## Introduction

Formal contractual arrangements cover a growing share of U.S. agricultural production. Contracting is closely tied to other features of ongoing structural change in agriculture, including shifts of production to larger farms, increased farm specialization, and greater product differentiation. USDA's Economic Research Service (ERS) analyzes the use of contracting and related developments in agriculture. This bulletin extends two earlier ERS reports that tracked agricultural contracting through 2003. It uses data gathered in USDA's Agricultural Resource Management Survey (ARMS) to update information in the previous reports to 2005. It also explores three new topics on contracting in specific commodities: the expansion of contracting in peanuts and tobacco following changes in agricultural policy; contrasts in the use of production contracts in hog and broiler production; and the use of marketing contracts for major field crops.

This report distinguishes three methods for transferring commodities from farms to the next stages of food production:

- 1. Spot (or cash) markets. In spot markets, producers are paid for their products at the time ownership is transferred off the farm, with prices based on prevailing market prices at the time of sale, under agreements reached at or after harvest. Buyers may pay premiums for products of superior quality, based on factors observable or agreed to at the time of sale. Farm operators control production decisions, such as the types of farm inputs to buy, as well as when and how to apply them. Operators also make financing decisions and marketing arrangements, including finding a seller, determining a price, and delivering the product. Spot markets still govern most farm product transactions.
- 2. Vertical integration. Products can also be transferred through vertical integration, which combines the farm and downstream users of a commodity under single ownership. One example is farmers' collectively owning a cooperative that purchases and provides agricultural inputs, or that markets and sometimes processes agricultural commodities. According to ARMS, about 16 percent of U.S. farms received cooperative refunds or dividends in 2005, and those farms accounted for 36 percent of the value of agricultural production (not all of their production was marketed through their co-ops, of course, and the production that was so marketed could have been transferred through spot market transactions or through contracts). But this report focuses on another type of vertical integration—private ownership that links farms and buying entities. For example, a winery may own and operate vineyards, while citrus processors may own and operate orange groves. Vertically integrated meatpackers own hog farms and cattle feedlots, and dairy farmers may choose to purchase feed or integrate the production of feed onfarm. Under vertically integrated product transfers, markets do not determine commodity prices, and internal decisions affect product transfer. Vertical integration that links farms with processors or retailers is still relatively uncommon.<sup>2</sup>

<sup>1</sup>MacDonald et al. (November 2004), and MacDonald and Korb (January 2006).

<sup>2</sup>The 2005 ARMS asked respondents if they "...were part of a larger firm or corporation, such as a branch of a firm that also processes the agricultural product of the operation?" Affirmative responses covered 0.9 percent of U.S. farms and 5 percent of the value of production in agriculture. The latter statistic overstates the extent of vertical integration between farm production and processing, since farms that are owned by processors do not necessarily send all production to the commonly owned processing plants.

- 3. **Agricultural contracts.** More and more, farm product transactions are organized through agreements between farmers and buyers that are reached prior to harvest (or before the completion of a production stage, as in the case of livestock), and that govern the terms under which products are transferred from the farm. Contracts provide for much closer linkages between farmers and specific buyers than spot markets and may provide the contractor/buyer with greater control of agricultural production decisions. ERS distinguishes two types of agricultural contracts—production and marketing contracts.<sup>3</sup>
  - a. *Production contracts* specify services that the farmer provides for the the contractor, who owns the commodity while it is being produced. The contract specifies: (1) the services to be provided by the farmer, (2) the manner in which the farmer is to be compensated for the services, and (3) specific contractor responsibilities for provision of inputs. For example, farmers provide labor, housing, and equipment under livestock and poultry production contracts, while contractors provide other inputs such as feed, veterinary and livestock transportation services, and young animals. The farmer's payment usually resembles a fee paid for the specific services provided by the farmer, instead of a payment for the market value of the product. Since contractor-provided inputs may account for a large share of production costs, the fee paid to the farmer may be a small fraction of the commodity's value.
  - b. *Marketing contracts* focus on the commodity as it is delivered to the contractor, rather than on the services provided by the farmer. They specify a commodity's price or a mechanism for determining the price, a delivery outlet, and a quantity to be delivered. The parties in a marketing contract agree to its terms before harvest or, for livestock, before transfer. The pricing mechanisms may limit a farmer's exposure to the risks of wide fluctuations in market prices, and they often specify price premiums to be paid for commodities with desired levels of specified attributes (such as oil content in corn or leanness in hogs). The farmer owns the commodity during production and retains substantial control over major management decisions, with limited direction from the contractor, and hence retains more autonomy of decisionmaking than is available under production contracts.

<sup>3</sup>While there can be significant differences among contracts within each type, pragmatic considerations of survey design limit us to two broad types. ARMS questions must be understood by a broad cross-section of producers, and must do so in a limited space. However, we believe that the production-marketing distinction is a powerful one, and so far have not found another two-way classification to be a compelling alternative. Nor have we found a three-way classification that will yield reporting benefits commensurate with the additional burden placed on respondents.