



# WEEKLY OUTLOOK

Department of Agricultural Economics  
College of Agriculture  
University of Illinois at Urbana-Champaign

December 5, 1984

## OPTIONS UPDATE

IN OUR LETTER OF NOVEMBER 7 WE INTRODUCED a discussion of soybean options. We suggested that options offered producers two alternatives in their pricing program - buying puts or selling calls. At that time (November 2), March soybean futures were at \$6.505. The premium on a March put option with a \$6.50 strike price was \$.29 per bushel. The premium on a March call option with a \$6.50 strike price was \$.30 per bushel.

On November 30, March futures closed at \$6.22. The premium on the put option with a \$6.50 strike price had increased to \$.385 and the premium on the call option had declined to \$.11. The producer who had bought a put option on November 2 has been protected from the price decline. If that producer now wanted to sell soybeans, he or she could exercise the option to sell March futures at \$6.50 and immediately buy that futures back at \$6.22 for a profit of \$.28. The producer would then sell the soybeans in the cash market at approximately \$6.00 per bushel, for a net price of \$6.28 (minus commission fees). The net price would be further reduced by the cost of the option, or \$.29. The final net price then would be \$5.99. If the producer sold the beans for March delivery at \$6.12 rather than in the spot market for \$6.00, the net price is \$6.11 as outlined in the November 7 letter. However, additional storage costs would be subtracted from the price.

The price decline since November 2 has been almost identical to the premium on the put option. The producer who bought that option and now exercises that option is not any better off than the producer who has held inventory unpriced. Both would have been better off selling soybeans on November 2.

Rather than exercise the put option, the producer could elect to sell that option at a premium of \$.385 for a gain of \$.095 (the premium when purchased was \$.29). That \$.095 would then be added to the current price of \$6.00 for a net of \$6.095, or \$6.215 for March delivery (minus commissions). The higher price compared to exercising the option is a result of the improvement in the basis. As a general rule, offset of the option rather than exercise will be more attractive because of the additional commission fee associated with taking a position in the futures market when the option is exercised.

STATE • COUNTY • LOCAL GROUPS • U.S. DEPARTMENT OF AGRICULTURE COOPERATING

THE ILLINOIS COOPERATIVE EXTENSION SERVICE PROVIDES EQUAL OPPORTUNITIES IN PROGRAMS AND EMPLOYMENT.

What about the producer who sold the call option? To price soybeans, that producer would now buy a call option (to offset the original purchase) at a cost of \$.11 per bushel. That cost is subtracted from the original premium of \$.30 which the producer received at the time the option was sold, for a net gain of \$.19. That \$.19 is added to the current price of soybeans (\$6.00) for a net price of \$6.19 (minus commissions). If the producer sells the soybeans for March delivery at \$6.12, the net price is \$6.31, minus storage costs and commissions.

*Another Use of Options.* The current soybean basis is quite strong, 9 cents under January futures in central Illinois. The cost of storing soybeans is relatively high. A less expensive method of speculating on price may be to sell the cash soybeans and replace them with a long position in the futures market. This can be done indirectly with a basis contract or a delayed pricing contract. The producer who does this is speculating on an increase in the price of the futures contract rather than the cash price. Regardless of which method of ownership is chosen, the producer takes the risk of further price declines.

One way to avoid the risk of price decline and still gain from a price increase is to sell the soybeans and buy a call option on, say, March futures. If prices go down, the producer lets the option expire. If prices go up, the producer sells the option at a profit which is added to the selling price of soybeans. In either case, the producer forfeits the premium on the option. On November 30, the premium on a \$6.25 March call option was \$.20. March futures would have to go up \$.20 before the purchaser made a net gain.

The risk of a price decline is partly a function of where prices are now. The less risk, the less attractive the call option.

*Darrel Good*

Issued by *Darrel Good*, Extension Specialist, Prices and Outlook

Cooperative Extension Service  
United States Department of Agriculture  
University of Illinois  
At Urbana-Champaign  
Urbana, Illinois 61801

Official Business  
Penalty for private use, \$300

POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF  
AGRICULTURE  
AGR 101



FIRST CLASS