Basic Marketing of Texas Cotton: Forward Contracts, Cash Sales, Marketing Pools, and the USDA Loan Program

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Executive Summary

This paper is written with a focus on new cotton producers in the northern Texas High Plains, the South Texas/Winter Garden boll weevil eradication zone, and elsewhere who may be unfamiliar with some of the basic marketing alternatives for cotton. The topics discussed are: forward contracts, cash sales at harvest, marketing pools, and USDA loan programs. The advantages and disadvantages of these alternatives are discussed as an introduction to thinking about hedging with futures and options.

Forward Contracts

Description

A forward contract is a legal agreement that specifies either the price or basis for a quantity (either bales or acreage) and quality of cotton delivered by a future date. Forward contracts are used by cotton merchants to guarantee minimum supplies at an established price in order to make sale commitments to end users. Forward contracts are more widely used in other parts of the Cotton Belt than in Texas (Table 1). The reason for this is that the contracting merchants face less production risk in the more stable production areas (which is also why they tend to offer bale contracts in those regions). Due to extreme variations in weather and production in Texas, most forward contracts are based on contracted acres, and are offered more during times of relative shortage. Acreage contracts imply that the merchant will share in more of the production risk, although he may make up for this in the price/basis terms offered, and also in the late timing that contracts are offered during the season. The terms of cotton marketing contracts are fairly uniform across the country being based on model contracts approved by the Texas Cotton Association and the American Cotton Shippers Association.

Considerations

The wisdom of the ages applies to forward contracts: *Read the fine print*. Contracts may or may not include disaster clauses, penalties for late delivery, yield limitations, etc., so it behooves the grower to study them in detail. Another important question of any forward contract is how it affects the grower's legal ownership status ("beneficial interest" in USDA parlance) during the period when growers will also be participating in USDA loan programs. In general, growers want contract language which allows them to retain beneficial interest until after the grower makes application for loan deficiency payments (discussed below).

Advantages/Disadvantages

One major advantage of forward contracts is being able to reduce price (or basis) risk by locking in a favorable price (or basis) when the opportunity exists in the market. Growers should recognize that this reduction in price risk is not free. The price/basis terms offered by the buyer are likely what is required to either bear the price risk or else hedge his position in the futures market. Another advantage of early contracting is that it may enable growers to more easily secure operating loans. The disadvantages of forward contracting to the grower include: 1) no attractive contracts being offered when the market opportunity is there, 2) having no transparent way to evaluate the terms of different contracts on a consistent basis (other than just hearsay or experience), and 3) having quality specifications be subject to the USDA's Commodity Credit Corporation (CCC) loan schedule of premiums and discounts. Research has shown that the CCC loan schedule overly penalizes Texas cotton in accurately reflecting the true market value of quality differences.

Table 1. Forward Contracting of Upland Cotton by Growers, as of August 1, Crops of 1996-2005 and Planted Acreage, 2005 Crop

	Cotton Crops										Plantings
States	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**1,000 Acres**
Southeastern States	33	29	31	12	26	6	7	9	13	10	2,985
South Central States	25	30	34	6	11	6	3	4	*	11	3,880
Texas/Oklahoma	12	12	13	2	5	5	-	1	4	3	6,100
Western States	21	23	30	1	4	*	*	*	*	-	795
United States	21	21	24	5	12	5	2	4	5	7	13,760

Cash Sale at Harvest

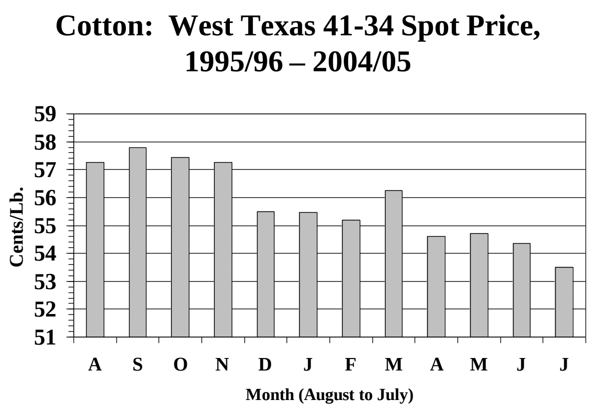
Advantages

A similar but simpler marketing alternative is selling your cotton after harvest, either to a gin/broker, independent broker, or larger merchant/shippers. The advantage of this approach is simplicity – there are no risks related to not fulfilling production contracts. There is also no basis risk to take account of.

Disadvantages

When waiting to sell at harvest, the grower is fully exposed to price risk, basically bearing whatever the market happens to be offering at harvest time. Harvest-time prices tend to be lower, as shown below in Figure 1 for the higher Lubbock cash prices in the months proceeding the December harvest time. This graph illustrates the advantage of forward pricing to take advantage of higher prices prior to harvest. Like forward contracts, harvest-time cash sales contracts are also typically based on the CCC loan schedule of premiums and discounts, which has the aforementioned disadvantage for Texas cotton. The problem is compounded by the use of USDA-AMS spot market quotes as the means of price discovery, i.e., process or degree to which market prices reflect the value of a given quantity, quality, location, and lot size of a commodity. As with the CCC loan schedule, research in Texas indicates that USDA-AMS spot prices do not provide consistent, accurate, or comprehensive valuation of the range of qualities of cotton across Texas [1, 2]. Thus, cash bids may not reflect the value of your quality relative to others.

