3. The U.S. Farm Sector

Farm Labor

Labor use on U.S. farms has changed dramatically over the past several decades. Average annual farm employment dropped from 9.9 million in 1950 to 2.8 million in 1998. This decrease resulted largely from the trend toward fewer and larger farms, increased farm mechanization and other technological innovations, and higher off-farm wages. However, farm employment appears to have stabilized in recent years as increases in mechanization and labor-saving technology have leveled off and the downward trend in farm numbers has slowed.

Family workers, including farm operators and unpaid workers, accounted for 69 percent of farm labor in 1998, while hired farm workers accounted for 31 percent. Service workers, including crew leaders and custom crews, accounted for 9 percent of all workers on farms in 1998.

The average wage rate for hired farm workers in the United States in 1998 was $7.47 per hour. Wages varied by type of worker: livestock workers averaged $7.03 per hour, and field workers averaged $6.97 per hour.

A significant portion of total farm production expenses is spent on labor. The 1997 Census of Agriculture reported the expenditures for hired and contract labor on U.S. farms were $17.8 billion in 1997, or almost 12 percent of total farm production expenses. About 34 percent of all farms had hired labor expenses and 12 percent had contract labor expenses.

The importance of labor varied significantly by farm type and size of farm. The proportion of total farm production expenses attributed to hired and contract labor expenses was greatest on horticultural specialty farms (44 percent), fruit and tree nut farms (40 percent), and vegetable and melon farms (32 percent). These types of farms are least mechanized, and many of the commodities they produce are still harvested by hand. At the other extreme, labor expenses comprised less than 5 percent of all production expenses on beef cattle, hogs, sheep, and poultry farms.

Larger farms are more likely to have labor needs in excess of that provided by the family farm. Farms of 260 or more acres, which accounted for only 31 percent of all farms, had 70 percent of all labor expenses in 1997. In terms of sales class, the 26 percent of all farms with $50,000 or more in value of products sold accounted for 96 percent of all labor expenses.

Agricultural Credit

Farm business debt at the end of 1997 was $165.4 billion, up $9.3 billion from 1996. Farm real estate debt rose $3.7 billion (over 4 percent) from 1996 to $85.4 billion at the end of 1997, while farm business nonreal estate debt increased $5.6 billion (over 7 percent) to $80.1 billion at the end of 1997. The increase in farm debt in 1997 was higher than the recent trend of modest growth in outstanding loan balances.

While volatile commodity prices have generated some concern about short-term profitability in some farm enterprises, farmers and lenders maintain confidence in the long-run viability of agriculture. The availability and use of credit plays a significant role in the sustained profitability of farm enterprises. In this regard, a symbiotic relationship exists between agricultural producers and their lenders; the health of one depends on the condition of the other.

Loans made to agricultural producers are classified as real estate and non-real-estate loans in the farm sector accounts. Real estate loans generally have terms of 10 to 40 years and are ordinarily used to purchase farmland or to make major capital improvements to farm property. Non-real-estate loans are typically made for loan terms of less than 10 years, with the term depending on the purpose of the loan. Seasonal operating loans are made for less than 1 year, while loans to purchase machinery and equipment or livestock may run for 7 years or more.

Commercial banks held over 40 percent of all farm business debt at the end of 1997, providing $25.2 billion in real estate loans (almost 30 percent of total) and $41.7 billion in non-real-estate debt (52 percent). The Farm Credit System (FCS) held $27.1 billion in farm business real estate loans and $15.2 billion in non-real-estate loans. In total, the Farm Credit System held about 25 percent of farm business loans. Favorable interest rate spreads improved FCS earnings during 1990-97. Improved borrower financial conditions have translated into improved Farm Credit System performance.

Life insurance companies maintained their presence in the agricultural credit market, as their total farm business debt rose slightly to $9.7 billion, giving them an 11-percent share of the farm business mortgage market. USDA's Farm Service Agency (formerly Farmers Home Administration) direct loans to farm businesses dropped by $600 million in 1997. The "Individuals and others" classification is composed primarily of sellers financing the sale of farmland, input suppliers, farm machinery finance corporations, and some minor lending agencies. These accounted for $19 billion in real estate loans and $18.8 billion in non-real-estate loans at the end of 1997.

Table 3-1.

Farm business debt, selected years

	Farm debt outstanding, December 31											
	1950	*1960*	*1970*	*1980*	*1985*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*	*1996*
Real estate debt:					*$ Billion*							
Farm Credit System	0.8	2.2	6.4	33.2	42.2	26.0	25.3	25.4	24.9	24.6	24.9	25.7	27.1
Life insurance companies	1.1	2.7	5.1	12.0	11.3	9.7	9.5	8.8	9.0	9.0	9.1	9.5	9.7
Banks	0.8	1.4	3.3	7.8	10.7	16.3	17.4	18.8	19.6	21.1	22.3	23.3	25.2
Farm Service Agency	0.2	0.6	2.2	7.4	9.8	7.6	7.0	6.4	5.8	5.5	5.1	4.7	4.4
Individuals and others	2.1	4.5	10.5	27.8	25.8	15.2	15.6	16.1	16.7	17.5	18.0	18.5	19.0
Total	5.2	11.3	27.5	89.7	100.1	74.79	74.9	75.4	76.0	77.7	79.3	81.7	85.4
Non-real-estate debt:												
Banks	2.4	4.7	10.5	30.0	33.7	31.3	32.9	32.9	34.9	36.7	37.7	38.3	41.7
Farm Credit System	0.5	1.5	5.3	19.8	14.0	9.8	10.2	10.3	10.5	11.2	12.5	14.0	15.2
Farm Service Agency	0.3	0.4	0.7	10.0	14.7	9.4	8.2	7.1	6.2	6.0	5.1	4.6	4.3
Individuals and others	2.5	4.5	4.8	17.4	15.1	12.7	13.0	13.2	14.2	15.2	16.2	17.4	18.8
Total	5.7	11.1	21.3	77.1	77.5	63.2	64.3	63.6	65.9	69.1	71.5	74.4	80.1
Total, all	10.9	22.4	48.8	166.8	177.6	138.0	139.2	139.1	141.9	146.8	150.8	156.1	165.4

Source: USDA, Economic Research Service, Resource Economics Division.

The Balance Sheet

Farm business asset values are estimated to have totaled $1,088.8 billion on December 31, 1997, an increase of 5 percent over the preceding year. Farm business debt rose 6 percent during 1997, totaling $165.4 billion at year's end. As a result, farm business equity is estimated to have risen 5.2 percent.

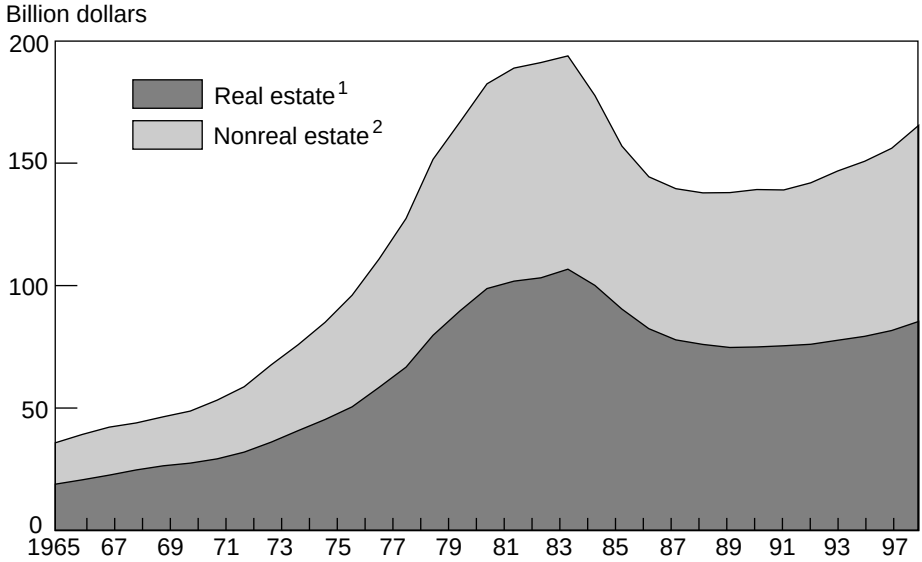
The debt-to-asset ratio for 1997 (expressed as a percentage) increased from 15.1 to 15.2. This ratio is substantially below the peak of 24 percent reached in 1985.

Real estate assets accounted for 78 percent of the value of farm business assets at the end of 1997. Real estate assets are expected to have increased 6 percent during the year.

Non-real-estate assets are estimated to have increased 2 percent during 1997. The value of machinery and motor vehicles and for crops stored decreased from 1996 to 1997, whereas, the value of purchased inputs, financial assets, and livestock and poultry increased during this period.

Figure 3-1.

