

Farm Business Arrangements

U.S. farms use a variety of business arrangements that link them to other firms and individuals. The extent of these linkages varies by farm type, but they include arrangements to access or control productive resources. The key to agricultural production is the control of assets, but control can be accomplished through renting land and other assets rather than through buying them. Similarly, farms can use hired labor, contract labor, or custom work rather than family labor. Farms may also link to other firms through marketing or production contracts to sell or otherwise remove the commodities they produce.

Accessing Resources

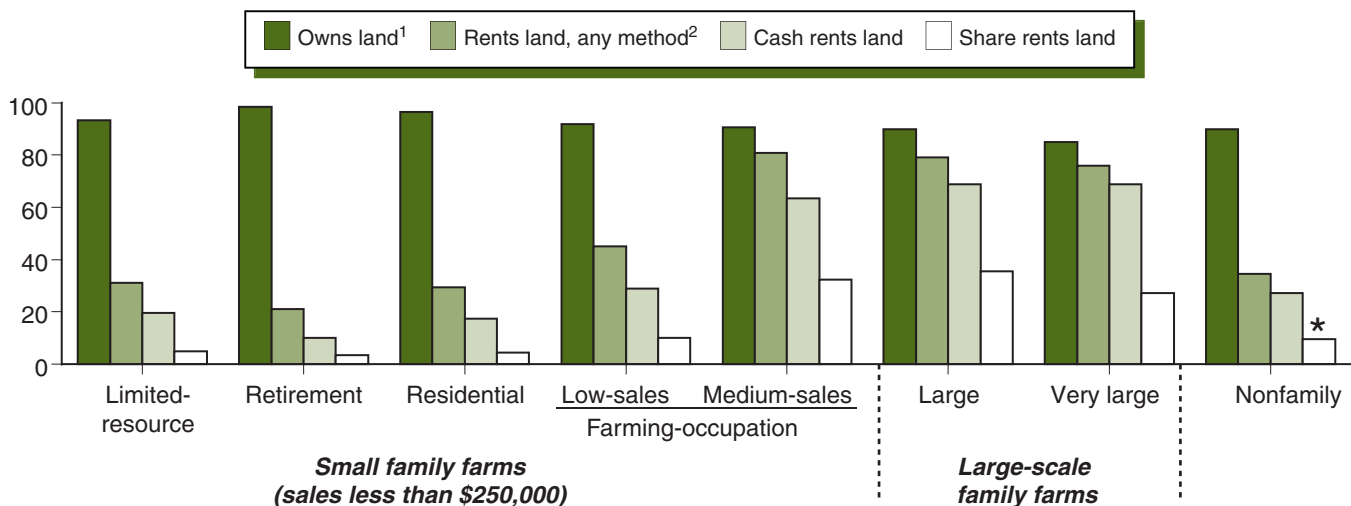
Land ownership is more common than renting in each farm type (fig. 12), with at least 9 out of 10 farms owning land. Renting land, however, is also very common among family farms with sales of at least \$100,000, namely medium-sales farms, large family farms, and very large family farms. Three-fourths of farms in each of the three types rent land. The relatively large share of farms in these types reporting share renting—between 27 and 36 percent—reflects their heavy specialization in cash grains. Thirty-nine percent of cash-grain farms rent for shares, and cash-grain farms account for 72 percent of all land rented for shares.

Figure 12

Methods of accessing land, 2003

Ownership of land is common

Percent of farms in group



* = Standard error is between 25 and 50 percent of the estimate.

¹Share of farms that owns land is slightly higher than the sum of full owners and part owners in table 3. Farms owning a small share (less than 1 percent) of the land they operate are tenants in table 3, but are classified as owning land here.

²Includes operations renting land free of charge, not shown separately. Farms may rent for both cash and shares. Thus the percent cash renting and percent renting for shares may total to more than the percent renting under any method.

Source: USDA, Economic Research Service, 2003 Agricultural Resource Management Survey, Phase III.

No fewer than one-fourth of the farms in each type report using custom work, and at least one-fifth of the farms in each type report using hired or contract labor (fig. 13). The operator, however, provides between half and three-quarters of all farm labor in each small-farm type and two-fifths on large farms (table 9). The frequency of machinery leasing is fairly low among small farms, but becomes important as farm size increases to the large and very large categories (fig. 13). There may be a size threshold below which machinery leasing is not economical to farms or suppliers.

