price paid) to all other growers with whom it has contracted. Because of this, growers cannot expect the processor to agree to a hold up, and so they will not attempt one. The processor most-favored-customer clause makes growers reliable.

Nine of thirteen marketing agreements for perishable commodities contain a cooperative most-favored-customer clause, and seven contain a processor most-favored-customer clause. Only one of the four marketing agreements for nonperishables contains a most-favored-customer clause, and it binds only the processor. The absence of most-favored-customer clauses in the contracts for nonperishables is consistent with the lower contractual quasirent for traders of these commodities. Where one party's quasirent is small, the other party's incentive to engage in a hold up is slight. Likewise, where mechanical grading methods exist, an accurate value of produce is more easily determined. Consequently, court-awarded damages for breach will be closer to the mark and quasirent will be lower and so the need for a most-favored-customer clause to deter hold ups will be less. Indeed, most of the contracts for perishables that do not include most-favored-customer clauses do include mechanical grading clauses. Finally, a feature of most-favored customer clauses that deserves note is that the size of the implied third-party renegotiation bond, and so its capability to deter hold ups, depends upon the volume of transactions with other (third-party) traders. For example, a most-favored-customer clause binding a cooperative dealing with only one processor has no effect. Here there is no implied third-party bond, and the clause does not deter a processor hold up. The absence of

most-favored-customer clauses in some agreements, then, may reflect the existence of a dominant processor (or by analogy, a dominant cooperative).

Conclusion

Forward contracting between growers and processors of fruits and vegetables creates a situation where postcontractual opportunistic behavior by either party will be quite harmful to the other. Consequently, both producers and processors will desire assurance of contractual reliability—an activity that we interpret as "guaranteeing the market." An examination of the membership and marketing agreements of bargaining cooperatives in these markets revealed several ways in which the cooperatives act to ensure the performance of their members and processors. Contract clauses requiring mechanical or third-party grading, liquidated damages clauses, and most-favored-customer clauses all serve to deter opportunistic behavior and so guarantee the market.

Notes

1. According to Mighell and Hoofnagle, in 1970 85 percent of vegetables for processing were grown under forward contracts and an additional 10 percent were grown by vertically integrated processors.

2. If processors, when confronted with producer default, can quickly secure produce from other suppliers while producers, when confronted with processor default, cannot quickly find alternative buyers, opportunistic behavior by producers will be of less concern than opportunism by processors. In this regard, the situation may not be symmetric.

3. Recall that devising contracts to deter unreliability is only one way to guarantee a market. So the following discussion may only partially characterize the way in which bargaining cooperatives act to guarantee markets.

4. These contracts were generously provided by Mahlon Lang. They are the result of an attempt to collect contracts from all bargaining cooperatives. Although we have not seen a comparable sample of more recent contracts, we believe these 1970s contracts to be very similar to those used currently.

5. For example, if the contract requires a grower to deliver tomatoes to the processor, default might be induced by making delivery difficult. A processor may hire the available delivery trucks, making delivery impossible, or perhaps arrange for other produce to be delivered simultaneously, creating a queue at the processor's plant. The second action leads to quality deterioration during the time spent in the queue. Sufficient deterioration makes the tomatoes unacceptable or entails a default on the agreement to deliver tomatoes of a certain quality.

6. Although the function of this clause is to introduce the cooperative as the holder of a third-party bond into the exchange between grower and processor, it would be improper to think of a bargaining cooperative as generally passive and not an advocate of its members. In its role as a negotiator of price, the cooperative is clearly an active advocate of its members. Even in its role as a third-party bondholder, the cooperative acts to assure processors that member growers will not default, and this assurance should be rewarded with a higher price paid to these member growers.

7. Earlier in the contract the Association was designated as "exclusive sales agent" for the growers.

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