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Production Contracts and Debt Usage on Commercial Farms

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The ongoing industrialization of U.S. agriculture has captured public attention in recent years. The internalization of transactions and tightening of linkages between consumers and producers could change the agribusiness environment, affecting farm businesses, farm lenders, input suppliers, and government farm policy. These changes are occurring in the midst of a consolidation of farms, input suppliers, and lenders. Industrialization and consolidation will, undoubtedly, force institutions serving agriculture to change the way they conduct their business. This paper focuses on how one aspect of industrialization, the use of production contracts, affects the demand for credit and repayment ability of farmers.

Industrialization has been a characteristic of US agriculture for decades. More than 30 years ago Breimyer, in his classic three economies of agriculture, identified industrialization as a swing from agriculture based on fixed land resources to one based largely on manufactured, and hence variable resources. Today, industrialization is generally associated with both the consolidation of agriculture into larger and fewer operations and a shift of animal production into large scale confinement units that are much like factories (broilers and pork). A characteristic of industrialization is growth in the usage of production contracts and more vertical integration between producers and agribusiness marketers. Under a production contract, the farm produces a specified quality and quantity for the contractor. The contractor typically owns the commodity being produced, makes most of the production decisions, and supplies most of the inputs.

Current interest in agricultural industrialization is probably a consequence of an apparent acceleration of its movement, especially in the pork industry. According to USDA estimates, between 1970 and 1990, the share of hogs produced under contract or from vertically integrated operations expanded from 2 to 21 percent.

Because production contractors assume much of the risk associated with production and supply many of the inputs, their use could have definite effects on the demand for credit by farmers. Production contracts reduce the need for production credit since the contractor provides many of the inputs. This is especially true for hogs and poultry where the contractor typically supplies the animals to be cared for as well as many of the variable inputs (feed, hauling, animal health). In most instances, the contractor maintains title to the product and such advances are not usually characterized as credit transactions. For purposes of this study, the ownership of the commodity determines the type of contract. In production contracts, the contractor is the owner of the commodity and as such pays many of the expenses. Contracts also provide a means for the

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farmer to increase the volume of business with relatively limited capital requirements. Income stability associated with contract arrangements may allow a more favorable credit rating for the borrower, thus enhancing access to credit.

On the other hand, financing farms with a high dependence on production contracts can be risky if the contractual relationship is not stable. This is because income for servicing debt can be highly dependent on the reliability of the contract. Uncertainties about the length and terms of the contract could reduce credit availability. Contractees in areas with a limited number of contractors are subject to the risk of not being able to secure another processor if discontinued by their current contractor. Also, many of the farm assets needed for contract production are highly specific. Livestock farms with production contracts represent such an example. The associated livestock facilities are highly specific and, thus, less valuable as loan collateral. A specialized hog or poultry facility obviously cannot be moved, like a tractor or a combine, to another farm. As a consequence of these factors, lenders may be more likely to pursue FSA guarantees on loans to contract producers. Additionally, lenders may require credit enhancements from contractors as a condition for financing growout facilities. This would be especially likely for contract pork producers, given the historical variability in profit margins for pork production.

Despite emerging concerns about their effects on farm structure, there is little indication that the frequency of contracts has changed over the last 15-20 years. Only 44,000 farms reported production contracts in 1993, with nearly half of these being poultry farms (Hoppe). Results from 1978 Farm Finance Survey indicated 43,665 farms, or about 1.9 percent used production contracts (U.S. Bureau of Census, 1982). The 1988 Agricultural Economics & Land Ownership Survey indicated 1.8 percent of all farms used production contracts.

If the use of production contracts were to expand, as many believe it will, what will be the impacts? Analysis of farm-level financial data on the use of production contracts could provide insights as to the expected effects of agricultural industrialization on farm credit markets. For example, do farms which utilize production contracts appear more or less reliant on lenders as a source of capital? Are farms which rely heavily on production contracts more heavily indebted than comparable farms? Does participation in contracts change the purpose for which debt is used? These topics were addressed utilizing farm-level data obtained from USDA's Farm Costs and Returns Survey (FCRS) to analyze debt usage patterns among farm operators reporting production contracts (see **About the Data**).