Contracting

Contracts can potentially provide benefits to both producers and contractors (MacDonald and Banker, 2005, pp. 52-53; MacDonald et al., 2004, pp. 24-30). Farmers get a guaranteed outlet for their production with known compensation, while contractors get an assured supply of commodities with specified characteristics, delivered in a timely manner. ERS defines two types of contracts in ARMS—marketing contracts and production contracts (see box, “Types of Contracts”). Although contracts account for about two-fifths of U.S. agricultural production, the share varies by commodity (fig. 14). For example, U.S. farmers produce virtually all sugar beets and poultry

Types of Contracts

A contract is a legal agreement between a farm operator (contractee) and another person or firm (contractor) to produce a specific type, quantity, and quality of agricultural commodity. Farmers typically use two types of contracts, marketing contracts and production contracts. The characteristics of each type of contract are described below.

Characteristic	Marketing contract	Production contract
Items specified in contract	Price (or pricing mechanism), product qualities & quantities, and delivery schedule	Fees received by the farmer. Also, farmer and contractor responsibilities for inputs and practices
Finalization of contract	For crops: before harvest For livestock: before animals are ready to be marketed	Before production of the commodity
Ownership of commodity	Remains with the farmer during production	Commodity belongs to the contractor during production
Contractor involvement in production	Minimal	Often provide specific inputs, production guidelines, and technical advice
Inputs	Farmer provides all inputs	Contractor provides specified inputs. In livestock contracts, for example, contractors typically provide feed, veterinary services, transportation, and young animals
Compensation to farmer	Contract sets a price (or pricing formula) and outlet for the commodity	Farmer is paid a fee for services rendered. Fee is based on input costs, quantity produced, or both

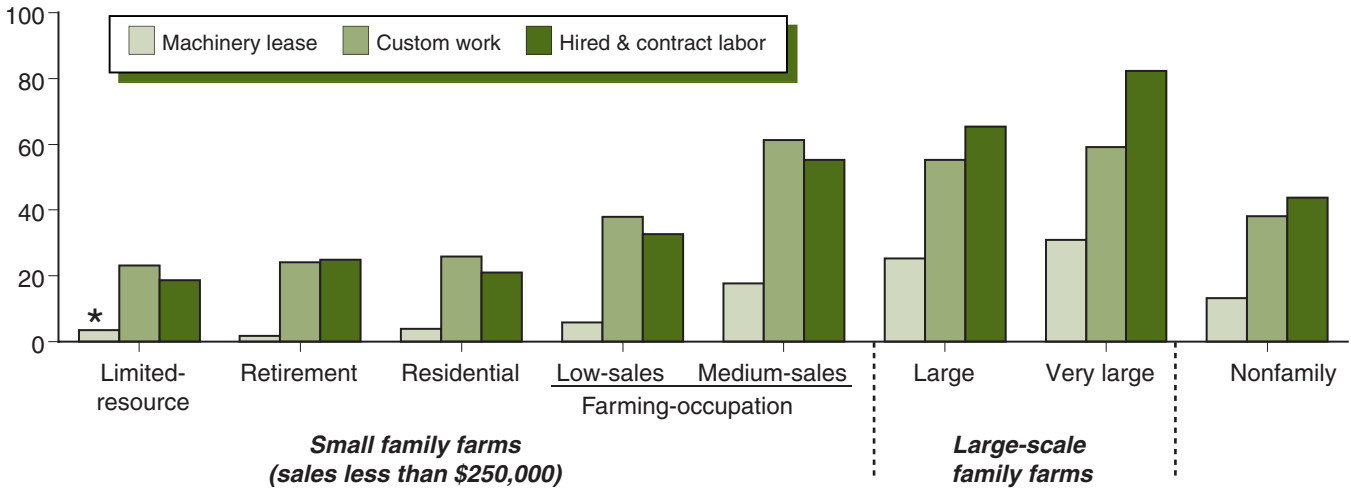
Source: MacDonald and Banker (2005); MacDonald and Korb (2006).

Figure 13

Selected methods of input procurement, 2003

Custom work and hired & contract labor are common, even among small farms

Percent of farms in group



* = Standard error is between 25 and 50 percent of the estimate.

