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America's Diverse Family Farms

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Broad descriptions of farms based on U.S. averages can mask variation among different sizes and types of farms. This report uses a farm classification, or typology, developed by USDA's Economic Research Service that categorizes farms into more homogeneous groupings to better understand conditions within the Nation's diverse farm sector. The classification is based largely on annual revenue of the farm, major occupation of the principal operator, and family/nonfamily ownership of the farm.

Farm Typology

The farm typology, or classification, developed by ERS primarily focuses on the “family farm,” or any farm where the majority of the business is owned by the principal operator—the person most responsible for running the farm—and individuals related to the principal operator. USDA defines a farm as any place that produced and sold—or normally would have produced and sold—at least \$1,000 of agricultural products during a given year. USDA uses acres of crops and head of livestock to determine if a place with sales of less than \$1,000 could normally produce and sell that amount. Farm size is measured by gross cash farm income (GCFI), a measure of the farm’s revenue that includes sales of crops and livestock, Government payments, and other farm-related income, including fees from production contracts.

Family farms

Small	Midsize	Large-scale	
GCFI < \$350,000	GCFI \$350,000- \$999,999	Large ----- GCFI \$1,000,000 - \$4,999,999	Very large ----- GCFI ≥ \$5,000,000

Small Family Farms (GCFI less than \$350,000)

- **Retirement farms.** Small farms whose principal operators report they are retired, although they continue to farm on a small scale (366,812 farms; 17.9% of U.S. farms in 2016).
- **Off-farm occupation farms.** Small farms whose principal operators report a major occupation other than farming (860,739 farms; 41.9% of U.S. farms).
- **Farming-occupation farms.** Small farms whose principal operators report farming as their major occupation.
 - **Low-sales.** GCFI less than \$150,000 (506,001 farms; 24.7% of U.S. farms).
 - **Moderate-sales.** GCFI between \$150,000 and \$349,999 (110,524 farms; 5.4% of U.S. farms).

Midsize Family Farms (GCFI between \$350,000 and \$999,999)

- Family farms with GCFI between \$350,000 and \$999,999 (122,980 farms; 6.0% of U.S. farms).

Large-Scale Family Farms (GCFI of \$1,000,000 or more)

- **Large family farms.** Farms with GCFI between \$1,000,000 and \$4,999,999 (53,763 farms; 2.6% of U.S. farms).
- **Very large family farms.** Farms with GCFI of \$5,000,000 or more (6,449 farms; 0.3% of U.S. farms).

Nonfamily Farms

- Any farm where the principal operator and persons related to the principal operator do not own a majority of the business (24,992 farms; 1.2% of U.S. farms).



Farms, Production, and Farmland

Most U.S. farms are small; small farms operate half of farmland but account for only 23 percent of production.

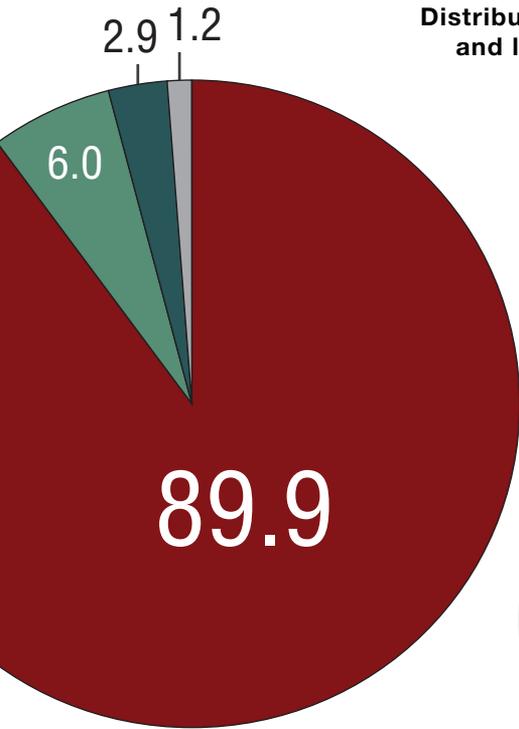
- Ninety percent of farms are small, and these farms accounted for 51 percent of the land operated by farms in 2016.
- Large-scale family farms accounted for the largest share of production, at 45 percent.
- Family farms of various types together accounted for 98.8 percent of farms and 90 percent of production in 2016.
- Nonfamily farms accounted for the remaining farms (1 percent) and production (10 percent). Nineteen percent of nonfamily farms had gross cash farm income (GCFI) of \$1,000,000 or more, and they accounted for 88 percent of nonfamily farms' production. Examples of nonfamily farms include partnerships of unrelated partners, closely held nonfamily corporations, farms with a hired operator unrelated to the owners, and (relatively few) publicly held corporations.



