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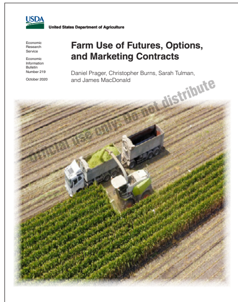

Farm Use of Futures, Options, and Marketing Contracts

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What Is the Issue?

Farm producers must contend with forces beyond their control. Weather, including droughts and floods, can diminish the anticipated output from a field or herd, and changes in product or input prices can decrease anticipated revenues or increase anticipated costs. Farmers may use on-farm strategies, such as commodity diversification, to manage such risks, and they may also draw on Federal risk management support programs, including commodity support programs, Federal crop and livestock insurance, and disaster assistance. Market mechanisms are also available to farmers who can use agricultural derivatives—such as futures and options contracts—and marketing contracts to protect against price fluctuations. These tools can help guarantee producers an established price before harvest.

Futures, options, and marketing contracts each have pros and cons. Strategies to manage risk can vary in key ways: with ranges in upfront costs, flexibility of contract terms, risk of default by the other party; and ease of closing out a contract. This study describes these risk management strategies and describes the use of futures, options, and marketing contracts by producers, with a primary focus on corn and soybeans.

What Did the Study Find?

- In 2016, more than 156,000 farms used marketing contracts and over 47,000 farms used futures or options contracts to hedge price risks. Farmers used futures and options contracts across a range of commodities, with corn and soybeans accounting for the bulk of farmer use. These commodities are the primary focus of this report.
- While just over 10 percent of corn and soybean farmers traded in futures contracts, those who did covered a substantial fraction (over 40 percent) of their production. Similarly, while only 20–25 percent of corn and soybean farmers used marketing contracts, those who did covered over 40 percent of their production with marketing contracts.
- However, few of them (6 percent of corn farms and 8 percent of soybean farms that used futures) hedged all their production through the futures market.
- Farmers often use a portfolio of risk management tools. Those who use marketing contracts are much more likely to use futures and options than farmers who do not use marketing contracts. They are also more likely to invest in on-farm storage of their crops, which facilitates their ability to vary marketing volumes over time.

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- Agricultural futures and options are used most often by larger corn and soybean farms as a means of hedging against potential fluctuations in price. Farm operator age and education are also associated with futures and options use. Nearly 18 percent of college-educated corn and soybean farmers used futures, as did nearly 25 percent of operators who were 35 or younger. Farms with debt are also more likely to use derivatives than farms without debt: among all farms, only 10 percent used futures as compared with over 15 percent for those with debt.

How Was the Study Conducted?

This study is based primarily on data from the 2016 Agricultural Resource Management Survey (ARMS), a large annual survey of U.S. farms. Conducted by USDA's National Agricultural Statistics Service (NASS) and Economic Research Service (ERS), the survey is representative of the 2 million farms in the 48 contiguous States. The survey elicits information on farm production, farm and farm household attributes and finances, and production and marketing practices. ERS added supplemental questions on risk management practices to the 2016 ARMS questionnaire, including questions on the use of futures and options, and linked responses to these questions to other questions—on the use of marketing contracts, commodity mix, farm size, and operator attributes—that appear in each year of the survey.