AN ESTIMATED 2000 TEXAS-OKLAHOMA PRE-SEASON PRICE SCHEDULE BASED ON MARKET HISTORY

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Abstract

Accurate price reporting in the cotton industry is important. The DPES pre-season price schedule for Texas and Oklahoma is calculated each year to provide a means of examining the market history of quality premiums and discounts. This provides participants in the marketplace with access to a timely and reliable source of information that presents an accurate representation of the cotton market.

Introduction

The Daily Price Estimation System (DPES) is maintained and operated by the Department of Agricultural and Applied Economics, Texas Tech University. The DPES is a computerized, econometric price analysis system, which uses sales of cotton from electronic cotton markets to estimate and report prices and quality premiums and discounts for various quality combinations in Texas and Oklahoma producer markets. This system uses a set of computer programs and established statistical techniques to estimate cotton prices and quality premiums and discounts on a daily basis (Brown et al.; Brown and Ethridge).

Pre-Marketing Year Price Discovery

The Commodity Credit Corporation (CCC) loan program makes nonrecourse loans to producers based on a loan schedule that assigns loan levels for base quality with premiums and discounts for various quality deviations from that base. Over time, this loan schedule has come to be used for a variety of price determination purposes ranging from forward contract pricing to the allocation of dividend payments to members of marketing associations. This schedule has also been used by the industry as a price discovery mechanism to determine cotton prices for the upcoming marketing year. As such, this demonstrates the importance to the industry of having a means of examining the price structure of the market before the season starts in order to facilitate a number of marketing functions such as forward contracting.

DPES Pre-Season Price Schedule

Texas Tech University has developed a method of estimating a price schedule for the upcoming marketing year based on market history. This schedule is meant to serve as an alternative pre-marketing year price discovery mechanism. This schedule is an extension of the work started by Carr and Ethridge in which the loan schedule used by the CCC was combined with DPES annual crop estimates (beginning in 1989) to create a price schedule which had been adjusted for the coming year using actual market history. This replaced the method of using the Daily Spot Cotton Quotations (DSCQ) to adjust the schedule, as they have been found to not accurately represent market prices in the Texas and Oklahoma cotton markets.

Beginning in 1989, a weighted average of prices by number of bales per region (West Texas and East Texas/Oklahoma) was taken for the first seven months of each crop year. These average prices were then averaged with the 1989 CCC loan schedule to derive the adjusted 1990 DPES pre-season price schedule. The following year, the 1990 DPES price schedule was adjusted using a weighted average of prices for the first seven months of the

1990 crop year to derive the 1991 DPES pre-season price schedule. This method was used to adjust the DPES price schedule for each successive marketing year up to the current crop year (2000), which is presented in Table 1.

Although it is not possible to accurately forecast cotton prices or price movements for any forthcoming marketing year, the DPES pre-season price schedule does provide a means of examining prices, premiums and discounts based on actual market history, which may be used to provide buyers and sellers with an overall picture of the cotton spot market in Texas and Oklahoma.

2000 Grading Changes

Beginning with the 2000/01 marketing year, both the CCC loan schedule and the daily spot market price reports published by the USDA have been expanded to include two additional grades-length uniformity and preparation. Length uniformity is the ratio between the mean length and the upper half mean length of the fibers and is expressed as a percentage. Preparation is the classer's determination of the degree of roughness or smoothness of the cotton lint as a result of the ginning process. Like bark and other extraneous matter grades, preparation is also reported as either a level 1 or level 2 occurrence. In conjunction with these additions to the official USDA price reports, the official base level for the fiber strength was shifted upwards from 24.5 to 27.5 grams/tex.

In keeping abreast of the new developments within the HVI measurements and their use by the cotton industry, the DPES pre-season price schedule has been adjusted to incorporate these grade changes as well. Therefore, premiums and discounts for both length uniformity and preparation have been added to this year's price schedule, and the base level for fiber strength has been adjusted to correspond with the new base. In addition, discounts for the other extraneous matter, which were not previously reported in the pre-season price schedule, have been added. Premiums and discounts for the new grades were calculated by averaging the year-end (1999/00 marketing year) weighted averages for these grades with the corresponding premiums and discounts from the 2000 CCC loan schedule. These estimates will be updated for successive years using the same method employed to derive the estimates for the other grades.