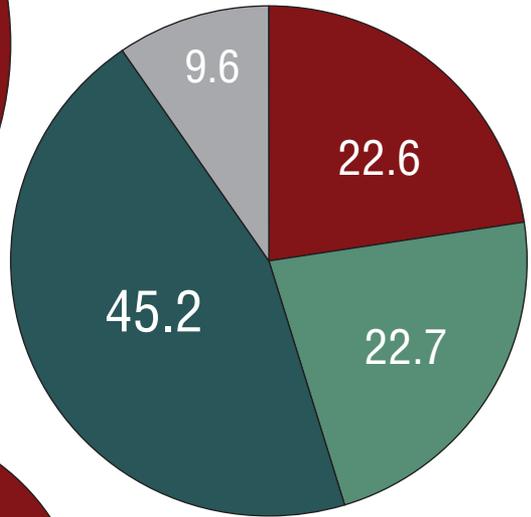
Differences among farm types are illustrated in this report using 2016 data from the Agricultural Resource Management Survey (ARMS), an annual survey conducted by USDA's National Agricultural Statistics Service and ERS. The analysis in this report is based on a sample of approximately 18,500 farms.

Distribution of farms, value of production, and land operated by farm type, 2016

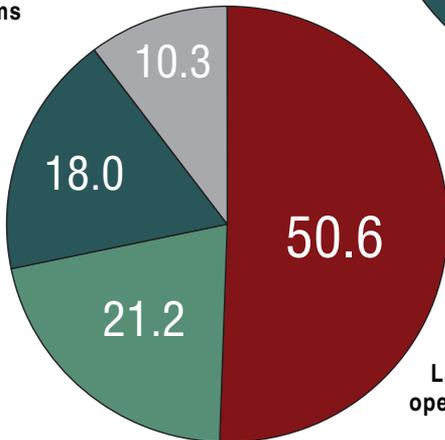
- Small family farms
- Midsize family farms
- Large-scale family farms
- Nonfamily farms



Number of farms



Value of production



Land operated

Note: Totals may not add to 100.0 percent, due to rounding.

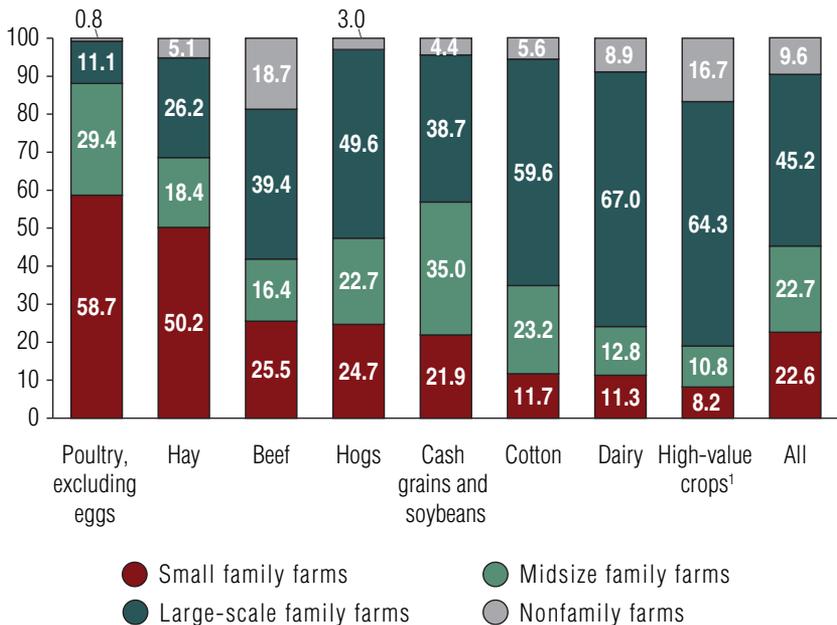
Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2016 Agricultural Resource Management Survey.

