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Contracting in Tobacco? Contracts Revisited

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Abstract

Contracting is the new mode of selling U.S. grown flue-cured tobacco. In 2002, 79 percent of flue-cured tobacco was sold under contract; just 4 years earlier, tobacco contracts had not been used at all. The rapid shift to contracts was prompted by one cigarette company, which stated that tobacco sold in the auction market did not satisfy its quality requirements. Contracts typically provide farmers with incentives for producing high-quality commodities via higher prices. This study investigates this idea by comparing contract flue-cured tobacco prices with auction market prices. For high-quality tobacco, contract prices exceed auction market prices, and for low-quality tobacco, contract prices are less than auction market prices.

Keywords: Tobacco, flue-cured tobacco, agricultural contracts, contracts, auction markets

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Introduction

Nearly 80 percent of U.S. flue-cured tobacco is now grown under contract. Just 4 years ago (1999), all flue-cured tobacco in the United States was sold in the auction market. During the 2000 flue-cured marketing season (July 2000-June 2001), according to USDA, 9 percent of flue-cured tobacco was sold under contract, or 50 million pounds of a total 564 million pounds. In the 2001 marketing season, USDA reports that 81 percent of all flue-cured tobacco was sold under contract, or 440 million out of a total 545 million pounds. In the 2002 marketing season, USDA reports indicate that 79 percent, or 446 million pounds of flue-cured tobacco, was sold under contract. Flue-cured tobacco accounts for approximately 60 percent of the tobacco produced in the United States, burley accounts for 35 percent, and minor types the remaining 5 percent. The jump in contracting began after Philip Morris, in 1999, stated its intentions to begin contracting within the USDA tobacco program. In 2003, nearly all major cigarette companies and leaf dealers contracted for tobacco.

Contracts, while new to tobacco growers, have been widely used in the production and sale of many agricultural commodities. Broilers, for example, are produced under contract, vegetables for processing are generally produced under contract, and fresh fruits and vegetables are frequently sold under contract. Specialized products—such as organic vegetables intended for processing, or a particular variety of wheat needed for pasta—are often produced under contract. Past experience suggests that tobacco contracts are here to stay and are likely to be used more frequently over time.

Many researchers believe that consumer preferences are driving the proliferation of agricultural contracts. The rationale underlying this belief is that consumers have developed stronger preferences for specific qualities. In response, manufacturers and other intermediaries directly contract with growers to ensure that they receive exactly the quality and quantity desired. Cigarette production, for example, requires a particular blend of different tobaccos, specifically "narrowly defined grades and styles of flue-cured and burley tobacco to produce very flavor-specific blends for our high quality cigarettes" (Philip Morris). Growers can increase tobacco leaf quality through different practices, such as the way tobacco leaves are harvested. Tobacco leaves ripen from the bottom of the stalk to the top. To obtain ripe tobacco, therefore, growers must harvest leaves from each plant several times. According to farmers, auction prices did not justify their making several harvesting passes, and so farmers were harvesting on just one or two passes, rather than three, four, or five passes (Blake and Vukina). Tobacco quality can also be increased by using high-quality seedlings and best management practices when planting, tending, and harvesting the leaves. In this light, the rapid shift to contracting in tobacco is not surprising, since the experience with other commodities has proved that manufacturers get inputs of a desired quality by contracting with growers.

A key contracting issue is the relationship between price and quality. Buyers are generally willing to pay higher prices for higher quality. And all else equal, producers generally incur greater costs to produce higher quality. When buyers cannot observe quality, only low-quality merchandise will be sold in the marketplace. This phenomenon has been observed repeatedly in agricultural markets. In Quebec's dairy market (Dupree) and in the early American tobacco market in Maryland (Schweitzer), low-quality merchandise was sold when there was no way to regulate or monitor quality. This same phenomenon led to the legislation of Federal grades and standards for fruits and vegetables and grains (Dimitri). This idea is relevant to the tobacco industry since Philip Morris's press release states that the tobacco crop "…doesn't match what we at Philip Morris need" (Philip Morris). This comment suggests that prices or institutions might not have adapted in such a way to provide growers with incentives to increase the quality or alter the mix of quality they produced and marketed. As a result, tobacco manufacturers were probably not receiving the blend and quality they required to produce cigarettes and cigars.