It should, however, be noted that there is a low occurrence of both other extraneous matter and preparation in bales classed in the Texas-Oklahoma cotton markets. Thus, discount estimates reported for these qualities may not be very reliable and should be used with caution.

Conclusions

Because of the importance of accurate price reporting to the cotton industry, participants in the marketplace should have access to a timely and reliable source of information that presents an accurate representation of the cotton market. Therefore, the DPES pre-season price schedule for Texas and Oklahoma is calculated each year and is distributed on a request basis to the cotton industry so as to provide an alternative means of examining the market history of quality premiums and discounts. The pre-season price schedule is also posted on the Cotton Economics Research Institute web page, which can be accessed at < www.aeco.ttu.edu/DPES/ >.

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282

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Table 1: 2000 DPES Pre-Season Price Schedule for Texas and Oklahoma.

Color Grade and Staple Premiums and Discounts in Points/lb.[a]										
					Staple Length					
		26 - 28	29	30	31	32	33	34	35	36	37+
C o l o r G r a d e	11	-1089	-886	-627	-418	-215	-19	170	350	521	684
	21	-1089	-886	-627	-418	-215	-19	170	350	521	684
	31	-1120	-921	-771	-456	-256	-61	125	303	471	477
	41	-1208	-1016	-764	-564	-369	-181	Base	172	334	488
	51	-1346	-1167	-925	-733	-547	-368	-196	-33	120	266
	61	-1528	-1363	-1134	-1044	-779	-612	-452	-301	-159	-25
	71	-1746	-1597	-1383	-1217	-1056	-902	-756	-618	-490	-369
	12	-1184	-989	-736	-534	-337	-147	36	211	376	533
	22	-1184	-989	-736	-534	-337	-147	36	211	376	533
	32	-1214	-1022	-875	-571	-376	-188	-8	164	327	332
	42	-1299	-1115	-870	-675	-486	-304	-129	37	194	343
	52	-1434	-1260	-1025	-839	-659	-485	-319	-161	-13	127
	62	-1610	-1451	-1228	-1140	-884	-722	-567	-421	-284	-155
	23	-1376	-1193	-955	-765	-580	-401	-229	-65	90	239
	33	-1404	-1223	-1086	-799	-616	-439	-270	-108	45	51
	43	-1484	-1311	-1080	-897	-681	-548	-384	-228	-80	61
	53	-1611	-1448	-1227	-1052	-882	-719	-563	-415	-275	-143
	63	-1778	-1627	-1418	-1335	-1094	-941	-796	-658	-529	-408
	34	-1631	-1465	-1339	-1076	-908	-746	-591	-442	-301	-296
	44	-1705	-1545	-1334	-1166	-1003	-846	-695	-552	-416	-287
	54	-1826	-1676	-1469	-1309	-1190	-1003	-860	-724	-596	-475

Micronaire Differences

Mike Range	Disc.
< 24	-1036
25 - 26	-882
27 - 29	-642
30 - 32	-394
33 - 34	-277
35 - 49	Base
50 - 52	-354
≥ 53	-508

	Level 1	Level 2
Bark	-363	-1131
Preparation	-803	-1734
Other Ext. Matter	-603	-791

Leaf Grade Differences

Leaf Grades	Prem./ Disc.
1	84
2	84
3	72
4	Base
5	-128
6	-309
7	-534

Uniformity Differences

Uniformity	Disc./ Prem.
< 77	-63
78	-50
79	-37
80	-9
81	Base
82	9
83	32
84	45
85	59
> 86	72

Strength Differences

Grams/Tex.	Disc./ Prem.
18	-290
19	-141
20	-129
21	-117
22	-88
23	-74
24 - 25	-63
26	-7
27 - 28	Base
29	7
30	18
31	40
≥32	57

[a]100 points = 1 cent