Different types of farms account for the production of specific commodities.

- Large-scale family farms account for half of hog production and two-thirds of both dairy production and high-value crops like fruits and vegetables.
- Midsize and large-scale family farms dominate cotton (83 percent of production) and cash grains/soybeans (74 percent).
- Small farms produce 59 percent of U.S. poultry output and 50 percent of hay.
- Small and large-scale farms together account for two-thirds of beef production. Small farms generally have cow/calf operations, while large-scale farms are more likely to operate feedlots.

Value of production for selected commodities by farm type, 2016

Percent of value of production



Note: Totals may not add to 100.0 percent, due to rounding. ¹High-value crops include vegetables, fruits/tree nuts, and nursery/greenhouse products.

Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2016 Agricultural Resource Management Survey.

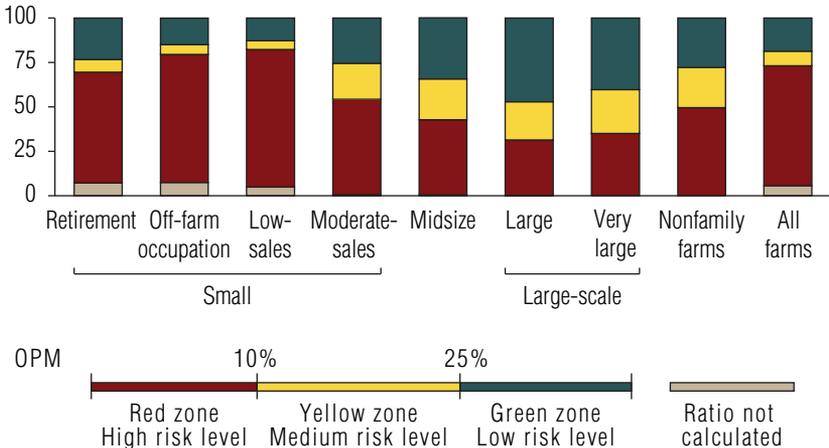
Farm Financial Performance

Small farms are more likely to have an operating profit margin (OPM) in the red zone—indicating a higher risk of financial problems—but some are more profitable. (See the figure for definition of OPM.)

- Each type of small family farm had between 54 and 77 percent of its farms in the red zone, with an OPM of less than 10 percent, in 2016. Most small farms in the red zone had a negative operating margin, the result of losses from farming.
- Other small farms were more profitable: 13 to 26 percent of each small farm group had an OPM in the low-risk green zone, with a margin greater than 25 percent.
- Nevertheless, an even greater share of midsize (34 percent) and large-scale farms (47 and 40 percent) had an OPM greater than 25 percent. In addition, a majority of midsize and large-scale farms operated outside the red zone.

Farms by operating profit margin (OPM) and farm type, 2016

Percent of farms in each group



Note: Totals may not add to 100.0 percent, due to rounding. Operating profit margin (OPM) = 100 X (net farm income + interest paid – charges for unpaid labor and management) ÷ gross farm income.

Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2016 Agricultural Resource Management Survey.