Farm business debt

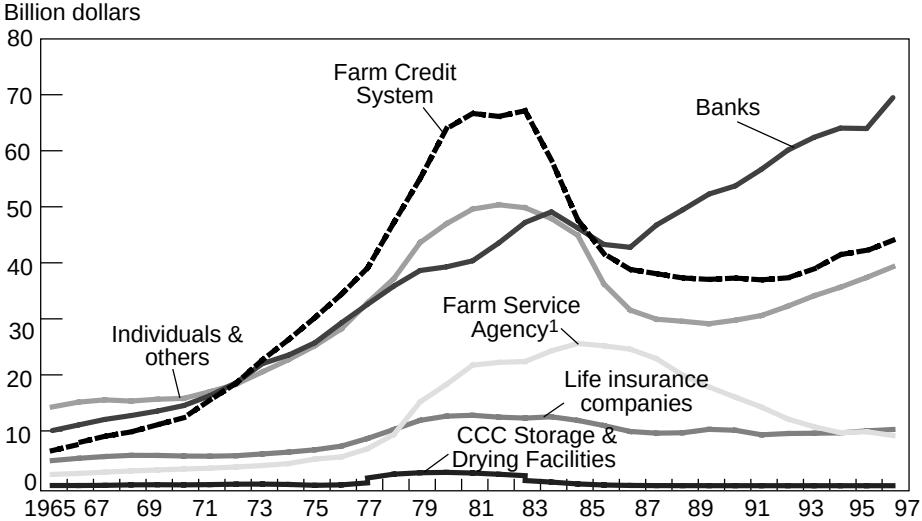


[1] Debt secured by farm real estate. [2] Debt for operating purposes.

Source: USDA, Economic Research Service, Resource Economics Division.

Figure 3-2.

Farm business debt by lender



[1] Includes the former Farmers Home Administration's loans.
Individuals and others include Commodity Credit Corporation real estate loans.

Source: USDA, Economic Research Service, Resource Economics Division.

Farm business real estate debt increased 4.5 percent in 1997, standing at $85.4 billion at the end of the year. Non-real-estate debt rose 7.6 percent to $80.0 billion. On December 31, 1997, commercial banks held 40 percent of farm business debt, and the Farm Credit System held 26 percent.

Table 3-2.

Farm business assets, debt, and equity[1]

Item	*1960*	*1970*	*1980*	*1990*	*1997*
			Billion dollars		
Assets	171.0	273.0	965.9	841.5	1,088.8
Real estate	123.3	202.4	782.8	620.0	849.2
Non-real-estate 2/	47.7	70.6	183.0	221.5	239.6
Debt	22.4	48.8	166.8	138.0	165.4
Real estate 3/	11.3	27.5	89.7	74.7	85.4
Non-real-estate 4/	11.1	21.2	77.1	63.2	80.1
Equity (assets minus debt)	148.6	224.3	799.0	703.5	923.4

[1] As of December 31. 2/ Crop inventory value is value of non-Commodity Credit Corportation (CCC) crops held on farms plus value above loan rate for crops held under CCC. 3/ Includes CCC storage and drying facilities loans. 4/ Excludes value of CCC crop loans.
Source: USDA, Economic Research Service, Resource Economics Division.

Net Value-Added, Net Farm Income, and Net Cash Income

Net value-added and net farm income both declined by $3.5 billion in 1997, but each measure remained at a level surpassed only by the record values attained in 1996. Both these measures of farm income had risen substantially from 1995 to 1996. As a consequence, even though net value-added fell 3.7 percent in 1997, it was still $17.9 billion greater than for 1995. **Net value-added** represents the total value of the farm sector's output of goods and services, less payments to other (non-farm) sectors of the economy, and is production agriculture's addition to national output.

The value of the sector's production (final output) increased by $2.3 billion in 1997. This increase, however, was exceeded by the $5.7 billion expansion in out-of-pocket costs (intermediate consumption outlays). The result was $3.5 billion less in net value-added to be distributed among the providers of resources to the farm sector in 1997. Hired workers and lenders received 3.9 percent and 3.5 percent more for their contributions to 1997 farm production than in 1996. By contrast, the earnings of non-operator landlords were down 7.4 percent. The decline in earnings to landlords reflected lower returns to holders of share-rent contracts, which, in turn, can be traced directly to the $3.1 billion decline in the value of crop production. Most share-rent arrangements involve crops, and while the harvest for many major crops remained near or even exceeded the record levels of 1996, prices received in selling commodities were significantly lower than in 1996.

Net farm income, which fell $3.5 billion from 1996 to 1997, is that portion of net value-added earned by farm operators (defined as those individuals and entities who share in the risks of production). Typically, it is the farm operators who benefit most from the increases and absorb most of the declines arising from short-term, unanticipated weather, and market conditions. In fact, an amount equal to the total 1997 drop in net value-added accrued to farm operators, as the increase in factor payments to hired labor and lenders offset the lower payments to landlords. Declining prices accounted for much of the drop in net value-added in 1997 and is reflected in net farm income.

Net cash income rose by $4.3 billion, a 7.7-percent increase from 1996 to 1997. Cash earnings realized within the year from the sales of production, and the conversion of assets, both inventories (in years in which they are reduced) and capital consumption, into cash are the receipts included in net cash income. Unlike net farm income, net cash income does not include the value of home consumption, changes in inventories, capital replacement, and implicit rent and expenses related to the farm operator's dwelling—none of which reflect cash transactions during the current year.

The value of the agricultural sector production (commodities and services) rose a mere $2 billion from 1996 to 1997, but the level in 1996 had exceeded the previous record (1994) by a whopping $20 billion. Increases of $5 billion in the value of cattle production and $3.6 billion in the value of soybean production more than offset the declines in value of other commodities where lower prices decreased returns. Yet, the higher value of output only partially offset the $5.7 billion increase in intermediate consumption outlays. The outcome was a $3.8 billion fall in net value-added.

The total value of final 1997 crop output was down $3.4 billion, reflecting significant price declines for many major crops. In 1996, crop prices had been high in the first half but began a decline in the second half that continued on through 1997. Soybeans were an exception as prices ascended to an unusually rarified level of $8 per bushel or more in the first half of 1997. Soybean prices began tailing off in the second half, but still finished the year in a range favorable to producers. With large crop harvests in 2 consecutive years, farmers sold during the year approximately what they harvested, incrementing inventories by a modest $323 million. Inclusion of the inventory change enables a full accounting of a current year's production in the tabulation of the calendar year's farm sector output.

The total value of livestock production in 1997 was $4 billion higher than the previous year, the second consecutive year with significant increase. The value of cattle produced jumped $5 billion, and hog producers added another $498 million to the production of meat animals. The value of dairy products declined $1.8 billion. Market prices available to farmers for hogs and broilers declined sharply in the latter half of 1997, beef cattle prices were steady throughout the year after staging a comeback from lows reached in first half of 1996, and dairy prices bottomed out and turned up in the summer of 1997. The $5 billion rise in cattle production resulted from a jump in production in response to the improvement in market prices. Producers reversed the herd liquidation which they had been employing to minimize the consequences of being caught in an ongoing cost-price squeeze without prospects of an immediate turnaround. The rapid structural change occurring in livestock production with regional shifts in production and consolidation into large operations

Table 3-3.

Value added to the U.S. economy by the agricultural sector via the production of goods and services, 1994-97[1]