Why Industrialization Is Likely to Increase

Despite little change in their usage by farmers, many expect the ongoing industrialization of agriculture to result in an expansion of production contracts. With respect to production contracts, industrialization appears to be the result of two powerful forces, *"--a new consumer and a new producer--and the impacts that these two players have on the markets where they meet"* (Barkema). New lifestyles, shifting demographics, and a growing appreciation for the link

between diet and health are resulting in a splintering of mass food markets into myriad niches (Drabenstott). Advances in information technology, such as scanning data, have enabled food companies to better identify consumer preferences. Food companies are responding by marketing customized products aimed at a specific food niche. Advances in agricultural technology increasingly make it possible to take product development back to the farm level. Thus, the food processor will be able to isolate and incorporate specific traits desired by consumers into food products. Consequently, food companies will have a greater interest in controlling the production process using production contracts between the processor and a farmer. This should enable processors to reduce supply risk by assuring a steady flow of inputs, reduce quality risk by guaranteeing consistent, trait specific products.

Historically, agricultural markets have been characterized by bulk commodities flowing through spot markets to processors who, in turn, market to consumers. In industrialized agriculture, products will flow through direct market channels with prices set by contracts negotiated between the processor and farm operator. An expectation is that industrialization will result in a further polarization of commercial agriculture (Drabenstott). One pole will include those involved in commodity oriented agriculture, such as most current corn, soybean, or wheat producers. These producers, as well as processors, will be characterized by low margins and high volumes. Commodity prices will still be determined in spot markets. At the other extreme will be operators involved in specialized production outside of the traditional commodity markets. This already characterizes much of the production of vegetables, citrus fruit, potatoes, sugar, seed crops, eggs, broilers, and turkeys. Because of the value added, processors (contractor) and farmers may expect higher combined profits than those involved in commodity oriented agriculture.

Some operators will have greater opportunities to participate in specialized production than others. For example, farm operations located near regional employment and population centers could capitalize on their ability to supply highly perishable products to urban areas. Also, some farms are involved in commodities which are already heavily contracted or display characteristics making them greater candidates for contracting (e.g., milk, vegetables, fruits, horticulture, turkeys, egg).

Farmers Use of Production Contracts

An upcoming USDA study provides a detailed analysis of farmers' use of both marketing and production contracts (see USDA, 1996). Using 1993 FCRS data, the authors found that about \$47 billion (32 percent) of the total value of farm production was produced under contractual arrangements. But, only \$17 billion of this production occurred under production contracts with the remainder occurring under marketing contracts. Most production contracts involved poultry with the remainder involving hogs, dairy (replacement heifers), and processed fruit and vegetables.

The financial effects of production contracts will likely depend on the particular commodities produced. For example, contractors are likely to be a much more important source of capital to producers of hogs and poultry and less important for crops. Also, the industries involved are very different. Poultry would be considered mature with respect to industrialization with nearly all production occurring within a vertically coordinated framework. In comparison, the hog industry is in the early stages of industrialization. This has implications for the types of producers involved in production contracts. Poultry contractees are expected to be more established than hog contractees. Also, the types of facilities involved can impact the production characteristics. In contrast to crops, contract livestock production is likely to require highly specialized (single purpose) and expensive facilities.

Thus, it is important to analyze the financial characteristics of farms with production contracts by commodity produced under contract. However, the limited number of commercial-sized farms reporting production contracts prevents a very detailed analysis for any particular year. Pooling, or combining, individual years of data enable an analysis of contract farms involved in specific enterprises. For this analysis, data covering 1991-94 were combined. This provided sufficient sample size to examine the financial and debt characteristics of eight different categories of commercial-sized farms reporting production contracts. These categories and sample sizes were:

1. Poultry farms specializing in eggs (n=147).
2. Small poultry farms (less than \$250,000 in annual sales) specializing in broilers or turkeys (n=145).
3. Medium sized poultry farms (\$250,000 and \$500,000 of annual sales) specializing in broilers or turkeys (n=241).
4. Large poultry farms (500,000 or more in annual sales) specializing in broilers or turkeys (n=524).
5. Livestock farms with cattle, dairy, or sheep produced under contract n=164).
6. Farms with contract hog production (n=162).
7. Farms with fruit or vegetables produced under contract (n =194).
8. Farms with sugar, nursery, or other crops produced under contract (n=217).

