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AN ESTIMATED 2003 TEXAS-OKLAHOMA PRE-SEASON PRICE SCHEDULE BASED ON MARKET HISTORY

Dane Sanders, Sukant Misra, and Don Ethridge
Cotton Economic Research Institute
Department of Agricultural and Applied Economics
College of Agricultural Sciences and Natural Resources
Texas Tech University
Lubbock, TX

Introduction

The Daily Price Estimation System (DPES) is a computerized, econometric price analysis system that is maintained and operated by Texas Tech University's Cotton Economics Research Institute, Department of Agricultural and Applied Economics. The DPES uses sales of cotton from electronic cotton markets to estimate and report prices and quality premiums and discounts for various quality combinations in West Texas and East Texas/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 allocation of dividend payments of marketing associations to forward contract pricing. 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.

DPES Pre-Season Price Schedule

Based on market history, the Cotton Economics Research Institute has developed a method of estimating a price schedule for the upcoming marketing year. This schedule is meant to serve as an additional pre-marketing year price discovery tool. 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.

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 (2002), 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. This pre-season price schedule may be used to provide buyers and sellers with an overall picture of the spot cotton market in Texas and Oklahoma.

Conclusion

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 additional price information to examine the market history of quality premiums and discounts. The pre-season price schedule is also posted on the Cotton Economics Research Institute web page (http://www.aeco.ttu.edu/DPES/).

Note

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Carr, C. and D.E. Ethridge. "Evaluation of CCC Loan Premiums and Discounts for the Texas and Oklahoma Cotton Market." Texas Tech University Department of Agricultural and Applied Economics Cotton Economics Research Publication No. CER-96-2.

Table 1. 2003 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+
	11	-798	-662	-521	-390	-265	-145	19	82	173	263
	21	-803	-667	-526	-396	-270	-151	22	85	167	257
	31	-808	-672	-545	-402	-276	-157	16	79	160	230
	41	-838	-704	-566	-437	-313	-195	Base	62	122	206
C	51	-929	-799	-664	-538	-418	-304	-196	-95	-1	86
o	61	-1128	-1007	-880	-774	-650	-543	-441	-347	-258	-178
l	71	-1414	-1305	-1190	-1083	-981	-884	-792	-707	-628	-555
o	12	-909	-776	-640	-514	-393	-277	-168	-65	30	117
r	22	-910	-777	-641	-515	-394	-278	-169	-66	29	116
	32	-933	-803	-680	-542	-422	-307	-199	-97	-3	65
	42	-980	-851	-718	-595	-476	-364	-257	-157	-64	20
	52	-1115	-993	-865	-747	-634	-525	-424	-328	-240	-158
G	62	-1318	-1204	-1085	-986	-869	-769	-673	-584	-502	-426
r	23	-1037	-911	-780	-659	-543	-432	-327	-229	-137	-54
a	33	-1067	-941	-825	-693	-577	-468	-364	-267	-176	-111
d	43	-1143	-1020	-894	-777	-660	-558	-457	-362	-275	-194
e	53	-1244	-1126	-1004	-891	-783	-680	-583	-491	-407	-330
	63	-1549	-1444	-1334	-1243	-1136	-1043	-955	-873	-798	-727
	34	-1263	-1146	-1036	-913	-806	-703	-606	-516	-432	-371
	44	-1428	-1319	-1205	-1099	-997	-900	-809	-723	-643	-570
	54	-1590	-1487	-1378	-1279	-1188	-1092	-1006	-925	-851	-782

Micronaire Differences

Mike Range	Disc.
< 24	-406
25 - 26	-344
27 - 29	-248
30 - 32	-150
33 - 34	-91
35 - 49	Base
50 - 52	-152
> 53	-216

Leaf Grade Differences

Leaf Grades	Prem./ Disc.
1	62
2	47
3	28
4	Base
5	-37
6	-81
7	-132

	Level 1	Level 2
Bark	-209	-201
Preparation	-666	-782
Other Ext. Matter	-556	-579

Uniformity Differences

Uniformity	Disc./ Prem.
< 77	-29
78	-22
79	-15
80	-7
81	Base
82	7
83	15
84	18
85	15
> 86	18

Strength Differences

Grams/Tex.	Disc./ Prem.
18	--
19	--
20	-131
21	-106
22	-81
23	-61
24 - 25	-36
26	-12
27 - 28	Base
29	3
30	5
31	8
>32	10

[a]100 points = 1 cent