Tobacco Contracts Contain Many Provisions

While contracts offered by different companies vary, most contracts include provisions about quality, quantity, ownership, production standards, prices and payment, and enforcement. Contracts are quite specific and typically state that the contracting company will purchase only high-quality tobacco produced in accordance with the contract's provisions. Contracts also specify mechanisms for settling disputes between growers and contracting companies. The information that follows was gleaned from flue-cured tobacco contracts offered by several major cigarette manufacturers and leaf dealers. (These contracts are online at: http://www.cpes.peachnet.edu/tobacco/contracts/contracts.htm.)

Quantity provisions in all flue-cured tobacco contracts indicate that growers must have (and warrant that this is so) the rights to sell the tobacco they are contracting. For any additional allotment they obtain, the grower will give the contracting company the right of first refusal. Tobacco must be grown on the farm specified in the contract. Some contracts require the growers to estimate the amount of crop they will deliver, while other contracts require growers to specify the number of acres they will plant. These provisions, such as requiring that growers have the quota for contracted tobacco and requiring all tobacco to be grown on farms specified, ensure that contracted tobacco complies with the rules of the Federal tobacco program.

Quality provisions are fairly uniform across contracts. All require that flue-cured tobacco be harvested in phases. Some contracts specify that delivered tobacco have a minimum of 3 stalk positions, others 4, and one contract specifies a preference for 5 positions (but will accept 4). The stalk positions, from the bottom of the plant to the top, are primings, lugs, cutters, leaf, and tips. Some buyers specify they want tobacco consisting of 5 percent primings, 15 percent lugs, 10 percent cutters, 55 percent leaf, and 15 percent tips. A different contract specifies that it will limit purchase quantity to 25 percent lugs, 15 percent cutters, and 60 percent leaf and tips. Most contracts specify that delivered tobacco must have a moisture level less than 18 percent. These provisions ensure that tobacco manufacturers will receive the qualities they desire.

All flue-cured tobacco contracts specify that delivered tobacco will be free of all stalks, suckers, and foreign matter. Some companies specify that the tobacco not come into contact with polyurethane, polystyrene, or fiberglass insulation in the curing chamber of curing barns. Some contracts specify that the crop must meet acceptable tolerances for tobacco-specific nitrosamines. All contracts require that tobacco be delivered in bales, with each bale having tobacco from one farm, of a single stalk position, weighing between 600 and 850 pounds. Some contracts indicate that the bale must be covered with an approved corrugated fiberboard slip sheet, not to exceed 5 pounds.

Production standards are consistent across contracts. All contracts require that growers use flue-cured seedlings that meet industry-established minimum standards. Tobacco must be cured in barns equipped with properly maintained heat exchangers that prevent tobacco from being exposed to combustion gases. All contracts specify that only pesticides, fungicides, growth regulators, and herbicides approved by the EPA, USDA, or other government agencies can be used. Most require that the grower maintain records as required by EPA or other government agencies. Some contracts specify that growers use appropriate agricultural practices in raising, harvesting, curing, and delivering tobacco, and that the crop receive adequate but not excessive pesticides, fungicides, and herbicides and adequate fertilizer, which is applied according to correct application rates and methods. Other contracts require that growers implement good agricultural practices, maintain records for fertilizer usage and application, and implement any best management practices that are required by State law. These provisions make sure that Federal and State regulations are followed when planting, tending, harvesting, and curing tobacco, thus making producers accountable for satisfying such regulations.

Some contracts require the buyer to be given reasonable access to farms to monitor and inspect all phases of tobacco production, including (but not limited to) monitoring of crop progress, inspection of production or curing practices or facilities, and testing and sampling of tobacco or soil, and that growers will cooperate with inspection, monitoring, and testing. It is not clear how often such inspections occur in practice.