The farm operator balance sheets and income statements provide a financial profile of each of these farm types (table 1; table 2). These financial statements demonstrate that the financial and structural characteristics of commercial-sized crop farms reporting production contracts differ by the commodities contracted. Farms involved in the production of contract

poultry or hogs tended to have less assets and less wealth. Also, over two-thirds of the total farm assets on these farms were in the form of real estate. Most farm expenses on poultry farms were for hired labor, utilities, repairs & maintenance, and interest costs. Since the contractor provides most of the working capital (for feed, birds, and hauling), there is less of a need for operating or nonreal estate credit. The financial profiles of contract hog producers appear similar to those for poultry farms. As with poultry farms, a majority of their investment is in land and buildings. Contract hog farms tend to be less adequately capitalized than farms producing contract cattle or crops. Also, large shares of their expenses are for repairs, labor, utilities, and interest, probably reflecting the importance of contractors as a source of working capital (feed, hogs, hauling).

Farms involved in contract production of cattle, sheep, or dairy cattle reported a much larger investment in total assets, greater wealth, and a much smaller proportional investment in real estate assets than other contract farms. Given the low investment in breeding livestock and high livestock inventory, these farms are likely to be farmer-owned feedlots who feed cattle (or sheep) for investors or other farmers. Also, they can be raising dairy herd replacements under contract for other farmers. In these cases, it is unlikely that a contractor is supplying much working capital to the farmer.

Compared to farms producing livestock under contract, farms involved in the production of contract crops were larger both in terms of total assets and net worth. The production of these unique commodities can require specialized equipment as reflected by the relatively high investment (20 percent of total assets) for farm equipment. Compared to poultry and hogs, contractors are less likely to be an important source of working capital. Farms involved in contract crops had relatively high cash expenses, much of which are likely financed with operating loans.

Debt Characteristics

If agriculture continues to become more industrialized and the use of production contracts expands, the structure of credit markets and the role of lenders could be impacted. Financing farms with a high dependence on production contracts can be risky since many of the farm assets needed for contract production are highly specific. Also, income for servicing debt can be highly dependent on the reliability of the contract. On the other hand, the acceptance of price and production risk by contractors reduces the variability in farmer's cash flows and increases debt carrying capacity. Livestock farms with production contracts are a good example of the risks associated with production contracts. The associated livestock facilities are highly specific and, thus, less valuable as loan collateral. Uncertainties about the length and terms of the contract could also reduce credit availability. Contractees in areas with a limited number of contractors are subject to the risk of not being able to secure another processor if dropped by their current contractor.

Debt Usage More Common on Contract Farms.

With the exception of small poultry farms, the average debt-asset ratio for farms with production contracts exceeded that of livestock or crop farms without contracts (table 3). Compared to farms without contracts, livestock farms with contracts were more likely to be highly indebted with debt-asset ratios greater than 0.40 (table 3).

When contract farms utilize real estate debt, they tend to leverage a greater proportion of their real estate assets. On average, the ratio of real estate debt to real estate assets was 0.22 for non-contract commercial-sized farms with real estate debt (table 3). In contrast, for farms with production contracts this ratio ranged from 0.28 for fruit-vegetable farms to 0.48 for cattle-sheep-dairy farms. Real estate debt was especially an important source of capital for egg, large poultry, and contract hog farms where more than 60 percent of the farms reported real estate debt.