Figure 1. West Texas 41-34 Cotton Average Monthly Spot Price, 1995/96-2004/05.



Marketing Pools

Description

Marketing pools are a popular marketing alternative among Texas cotton growers. Marketing pools are typically farmer cooperatives which, among other services, provide marketing services for the pooled production of the co-op members. A 2001 article in Progressive Farmer listed 13 regional cotton marketing pools in the U.S. [3], but there are many smaller pools consisting of groups of gins.

Advantages

The advantages of marketing pools are that, in theory, they should have a stronger bargaining position in selling large volumes of cotton to buyers relative to an individual farmer's position. Another significant advantage of marketing pools for growers is that pools are usually available, easy to use, guarantee market access, and basically provide an average price received for the season (although the latter could also be seen as a disadvantage). In short, pools provide "a home" for cotton and free growers from the task of locating and negotiating with buyers. The marketing pools that are organized as grower cooperatives (as most of them are) have another legal advantage of being able to place their cotton into the CCC loan program (discussed below) which creates storage advantages when markets prices are below the loan rate. Finally, there are enough marketing pools around to provide competition with each other as well as with local merchants. Growers should be the beneficiaries of this competition in terms of either higher offers from local merchants or the best terms offered by pools.

Disadvantages

The main disadvantages of pools are analogous to forward contracts. It is very difficult to get comparative marketing performance information from pools to choose among them. Also, as with forward contracting, there is no free lunch. The marketing services will come at a cost such as agent fees, limits on pricing flexibility, limits on quality premiums, or simply in getting an average price instead of being in the upper third.

Considerations

In considering marketing pools, growers should inquire about the requirements and provisions regarding the level of production that must be committed, the pricing flexibility [4], and any premiums offered for quality attributes. Growers should also make sure that the pool they are considering is reputable and has financial integrity.

USDA CCC Loan Program

Background

The "cotton loan program" is technically part of the USDA's marketing assistance program authorized by the 2002 farm bill. The loan program establishes a government floor or support price for cotton at the loan rate of 52 cents per pound. In previous decades, the CCC loan program operated by the USDA essentially buying up all cotton when prices were below the loan rate, effectively supporting grower prices at the loan rate. The "loan rate" terminology exists because the program is designed as a financial operation: growers receive a non-recourse "loan" from the USDA valued at the loan rate times their bales of cotton, with the latter as collateral. If post-harvest market prices exceed the loan rate, growers can redeem their cotton, pay off the CCC loan (plus storage) and sell it. If prices are below the loan rate, growers simply forfeit their cotton to the USDA and keep the loan. The implications of this were that the government would collect large quantities of cotton when prices were low, so beginning in the 1980s; additional provisions were added to move this cotton directly to the world market while still maintaining the price support system. What follows is a description of how the loan program currently operates (at least until the next farm bill in 2008). The linked USDA bulletin at http://www.fsa.usda.gov/pas/publications/facts/nonrec03.pdf provides much more detail on how these programs work.

Description

The cotton loan expands the domestic price support system (described above) by taking account of world prices. A British company called CotLook, LTD calculates and publishes an index of world cotton prices called the CotLook A-Index (referred to by USDA as the Far East or FE price). The A-Index is the average of the five lowest price quotes of the following world cotton descriptions (all middling .1-3/32"): Memphis Territory; California-Arizona; Mexico; Central America; Paraguayan; Turkish; Uzbekistan; Pakistani 1503; Indian H-4; Chinese Type 329; West African; Tanzanian; Greek; Syrian; and Australian. USDA takes the A-Index and, on a weekly basis, calculates the official adjusted world price (AWP). The AWP adjusts the A-index for the average cost differences of transportation and handling from the U.S. to Asia, and the average quality differences for U.S. base grade (strict low middling, 1-1/16") cotton. The current AWP calculation is shown below in Table 2.

Table 2. Adjusted World Price Determined by USDA, as of September 8, 2011

A-Index of World Prices (Far East price, cents per lb.)	113.36
Adjustment to US location and grade (cents per lb.)	-20.56
Adjusted World Price (AWP, in cents per lb.)	92.80
US Average Loan rate (cents per lb.)	52.00
Loan Deficiency Pmt. Rate(=Loan-AWP, cents per lb.)	0.00

