

Commodity Prices as Related to Vegetable Oil Marketing, Prices and Utilization¹

DAVID M. BARTHOLOMEW, Soybean Complex Specialist, Merrill Lynch, Pierce, Fenner & Smith
350 North Michigan, Chicago, Ill.

Seven months ago, at the AOCs Chicago meeting (on Sept. 30), I spoke of the probability that this season would see soybean oil prices become moderately easier. Supplies were apparently going to be more ample, but not overly burdensome, so that prices should stay somewhere in the median level between the extremes of 7 cents and 14 cents which were experienced from mid 1969 to early 1970. Then before October was over, we saw 15 cents. It seemed that once again a market prognostication had been promptly obliterated. That occurrence, however, turned out to be of short duration as it was associated primarily with the delay in soybean harvest due to weather factors. Since then we have seen a rather steady decline toward the median level as forecast.

What has happened in some of the other fats and oils during the seven months? Sunflower oil moved up sharply in world markets as virtually every producing country reported disappointing production. Even Russian production fell below the previous year instead of having an equal amount or slightly larger as most observers had supposed. Some improvement in southern hemisphere production is apparent in crops being harvested there, but not as much as expected earlier.

Peanut oil prices overseas moved dramatically higher due to serious shortages in Central Africa's production. India did manage to set a new record output, but certainly not by such a wide margin as early estimates suggested. However, crops now being harvested in South Africa, Argentina and Brazil are thriving and should do much to alleviate the situation.

Cottonseed oil has been in good demand to fill the peanut oil gap. The Russian crop was up appreciably, the U.S. crop was off from earlier estimates, while Mexico and Brazil fell under the influence of poor weather.

Rapeseed production in Canada last season about doubled the previous year's crop. The European crop made some recovery from the very low output of 1969. Canada now leads the world in rapeseed production, and the planting intentions report shows farmers there expect to increase the acreage this year by 29%. Some increases are also expected in Europe. Palm oil and coconut oil supplies are increasing significantly due to expansion in producing area and more favorable weather. Fish oil supplies are likewise building as a result of improved fish catch results.

Lard production increased significantly in the U.S. and Europe, as expected. But yield per hog was down due to the high cost of feeds. This also was expected, and as a result, lard prices have not fallen as sharply as they might have. Another price supporting factor has been the substitution, where possible, of lard for vegetable oils. Lard price, which traditionally fluctuates from 2 cents over soybean oil to 2 cents under, has recently slipped from a premium to a discount of 1/2 to 1 cent.

Corn oil is strictly a derivative of the corn milling industry. Its supply depends upon the amount of corn processed for other products, instead of the reverse. Its demand has increased in recent years, especially for the margarine trade. In recent months the price soared to about double the price of soybean oil as users booked ahead when they saw corn prices advance so strongly, but now both corn and corn oil prices have settled back to more reasonable levels.

Stocks of the four leading fats and oils used in making salad oil, shortening and margarine have been building since last fall. These are soybean oil, cottonseed oil, corn oil and lard. Table I shows the end-of-month totals for the past two years, beginning prior to the bullish market which started in the summer of 1969, in million pounds.

During this period cottonseed oil stocks have declined as the government inventory was liquidated and the cotton crop declined. Lard stocks increased as hog production increased, but stocks would have increased much more were it not for a surge in exports to the U.K. under a government subsidy program. This enable us to regain a market which had encountered serious inroads by the subsidy program of the European Common Market. Soybean oil production increased with an expansion in crushing capacity.

Meanwhile, domestic consumption was curtailed late last year into the early part of this year as the economy slowed down, conservative spending attitudes developed, and attractive returns for savings accounts developed. We can see a pickup in domestic demand now taking place. The economy is in a recovery phase, the public is more willing to spend money, and the savings incentive is being reduced.

Soybean oil exports are gaining on last season, largely due to substantial purchases by Yugoslavia which had a serious shortage of sunflower oil. PL 480 purchases by several countries will be larger than originally thought because the money granted will buy more soybean oil with prices lower. Also export sales under CCC credit provisions will continue to be large thru this season as there is no statutory limit on CCC credit beginning July 1 of this year. Next season's exports will likely be smaller however, if other country's oilseeds crops turn out better.