Reflecting the importance of contractors as a source of capital, contract poultry farms were less likely to owe operating debt. On average, 38 percent of commercial-sized farms have operating loans (table 3). But only 19 percent of contract egg farms and 17 percent of broiler/turkey farms reported any operating debt. In contrast, 50 percent or more of the cattle-sheep-dairy and crop farms with production contracts reported operating loans. Whereas poultry farms receive most of their gross farm income from production contracts, cattle-sheep-dairy contract farms receive income from a combination of sales of livestock owned by the farmer and production contracts (table 2). The operating loans reported by contract cattle-sheep-dairy farms are most likely used to finance the feed and purchases of these livestock. Crop farms with production contracts were especially reliant on operating credit with about 60 percent of the farms having an operating loan. This can be attributed to the fact that contractors involved in crop production are less important sources of operating capital to farmers. Additionally, production of these crops can require specialized techniques and equipment which can contribute to a greater demand for production credit by farmers.

Poultry & Hog Farms with Contracts Report Less Farm Equity.

The average amount of farm equity reported by commercial-sized poultry and hog farms was significantly less than that for other farms. The average net worth for commercial-sized egg, broiler & turkey, and hog farms respectively was; \$378,912, \$353,047, and \$213,898. This compares with an average for comparable livestock farms of \$677,000. One possible explanation is that reduced production and marketing risks from contracting encourage farm operators to increase their use of financial leverage. Another explanation is that operators choosing contracts are already highly indebted and less able to shoulder the production or marketing risk. Given their low net worth and associated financial stress, this may be the case for contract hog farms where 57 percent of the farms reported less than \$150,000 of net worth.

It is noteworthy that the distribution of farm wealth among large (over \$500,000 in annual sales) broiler & turkey farms reflected the distribution among all commercial-sized farms. For example, 21 percent of these farms reported more than \$750,000 of net worth compared to 23 percent for all commercial-sized farms. Much of the poultry production is already concentrated among these larger operations. Because of the lower equity investment, contract poultry production has been mentioned as a method for beginning farmers with limited resources to enter farming (Dodson). However, this will likely become less of an option as poultry production becomes more consolidated among larger farms.

The average farm equity of contract crop farms was significantly higher than for commercial-sized crop farms without contracts. However, this may be more a consequence of the commodity produced rather than involvement in contract production. For example, the average amount of farm equity for contract fruit-vegetable farms was not significantly different from farm equity levels reported for non-contract fruit-vegetable farms. Commodities which are likely candidates for contract crop production may already have greater profit margins, thus contributing to their greater wealth. Another explanation would be that fruit and vegetable production tends to occur in regions characterized by greater land values.

Debt Market Shares and Loan Terms

Debt by lender and loan terms were only available from the FCRS for 1991-93. Also, these questions were asked only on about half of the survey questionnaires. Consequently, fewer observations were available for analysis requiring a merging of farm types to insure statistical reliability. Debt market shares for commercial-sized farms were estimated for: (1) Poultry farms with production contracts, (2) Other livestock (cattle-sheep-dairy, hogs) farms with production contracts, and (3) Crops farms with production contracts. Banks represented the largest source of credit to farms with contracts for poultry and other livestock (table 4). FCS market shares for farms producing contract livestock and poultry were about the same as for non-contract farms. In contrast, FCS's debt market share of contract crop farms (39 percent) was significantly greater than that for non-contact farms. Probably as a consequence of the strong equity positions of contract crop producers, FmHA direct lending was not a significant source of credit to contract crop producers.

A concern has been that facilities for contract poultry and hog production are financed on terms which are longer than the facility's technical life. This could result in contractors requiring poultry and hog contractees to undertake expensive capital improvements before the original facility loan is paid off. Poultry facilities can be financed with either a long term real estate or a shorter term nonreal estate loan. Thus, comparisons of terms need to be made for the average of real estate and nonreal estate loans. There was no indication that term to maturity on non-operating loans made to poultry farms differed from terms for other farm types. The average term to maturity for real estate and nonreal estate loans was 16-17 years, regardless of farm type. Thus, poultry producers do not appear to have received any unique treatment from lenders concerning their loan terms. If 16-17 years is longer than the technological life of a

modern poultry house, terms on future poultry loans are likely to be modified. Also, the average age of a real estate loan was found to be 6-7 years, regardless of farm type. This would suggest that regardless of terms or commodity produced, farmers tend to pay off real estate loans at the same rate.