	1994	1995	1996	1997	Year-to-year change Amount	Percent
	$ Million				$ Million	Percent
Final crop output	100,314	95,805	115,591	112,498	(3,093)	(2.7)
Food grains	9,545	10,417	10,741	10,603	(138)	(1.3)
Feed crops	20,351	24,581	27,265	27,638	374	1.4
Cotton	6,738	6,851	6,983	6,515	(468)	(6.7)
Oil crops	14,657	15,496	16,362	19,911	3,549	21.7
Tobacco	2,656	2,548	2,796	2,886	90	3.2
Fruits and tree nuts	10,335	11,119	11,933	12,790	858	7.2
Vegetables	13,893	14,913	14,561	15,086	525	3.6
All other crops	14,897	15,165	15,935	16,668	732	4.6
Home consumption	72	104	92	78	(13)	(14.7)
Value of inventory adjustment[2]	7,170	(5,390)	8,924	323	na	na
Final animal output	89,691	87,632	92,190	96,200	4,009	4.3
Meat animals	46,785	44,828	44,414	49,925	5,511	12.4
Dairy products	19,935	19,894	22,820	20,989	(1,831)	(8.0)
Poultry and eggs	18,445	19,070	22,345	22,183	(162)	(0.7)
Miscellaneous livestock	3,004	3,227	3,425	3,471	46	1.3
Home consumption	409	365	333	380	47	14.2
Value of inventory adjustment[2]	1,112	248	(1,147)	(749)	na	na
Services and forestry	17,886	19,388	20,671	22,074	1,403	6.8
Machine hire and custom work	2,071	1,928	2,154	2,601	447	20.8
Forest products sold	2,743	2,947	2,824	2,840	16	0.6
Other farm income	4,392	5,213	5,894	6,350	456	7.7
Gross imputed rental value of farm dwellings	8,680	9,300	9,799	10,283	484	4.9
Final agricultural sector output	207,891	202,824	228,452	230,771	2,319	1.0
Less: Intermediate consumption outlays	104,903	109,002	112,852	118,552	5,700	5.1
Farm origin	41,278	41,626	42,675	45,695	3,021	7.1
Feed purchased	22,631	23,829	25,234	25,232	(3)	(0.0)
Livestock and poultry purchased	13,273	12,335	11,229	13,753	2,524	22.5
Seed purchased	5,373	5,462	6,212	6,711	499	8.0
Manufactured inputs	24,398	26,155	28,640	28,964	324	1.1
Fertilizers and lime	9,180	10,033	10,934	10,933	(1)	(0.0)
Pesticides	7,225	7,726	8,526	8,827	301	3.5
Petroleum fuel and oils	5,312	5,427	6,019	6,223	204	3.4
Electricity	2,682	2,968	3,161	2,981	(181)	(5.7)
Other intermediate expenses	39,227	41,220	41,536	43,892	2,356	5.7
Repair and maintenance of capital items	9,083	9,470	10,254	10,394	139	1.4
Machine hire and custom work	4,790	4,792	4,719	4,833	113	2.4
Marketing, storage, transportation expenses	6,821	7,182	6,926	7,106	179	2.6
Contract labor	1,805	1,969	2,129	2,596	467	21.9
Miscellaneous expenses	16,728	17,807	17,508	18,964	1,457	8.3
PLUS: Net Government tranactions	989	106	98	56	(42)	(43.0)
+ Direct Government payments	7,879	7,279	7,340	7,496	156	2.1
- Motor vehicle registration and licensing fees	415	462	423	461	39	9.2
-Property taxes	6,475	6,711	6,819	6,979	160	2.3
Gross value added	103,977	93,929	115,699	112,275	(3,423)	(3.0)
less: Capital consumption	18,695	19,099	19,419	19,520	101	0.5
Net value-added	85,282	74,830	96,280	92,755	(3,524)	(3.7)
LESS: Factor payments	37,015	38,847	42,928	42,931	4	0.0
Employee compensation (total hired labor)	13,506	14,321	15,406	16,011	604	3.9
Net rent received by nonoperator landlords	11,774	11,799	14,301	13,243	(1,057)	(7.4)
Real estate and non-real-estate interest	11,735	12,726	13,221	13,678	457	3.5
Net farm income	48,266	35,984	53,352	49,824	(3,528)	(6.6)

[1]Final sector output is the gross value of the commodities and services produced within a year. Net value-added is the sector's contribution to the national economy and is the sum of the income from production earned by all factors of production. Net farm income is the farm operators' share of income from the sector's production activities. The concept presented is consistent with that employed by the Organization for Economic Cooperation and Development.

[2]A positive value of inventory change represents current-year production not sold by December 1. A negative value is an offset to production from prior years included in current-year sales.

Na = not applicable.

Source: USDA, Economic Research Service, Resource Economics Division

Table 3-4.

Farm income indicators, 1994-97

	1994	1995	1996	1997	Year-to-year change Amount	Year-to-year change Percent
	Million dollars				$ Million	Percent
Gross farm income	215,770	210,104	235,791	238,267	2,476	1.1
Gross cash income	198,326	205,476	217,791	227,952	10,160	4.7
Farm marketings	181,241	188,108	199,580	208,665	9,085	4.6
Crops	93,072	101,090	106,575	112,097	5,522	5.2
Livestock and products	88,169	87,018	93,005	96,568	3,563	3.8
Government payments	7,879	7,279	7,340	7,496	156	2.1
Farm-related income	9,206	10,088	10,872	11,791	919	18.5
Noncash income	9,161	9,770	10,223	10,741	518	5.1
Value of home consumption	481	469	425	458	34	8.0
Rental value of dwellings	8,680	9,300	9,799	10,283	484	4.9
Operator and other dwellings[1]	8,241	8,732	9,167	9,716	549	6.0
Hired laborer dwellings	439	568	631	566	(65)	(10.3)
Value of inventory adjustment	8,283	(5,142)	7,777	(425)	na	na
Total production expenses	167,504	174,120	182,439	188,443	6,004	3.3
Intermediate product	103,513	107,494	111,145	116,417	5,272	4.7
Farm origin	41,278	41,626	42,675	45,695	3,021	7.1
Feed purchased	22,631	23,829	25,234	25,232	(3)	(0.0)
Livestock and poultry purchased	13,273	12,335	11,229	13,753	2,524	22.5
Seed purchased	5,373	5,462	6,212	6,711	499	8.0
Manufactured inputs	24,398	26,155	28,640	28,964	324	1.1
Fertilizer and lime	9,180	10,033	10,934	10,933	(1)	(0.0)
Pesticides	7,225	7,726	8,526	8,827	301	3.5
Fuel and oil	5,312	5,427	6,019	6,223	204	3.4
Electricity	2,682	2,968	3,161	2,981	(181)	(5.7)
Other	37,837	39,713	39,830	41,757	1,927	4.8
Repair and maintenance	9,083	9,470	10,254	10,394	139	1.4
Other miscellaneous	28,754	30,243	29,576	31,364	1,788	6.0
Interest	11,735	12,726	13,221	13,678	457	3.5
Real estate	5,782	6,042	6,359	6,544	185	2.9
Non-real-estate	5,954	6,685	6,862	7,133	272	4.0
Contract and hired labor	15,311	16,290	17,535	18,606	1,071	6.1
Net rent to nonoperator landlords[2]	11,774	11,799	14,301	13,243	(1,057)	(7.4)
Capital consumption	18,695	19,099	19,419	19,520	101	0.5
Property taxes	6,475	6,711	6,819	6,979	160	2.3
NET FARM INCOME[3]	48,266	35,984	53,352	49,824	(3,528)	(6.6)
Gross cash income	198,326	205,476	217,791	227,952	10,160	4.7
Cash expenses	147,648	153,640	161,354	167,168	5,815	3.6
Cash expenses, excluding net rent	134,495	140,433	145,620	152,494	6,874	4.7
Intermediate product	102,566	106,532	109,962	115,142	5,180	4.7
Interest	11,338	12,303	12,785	13,196	411	3.2
Cash labor expenses	14,873	15,722	16,904	18,040	1,136	6.7
Property taxes	5,718	5,876	5,970	6,117	147	2.5
Net rent to nonoperator[4]	13,154	13,206	15,733	14,674	(1,059)	(6.7)
NET CASH INCOME	50,678	51,836	56,438	60,783	4,346	7.7

[1]Value added to gross income. Value added to net farm income equals difference in net farm income and returns to operators.

[2]Includes landlord capital consumption.

[3]Statistics in and above the Net Farm Income line represent the farm sector, defined as including farm operators' dwellings located on farms. Statistics below the Net Farm Income line represent only the farm businesses to the exclusion of the operators' dwellings.

[4]Excludes landlord capital consumption.

Na = not applicable.

Source: USDA, Economic Research Service, Resource Economics Division.

(examples: hogs in North Carolina and dairy in California) has resulted in higher production and lower prices that will persist until higher cost production declines in sufficient quantities to achieve an equilibrium. As an aside, a consequence of this restructuring is that a higher percentage of feed is being purchased as opposed to being grown on the farms producing the livestock.

Farm Household Income

Farm operators have been surveyed by the annual Agricultural Resource Management Study (formerly the Farm Costs and Returns Survey) about the finances and production of their farms since 1985. Beginning in 1988, USDA collected additional information about the operator's household. In 1997, the most recent year for which the survey data are available, about 98 percent of farms were covered in the household definition. Included are those run by individuals, legal partnerships, and family corporations. Nonfamily corporations, cooperatives, and institutional farms are not included in the household definition.