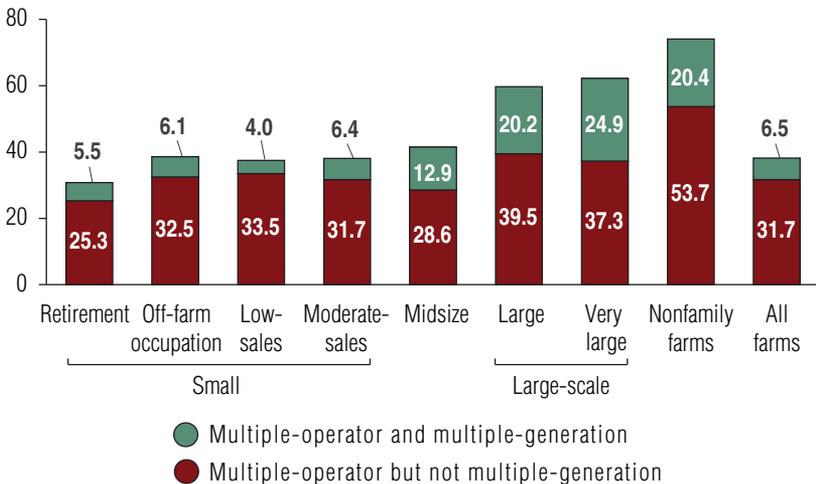
Farms and Farm Operators

More than a third of farms have multiple operators, and larger farms are more likely to have multiple generations of farm operators.

- Most secondary operators on small farms are the spouse of the principal operator.
- Multiple-generation enterprises are most common among large-scale family farms and nonfamily farms (20-25 percent).
- Principal and secondary operators on nonfamily multiple-generation farms are likely to be unrelated managers from different generations.
- Generational lifecycles, particularly the presence or absence of younger related operators on family farms, may affect farm expansion and contraction decisions, as well as succession.

Multiple-operator and multiple-generation farms by farm type, 2016

Percent of farms in each group



Note: Multiple-operator farms have more than one operator. Multiple-generation farms are multiple-operator farms with a difference of at least 20 years between the ages of the youngest and oldest operators. The remaining farms are single-operator farms with only one operator (not shown).

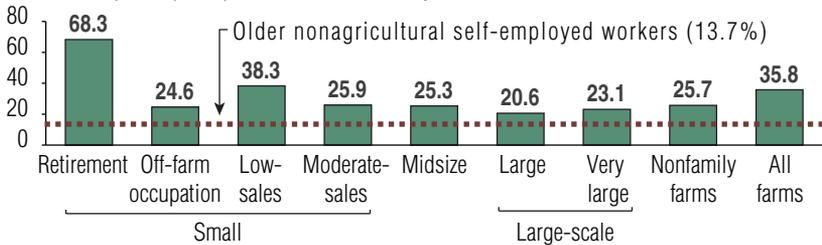
Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2016 Agricultural Resource Management Survey.

A large share of principal farm operators are age 65 or older.

- Thirty-six percent of principal farm operators were at least 65 years old in 2016, compared with only 14 percent of self-employed workers in nonagricultural businesses.
- Retirement farms had the highest percentage of older operators (68 percent), as might be expected, followed by low-sales farms (38 percent). Only 21 to 26 percent of operators in the remaining typology groups were age 65 or older.
- Operators age 55 to 64 made up the same share of farms as older operators, 36 percent, but they accounted for 42 percent of farm production versus 23 percent for older operators.
- Older operators’ production totals were less if they were retired. About one-third of older operators reported they were retired (12 percent of all U.S farms), and they accounted for only 3 percent of farm production. The remaining older operators (24 percent of U.S. farms) accounted for 20 percent of production.
- The advanced age of farm operators is understandable, given that the farm is the home for most farmers and farmers can phase out of farming gradually by renting out or selling parcels of their land. Operators on retirement farms rented out 31 percent of their land in 2016 and enrolled another 14 percent in the USDA Conservation Reserve Program (CRP).

Older principal operators by farm type, 2016

Percent of principal operators at least 65 years old



Note: The principal operator is the operator most responsible for running the farm. In the case of single-operator farms, the sole operator is a principal operator. Older operators are at least 65 years old. Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2016 Agricultural Resource Management Survey for age of principal operators. U.S. Department of Labor, Bureau of Labor Statistics for older nonagricultural self-employed workers.

