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Contracts, Markets, and Prices: Organizing the Production and Use of Agricultural Commodities

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Production and marketing contracts cover a growing share of U.S. agricultural production. These formal written contracts are increasingly used in place of spot markets, where commodities are bought and sold for immediate delivery, to set prices for agricultural commodities and market them, as well as to govern product quality, quantity, and production techniques. The expansion of contracting is closely tied to other developments in agriculture, such as increasing farm size, greater demand for customized products, and tighter product monitoring from production through marketing.

What is the issue?

Contracts can provide farmers with important benefits, such as reduced income risks, easier access to credit, or higher prices for products with special attributes. For buyers, contracts can deliver products with desired qualities that reduce processing costs or fulfill consumer demands. But the use of agricultural contracts may also carry costs. They limit farmers' decisionmaking freedom, and they may lead farmers to exchange price risks in the market for unexpected contract risks. By reducing spot market volumes, contracts can increase the risks of trading in spot markets, raising costs and undermining the value of traditional USDA price reports (which are useful only to the extent that they provide information about products moving through the whole system). Finally, some observers argue that contracts allow buyers of agricultural commodities to exploit market power and reduce prices paid to farmers.

This report assesses what we know about agricultural contracting in the United States. It synthesizes existing analyses to evaluate contracting's effects on risk, productivity, market power, and price discovery.

What did the study find?

- Contracts governed 36 percent of the total value of U.S. agricultural production in 2001, up from 28 percent in 1991 and 12 percent in 1969.
- Spot markets still dominate the sales of major grain and oilseed crops like corn, wheat, and soybeans.

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- Contracts dominate poultry, hog, sugar beet, and tobacco markets and cover from a third to a half of fruit, vegetable, cotton, and rice production.
- Contracts are more likely to be used by larger producers and for products with special attributes, such as corn or soybeans with high oil content or animals raised on organic feed.
- While overall data for agriculture show steady expansion in the use of contracts, dramatic shifts can occur quite quickly for specific commodities. Tobacco and hogs each turned to widespread use of contracts in just a few years, and producers expect a sharp expansion of contracting in fed cattle.
- A major benefit of contracts is that they often offer higher prices than farmers could receive in spot markets. Although contracts can be designed to greatly reduce growers' risks from price fluctuations, the study finds that producers may contract mainly to secure higher prices for delivering products with desired (and often higher cost) attributes. Well-designed contracts also often lead to increased productivity, either by cutting production or processing costs or by enhancing product value, with only secondary attention to risks.
- Contract terms may, under some market conditions, allow buyers to impose lower prices on producers. The exercise of market power is of real concern in contract markets, which are often concentrated markets with few buyers. But because contracts can enhance productivity and response to consumer demand, broad actions to ban or limit their use may raise production costs and reduce demand for farm products. Thus, it is important to identify contract terms that extend market power without reducing efficiency.
- Contracting may complicate market price reporting. The growth of contracting has affected USDA's voluntary price reporting program for livestock, resulting in a drop in the number of transactions whose prices are reported. This report looks at the early effects of the government's imposition of mandatory reporting of livestock prices in contract and spot transactions. After overcoming some early transition challenges, USDA mandatory livestock price reports now cover a much larger volume of transactions than the voluntary reports were capturing. Deeper and more accurate livestock price reports have yet to reverse the shift to more widespread contract use, however, because contracts may continue to more reliably tie prices to product attributes.
- Contracting creates an ongoing challenge for government policy. To meet their own food safety, product attribute, and environmental goals throughout their supply chains, processors and retailers can use agricultural contracts to control many farm-level production processes. The expanded use of contracts raises several issues for government regulatory agencies with responsibility for ensuring food safety, food attributes, and environmental control. For example, should contractors bear financial liability for food safety or environmental failures at contractee farms? When should a contract be taken as evidence of compliance with public regulations, allowing regulatory agencies to shift inspection resources to facilities or activities that pose higher risks to health and the environment?

How was the study conducted?

The report relies extensively on data collected through USDA's annual Agricultural Resource Management Survey (ARMS), as well as on predecessor surveys, to provide a comprehensive picture of how contracts are used. The report then synthesizes existing analyses of agricultural contracting to evaluate its effects on risk, productivity, market power, and price discovery. This synthesis makes it possible to arrive at conclusions that no single or small set of studies can support. It also suggests areas where further research would be valuable.