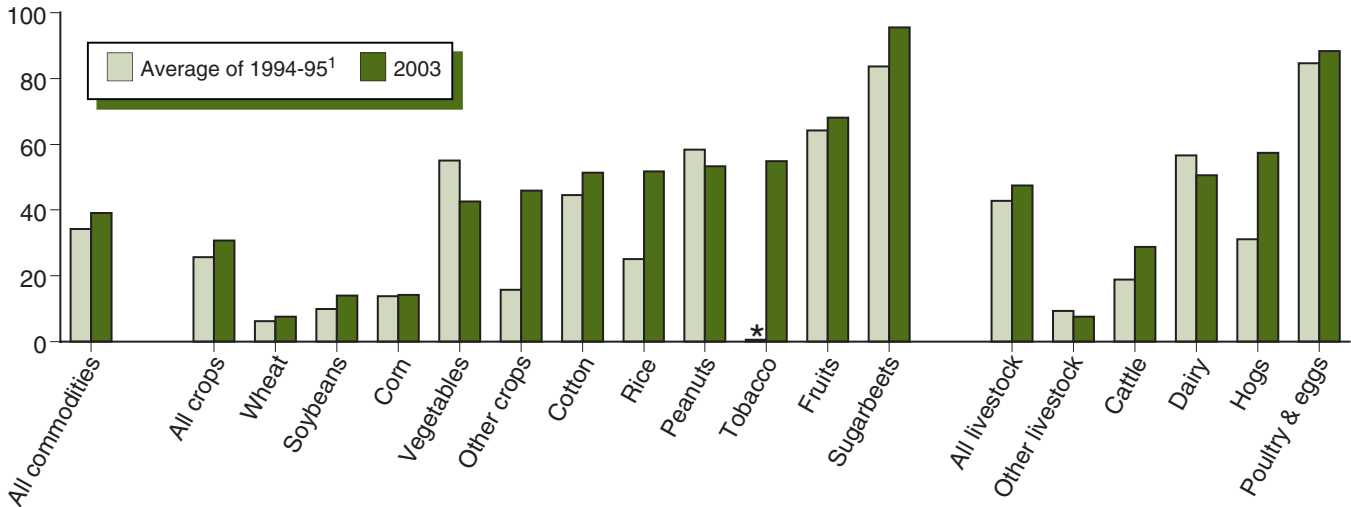
Source: USDA, Economic Research Service, 2003 Agricultural Resource Management Survey, Phase III.

Figure 14

Share of value of production under marketing or production contracts for selected commodities, 1994-95 and 2003

Tobacco and hogs sold or removed under contract increased dramatically

Percent of value of production



* = Standard error is between 25 and 50 percent of the estimate.

¹An average of 1994 and 1995 was used to provide a more statistically reliable estimate.

Source: USDA, Economic Research Service, 2003 Agricultural Resource Management Survey, Phase III.

Table 9

Sources of labor hours for farming, by farm type, 2003

Item	Small family farms					Large-scale farms			
	Limited- resource	Retire- ment	Residential/ lifestyle	Farming-occupation		Large	Very large	Nonfamily farms	All farms
Low- sales				Medium- sales					
	<i>Number</i>								
Total farms	235,030	308,832	892,602	363,812	134,833	84,294	66,656	35,048	2,121,107
	<i>Annual hours per farm</i>								
Mean hours worked	1,973	1,294	1,451	2,751	5,197	6,703	16,493	10,865	2,784
Principal operator (paid & unpaid hrs.)	1,395	913	887	1,787	2,894	2,857	2,839	1,553	1,380
Spouse (paid & unpaid hrs.)	185	138	266	440	661	609	592	*280	317
Other operators (paid & unpaid hrs.)	*86	73	79	134	502	855	1,456	*650	199
Unpaid workers	231	88	145	207	375	360	296	*167	185
Hired labor	*45	56	*43	126	618	1,640	9,666	*6,260	564
Contract labor	32	28	32	57	148	382	1,643	d	139
	<i>Percent of total hours</i>								
Share of total hours worked by:									
Principal operator	70.7	70.5	61.1	65.0	55.7	42.6	17.2	14.3	49.6
Spouse	9.4	10.6	18.3	16.0	12.7	9.1	3.6	*2.6	11.4
Hired labor	*2.3	4.3	*3.0	4.6	11.9	24.5	58.6	*57.6	20.3
	<i>Annual person equivalents per farm</i>								
Average person equivalents ¹	0.987	0.647	0.726	1.375	2.599	3.352	8.247	5.432	1.392
	<i>Percent of farms</i>								
Farms by person equivalents: ¹									
Less than .5	35.2	53.5	45.3	18.6	d	d	d	31.6	34.6
.5 to .999	26.7	26.3	31.1	23.4	4.8	4.9	1.9	10.8	24.6
1 to 1.999	30.1	16.2	18.1	37.6	36.5	23.7	13.6	15.3	23.7
2 to 2.999	4.3	*2.6	*4.0	12.1	26.1	27.2	18.4	*11.9	8.1
3 to 3.999	*1.8	*0.9	*1.1	5.1	17.3	16.6	14.0	*8.5	4.0
4 to 4.999	d	d	d	*2.1	8.5	9.7	11.0	*4.7	1.9
5 or more	d	d	**0.3	*1.1	5.9	16.5	40.9	17.1	3.0