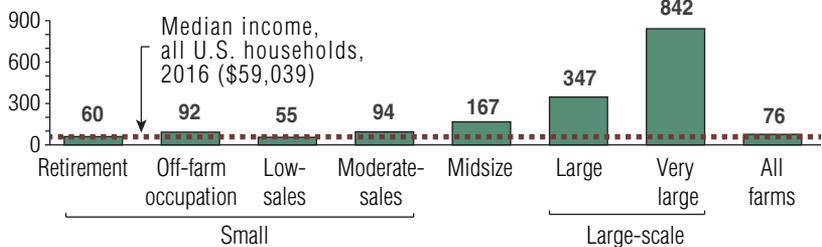
Farm Operator Household Income and Wealth

Farm households in general are not low income when compared with all U.S. households.

- Each type of farm household—except those operating low-sales farms—received a median income at or above the median for all U.S. households in 2016.
- Overall, only 38 percent of farm households had income below the median for all U.S. households, but the share was larger for households operating retirement farms or low-sales farms—49 percent and 56 percent, respectively.
- Self-employment or wage/salary jobs are the main source of off-farm income for farm households. Farm households often use off-farm income to cover farm expenses and fund their farm operations.
- Operators of small farms—especially retirement, off-farm occupation, and low-sales farms—often report losses from farming. Some operators reporting losses may write farm losses off against other income for income tax reporting purposes.

Median operator household income by farm type, 2016

Thousand dollars per household



Note: Operator household income is not estimated for nonfamily farms. Operator household income includes both farm and off-farm income received by household members. Median income falls at the midpoint of the distribution of households ranked by income; half of households rank above the median and half below it.

Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2016 Agricultural Resource Management Survey for farm households. U.S. Department of Commerce, U.S. Bureau of the Census, 2017 Current Population Survey for all U.S. households.



Farm households with income or wealth below the median for all U.S. households, 2016

Farm type	Farm households with...	
	Income below U.S. median (\$59,039)	Wealth below U.S. median (\$97,000)
	Percent of farm households	
Small family farms		
Retirement	48.7	2.8
Off-farm occupation	27.2	3.3
Low-sales	55.7	2.6
Moderate-sales	32.0	2.9
Midsized family farms	21.8	3.5
Large-scale family farms		
Large	14.0	3.5
Very large	15.1	1.8
All family farms	37.8	3.0

Note: Operator household income and wealth are not estimated for nonfamily farms.

Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2016 Agricultural Resource Management Survey. U.S. Dept. of Commerce, Bureau of the Census, 2017 Current Population Survey. Board of Governors of the Federal Reserve Board, in cooperation with the U.S. Dept. of the Treasury, 2016 Survey of Consumer Finances.

Average (mean) farm operator household income by source and farm type, 2016

Farm type	Total average income	Income from farming	
		Amount	Negative
	Dollars per household		Percent of households
Small family farms			
Retirement	83,512	4,705	54.6
Off-farm occupation	127,784	-1,513	66.3
Farming-occupation			
Low-sales	60,074	-1,086	54.4
Moderate-sales	102,130	50,720	21.2
Midsized family farms	185,684	119,140	16.9
Large-scale family farms			
Large family farms	422,261	357,203	11.6
Very large family farms	1,737,715	1,674,839	13.9
All family farms	117,918	24,731	54.2

Note: Totals may not add to totals due to rounding. Operator household income is not estimated for nonfamily farms. ¹Earned income comes from off-farm self-employment or wage/salary jobs. Unearned income includes interest and dividends, benefits from Social Security and other public programs, alimony, annuities, net income of estates or trusts, private pensions, etc.

Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2016 Agricultural Resource Management Survey.

From off-farm sources

Total	Earned ¹	Unearned ¹
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Dollars per household