Summary and Conclusions

The use of production contracts remains relatively uncommon among commercial farms with only about 40,000 farms reporting their use. The effects of these contracts on farm credit demand are more likely a consequence of the particular commodity rather than the contracts. The relationship between risk and return for the commodity contracted will strongly affect the demand for contracts by farmers. If by contracting, the farmer can lower his risk and increase his profit margin, contractors should be able to attract producers with higher quality resources. This may be the case with processed fruits, vegetables and various specialty crops and would be consistent with Drabenstott's hypothesis that farms involved in highly specialized contract production may receive higher returns.

As previously mentioned, crop farms with contracts were larger, reported more wealth, and greater returns than crop farms without contracts. This could also be because farm operators already receive a premium for producing these types of crops. Another explanation is that crop contractors are highly selective of their contractees. The ability of a contract crop farmer to deliver a quality product can be highly dependent on the quality of the land, farm machinery and equipment. Crop contractors would, consequently, seek out successful operators which are likely to be established or well-capitalized farmers with access to superior land resources and the most modern machinery.

Growth of industrialization in crops could result in an "elite" class of farmers who are wealthier and more profitable than average. These operators would likely be considered prime customers by most lenders. Their wealth and profitability would make them low-risk borrowers. Also, their ability to service larger loans would make them low cost borrowers. Thus, competition for these credits will be keen. It will be important for lenders to have a knowledge of the contractor's business in order to assess risk and obtain information which can be used to better serve the customer. As currently, contract crop farm credit needs will probably be met by banks and the FCS while FSA will play a minor role both as a direct and guaranteed lender.

If, on the other hand, production contracts only provide the farmer a method of reducing risk, production contracts would attract farm operators with limited capital who may be unable to accept marketing and production risks. This would explain the growth in hog contracts among low equity producers. If the characteristics of current hog contractees are indicative, increased industrialization in livestock will result in farms with higher debt levels and more financial stress. Contract livestock farms will likely be highly reliant on the contract production for most of their farm income. The combination of greater financial stress and

dependence on the contract for income would make financing these farms risky. Lenders in regions where contract livestock production is occurring will need to develop and maintain relationships with the contractor. In some cases, the contractors will be asked to provide credit enhancements such as loan guarantees or long-term contracts. In financing contract livestock farms, a lender would need to know both the farmer's and contractor's business. Also, the uniqueness of the assets will further contribute to riskiness of lending. Both the guaranteed and direct programs of FSA will likely play an important role in providing credit to these operations.

Production contracts may have a longer term affect on farm credit markets by facilitating consolidation. An expanded use of production contracts will enable farm operators to manage larger facilities. For example, 40 percent of all broilers are currently produced on farms which can produce more than 300,000 broilers per year. The greater importance of contractors in providing operating capital can create opportunities for agribusiness lending. Though servicing these credits is likely to require expertise and lending capacity beyond the capability of most small rural or agricultural banks. The credit needs of contractors are likely to be met by large regional or national banks or by CoBank where farmer-owned cooperatives are concerned.

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About the Data

Data for this report comes from USDA's Farm Costs and Returns Survey (FCRS). The FCRS is composed of several questionnaire versions (for technical documentation see Morehart, Johnson and Banker, 1992). All versions collect the same core group of questions related to farm income, expenses and operator characteristics. The survey is administered each spring in the 48 contiguous States through personal enumeration.

The target population of the FCRS is operators associated with farm businesses representing agricultural production across the United States. A farm is defined as an establishment which sold or normally would have sold at least \$1,000 of agricultural products during the year. Farms can be legally organized as proprietorships, partnerships, family corporations, non-family corporations or cooperatives.

Data are collected from only one operator per farm, the senior farm operator. A senior farm operator is the operator who makes most of the day-to-day management decisions. When management is equally shared, USDA interviews the oldest person. This one-farm/one-operator survey design gives us good financial information for the farming business, but limits information about income and equity-sharing when more than one operator is involved. Others provide inputs to the farm and receive income from production such as contractors and share-rent landlords. The FCRS does not include information on these entities, except as they relate to the farm business.