Soybean Meal

It is impractical to consider the soybean oil situation without also looking at the soybean meal picture. A crusher must move the meal produced. It is physically impossible to store meal for any length of time, whereas soybean oil is readily stored for an extended period. As long as the meal can be sold at a reasonable return, he will keep crushing at a high rate even if it means storing part of the oil produced. He certainly will not, however, keep crushing at that rate if it seriously jeopardized meal price and if he has to build stocks of unsold oil. For this

TABLE I

Month	Year		
	1969	1970	1971
Jan.	1,003	1,040	1,081
Feb.	1,035	1,072	1,136
Mar.	1,188	1,039	1,117
Apr.	1,216	1,101	
May	1,179	1,153	
June	1,167	1,036	
July	1,133	986	
Aug.	1,096	947	
Sept.	919	784	
Oct.	967	816	
Nov.	984	1,007	
Dec.	1,040	1,065	

¹ Presented at the Annual Meeting of the American Oil Chemist's Society, Houston, May 1971.

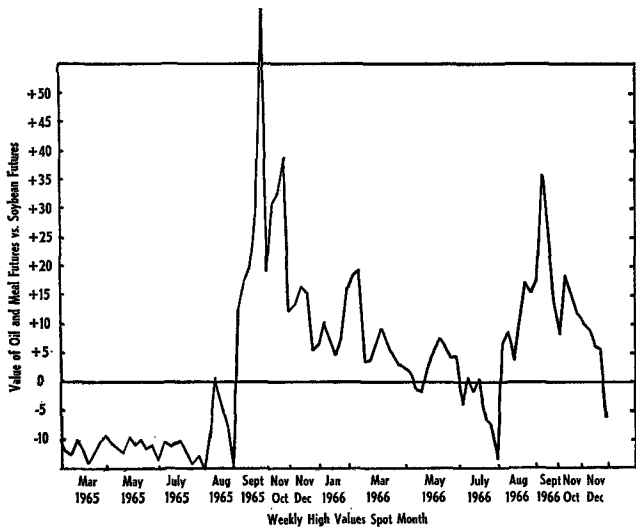


FIG. 1

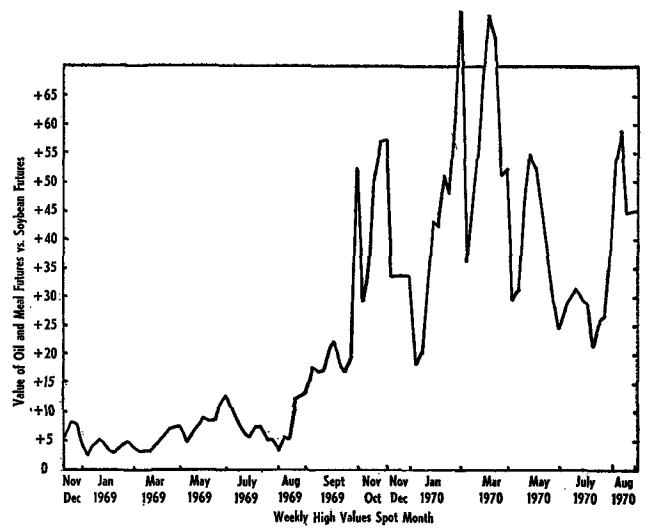


FIG. 3

reason we now see the crushing rate diminishing. Broiler numbers have trailed last year's figures by around 6% since February; they are the largest single consumer of soybean meal. Hog numbers have been high, however, so they have helped keep the meal demand from falling off sharply. Fishmeal prices have been too high to be competitive, but other protein sources have certainly kept the lid on soybean meal prices. Now we are entering a period of diminishing hog numbers and at the same time fishmeal prices are gradually coming down. This could add up to much lower return for soybean meal, but we think not. With the diminishing hog supply in the period ahead, coupled with the indicated better returns for cattle, it is probable that broiler demand will pick up which should translate into better demand for soybean meal. We must also consider the probability of increased production of sunflower seed, rapeseed and peanuts in the northern hemisphere if the weather permits, and these yield a higher percentage of oil than soybeans. Therefore, we would expect that the incentive to crush beans will most likely shift more in favor of the meal demand than for oil demand. This should be true for both domestic and foreign crushers.