78,807	41,624	37,183
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129,297	102,209	27,088
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61,161	35,027	26,133
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51,410	35,395	16,015
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66,544	45,725	20,820
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65,058	45,001	20,056
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62,876	35,665	27,211
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93,187	65,680	27,506
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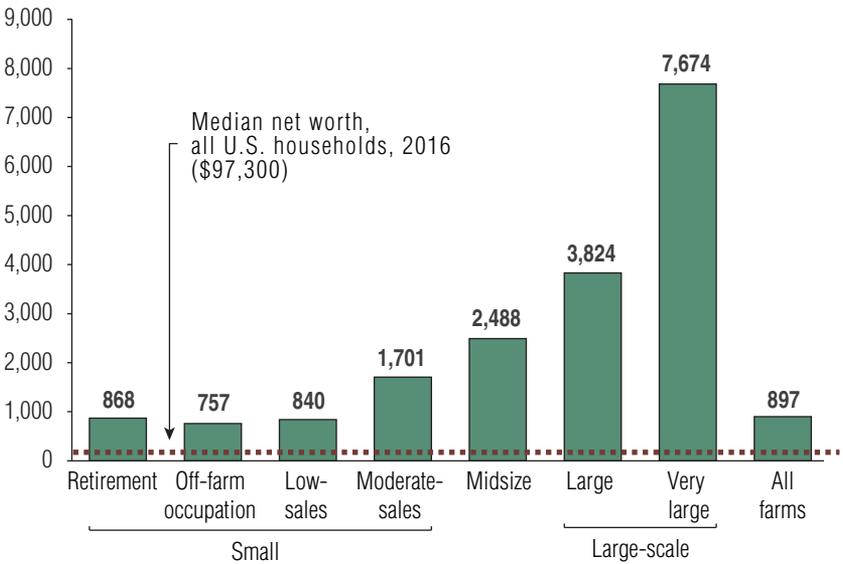


Wealth—as well as income—is important to farm household well-being, and farm household wealth exceeds that of U.S. households in general.

- Median operator wealth for each type of farm was much higher than the median for all U.S. households in 2016.
- Only 3 percent of farm households had less wealth than the median for all U.S. households, with little variation by type of farm.
- Farm households have substantial farm assets, reflecting the value of their farmland, and most have relatively low farm debt. Farm real estate accounts for about 81 percent of the assets of family farms.

Median operator household wealth by farm type, 2016

Thousand dollars per household



Note: Operator household wealth is not estimated for nonfamily farms. Operator household wealth is defined as household net worth, the difference between the household's assets and liabilities, considering farm and nonfarm assets and liabilities. Median wealth falls at the midpoint of the distribution of households ranked by wealth; half of households rank above the median and half below it.

Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2016 Agricultural Resource Management Survey for farm households. Board of Governors of the Federal Reserve Board with the cooperation of the U.S. Department of the Treasury, 2016 Survey of Consumer Finances for all U.S. households.



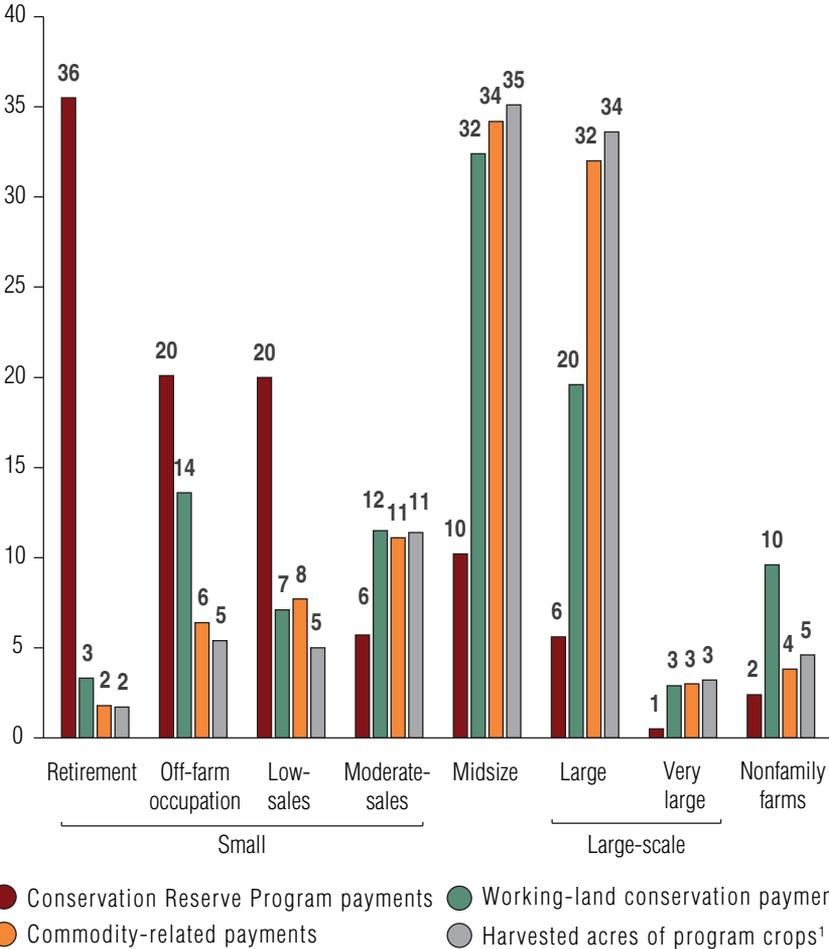
Government Payments and Federal Crop Insurance