Contracts specify payment methods and prices. Payments are net of withholdings required by USDA or other government agencies and, in some cases, liens. Nearly all contracts specify that checks will be available by the end of the business day of delivery. Prices for each grade are established in the agreement. Many contracts specify company grades that correspond to USDA grades, although each company grade may cover several USDA grades.

Exclusionary provisions may be part of a contract. Some contracts forbid growers from selling tobacco to any party other than the company, unless the grower has received written permission from the company, or unless the company has declined to purchase the tobacco. In some cases, the contract specifies that if the grower makes an unauthorized sale to a third party, the contracting company is entitled to receive 25 percent of gross proceeds of the sale from the grower. The only exception is that growers can sell tobacco that was rejected by the contracting company to other buyers. These provisions ensure that growers will not sell the tobacco committed to the contracting company to other agents, who might, for example, offer the grower a higher price than that specified in the contract.

All contracts specify that the tobacco will be weighed and inspected after it is received, and most specify that the weight of packing materials will be deducted from total weight. All contracts indicate that tobacco will be graded the same day it is received, and that growers or their representatives can be present at the time of weighing and grading. All disputes over grade or weight must be brought up before the company accepts the shipment and orders payment for the tobacco. If a dispute cannot be settled, some contracts specify that the grower has the right to terminate the agreement for all tobacco that has not been delivered.

All contracts specify that any flue-cured tobacco that is unusable (wet, damaged, or nested) or that contains suckers, stalks, or foreign matter, as well as any tobacco that does not meet delivery standards, curing standards, or Federal regulations can be rejected. All contracts specify that after accepting the tobacco, if the buyer finds that the tobacco does not meet requirements of the agreement, the acceptance may be revoked. In some cases, the grower has 48 hours to inspect the tobacco and attempt to resolve disputes. In other cases, the grower is required to repay the company and reclaim the tobacco, bearing all costs of doing so. All contracts specify that the grower can sell tobacco rejected by the company to a different buyer.

Nearly all contracts state that the grower owns all the tobacco, and assumes all risk of loss and damage to the tobacco until the buyer accepts the tobacco at the agreed-upon delivery station. At that time, ownership and risk of loss and damage pass to the company. Growers accept all loss and damage to the crop due to bad weather; in other words, contracting companies do not share production risk with growers.

Tobacco Contracts Reward High Quality

Growers can affect tobacco quality, albeit imperfectly, through their choices of farming, harvesting, curing, and sorting techniques. The ability to influence tobacco quality makes it possible for contracting firms to offer a “carrot and stick” approach to induce growers to produce qualities they desire. By paying high prices for high quality and low prices for low quality (relative to the prices received in the auction market), contracts can provide growers with larger price incentives to increase the share of high-quality tobacco and decrease the share of low-quality tobacco for each crop. A comparison of auction price data and contract price data indicates that the pricing scheme of tobacco contracts rewards high quality and punishes low quality. According to industry experts, this relationship between quality and price is frequently absent from prices in the auction market, in which growers often receive the same price regardless of the grade.

The table shows the relationship between prices (both auction and Philip Morris contract) for different levels of quality for the 2001 marketing year. Auction market prices are shown as an average price, and a minimum and maximum auction price for all five stalk positions. From the bottom of the plant to the top, the five stalk positions are: primings, lugs, cutters, leaf, and tips. For primings of contract grades 1 and 2, which correspond to the higher USDA grades for primings, the contract price offered by Philip Morris exceeds the average auction price and the maximum auction price. For lugs (contract grades 1, 2, and 3) and cutters (contract grades 1, 2, and 3), contract prices exceed both the average price across auctions and the maximum auction price. For leaf grades 1 and 3, contract prices exceed or equal auction market prices. For grades 2 and 4, leaf contract prices exceed the average auction market price. For the lowest quality of leaf, captured in grade 5, contract prices are below the average and highest auction market prices, but exceed the lowest auction market price. Contract prices for tips follow a similar pattern: contract prices are higher than the average auction price for grades 1, 2, and 3. Contract prices are above all auction market prices for grade 1. For grades 2 and 3, contract prices are greater than all but the maximum auction prices. For grade 4, the lowest quality tip, contract prices are less than the average and maximum auction prices, but are greater than the minimum auction market prices.