The AWP then reflects the value of U.S. cotton on the world market, i.e., roughly what an exporter or foreign buyer would bid for U.S. cotton. It is also what it costs a merchant to redeem a grower's crop from the CCC loan. The loan deficiency payment [5] (LDP) calculated above is roughly the difference between the USDA loan rate and what the grower would get by selling it on the world market. The current cotton loan program is designed to keep the 52 cent support price effective, so when world prices are low, the program pays the LDP to sell their cotton on the world market in lieu of putting their cotton in the loan program. The LDP shrinks to zero in years when the A-Index of world prices are high enough to result in an AWP in the mid-50s or higher. Conversely, the LDP increases as world prices (and hence the AWP) falls below 52 cents per pound. Growers actually have several alternatives to receive payments in the situation of low world prices: 1) forward contract prior to harvest, and apply to USDA for an LDP while still maintaining beneficial interest [6], 2) apply for an LDP (while still maintaining beneficial interest) during the harvest period then sell the cotton [7] , or 3) forgo the LDP, store the cotton under the USDA loan program, and receive the loan rate (and the obligation to pay storage and accrued interest). Alternatives 1) and 2) both require monitoring of weekly LDP rates and diligence on the part of growers to make sure that their forward contracts or cash sales do not disqualify them from applying for the LDP.

Under Alternative 3) there are three alternative choices for cotton that is in the loan: A) forfeiture to the USDA (in which case the grower keeps the loan value less any storage and accrued interest, B) redemption, or taking the cotton back out of the loan, paying off the loan at the loan rate (plus accrued interest to that point) or the AWP, whichever is lower, and selling it on the world market, or C) “selling equities”, i.e., making an equity sale [8] to a merchant. Choice A) would generally only be made as a last resort. Choice B) would generally be made if the AWP was less than the loan rate plus accrued interest costs. In that case, the grower would realize a net gain, which is called a marketing loan gain (MLG). The MLG incentive is exactly that of the LDP: to move U.S. cotton into the world market. Regarding Choice C), equity bids from merchants to growers is a common practice, especially in West Texas. Equity offers are calculated by merchants based on the estimated MLG, trends in U.S. and world prices, the time remaining until expected loan redemption by the merchant, the expected cost of carrying the cotton, and the level of the Step 2 payment. It is presently unknown as to the ultimate effect of Step 2 payment elimination, but it will probably result in a several cent reduction in the equity bids from merchants. Growers with cotton in the loan should evaluate any equity bids to their expected MLG under Choice B.

Eligibility

There are a number of eligibility requirements for marketing assistance loans and loan deficiency payments which are related to the producer, the commodity, or other commodity program provisions. One important concept already mentioned is beneficial interest. In addition to maintaining beneficial interest, the cotton pledged as collateral for a non-recourse loan must satisfy USDA's minimum grade and quality requirements. Lastly, the sum of marketing loan gains and loan deficiency payments for all crops during a crop year is limited to $75,000 per person. **Your local USDA-FSA office has the final word on eligibility requirements.**

Thinking About Hedging with Futures and Options

Futures and options allow you to build on the advantages of all of the basic cotton marketing alternatives discussed in this article. With forward contracting, cash sale at harvest, or marketing pools, you are ultimately locked into a price and will generally not be able to take advantage of upward price movements. There are basic marketing strategies with futures and options, e.g., purchasing call options that can give you an opportunity to take advantage of future price increases with no other obligation. For more information visit http://trmep.tamu.edu/cg/list.htm.

Notes:

1. Hudson, D., D. Ethridge, C. Anderson, and J. Brown. 1993. How reliable is Cotton Price Reporting in Texas Cotton Markets? Pub T-371, Texas Tech Univ. Lubbock. October, 19993.
2. Chen, D. T., Carl G. Anderson, and C. Shafer. 1994. Cotton Quality Premiums and Discounts: A Comparison of CCC Loan Schedules and Spot Market Quotations. Proceedings of the 1994 Beltwide Cotton Conferences. National Cotton Council: Memphis.
3. Deterling, Del. 2001. "Price-Squeezed Growers Jump Into Pools." Progressive Farmer. Vol. 116(7). Mid-June, 2001. pp. 14-19.
4. For example, a marketing pool may offer growers a choice of a "seasonal pool" where the marketing pool makes all the pricing, hedging, and farm program decisions, or a "call pool" where the grower has some choices.
5. The LDP is sometimes called a "POP" payment by growers; "POPing your cotton" means applying for an LDP.
6. A producer retains beneficial interest in a quantity of a commodity if he has: 1) control of the commodity, risk of loss; and title to the commodity. For loans, a producer must retain

beneficial interest in the commodity from the time of harvest through the date the loan is redeemed or CCC takes title to the commodity. For LDP's, a producer must retain beneficial interest in the commodity from the time of harvest through the date the LDP is requested. Once beneficial interest in a commodity is lost, the commodity remains ineligible for a loan or an LDP even if a producer regains control, risk of loss, and title.

7. New cotton producers should carefully note that cotton in the loan does not require payment of storage costs if market prices are below the loan rate. Free storage costs in those circumstances means that cotton in the loan will be more attractive to merchants. Therefore, when prices are below the loan rate, if you take the LDP and opt out of the loan before you've sold your cotton, you may get lower bids for your cotton than otherwise would have. Furthermore, you will have to pay storage.
8. The term "equity offer", also known as "selling equities" should not be confused with so-called "equity contracts". Merchants use equity contracts to bid for cotton before it is put into the loan.

The Cotton Marketing Planner
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