Recipients of Government payments differ by program.

- Commodity program payments are targeted at production of specific commodities and reflect acreage in crops historically eligible for support. Seventy-seven percent of these payments went to moderate-sales, midsize, and large family farms in 2016, roughly proportional to their 80-percent share of acres in program crops.
- Thirty-two percent of working-land conservation payments went to midsize family farms and another 20 percent went to large family farms. These programs target production, indirectly, by focusing environmental programs on lands in production.
- CRP, however, targets environmentally sensitive land; retirement, off-farm occupation, and low-sales farms received 76 percent of these payments in 2016.
- Seventy percent of all farms received no farm-related Government payments in 2016.

Distribution of Government payments by farm type, 2016

Percent of U.S. payments or acres of program crops



Note: Totals may not add to 100.0 percent, due to rounding. Bars of a given color sum to 100 percent.

Conservation programs: Conservation Reserve Program—Conservation Reserve Program and Conservation Reserve Enhancement Program. Working-land programs—Environmental Quality Incentives Program, Conservation Security Program, and Conservation Stewardship Program. All other Federal conservation programs—Includes the Agricultural Conservation Easement Program and other miscellaneous conservation payments (about 2 percent of Government payments; not presented separately).

Commodity-related programs: Includes Price Loss Coverage Program, Agricultural Risk Coverage Program, Margin Protection Program for dairy, loan deficiency payments, marketing loan gains, and agricultural disaster payments.

¹Program crops include corn, peanuts, rice, sorghum, soybeans, barley, oats, wheat, canola, other oilseeds, and dry edible beans/peas/lentils.

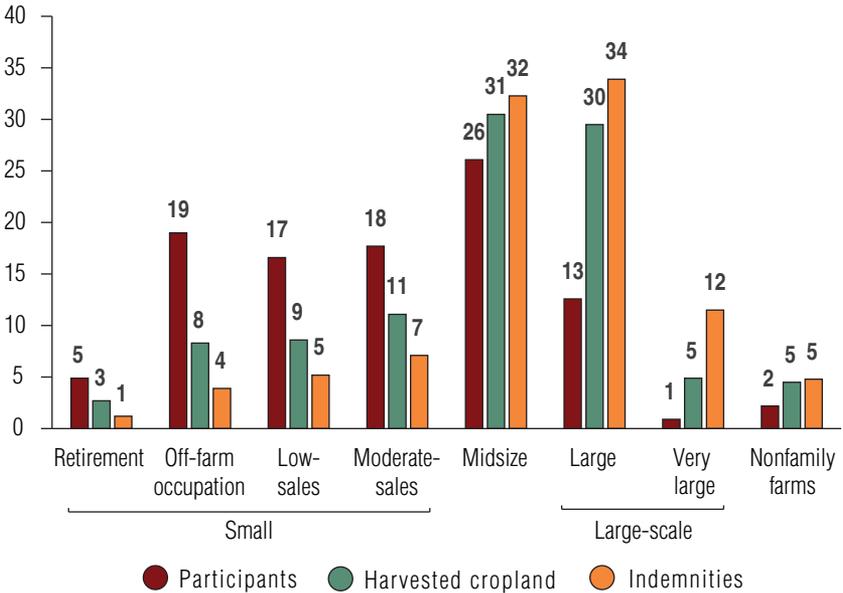
Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2016 Agricultural Resource Management Survey.