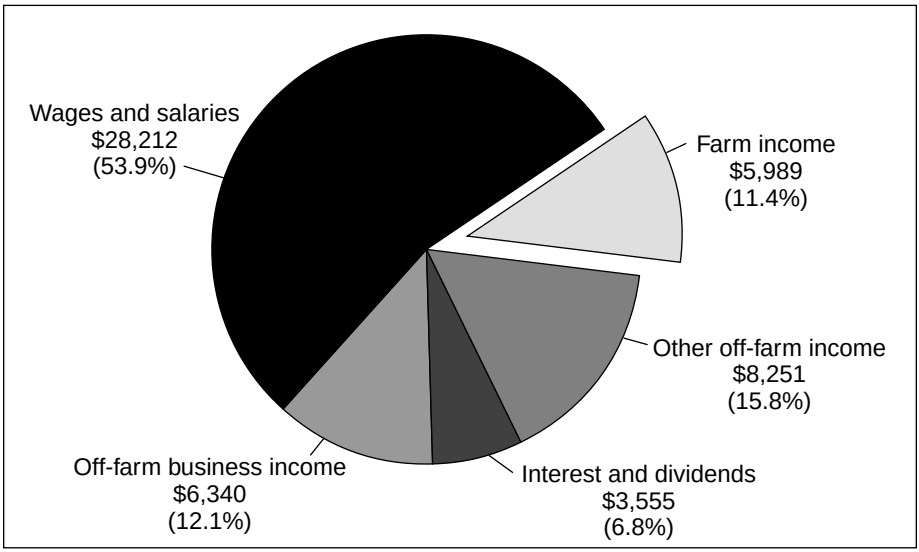
Like many other U.S. households, farm households receive income from a variety of sources, one of which is farming. The 1997 average household income for farm operators households was $52,300, which is on par with the average U.S. household. About 89 percent of the average farm operator's household income came from off-farm sources, and many operators spent most of their work efforts in occupations other than farming. Off-farm income includes earned income such as wages and salaries from an off-farm job and net income from an off-farm business. Off-farm income also includes unearned income, such as interest and dividends, and Social Security.

For the majority of farm operator households, off-farm income is critical. Most U.S. farms are run by households that depend mainly on off-farm income. About 43 percent of operators reported a nonfarm major occupation in 1996, and another 19 percent were retired. Most operators of larger farms reported farming as their major occupation, and their households were more likely to depend on farm income.

Average household income and dependence on off-farm income also varies among types of farm households. For example, 8 percent reported negative household income for 1997. On average, these households lost $47,566 from farming during the year. About 34 percent had household income of $50,000 or over, with farm income averaging $29,025. Among occupational categories, households of operators who reported occupations other than farming or retired had the highest average household income, largely from off-farm sources. Data on operators' age show that households associated with the oldest operators had the lowest average household income. Data on operators' educational level show significant increases in average income with each higher educational level.

Figure 3-3.

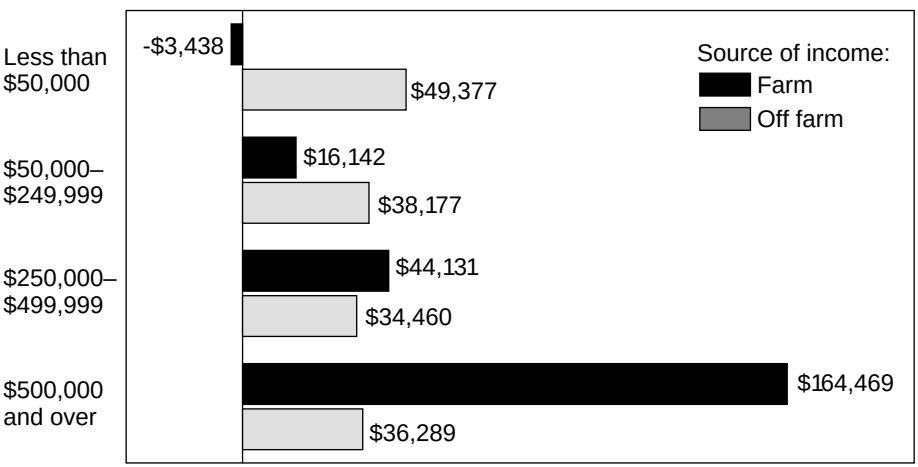
Sources of income for average farm operator household, 1997



Source: USDA, Economic Research Service,
Resource Economics Division, 1997 Agricultural Resource Management Study.

Figure 3-4.

Average farm and off-farm income for farm operator households, by size of farm, 1997



[1] Based on gross value of farm sales, which includes farm businesses', share landlords', and production contractors' shares of agricultural production.

Source: USDA Economic Research Service, Resource Economics Division, 1997 Agricultural Resource Management Study.

Table 3-5.

Farm operator households and household income, by selected characteristics, 1997

Item	Number of households	Average household income[1]	Share from off-farm sources [2]
	Number	Dollars	Percent
All operator households	2,011,568	52,347	88.6
Household income class:			
Negative	151,543	-35,678	-33.3
0-$9,999	178,539	5,302	213.3
$10,000-$24,999	398,564	17,438	112.5
$25,000-$49,999	591,897	36,116	94.7
$50,000 and over	691,025	117,843	75.4
Operator major occupation:			
Farm or ranch work	756,299	48,314	60.8
Other	866,331	63,954	104.7
Retired	388,939	34,335	97.6
Operator age class:			
Under 35 years	153,470	50,842	89.0
35-44 years	378,549	48,597	86.3
45-54 years	503,402	65,194	89.0
55-64 years	423,229	51,795	86.9
65 years or older	552,918	44,058	91.0
Operator educational level:			
Less than high school	312,036	27,879	93.2
High school	870,210	47,750	86.8
Some college	448,285	50,652	87.2
College	381,037	84,877	90.6

[1]The household income of farm operator households includes the net cash farm income that accrues to the farm operation, less depreciation, as well as wages paid to household members for work on the farm, net income from farmland rentals, and net income from another farm business, plus all sources of off-farm income accruing to the household. In cases where the net income from the farm was shared by two or more households, the net cash income was allocated to the primary operator's household based on the share that the operator reported receiving.

[2]Income from off-farm sources is more than 100 percent of total household income if farm income is negative.

Source: USDA, Economic Research Service, Resource Economics Division, 1997 Agricultural Resource Management Study.

Net Farm Income by State

Thirty-one of the 50 States experienced declines in net farm income of varying degrees in 1997 in contrast to the across-the-board increases experienced in the prior year. In order to retain perspective, remember that 1996 was truly an exceptional year with record yields for major crops and prices that remained unusually high. The value of crop production soared in 1996 reflecting rebounds in both acres harvested and yields for major crops.

Crop prices were much higher in the first half of 1996 relative to the same period in 1995 and tended to remain stable in the latter half of the year, despite the rebound in production. Corn and soybeans led the recovery, and the producers of these two crops, along with hogs, were among the principal beneficiaries of favorable prices. Previous growth in the economies of Southeast Asia translated into demand for U.S. agricultural products and helped to support commodity prices and boost farm income. These economies began to falter in the summer of 1997 and began to reduce their demand for imports of agricultural commodities.

In 1997, farmers faced contrasting production and market conditions depending on the types of commodities produced. Cattle producers experienced stable prices throughout the year at levels significantly above the lows of 1996 and benefitted from lower feed as a consequence of declining grain prices. Rising hog prices in the first half of 1997 led hog producers to step up production only to see prices drop once the extent of the production increase became known. Soybean producers experienced soaring prices in the first half of the year as world stocks dwindled but saw prices retreat in the latter half of the year, eventually returning to near beginning-year levels.

Wheat producers suffered perhaps the most market adversity in 1997. Market prices were low at the beginning of 1997 and declined throughout the year. A drop in demand for exports of U.S. wheat resulted from the depreciation in the currency values in many countries. This effectively reduced the demand for imports into the consuming countries and increased the competitive advantage of exporting countries.

Dairy prices were impacted by additional supplies of milk in States not traditionally known for dairy farming. California in particular has experienced a large increase in the production of milk. Expansion is occurring in large, dry-lot dairy operations that by all indications are among the lowest cost producers. Higher cost producers will have to reduce capacity to bring price and quantity into equilibrium. This process is not unlike what has been occurring in hog production for the last 5 years and what occurred in the broiler industry several decades ago.

The contrasting commodity situations yielded some distinctly different regional effects. Leading cattle States, particularly those with cow-calf operations, were the leaders in year-over-year gains in net farm income. Income was up more than 90 percent in Oklahoma and Wyoming. Income was down more than 50 percent in North Dakota (-90), Maine(-75), Wisconsin(-66), and New York(-51). The latter three States are traditional dairy-producing States. The North Dakota agricultural economy is heavily dependent on wheat sales, and producers suffered a one-third drop in production due to lower yields, giving farmers less to sell at lower prices.

California continues to lead the Nation in cash receipts and farm income, reflecting both its substantial land mass and its commodity mix, which is heavily weighted towards those with high value of production per acre. California's net farm income in 1997 slipped 1.7 percent to $5.8 billion, down from $5.9 billion in 1996. Iowa with $3.7 billion, representing a reduction of 7 percent, maintained its position as the State with the second largest net farm income in 1997. Two additional States earned at least $3.5 billion in net farm income for 1997—Texas ($3.6 billion) and North Carolina ($3.5 billion)—and three additional States exceeded $2 billion—Georgia, Illinois, and Nebraska. In contrast, four States had their net farm income plummet in excess of 50 percent: North Dakota (-90), Maine (-75), Wisconsin (-66), and New

York (-51). The latter three States are in the northern tier of the traditional dairy States where producers may be among the higher cost producers. Short growing seasons and cold weather may put producers in the more northern latitudes at a comparative disadvantage to the more Southern States, in terms of costs per unit of output.

