

Supply and demand economics

The following article was prepared in late November 1988 by David M. Bartholomew, assistant vice president of Merrill Lynch Futures Inc., Chicago, Illinois.

With each month's revision of U.S. Department of Agriculture (USDA) Supply/Demand reports, it is interesting to watch projections of annual price ranges. It is popular opinion that when the price goes up or down from one month's report to the next, it is related to demand projections, and especially export demand, because demand is likely to be most responsive to price. Classic studies of economics draw one to the conclusion that when price goes down, demand should be stimu-

lated, and when it goes up, there would be a slowing of demand.

Such an appraisal should be valid before the season begins. Later, however, it should be understood that price and demand may go in the same direction, i.e., if actual consumption is exceeding earlier demand predictions, there can be a firming of prices, or conversely, lower consumption statistics may depress prices.

Unfortunately, it doesn't always work that way. Even more unfortunately, traders and analysts fail to

realize this. A classic illustration occurred in the season that has just ended. Table 1 shows the figures, with soybean meal in thousand short tons, followed by price range estimates in dollars per ton.

An examination of these figures reveals the following:

- Domestic use predictions changed very little, yet price went up substantially.

- Export predictions rose early in the season by 1.5 million tons, then dropped by half that amount.

- Despite these factors, average prices advanced by 40% and held to the end of the season even though consumption did not total the amounts predicted earlier when prices were lower.

- Low prices may have little influence on stimulating demand. High prices, likewise, may do little toward retarding demand.

- Many other things are more important than price in changing demand, at least for periods of 12 to 18 months in the case of soybean meal. These include animal price, cost of other feeds, interest rates, production in other countries, foreign exchange relationships, and policy changes in major consuming countries such as the USSR in recent months.

Thus, it must be concluded that it can be misleading to attempt a simplistic analysis of USDA Supply/Demand projections in relation to season average prices provided therein. Obviously, the economists who prepare those reports are deriving consumption changes from something other than price projections, as well they should. Being aware of this can protect against erroneous conclusions made by media reporters, traders and so-called market analysts who want only simple answers in a very complicated market.

Table 2 shows the path of these reports for the current season. Obviously, nothing has changed in USDA methodology. The same conclusion is still in order.

TABLE 1

USDA Supply/Demand Reports for Soybean Meal, 1987-88 Season^a

Month	Domestic	Exports	Carryover	Price estimates
	(thousand short tons)			(dollars per ton)
May (1987)	21,250	6,000	300	145-170
June	21,050	6,500	250	150-175
July	21,000	6,700	265	150-170
August	21,100	7,250	300	150-170
October	21,060	7,300	300	150-175
November	21,200	7,100	300	150-175
December	21,000	7,500	300	175-205
January (1988)	20,950	7,200	300	175-205
February	20,950	7,000	300	175-195
March	21,050	6,700	300	175-195
April	21,050	6,700	300	185-200
May	21,050	6,700	300	195
July	21,050	6,650	300	225
August	21,300	6,650	300	225
September	21,350	6,600	300	223
October	21,300	6,750	250	222
November	21,396	6,750	154	222

^aNote: No change in months omitted. Unofficial totals of actual consumption: 21,195 for domestic, 6,880 in exports.

TABLE 2

USDA Supply/Demand Reports for Soybean Meal, Current Season

Month	Domestic	Exports	Carryover	Price estimates
	(thousand short tons)			(dollars per ton)
May (1988)	21,000	6,500	300	180-230
June	21,000	6,500	300	180-230
July	20,050	5,500	300	225-275
August	19,150	4,600	300	235-285
September	19,500	4,500	300	235-285
October	20,000	4,200	300	225-275
November	20,000	4,350	300	235-275