Soybean Crushing Margin

Crushers, of course, are in the business of turning seeds into oil and meal. They have invested capital into the installation, so they would prefer to maximize the utilization of that investment. Sometimes, the profit return is favorable and sometimes it is not. Occasionally it is

extremely good or extremely poor. The best returns are seen when demand is good for both oil and meal, for seldom can one or the other carry the full load of profit return. And obviously the best returns are seen when the demand for both products is greater than the available capacity to produce them. When this occurs, however, the industry starts an expansion program and usually the tendency is to over-expand. Then there is a period when profits may be poor, until demand catches up with the new capacity level.

The last time when profits were extremely poor for an extended period was prior to September of 1965. They were extremely good from the fall of 1969 to all of 1970. During this latter period there was a large surplus of soybeans which had been built up during the high support price years of 1966 thru 1968. Then it developed that demand for soybean oil and meal increased rapidly in 1970 as the world supplies of other oils and proteins fell short of usual production. Now we have sharply expanded crushing capacity, both here and abroad, and the profit margin is declining. Aiding in this decline is the almost total elimination of soybean supply, so soybean prices can more readily move in the direction of product values.

In Figures 1 to 4 we show a continuation chart of the soybean crushing spread as expressed to the relationship of the combined value of soybean oil and meal futures vs. soybean futures for the spot month. This is not an accurate picture of actual cash return for any given soybean crushing plant because soybean futures are based

(Continued on page 273A)

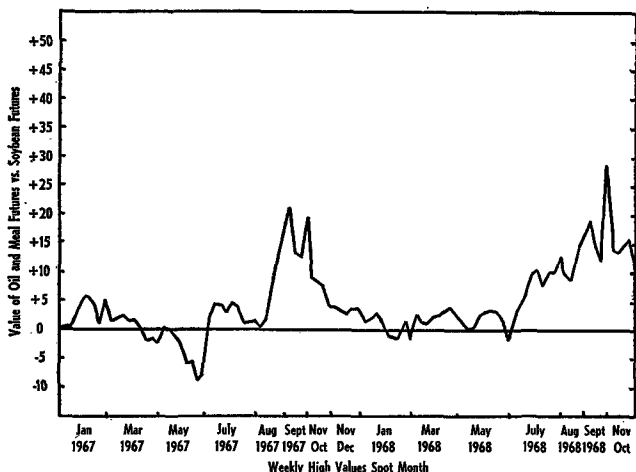


FIG. 2

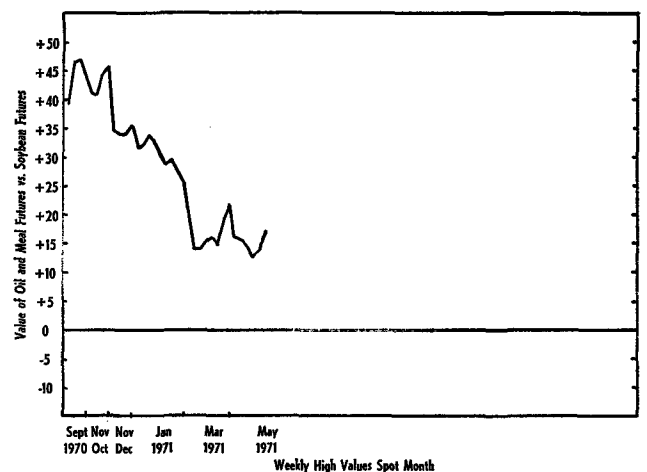


FIG. 4

• *Fats and Oils Report . . .*

(Continued from page 256A)

on the value of beans in store at Chicago, while product futures are based on Decatur, Illinois values, but the trend representation is accurate. It should be mentioned, however, that crushers customarily use futures as a hedge so that whatever profits they realize from futures transactions become a part of the total profit equation. Thus it becomes possible for a crusher, at times, to secure only a modest profit, or no profit, from the actual crushing operation, but when the futures profit is added on there is a satisfactory return indeed.