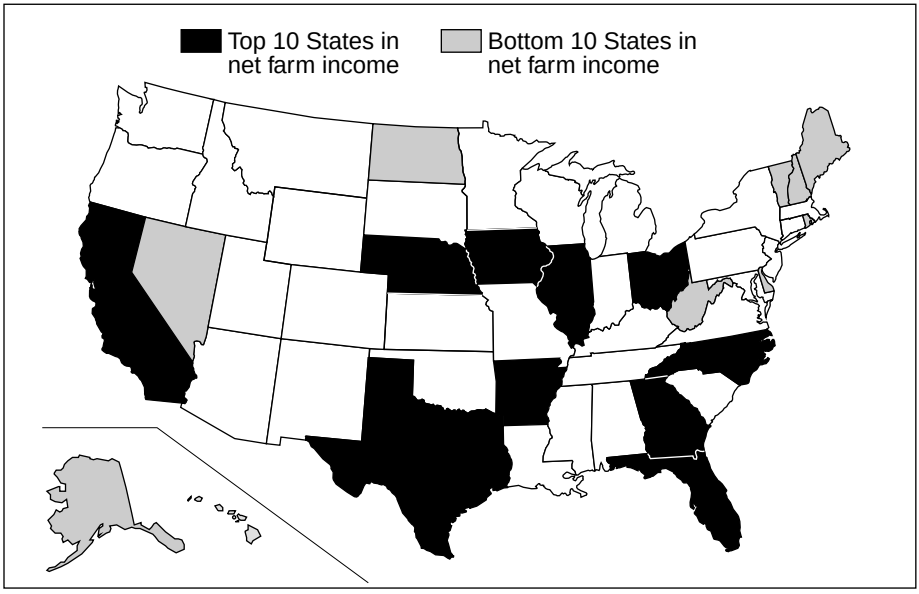
State Rankings by Cash Receipts

The top 10 States in cash receipts for all commodities in 1997 were California, Texas, Iowa, Nebraska, Illinois, Kansas, North Carolina, Minnesota, Florida, and Georgia. The share of total cash receipts derived from crop or livestock sales varied greatly among these 10 top-ranked States.

California led the Nation in crop sales with $19 billion, and was the top producing State for 8 of the sector's top 25 commodities: dairy products, greenhouse and nursery products, hay, grapes, tomatoes, lettuce, almonds, and strawberries. Milk and other commodities in which California is a leading producer tend to be perishable and expensive to transport, either because they are bulky and\or require special handling, such as refrigeration. Three-quarters of California's farm sales were from crops; fruits and nuts equaled 30 percent, vegetables, 24 percent; and greenhouse and nursery, 9 percent. Florida's pattern of cash receipts is similar to California , with vegetables, fruits and nuts, and greenhouse and nursery accounting for 69 percent of agricultural sales. By contrast, 61 percent of Texas' cash receipts were from livestock, and 71 percent of that was cattle and calves. Over 8 percent of the Nation's livestock

Figure 3-5.

Net farm income, 1997



Source: USDA, Economic Research Service, Resource Economics Division

sales value was attributed to Texas. Iowa's sources of cash receipts are, in contrast to those of Texas, more heavily weighted to crops, which comprise 57 percent of the total and livestock 43 percent. Feed grains and oilseeds represented 56 percent of Iowa's sales, while hogs accounted for 23 percent. Iowa leads the Nation in both corn and hog sales.

Cattle and calves remained the top ranked commodity in generation of cash receipts for 1997, as sales surged $5 billion or 16 percent. In fact, the sales of cattle and calves are still $3.3 billion or 8.3 percent below the peak attained in 1993, but 1997 represents a significant reversal of the slide. Historically, cattle production and the related herd size has evidenced the existence of a multi-year cycle, and indications are that cattle had previously been in the downward phase of that cycle. As the largest of the animals produced in significant quantities in the U.S. agricultural sector, cattle have by far the longest gestation period and the longest growth stage in developing into an adult animal for marketing and breeding purposes, all of which contribute to the length of the cycle. Texas led in cattle and calf receipts with $5.8 billion, up $454 million (8.3 percent) from the prior year but still $340 million (-5.5 percent) below its 1993 peak in sales. Nebraska ($4.4 billion) and Kansas ($4.4 billion) were the second and third leading producers of cattle.

Dairy products ranked second in cash receipts, with California remaining the leader in sales with over $3.6 billion. Dairy sales in California slipped $97 million (-2.6 percent) in 1997, but the State's sales have risen $955 million (36 percent) since 1993. This shift is significant, both geographically in the replacement of production in the Lakes States and structurally in the production of milk via large operations. The rapid population growth in California and other adjacent States has created an explosion in the demand for dairy products sufficient to enable large dairies capable of achieving economies of scale to be cost competitive, regionally. Wisconsin was second in dairy sales but lagged considerably behind California in 1997, followed by New York, Pennsylvania, and Minnesota. These five States were the only ones with sales of dairy products exceeding a billion dollars.

Corn and soybeans were the third and fourth-ranked commodities in the Nation, with Iowa and Illinois the undisputed leaders in sales of these commodities. Iowa's corn receipts were highest at $3.8 billion, followed by Illinois with $3.5 billion. Iowa also lead in soybean sales of $3.3 billion followed by Illinois, with $3.1 billion for 1997. This is first time any States have reached the $3 billion level in soybean sales, which indicates what an exceptional year 1997 was for soybean producers.

Table 3-6

States ranked by cash receipts, with 5 leading commodities, 1997[1]

	Total		Livestock and products		Crops		State's top ranking commodities by value of cash receipts				
State	Rank	Cash receipts	Rank	Cash receipts	Rank	Cash receipts	1	2	3	4	5
ALABAMA	26	3,227	15	2,431	34	796	Broilers	Cattle and calves	Cotton	Chicken eggs	Greenhouse/nur.
ALASKA	50	32	50	6	50	26	Greenhouse/nur.	Dairy products	Hay	Potatoes	Cattle and calves
ARIZONA	31	2,145	32	888	29	1,257	Cattle and calves	Dairy products	Lettuce	Cotton	Cantaloups
ARKANSAS	11	5,862	10	3,416	15	2,446	Broilers	Soybean	Rice	Cotton	Cattle and calves
CALIFORNIA	1	25,289	2	6,294	1	18,995	Dairy products	Grapes	Greenhouse/nur.	Cattle and calves	Lettuce
COLORADO	17	4,399	12	3,012	25	1,388	Cattle and calves	Corn	Wheat	Dairy products	Hogs
CONNECTICUT	43	496	43	218	40	279	Greenhouse/nur.	Dairy products	Aquaculture	Chicken eggs	Tobacco
DELAWARE	40	748	39	573	44	174	Broilers	Soybean	Greenhouse/nur.	Corn	Dairy products
FLORIDA	9	6,243	28	1,265	5	4,978	Greenhouse/nur.	Oranges	Tomatoes	Cane for sugar	Dairy products
GEORGIA	10	5,887	9	3,442	16	2,445	Broilers	Cotton	Peanuts	Chicken eggs	Cattle and calves
HAWAII	45	483	48	68	39	415	Pineapples	Cane for sugar	Greenhouse/nur.	Macadamia nuts	Dairy products
IDAHO	24	3,315	25	1,389	20	1,926	Cattle and calves	Dairy products	Potatoes	Wheat	Hay
ILLINOIS	5	9,276	18	1,937	2	7,339	Corn	Soybean	Hogs	Cattle and calves	Dairy products
INDIANA	14	5,506	19	1,896	10	3,610	Corn	Soybean	Hogs	Chicken eggs	Dairy products
IOWA	3	12,841	4	5,530	3	7,311	Corn	Soybean	Hogs	Cattle and calves	Dairy products
KANSAS	6	9,001	5	5,017	8	3,985	Cattle and calves	Wheat	Corn	Sorghum grain	Soybean
KENTUCKY	21	3,633	17	1,978	22	1,655	Tobacco	Horses/mules	Cattle and calves	Soybean	Corn
LOUISIANA	32	2,140	36	659	23	1,481	Cotton	Cane for sugar	Rice	Soybean	Cattle and calves
MAINE	44	486	42	258	42	228	Potatoes	Dairy products	Chicken eggs	Aquaculture	Blueberries
MARYLAND	36	1,538	31	915	35	623	Broilers	Greenhouse/nur.	Dairy products	Soybean	Cattle and calves
MASSACHUSETTS	41	532	46	102	38	430	Cranberries	Greenhouse/nur.	Dairy products	Apples	Sweet corn
MICHIGAN	22	3,588	27	1,352	19	2,236	Dairy products	Greenhouse/nur.	Corn	Soybean	Cattle and calves
MINNESOTA	8	8,155	8	4,054	7	4,101	Soybean	Corn	Dairy products	Hogs	Cattle and calves
MISSISSIPPI	23	3,476	16	2,006	24	1,470	Broilers	Cotton	Soybean	Aquaculture	Cattle and calves
MISSOURI	13	5,564	13	2,795	13	2,768	Soybean	Cattle and calves	Corn	Hogs	Broilers
MONTANA	33	2,063	30	991	30	1,072	Cattle and calves	Wheat	Barley	Hay	Sugar beets
NEBRASKA	4	10,092	3	5,542	6	4,550	Cattle and calves	Corn	Soybean	Hogs	Wheat

