

Report on Fats and Oils

Leverage at Work in Cottonseed Oil Market

OF THE THREE principal food fats produced in this country, cottonseed oil has presented—and will probably continue to present—the greatest challenge to the analyst. We discussed this market in the January issue of this publication and pointed out that the principal price-determining factor was the size of a relatively small residual in the supply-demand picture. After supplies have been calculated and the anticipated exports and “fixed” domestic demand are subtracted from them, the quantity which is left represents the amount of cottonseed oil available for consumption in competitive uses domestically. The size of this residual availability determines how competitive the price of cottonseed oil must be relative to other food fats in order that this quantity of oil will be consumed. The tricky part of it is that small changes in production, exports, or fixed demand have a magnified effect on this residual.

The past three months have afforded an excellent example of this “leverage” at work. During that period, estimates of cottonseed oil production have been revised upward slightly, and those of exports have been revised downward. Both changes worked in the direction of increasing the quantity available for competitive uses at home (sometimes, with luck, changes like these offset each other), and between them they had a tremendous impact on price.

Before going on, we might mention that we have used as a measure of the fixed domestic demand that quantity of cottonseed oil which is consumed in winterizing¹ and “other edible”² products. This is based on the general belief that it is in the line of salad oil products that cottonseed oil is least likely to be replaced by soybean oil.³ At any rate the amount of cottonseed oil consumed in these two uses has shown a remarkable insensitivity to price in recent years. When it comes to the nonfixed, or *competitive* demand for cottonseed oil, we use as a measure its consumption in *shortening and margarine*. It is in this area that substitution of soybean oil is most likely to occur, and the quantity of cottonseed oil consumed in these products is demonstrably related to the price difference between cottonseed and soybean oils.

Revising Estimates

Three months ago we estimated that 1,400 million lbs. of crude cottonseed oil would be produced in the crop year beginning October 1957 and that exports would be 350 million lbs., leaving 1,050 million lbs. for domestic use. (We assumed that ending stocks would be unchanged from the year before.) Of these 1,050 million lbs. we guessed

¹ A small allowance is made for the amount of oil estimated to be winterized for export.
² Terminology of U. S. Census Bureau in Monthly Report M-28-2, “Fats and Oils—Consumption by Uses.”
³ In some salad oil uses, peanut, olive, or corn oils may serve in place of cottonseed oil, but when imports are taken into consideration, total supplies of these items do not appear to change much from year to year.

that 115 million would be lost in the refining process and that 685 million would be required to satisfy the fixed domestic demand, leaving only 250 million lbs. available for consumption in shortening and margarine.

Now let us look at what has happened since then. First of all, it developed that the 1958 soil bank sign-up in cotton was very large, and it began to appear that the amount of cottonseed needed for planting the 1958 crop would be diminished, leaving more for processing into oil and meal. Secondly, Census Bureau reports on mill inventories of cottonseed began to suggest that the 1957 production of cottonseed was slightly underestimated. Influenced by these developments, we are inclined now to estimate oil production at 1,472 million lbs., an increase of about 5.1% above our earlier estimate. The next thing to enter the picture was cheap peanut oil from Africa and Argentina, which provided serious competition for our cottonseed oil in European markets and forced analysts to lower their ideas on exports. We have done likewise and are now placing exports at 280 million lbs., a reduction of 20% from the estimate of 350 million lbs. we made in January. In addition, we are now estimating that stocks of cottonseed oil at the end of the crop year will be 10 million lbs. lower than at the beginning, making this amount available for consumption.

Now with a production of 1,472, exports of 280 and a decrease in stocks of 10, we have a figure of 1,202 million lbs. for domestic disappearance. Finally, based upon refining losses actually realized so far in the year, we have lowered our figure for total refining losses from 115 to 105 million lbs., a change of about 8½%. Leaving the estimate for fixed demand unchanged at 685 million lbs., we now end up with 412 million lbs. available for use in shortening and margarine, compared with our earlier estimate of only 250 million lbs. Thus by increasing the estimate of production by only 5%, decreasing the export figure by 20%, changing refining losses by 8½%, and making a small change in ending stocks, we have effected a 65% increase in the quantity available for use in margarine and shortening! That’s the way it is when you’re dealing with residuals.

Decline in Cottonseed Oil Price

The price difference between cottonseed oil and soybean oil has reacted sharply to this indicated increase in the amount of cottonseed oil available for competitive uses, and the price of the nearby cottonseed oil future at New York has declined from about 5.7¢/lb. over crude soybean oil to only 4.3¢/lb. over. (It has not helped any to have soybean oil itself also going down, and the total decline in cottonseed oil was about 2¢/lb.) We shall not conjecture whether this decline is sufficient to reflect accurately the changed supply-demand outlook or whether it is already excessive. We shall however discuss some figures relevant to the subject.

If one examines the total of all raw materials consumed in the manufacture of shortening (except lard, tallow, and vegetable stearine), he finds that cottonseed oil made up 25.0% of this total in the 1956-57 crop year and 20.3% in the first four months of this one. The lowest it has been was 17.1% in January of this year, when the high price of cottonseed oil was having its impact on consumption.