The FCRS is a probability survey. Probability surveys are designed on the premise that every unit in the population has a known probability of being selected. The expansion factors, or weights are established for each reporting unit and allow the FCRS to expand to the USDA official number of farms.

Table 1. Farm operation balance sheet for farms with production contracts and gross sales of \$50,000 or more, by commodity contracted 1991-94.

	Eggs	Broiler-turkeys under \$250,000 sales	Broiler-turkeys-\$250,000-\$500,000 sales	Broiler-turkeys-over \$500,000 sales	Cattle-sheep-dairy	Hogs	Fruit-veg.	Sugar, Nursery & Non-traditional crop
Number of farms	4,000	8,000	5,100	4,400	3,000	5,100	4,000	4,500
--Dollars per farm--								
Farm assets	500,847	331,307	423,349	728,140	935,767	336,785	956,211	953,833
Current assets	65,029	29,271	50,796	75,248	296,776	51,603	151,041	215,583
Livestock inventory	7,974	11,865	8,350	16,759	94,399	14,005	22,772	12,662
Crop inventory	6,972	3,110	3,269	3,194	47,566	16,033	42,585	77,463
Other assets	50,083	14,296	39,177	55,295	154,811	21,565	85,684	125,458
Non-current assets	435,818	302,037	372,553	652,892	638,992	285,182	805,170	738,249
Land and buildings	351,572	259,641	311,680	561,050	464,788	227,992	567,804	540,010
Farm equipment	65,908	30,908	46,141	72,159	118,514	46,481	208,262	170,929
Other non-current asset	18,338	11,488	14,732	19,683	55,690	10,709	29,104	27,310
Farm liabilities	121,935	64,120	86,674	199,036	250,662	122,887	195,546	204,405
Current liabilities	20,452	10,901	26,319	46,169	117,676	32,289	86,981	77,821
Noncurrent liabilities	101,483	53,218	60,356	152,868	132,986	90,598	108,565	126,585
Nonreal estate	19,910	6,639	13,650	18,375	17,924	22,261	23,001	16,918
Real estate	81,573	46,579	46,706	134,492	115,063	68,336	85,564	109,667
Farm equity	378,912	267,188	336,675	529,103	685,106	213,898	760,665	749,428
--percent of farms--								
Farms with farm equity of:								
Under \$150,000	<u>18</u>	27	16	15	<u>23</u>	57	17	<u>13</u>
\$150,000-\$400,000	48	64	51	37	33	30	26	33
\$400,000-\$750,000	27	4	30	27	<u>17</u>	9	32	24
Over \$750,000	<u>8</u>	<u>4</u>	<u>3</u>	21	27	<u>4</u>	25	30

Source: Farm Costs and Returns Survey 1991-94 (All versions)
 Estimates underlined have C.V.s of between 25 and 50 percent.

Table 2. Farm operation income statements for farms with production contracts and gross sales of \$50,000 or more, by commodity contracted, 1991-94.

	Eggs	Broiler-turkeys under \$250,000 sales	Broiler-turkeys-\$250,000-\$500,000 sales	Broiler-turkeys-over \$500,000 sales	Cattle-sheep-dairy	Hogs	Fruit-veg.	Sugar, Nursery & Non-traditional crop
Number of farms	4,000	8,000	5,100	4,400	3,000	5,100	4,000	4,500
--Dollars per farm--								
Gross cash income	93,581	48,133	76,156	153,806	344,072	88,579	399,135	275,184
Livestock sales	9,983	8,304	20,612	23,469	148,294	21,089	71,194	36,364
Crop sales (net CCC)	10,953	3,924	5,107	18,931	37,223	26,023	202,977	117,161
Government payments	1,242	450	668	1,153	8,392	3,782	12,075	13,920
Farm-rel.inc. ¹	71,403	35,455	49,769	110,253	150,163	37,685	112,889	107,739
Cash expenses	62,470	30,302	48,422	104,558	342,577	70,099	306,022	197,989
Variable expenses	41,386	22,352	34,209	73,567	284,615	47,305	234,609	143,108
Livestock purchases	1,722	1,381	937	4,480	84,602	6,372	14,514	7,599
Feed	6,172	1,506	4,407	11,388	67,873	9,142	12,806	8,172
Other lvsk-related	742	1,061	2,216	2,234	8,671	746	2,454	1,283
Seed and plants	1,055	408	791	1,894	7,106	2,383	18,178	11,579
Fert.& chem	3,953	1,535	2,825	5,574	18,379	6,959	54,587	43,180
Labor	10,745	3,842	3,949	15,967	39,272	5,216	62,318	20,652
Other var.expenses	16,977	12,619	19,084	32,031	58,712	76,847	69,752	50,643
Fixed cash expenses	21,084	7,951	14,214	30,991	57,962	22,794	71,413	54,881
Net cash farm income	31,110	17,831	27,734	49,248	1,496	18,480	93,112	77,195
Net farm income	20,382	17,176	22,934	30,006	18,356	14,916	76,913	86,220