The pricing system of contracts generally rewards growers for producing high-quality tobacco. In comparison, low-quality tobacco sold under contracts receives lower prices than low-quality tobacco sold in the auction market. Contracts also pay the largest price premium for high-quality primings, lugs, and cutters, which are the bottom-most leaves, and the first to ripen. The fairly substantial price differential for these three types provides growers with a strong incentive to harvest primings, lugs, and cutters as they ripen, rather than to wait and harvest them together. This pricing system, in principle, is designed to encourage producers to take appropriate steps to increase tobacco quality. Whether the pricing scheme actually improves tobacco quality depends on whether producer net returns increase with the higher prices.

Auction market and contract prices for flue-cured tobacco, 2001 marketing season

Stalk position	Contract grade	Contract price	Average auction price	Minimum auction price	Maximum auction price
Primings	1	1.66	1.56	1.53	1.59
	2	1.61	1.52	1.34	1.58
	3	1.51	1.46	1.34	1.52
	4	1.14	1.37	1.34	1.40
Lugs	1	1.78	1.67	1.65	1.68
	2	1.71	1.60	1.54	1.65
	3	1.64	1.49	1.37	1.54
	4	1.14	1.43	1.37	1.45
Cutters	1	1.88	1.78	1.76	1.79
	2	1.82	1.71	1.62	1.79
	3	1.75	1.60	1.43	1.66
	4	1.14	1.48	1.43	1.56
Leaf	1	1.96	1.94	1.91	1.94
	2	1.92	1.90	1.80	1.95
	3	1.87	1.79	1.45	1.87
	4	1.83	1.69	1.45	1.89
	5	1.20	1.56	1.09	1.69
Tips	1	1.95	1.92	1.83	1.94
	2	1.91	1.89	1.79	1.94
	3	1.77	1.68	1.29	1.88
	4	1.20	1.49	1.09	1.69

Sources: USDA, *Annual Report on Tobacco Statistics, 2001*, and Philip Morris contract prices.

Summary

Economists do not fully understand why the tobacco industry dramatically switched to contracts. One often-suggested reason for growth in contracting is that auction markets were not providing manufacturers with the qualities they desired, although most economists do not understand why the auction was unsuccessful in transmitting incentives for quality. Others have suggested that manufacturers offer higher prices to producers to encourage them to sell via contracts rather than the auction market. Regardless of the reason for the shift to contracting in tobacco, economists agree that contracts can provide strong price incentives for producing specific qualities. By rewarding producers for management practices that increase tobacco quality, high prices for high quality can provide manufacturers with qualities they desire. So far, the rapid growth in use of contracts suggests that both producers and manufacturers benefit from the new marketing system. Barring significant shifts in the industry's structure, these benefits are likely to continue.

References

Blake, Brown, and Tomislav Vukina. "Provision of Incentives in Agricultural Contracts: Case of Flue-Cured Tobacco." Manuscript, North Carolina State University. 2001.

Dimitri, Carolyn. "Contract Evolution and Institutional Innovation: Marketing Pacific-Grown Apples from 1890 to 1930," *Journal of Economic History*, March 2002.

Dimitri, Carolyn, and Edward Jaenicke. "Contracting in Tobacco?" *Tobacco Situation and Outlook*, U.S. Department of Agriculture, Economic Research Service, December 1999.

Dupre, Ruth. "Regulating the Quebec Dairy Industry, 1905-1921: Peeling Off the Joseph Label." *Journal of Economic History*. June 1990: 339-48.

Philip Morris, "Partnering Arrangements between Tobacco Farmers and Philip Morris," press release, p. 3, April 1999.

Schweitzer, Mary McKinney. "Economic Regulation and the Colonial Economy: The Maryland Tobacco Inspection Act of 1747." *Journal of Economic History*. Sept. 1980: 551-69.

United States Department of Agriculture. Agricultural Marketing Service. *Annual Report on Tobacco Statistics, 2001*.