—continued

Table 3-6

States ranked by cash receipts, with 5 leading commodities, 1997[1]

State	Total		Livestock and products		Crops		State's top ranking commodities by value of cash receipts				
	Rank	Cash receipts	Rank	Cash receipts	Rank	Cash receipts	1	2	3	4	5
NEVADA	47	310	44	180	45	130	Cattle and calves	Hay	Dairy products	Onions	Potatoes
NEW HAMPSHIRE	48	166	47	69	47	97	Dairy products	Greenhouse/nur.	Apples	Cattle and calves	Christmas trees
NEW JERSEY	39	776	45	180	36	596	Greenhouse/nur.	Dairy products	Cranberries	Pepper, green	Blueberries
NEW MEXICO	34	1,915	26	1,354	37	562	Cattle and calves	Dairy products	Hay	Chili peppers	Onions
NEW YORK	28	2,896	21	1,859	31	1,037	Dairy products	Greenhouse/nur.	Apples	Cattle and calves	Corn
NORTH CAROLINA	7	8,302	6	4,694	11	3,608	Hogs	Broilers	Tobacco	Greenhouse/nur.	Turkeys
NORTH DAKOTA	25	3,313	38	611	14	2,702	Wheat	Cattle and calves	Sunflower	Soybean	Barley
OHIO	16	5,345	20	1,869	12	3,476	Soybean	Corn	Dairy products	Greenhouse/nur.	Hogs
OKLAHOMA	18	4,369	11	3,061	27	1,308	Cattle and calves	Wheat	Hogs	Broilers	Greenhouse/nur.
OREGON	27	3,113	34	740	18	2,373	Greenhouse/nur.	Cattle and calves	Hay	Wheat	Dairy products
PENNSYLVANIA	20	4,128	14	2,789	26	1,339	Dairy products	Greenhouse/nur.	Cattle and calves	Chicken eggs	Mushrooms
RHODE ISLAND	49	83	49	9	48	74	Greenhouse/nur.	Dairy products	Sweet corn	Potatoes	Chicken eggs
SOUTH CAROLINA	35	1,695	33	797	32	898	Broilers	Tobacco	Greenhouse/nur.	Cotton	Turkeys
SOUTH DAKOTA	19	4,237	22	1,820	17	2,417	Cattle and calves	Corn	Soybean	Wheat	Hogs
TENNESSEE	30	2,292	29	1,005	28	1,287	Cattle and calves	Soybean	Broilers	Tobacco	Dairy products
TEXAS	2	13,461	1	8,184	4	5,277	Cattle and calves	Cotton	Greenhouse/nur.	Dairy products	Broilers
UTAH	37	953	35	715	41	238	Cattle and calves	Dairy products	Hay	Hogs	Greenhouse/nur.
VERMONT	42	513	40	416	46	97	Dairy products	Cattle and calves	Greenhouse/nur.	Hay	Christmas trees
VIRGINIA	29	2,401	24	1,538	33	863	Broilers	Cattle and calves	Dairy products	Tobacco	Turkeys
WASHINGTON	15	5,382	23	1,604	9	3,778	Apples	Dairy products	Wheat	Cattle and calves	Potatoes
WEST VIRGINIA	46	394	41	324	49	71	Broilers	Cattle and calves	Dairy products	Turkeys	Chicken eggs
WISCONSIN	12	5,756	7	4,070	21	1,686	Dairy products	Cattle and calves	Corn	Soybean	Hogs
WYOMING	38	845	37	646	43	199	Cattle and calves	Sugar beets	Hay	Sheep and lambs	Hogs

[1]All cash receipts are in million dollars.

Source: USDA, Economic Research Service, Resource Economics Division.

Table 3-7

Leading States for cash receipts, 1997[1]

Commodity [1]	Rank	Value	Top 10 States by their value of cash receipts									
			1	2	3	4	5	6	7	8	9	10
		$ Million	State and $ million									
			CA	TX	IA	NE	IL	KS	NC	MN	FL	GA
Total		208,665	25,289	13,46	112,841	10,092	9,276	9,001	8,302	8,155	6,243	5,887
			TX	CA	NE	IA	KS	NC	WI	MN	GA	AR
Livestock & poultry		96,568	8,184	6,294	5,542	5,530	5,017	4,694	4,070	4,054	3,442	3,416
			CA	IL	IA	TX	FL	NE	MN	KS	WA	IN
Crops		112,097	18,995	7,339	7,311	5,277	4,978	4,550	4,101	3,985	3,778	3,610
			TX	NE	KS	CO	OK	IA	CA	SD	MN	MO
Cattle and calves	1	36,094	5,849	4,385	4,354	2,286	2,009	1,652	1,323	1,188	973	901
			CA	WI	NY	PA	MN	TX	MI	WA	ID	OH
Dairy products	2	20,989	3,618	2,948	1,528	1,526	1,200	787	732	728	634	583
			IA	IL	NE	IN	MN	OH	KS	SD	MO	TX
Corn	3	20,456	3,777	3,524	2,643	1,600	1,325	964	890	782	781	658
			IA	IL	IN	MN	OH	MO	NE	AR	SD	KS
Soybeans	4	18,321	3,293	3,107	1,550	1,511	1,360	1,180	1,053	787	756	628
			GA	AR	AL	NC	MS	TX	MD	DE	CA	VA
Broilers	5	14,151	2,277	2,096	1,653	1,372	1,226	775	532	530	472	445
			IA	NC	MN	IL	NE	IN	MO	OK	OH	KS
Hogs	6	13,197	2,957	2,017	1,169	1,011	833	805	779	423	413	410
			CA	FL	TX	NC	OH	OR	MI	PA	GA	NY
Greenhouse & nursery[2]	7	11,431	2,346	1,134	1,043	943	525	469	433	362	306	266
			KS	ND	MT	WA	OK	ID	SD	TX	MN	CO
Wheat	8	8,926	1,503	1,270	699	694	523	423	402	362	317	309
			TX	CA	GA	MS	AR	NC	LA	AZ	AL	TN
Cotton	9	6,515	1,582	1,097	709	625	562	329	328	294	228	223
			CA	OR	WA	ID	TX	SD	KS	CO	NE	NM
Hay	10	4,633	679	289	258	256	230	224	198	187	163	159

—continued

Table 3-7

Leading States for cash receipts, 1997[1]

Commodity [1]	Rank	Value	Top 10 States by their value of cash receipts									
			1	2	3	4	5	6	7	8	9	10
		$ Million	State and $ million									
			GA	OH	CA	PA	IN	AR	TX	IA	AL	NC
Chicken eggs	11	4,531	359	357	345	315	300	276	268	242	221	203
			CA	WA	NY	OR	MI	PA	AZ	AR	GA	OH
Grapes	12	3,053	2,816	124	37	21	15	14	14	4	3	2
			NC	KY	TN	SC	VA	GA	FL	OH	IN	PA
Tobacco	13	2,886	1,193	730	228	213	191	158	32	29	26	25
			NC	MN	MO	AR	CA	VA	IN	SC	PA	IA
Turkeys	14	2,880	528	400	236	215	202	189	144	144	97	81
			ID	WA	CA	WI	OR	ND	ME	MN	MI	FL
Potatoes	15	2,259	526	432	152	139	128	113	100	99	80	80
			CA	FL	GA	OH	VA	NJ	IN	SC	TX	TN
Tomatoes	16	1,852	870	610	58	48	44	28	24	23	22	21
			FL	CA	AZ	TX	n.a	n.a	n.a	n.a	n.a	n.a
Oranges	17	1,717	1,128	580	5	3						
			AR	CA	LA	TX	MS	MO	n.a	n.a	n.a	n.a
Rice	18	1,657	717	319	262	168	137	54				
			KS	TX	NE	MO	OK	AR	IL	NM	SD	LA
Sorghum grain	19	1,619	666	450	204	86	60	29	28	21	20	19
			CA	AZ	NJ	NM	CO	OH	FL	NY	WA	n.a
Lettuce	20	1,608	1,251	303	14	13	10	6	6	3	3	
			WA	CA	NY	MI	PA	VA	ID	NC	OR	MA
Apples	21	1,527	817	167	126	92	53	29	18	17	16	16
			MN	ID	ND	CA	MI	MT	WY	CO	NE	WA
Sugar beets	22	1,349	389	239	194	128	126	59	58	54	45	25
			CA	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Almonds	23	1,127	1,127									
			GA	TX	AL	NC	VA	OK	FL	NM	SC	AZ
Peanuts	24	932	363	193	102	88	55	54	54	14	9	1
			CA	FL	OR	NC	NY	MI	WI	PA	WA	LA
Strawberries	25	908	686	146	20	13	10	7	6	5	5	4

n.a. = not applicable

[1]The 25 leading commodities ranked by value of farm marketings. [2]Excludes mushrooms.