Source: Farm Costs and Returns Survey, 1991-94 (All versions),

¹ Includes income received from production contracts.

Table 3. Debt statistics for reporting over \$50,000 in annual sales for farms with and without production contracts and by production specialty, 1991-94.

	Eggs	Broiler-turkeys under \$250,000 sales	Broiler-turkeys \$250,000-500,000 sales	Broiler-turkeys over \$500,000 sales	Cattle-sheep dairy	Hogs	Fruit-veg	Sugar, Nursery & other crop	All cont. farms	Non-cont. farms
--percent of farms--										
Any debt	80	55	74	80	71	92	82	78	75	74
Real estate debt	68	39	48	63	49	66	57	50	54	51
Nonreal estate debt	42	21	30	32	25	59	40	31	34	36
Operating loans	<u>19</u>	11	20	24	50	<u>34</u>	56	58	31	38
Total debt of:										
Over \$250,000	11	6	<u>7</u>	29	32	<u>13</u>	18	23	15	13
\$50-200,000	52	30	45	41	26	55	46	43	42	40
Under \$50,000	<u>17</u>	20	22	10	<u>13</u>	25	<u>19</u>	<u>12</u>	18	21
Real estate debt of:										
Under \$100,000	41	24	27	20	<u>22</u>	49	30	24	29	30
Over \$100,000	26	<u>15</u>	21	43	<u>28</u>	<u>18</u>	27	25	24	22
Nonreal estate debt of:										
Under \$50,000	27	<u>14</u>	16	17	15	42	25	17	21	23
Over \$50,000	<u>15</u>	<u>7</u>	<u>15</u>	15	<u>10</u>	<u>16</u>	15	13	13	13
Operating loans of:										
Under \$50,000	<u>18</u>	10	<u>8</u>	13	<u>19</u>	<u>25</u>	32	28	18	23
Over \$50,000	<u>1</u>	<u>1</u>	<u>12</u>	<u>11</u>	<u>31</u>	<u>9</u>	24	27	13	14
Debt-asset ratio of:										
0-0.10	28	56	40	30	37	<u>11</u>	33	43	36	43
0.10-0.40	49	29	38	33	36	<u>38</u>	49	42	38	40
Over 0.40	23	15	22	36	26	51	18	15	25	17
--percent--										
Debt-asset (all farms)	24	19	20	27	27	36	20	21	24	17
Debt-asset (farms w/dbt)	28	34	27	34	40	39	26	25	30	23
R.e debt/r.e assets (farms with r.e. debt)	33	33	31	41	48	40	28	33	35	22

Source: Farm Costs and Returns Survey 1991-94 (All versions)
 Estimates underlined have C.V.s of between 25 and 50 percent.

Table 4. Debt market shares and terms for farms with over \$50,000 in annual sales and reporting production contracts.

	Poultry	Other contract livestock	Contract Crops	All Contract	Non Contract
Market shares:			--percent--		
FCS	27	28	39	31	25
Bank	47	43	38	43	38
FmHA (direct)	12	9	2	8	11
Average term to maturity			--years--		
Nonreal-real estate avg	16	17	16	16	17
Age of real estate debt	6	7	6	6	7

Source: Farm Costs and Returns Survey 1991-93 (Expenditure versions)