1957-58	Price CSO* over SBO ^b ¢/lb.	A	B	C	D	E	F	G	H	I
		All fats and oils in shortening	Lard, tallow and vegetable stearine in shortening	A - B	CSO in shortening	D/C (%)	All fats and oils in margarine	CSO in margarine	G/F (%)	D & G
		million lbs.	million lbs.	million lbs.	million lbs.		million lbs.	million lbs.		million lbs.
Oct.....	3.6	178.1	54.1	124.0	26.6	21.4%	111.4	18.0	16.1%	44.6
Nov.....	4.5	169.5	62.2	107.3	24.9	25.2%	104.8	15.7	15.0%	40.6
Dec.....	5.3	151.9	52.8	99.1	19.6	19.8%	108.9	15.7	14.4%	35.3
Jan.....	5.5*	176.8	59.1	117.7	20.1	17.1%	121.3	17.7	14.6%	37.8
Oct.-Jan.....	.....	676.3	228.2	448.1	91.2	20.3%	446.4	67.1	15.0%	158.3
Feb.-Sept.....	.....	1173.7*	481.8*	691.9*	139.3*	20.15%*	778.6*	114.4*	14.7%*	253.7*
Total 1957-58.....	.....	1850.0*	710.0*	1140.0*	230.5*	20.2%*	1225.0*	181.5*	14.8%*	412.0*
Total 1956-57 for comparison.....	.....	1837.1	700.0	1137.1	283.6	25.0%	1171.3	263.2	22.4%	546.8

* Estimated.
^a Nearby future price, New York.
^b Crude, F.O.B., Midwest mills.

B-C is BEST!

Year In and Year Out Day In and Day Out

Most edible oil refiners have found this
statement true over the years

IF you want....

- economical bleaching
- less FFA rise
- greater stability
- less filter cloth replacement
- better clay uniformity

*In other words
Better-Cheaper Bleaching*

USE B-C



BENNETT-CLARK CO., Inc.

P. O. Box 951

NACOGDOCHES, TEXAS

(February figures are not available at this writing.) So far as margarine is concerned, cottonseed oil made up 22.4% of all fats and oils used in its manufacture in 1956-57, and 15.0% so far in this year. This figure reached its lowest level in December when it fell to 14.4%, then rose slightly to 4.6% in January. We might now estimate that the total amount of fats and oils (except lard, tallow, and vegetable stearine) used in making shortening this year will be 1,140 million lbs., and the total of fats and oils used in margarine will be 1,225 million lbs. With these figures we can construct the table shown at the bottom of page 8.

The fact that the figure in the lower right hand corner, representing the total amount of cottonseed oil consumed in margarine and shortening, is precisely equal to the 412 million lbs. we estimated earlier would be available for such use is no accident. We made it come out that way, in order to see approximately what amount of cottonseed oil would be available for this type of consumption in the February-September period. From the above table it appears that during this period cottonseed oil could make up about 20.15% of all the fats and oils (except animal fats and vegetable stearine) used in shortening and about 14.7% of all fats and oils used in margarine. These percentages would be below their level of October-November, above their level of December-January, and just a shade below their averages for the whole October-January period. You may play with the figures and draw your own conclusions.

It's an easy thing to build a case for either an advancing or declining cottonseed oil price. All you have to do is make a few relatively small adjustments in estimates of production and exports, and you can work quite a change in the all-important residual available for competitive uses. We shall undoubtedly have to change our own estimates again, and we are inclined at the present time to suspect that, if we do, it will be in the direction of making this residual smaller. There are some who believe that a figure of 280 million lbs. for exports may prove to be conservative.

R. D. WILLEMIN SR.

Merrill Lynch, Pierce, Fenner, and Smith
Chicago, Ill.

On the Educational Front

Continuation of a lecture program in chemistry at five of the top universities in the United States was announced by the Glidden Company, Cleveland, O. The program will be sponsored at the University of Illinois, Ohio State University, University of Michigan, Johns Hopkins University, and Case Institute of Technology. Also included in this year's program will be the University of Toronto.

Dr. John Gaillard, management counsel, will hold his next five-day seminar on industrial standardization in New York City, June 23-27, 1958. The seminar is intended to assist top management in establishing an administrative set-up and procedure for handling of standardization work in the individual company, training staff men in the function of the standards engineer, and teaching the art of writing specifications.

Fatty Acids Rise

Production of fatty acids of types previously reported by the Fatty Acid Producers' Council totalled 32.1 million lbs. for January 1958 as compared to 30.6 million lbs. for December 1957 and 33.9 million for January 1957. Disposition was 30.8 million lbs.

This month, for the first time, the Council is also reporting fatty acids produced from tall oil and having less than 2% rosin. Some 6.0 million lbs. of this product increase total fatty acid production to 38.1 million lbs. and total disposition to 36.2 million lbs.

Six companies are now submitting to the Council reports on fatty acids produced from tall oil. It should be noted however that a product containing more than 2% rosin, although included in Department of Commerce figures for tall oil fatty acids, is not now included in Council figures.