Source: USDA, Economic Research Service, Resource Economics Division

Government Payments by Program and State

Government payments of $7.3 billion in 1996 and $7.5 billion 1997 were significantly lower than the average for the first half of the 1990's. Total payments in both years were slightly higher than those of 1995 but 45 percent lower than the $13.4 billion in 1993 which was the highest level since 1988. Direct government payments were expected to begin declining with the 1996 Farm Act. Even though the payments in 1996 and later years reflect the production flexibility payments provided under the 1996 Act, adjustments for deficiency payments owed to farmers for some commodities in 1996 and repayments by farmers for overpayments under the previous farm program also are included in 1996 and 1997 payments.

Under the old farm program, deficiency payments due to producers were made in as many as three payments, in 2 calendar years. The first payment was based on an estimation of the final amount likely to be owed to the producer, using projected market prices over the relevant period; and subsequent payments were then the balance due once the actual market prices became known.

During the 1995/96 marketing year, commodity prices received by farmers tended to be higher than had been projected when determining initial deficiency payments for the 1995/96 crops. For many producers, this meant that the disbursement received as the first deficiency payment for the 1995 crops exceeded the amount they were due, once all the information necessary to complete the final determination became available. As a consequence, they were required to reimburse USDA; and these reimbursements were then available for disbursement under production flexibility contract payments.

After 1997, the influence of the deficiency repayment adjustments should be concluded and the payment totals will more closely follow the declining levels of production flexibility contract payments specified in the 1996 Farm Act. The payment totals will be constrained by the fixed funding set forth for production flexibility contracts in the 1996 Farm Act through the year 2002.

Innovative legislation was implemented in 1996

As a refresher, new legislation enacted effective for 1996 represented a significant departure from that which it replaced, mandating sweeping changes in the operational design of Federal farm programs for a period of 7 years. Under the new farm programs, government payments to farmers will decline over 7 years in both absolute terms and as a proportion of production income. Both the declining payments and diminishing role of the Government crystallized in the new legislation represent extensions of trends under which Government assistance as a share of production income was already in a decline.

The 1996 Farm Act, more formally known as The Federal Agriculture Improvement and Reform Act of 1996, signed in April1996, initiated a new Government farm policy for 1996 through 2002 that disconnects the link between production history and the level of Federal support payments. The legislation also severed the links between Government payments and the crops produced and commodity prices. During the 7-year period covered by the 1996 Act, payments determined during a one-time, sign-up window in 1996 are scheduled to decline.

The payments are a function of the farmer's established program crop acreage times the established program yield multiplied (per a formula) by a set payment rate. The crop acreage and program yields remain constant throughout the 7 years, but payment rates are scheduled to generally decline. Nonrecourse marketing loans administered by the Commodity Credit Corporation remain available for the contract crops, oilseeds, and extra long staple cotton. The loan rates are generally much lower than past support levels and marketing loans are available to producers. Consequently, farmers don't necessarily have to place the commodity under loan in order to receive the benefits for which they are eligible and the Government's potential financial exposure through loan defaults is reduced.

Restrictions: Farmers are not bound to plant any particular set of crops and have flexibility as to what they do plant, with some exceptions pertaining to fruits and vegetables. Two requirements that farmers must meet are to comply with established conservation measures and either buy crop insurance or sign a waiver to all Federal disaster assistance.

Exceptions: The legislation contains special language for peanuts and sugar that generally maintains the structure of those programs established under the previous legislation but at lower support levels, thereby reducing the Government's exposure. The dairy price support program will be phased out over 4 years and the dairy milk marketing orders are to be reduced by two-thirds in 3 years. Tobacco program provisions are covered under separate legislation and are not affected by the 1996 Farm Act.

Number of Farms and Net Cash Income by Sales Class

The number of farms decreased slightly to 2,057,910 in 1997, and the percent of farms in each major sales class changed somewhat. Almost three quarters of all U.S. farms have annual sales of less than $50,000, while approximately 1 percent of all farms have sales greater than $1 million. Farms with over $250,000 in sales account for less than 7 percent of all farms but dominate American agricultural output. These large farms sell 65 percent of the Nation's livestock and 61 percent of the crops. They have 61 percent of the gross cash income compared with 59 percent of the cash expenses. In 1997 they accounted for 67 percent of the Nation's net cash income. Approximately 35 percent of direct Government payments went to these farms.

Table 3-8

Government payments, by program and State, 1997[1]

State	Feed grain	Wheat	Rice	Cotton	Wool Act	Conservation[2]	Miscellaneous[3]	Total
				1,000	dollars			
Alabama	(318)	(3)	0	(112)	0	25,138	41,081	65,785
Alaska	0	0	0	0	0	990	500	1,490
Arizona	(140)	(59)	0	(933)	(7)	787	47,019	46,667
Arkansas	(1,502)	(394)	7	(505)	0	12,912	264,339	274,857
California	(1,022)	(147)	(11)	(1,217)	6	13,200	209,727	220,536
Colorado	(8,687)	(318)	0	0	0	78,338	106,292	175,626
Connecticut	(77)	0	0	0	0	162	1,299	1,384
Delaware	(571)	(1)	0	0	0	347	5,950	5,725
Florida	(106)	(1)	0	(11)	0	5,967	13,198	19,047
Georgia	(892)	(38)	0	(249)	0	27,866	82,520	109,207
Hawaii	0	0	0	0	0	163	391	554
Idaho	(301)	(528)	0	0	1	38,583	72,675	110,429
Illinois	(81,151)	(135)	0	0	0	62,071	571,701	552,486
Indiana	(44,556)	(71)	0	0	0	30,364	279,429	265,166
Iowa	(86,847)	(1)	0	0	0	148,216	651,533	712,901
Kansas	(29,526)	(1,356)	0	0	0	151,940	408,725	529,784
Kentucky	(7,354)	(39)	0	0	0	22,353	68,107	83,067
Louisiana	(824)	(42)	(27)	(534)	0	7,578	151,195	157,346
Maine	(66)	0	0	0	0	2,170	2,093	4,197
Maryland	(1,962)	(4)	0	0	0	2,152	19,304	19,490
Massachusetts	(45)	0	0	0	0	211	1,030	1,196
Michigan	(19,121)	(90)	0	0	1	20,854	119,642	121,287
Minnesota	(56,472)	(540)	0	0	(5)	86,946	387,120	417,049
Mississippi	(629)	(26)	5	(520)	0	35,562	135,469	169,861
Missouri	(15,484)	(145)	0	(72)	0	104,659	189,108	278,066
Montana	(422)	(571)	0	0	1	101,164	130,745	230,918
Nebraska	(82,023)	(282)	0	0	0	69,287	467,616	454,598

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Table 3-8

Government payments, by program and State, 1997[1]

State	Feed grain	Wheat	Rice	Cotton	Wool Act	Conservation[2]	Miscellaneous[3]	Total
				1,000	dollars			
Nevada	(1)	(5)	0	0	0	940	1,161	2,096
New Hampshire	(30)	0	0	0	0	172	747	889
New Jersey	(537)	0	0	0	0	226	3,940	3,629
New Mexico	(1,228)	(35)	0	(25)	0	18,201	22,085	38,998
New York	(4,622)	(13)	0	0	0	4,601	39,667	39,633
North Carolina	(3,349)	(28)	0	(61)	0	17,744	73,459	87,764
North Dakota	(5,178)	(1,305)	0	0	5	103,387	264,640	361,549
Ohio	(25,323)	(146)	0	0	0	25,899	185,998	186,429
Oklahoma	(1,622)	(916)	0	(66)	0	49,644	158,561	205,601
Oregon	(103)	(170)	0	0	2	26,371	37,328	63,429
Pennsylvania	(2,910)	(3)	0	0	0	7,447	30,936	35,471
Rhode Island	(1)	0	0	0	0	35	88	122
South Carolina	(1,325)	(35)	0	(80)	0	12,242	32,242	43,044
South Dakota	(18,150)	(262)	0	0	0	70,459	216,067	268,113
Tennessee	(2,899)	(53)	3	(97)	0	20,310	58,944	76,209
Texas	(23,460)	(579)	(30)	(1,366)	10	157,557	516,435	648,567
Utah	(154)	(8)	0	0	0	9,491	10,767	20,095
Vermont	(129)	0	0	0	0	741	2,481	3,093
Virginia	(1,580)	(21)	0	(2)	0	5,989	26,204	30,590
Washington	(373)	(556)	0	0	0	53,529	94,680	147,279
West Virginia	(183)	(0)	0	0	0	2,425	3,433	5,675
Wisconsin	(26,168)	(9)	0	0	0	45,635	157,114	176,572
Wyoming	(302)	(29)	0	0	(3)	10,241	12,481	22,387
United States	(559,723)	(8,964)	(54)	(5,851)	14	1,693,264	6,377,266	7,495,953