d = Data suppressed due to insufficient observations or because the standard error was greater than 75 percent of the estimate.

* = Standard error is between 25 percent and 50 percent of the estimate.

** = Standard error is between 51 percent and 75 percent of the estimate..

¹Note that one annual person equivalent equals 2,000 hours, or 50 weeks per year times 40 hours per week.

Source: USDA, Economic Research Service, 2003 Agricultural Resource Management Survey, Phase III.

under contract. Contracting also accounts for at least half of the production of cotton, rice, peanuts, tobacco, fruits, dairy products, and hogs. At the other extreme, only a small portion of wheat, soybeans, and corn—all traditional field crops—is grown under contract.

Growth over time. The aggregate data show slow and steady growth in contracting over the years, but change can be more rapid for some commodities. For example, figure 14 shows that the share of total agricultural production under contract grew by only 5 percentage points between 1994-95 and 2003, from 34 percent to 39 percent. During the same period, however, the share of tobacco production covered by contracts went from 1 percent to 55 percent. Cigarette manufacturers replaced cash auctions with contract marketing because contracts better enabled them to acquire enough of the specific types of tobacco they needed. The contracting share of hogs also increased rapidly, from 31 percent to 57 percent, driven in part by product differentiation. Processors wanted more control over the characteristics of the hogs they acquired, which helped them provide a consistent quality of meat to consumers (MacDonald and Banker, 2005, pp. 55-59).

Variation by type of farm. Use of contracts varies by farm type, as shown in table 10. The share of limited-resource, retirement, and residential/lifestyle farms using contracts is relatively low, ranging from 2 percent to 5 percent. For the remaining types of family farms, the use of contracts increases with sales, ranging from 8 percent of low-sales farms to 63 percent for very large family farms. The share of their production under contract also increases with sales, from 19 to 52 percent.

Although a relatively small percentage of each small-farm type has contracts, small farms make up 57 percent of the farms with contracts, reflecting the large number of small farms. A small percentage times the large number of farms in each type results in a large number of small farms with contracts. Production under contract, in contrast, is concentrated among very large family farms, which account for 59 percent of the total.

Table 10

Farms with contracts and value of production under contract, by farm type, 2003

Item	Small family farms					Large-scale farms			
	Limited- resource	Retire- ment	Residential/ lifestyle	Farming-occupation		Large	Very large	Nonfamily farms	All farms
Low- sales				Medium- sales					
	<i>Number</i>								
Total farms	235,030	308,832	892,602	363,812	134,833	84,294	66,656	35,048	2,121,107
	<i>Percent of group</i>								
Farms with contracts ¹	5.1	*2.4	3.2	8.2	28.0	45.4	63.3	18.4	9.6
Value of production under contract ²	12.5	11.9	11.3	*19.2	24.2	31.3	51.7	45.9	39.1
	<i>Percent of U.S. total</i>								
Farms with contracts ¹	5.9	3.7	14.2	14.6	18.6	18.9	20.8	3.2	100.0
Value of production under contract ²	0.5	0.5	1.5	3.3	7.6	11.5	59.0	16.1	100.0

* = Standard error is between 25 percent and 50 percent of the estimate.

¹Includes farms with production contracts, marketing contracts, or both.

²Includes the value of production of commodities under production or marketing contracts.

Source: USDA, Economic Research Service, 2003 Agricultural Resource Management Survey, Phase III.