The 1971 Crop Outlook

More than the usual uncertainty surround the soybean situation as we approach the 1971 crop. The carryover from the current season has been forecast to be only about 75 myn bushels on September 1, and new crop does not become available until late September. This could be a very tight situation. But more recently a carryover of at least 100 myn bushels has appeared to be more realistic since crush and export rates have fallen back from those seen earlier in the season. Now if part of this amount were in government hands it would be of no concern, but currently the government inventory has been liquidated. So all of it is in free supply and the grain trade will be willing to carry the excess into new crop year only at a carrying charge discount under November futures if new crop production looks adequate for the indicated demand.

There is one way, however, that the grain trade may escape the obligation of carrying the excess supply into new crop. It works this way: almost 23 myn bushels are still held by farmers in the re-seal loan program from the 1967 and 1968 crops. On July 31 those farmers holding title to those beans must decide whether to pay off the loan plus interest, or forfeit the beans to the government. If they can see no economic advantage to paying off the loan, they surely will surrender title. (Decision date for 1969 and 1970 crops in the loan program is June 30, but the break-even point on these is much lower due to a lower loan value and less interest cost, so they most certainly will be redeemed by farmers and sold into the market.) Meanwhile, much more will be known about the 1971 crop outlook. If the crop looks short of needs, then the market will be anxious to get all the supply into free hands and will bid up the price to keep them out of government inventory. If the crop looks ample, then there is no reason for the market to want any extra amount from previous years.

We can expect some additional acreage to be sown to soybeans, above the 3.2 myn acres increase shown in the March planting intentions report. In the first place, prices of new crop futures have never in the past 15 years been so high before planting time when farmers could be influenced to do something about it. Secondly, the new government farm program allows farmers more latitude to change between various crops, and some modifications in the program have been made since the planting intentions report was assembled. And third, if weather conditions conspire again to promote the probability of serious corn blight damage, there will likely be some corn acres switched to soybeans since beans can be planted later than corn. Therefore, we assume that soybean acreage will be increased by 4 to 5 myn acres over last year, which would be a total of about 48 myn acres planted.

HAHN LABORATORIES

Consulting and Analytical
Chemists

1111 Flora St. P.O. Box 1177 Columbia, S.C. 29202

This would mean about 47 myn acres harvested, which would produce 1,270 myn bushels at 27 bushels per acre, vs. 1,136 myn last year. We could even see a reduction in demand for the reasons stated earlier, if other oilseed crops in other countries expand. Partially off-setting this, however, will be less lard competition, better broiler demand meaning better meal demand, and the possibility of less cottonseed oil and meal competition due to drought in part of the cotton area if that condition continues.

Thus, it is understandable why the market has been acting so nervously in past weeks. The situation is extremely sensitive and could respond with considerable vigor, depending upon the events of the next 60 to 90 days.

• *Local Section News . . .*

Northern California Section

The Northern California Section of the AOCS has elected new officers for 1971. They are:

Chairman—Glenn Fuller, Western Regional Research Laboratory

Program Chairman—D.A. Chace, Safety Stores, Inc.

Secretary—F.R. McKenna, CPC International, Inc.

Treasurer—Edward Kirschner, Pacific Vegetable Oil Corp.



- Convenient bench-scale units provide complete facilities for applying heat and pressure to any chemical reaction.
- One and two liter sizes.
- Pressures to 2000 psig.
- Temperatures to 350° C.
- Automatic temp. control.
- Available in all principal corrosion resistant alloys.

Ask for Specification 4500

PARR INSTRUMENT COMPANY

211 Fifty-Third St.

Moline, Illinois 61265