[1]Includes both cash payments and payment-in-kind (PIK). [2]Includes amount paid under agriculture and conservation programs (Conservation Reserve, Agricultural Conservation, Emergency Conservation, and Great Plains Program). [3]Includes Production Flexibility Contracts Payments under the 1996 Farm Act. Other programs included in the miscellaneous category are Rural Clean Water, Forestry Incentive Annual, Dairy Indemnity, Extended Warehouse Storage, Extended Farm Storage, Livestock Emergency Assistance, Interest Payments, Disaster, Loan Deficiency, Market Gains, Milk Marketing Fee, Options Pilot, Limitation Refund, Additional Interest, Noninsured Assistance, Interest on NAP, Karnal Bunt Fungus, Production Flexibility, Reserve, Environment Quality Incentives, 90-Day Rule, Potato Diversion, Colorado River Salinity, and Wetlands Reserve.

Note: Unanticipated adjustments for deficiency payments owed to farmers in 1996 and repayments owed by farmers under the previous farm program are included in 1996 and 1997 payments. The negative numbers represent repayments by farmers.

Source: USDA, Economic Research Service, Resource Economics Division.

Table 3-9

Direct Government payments, by program, United States, 1950-97[1]

Year	Feed grains	Wheat	Rice	Cotton	Wool	Conservation[2]	Miscellaneous[3]	Total
				Million dollars				
1950	np	np	np	np	np	246	37	283
1951	np	np	np	np	np	246	40	286
1952	np	np	np	np	np	242	33	275
1953	np	np	np	np	np	181	32	213
1954	np	np	np	np	np	217	40	257
1955	np	np	np	np	np	188	41	229
1956	np	np	np	np	54	220	280	554
1957	np	np	np	np	53	230	732	1,015
1958	np	np	np	np	14	215	859	1,088
1959	np	np	np	np	82	233	367	682
1960	np	np	np	np	51	223	429	703
1961	772	42	np	np	56	236	387	1,493
1962	841	253	np	np	54	230	368	1,746
1963	843	215	np	np	37	231	370	1,696
1964	1,163	438	np	39	25	236	278	2,179
1965	1,391	525	np	70	18	224	235	2,463
1966	1,293	679	np	773	34	231	267	3,277
1967	865	731	np	932	29	237	284	3,078
1968	1,366	747	np	787	66	229	268	3,463
1969	1,643	858	np	828	61	204	199	3,793
1970	1,504	871	np	919	49	208	166	3,717
1971	1,054	878	np	822	69	173	149	3,145
1972	1,845	856	np	813	110	198	140	3,962
1973	1,142	474	np	718	65	72	136	2,607
1974	101	70	np	42	[4]	192	125	530
1975	279	77	np	138	13	193	107	807
1976	196	135	[4]	108	39	209	47	734
1977	187	887	130	89	5	328	192	1,818
1978	1,172	963	3	127	27	239	499	3,030
1979	494	114	59	185	33	197	294	1,376
1980	382	211	2	172	28	214	276	1,285
1981	243	625	2	222	35	201	605	1,933
1982	713	652	156	800	46	179	946	3,492
1983	1,346	864	278	662	84	188	5,874	9,296
1984	367	1,795	192	275	118	191	5,493	8,431
1985	2,861	1,950	577	1,106	98	189	924	7,705
1986	5,158	3,500	423	1,042	112	254	1,325	11,814
1987	8,490	2,931	475	1,204	144	1,531	1,972	16,747
1988	7,219	1,842	465	924	117	1,607	2,306	14,480
1989	3,141	603	671	1,184	81	1,771	3,436	10,887
1990	2,701	2,311	465	441	96	1,898	1,386	9,298
1991	2,649	2,166	550	407	154	1,858	431	8,215
1992	2,499	1,403	512	751	188	1,899	1,916	9,168
1993	4,844	1,909	650	1,226	173	1,967	2,633	13,402
1994	1,447	1,156	337	826	202	1,978	1,933	7,879
1995	3,024	587	784	30	98	1,896	860	7,279
1996[5]	(384)	(473)	175	(105)	56	1,793	6,279	7,340
1997	(560)	(9)	0	(6)	0	1,693	6,377	7,496

np = no program. [1]Components may not add due to rounding. Includes both cash payments and payments-in-kind (PIK). [2]Includes Great Plains and other conservation programs. [3]Through 1970, total amounts are for Soil Bank program, which was discontinued in 1971. Starting with 1971, amounts include all other programs. [4]Less than $500,000. [5]Commodity specific payments in 1996 reflect final deficiency payments due farmers under previous law, as well as repayments by farmers of unearned deficiency payments disbursed in advance of final determination. Production flexibility payments under the 1996 Farm Act are included in the miscellaneous category.

Source: USDA, Economic Research Service, Resource Economics Division.

Table 3-10.

Number of farms and net cash income by size class, 1997[1]

Item	$1,000,000 and over	$500,000 to $999,999	$250,000 to $499,999	$100,000 to $249,999	$50,000 to $99,999	$20,000 to $49,999	Less than $20,000
			Thousands				
Number of farms	19	35	83	207	188	270	1,257
			Million dollars				
Gross cash income	71,104	31,298	36,324	43,506	20,679	12,675	12,366
Cash receipts from marketings	68,126	29,470	33,590	39,828	18,470	11,049	8,132
Crops	33,421	15,419	19,621	24,024	9,861	6,485	3,265
Government supported	4,886	6,743	10,210	11,722	4,718	2,660	867
Nonsupported	28,535	8,676	9,411	12,303	5,143	3,825	2,398
Livestock	34,706	14,051	13,969	15,803	8,609	4,564	4,867
Government payments	470	762	1,397	2,051	974	962	880
Farm-related income	2,508	1,067	1,337	1,627	1,235	664	3,353
Cash expenses	50,015	21,367	26,650	31,306	14,065	10,004	13,762
Net cash income	21,090	9,932	9,674	12,200	6,614	2,671	(1,397)
			Percent				
Percent of total:							
Number of farms	0.9	1.7	4.0	10.1	9.1	13.1	61.1
Gross cash income	31.2	13.7	15.9	19.1	9.1	5.6	5.4
Cash receipts from marketings	32.6	14.1	16.1	19.1	8.9	5.3	3.9
Crops	29.8	13.8	17.5	21.4	8.8	5.8	2.9
Government supported	11.7	16.1	24.4	28.0	11.3	6.4	2.1
Nonsupported	40.6	12.3	13.4	17.5	7.3	5.4	3.4
Livestock	35.9	14.6	14.5	16.4	8.9	4.7	5.0
Government payments	6.3	10.2	18.6	27.4	13.0	12.8	11.7
Farm-related income	21.3	9.0	11.3	13.8	10.5	5.6	28.4
Cash expenses	29.9	12.8	15.9	18.7	8.4	6.0	8.2
Net cash income	34.7	16.3	15.9	20.1	10.9	4.4	-2.3

—continued

Table 3-10.

Number of farms and net cash income by size class, 1997[1]

Item	$1,000,000 and over	$500,000 to $999,999	$250,000 to $499,999	$100,000 to $249,999	$50,000 to $99,999	$20,000 to $49,999	Less than $20,000
			Dollars				
Per farm operation: [1]							
Gross cash income	3,788,552	900,997	437,983	210,210	110,145	46,934	9,840
Cash receipts from marketings	3,629,883	848,350	405,024	192,438	98,378	40,912	6,471
Crops	1,780,711	443,872	236,587	116,080	52,524	24,014	2,598
Government supported	260,341	194,099	123,107	56,637	25,130	9,849	690
Nonsupported	1,520,370	249,773	113,480	59,443	27,394	14,165	1,908
Livestock	1,849,172	404,479	168,437	76,358	45,854	16,898	3,873
Government payments	25,054	21,933	16,840	9,910	5,187	3,563	700
Farm-related income	133,615	30,714	16,119	7,862	6,581	2,459	2,668
Cash expenses	2,664,864	615,090	321,339	151,263	74,918	37,043	10,951
Net cash income	1,123,688	285,907	116,644	58,947	35,227	9,891	(1,111)

[1]Farm operations may have several households sharing in the earnings of the business (for example, partners or shareholders in the farm corporation). The number of households per farm operation tends to increase as sales per farm increase.

Source: USDA,Economic Research Service, Resource Economics Division