Indemnities from Federal crop insurance are roughly proportional to acres of harvested cropland.

- Midsize and large family farms together received 66 percent of indemnities while accounting for 61 percent of harvested cropland in 2016.
- Midsize and large farms’ share of indemnities reflects their high participation in Federal crop insurance. About two-thirds of midsize farms and three-fourths of large farms participated in Federal crop insurance, compared with only one-sixth of all U.S. farms.
- Grain farms—the most common specialization among midsize and large family farms—accounted for 67 percent of all participants in Federal crop insurance and 64 percent of harvested cropland in 2016.

Federal crop insurance participants, harvested cropland, and indemnities by farm type, 2016

Percent of U.S. participants, acres of cropland, and indemnities



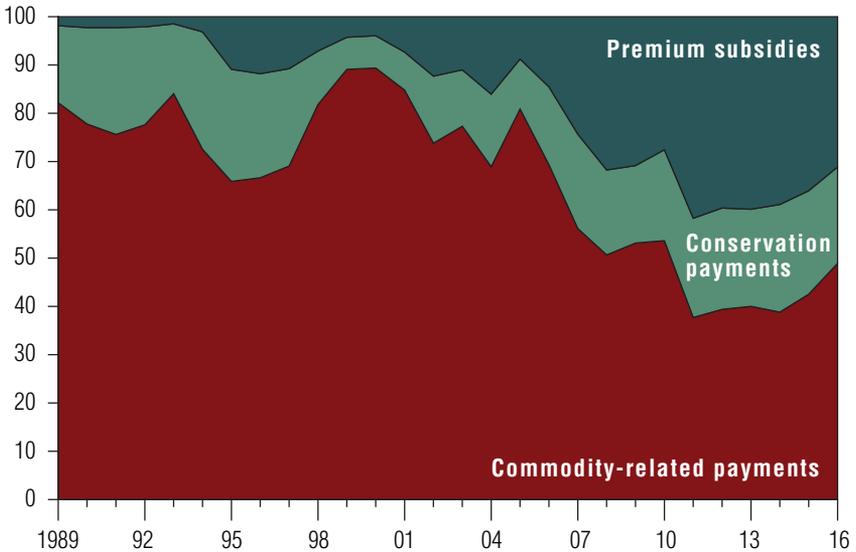
Note: Totals may not add to 100.0 percent, due to rounding. Bars of a given color sum to 100 percent. Indemnities are payments from insurance to compensate for losses. Participants are farms paying premiums. Source: USDA, National Agricultural Statistics Service and Economic Research Service, 2016 Agricultural Resource Management Survey.

The Federal crop insurance share of direct financial assistance to farms expanded markedly in recent decades, from 2 percent in 1989 to 31 percent by 2016.

- Legislation in 1994 and 2000 increased insurance premium subsidies, which encouraged more farmers to participate by providing them less costly coverage. In addition, attractive new insurance products—like revenue insurance—were introduced.
- In recent Farm Acts, the emphasis shifted to a greater reliance on risk management through insurance and less reliance on income support through commodity programs.

Share of direct financial assistance¹ to farmers from commodity-related programs, conservation programs, and Federal crop insurance subsidies, 1989 to 2016

Percent of total financial support



Note: Commodity-related payments and conservation payments are reported by calendar year, but crop insurance premium subsidies are reported by crop year. A crop year is the 12-month period starting with the month when the harvest of a specific crop typically begins. ¹Direct financial assistance is the sum of commodity-related program payments, conservation program payments, and Federal crop insurance premium subsidies.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics for Government payments. USDA, Risk Management Agency, Federal Crop Insurance Corporation, Summary of Business Reports, various years, for premium subsidies.



Measuring Financial Assistance

Direct financial assistance from the Government to farmers comes from:

- Commodity-related program payments,
- Conservation programs payments, and
- Subsidies for farmers' Federal crop insurance premiums.

The main cost of Federal crop insurance is the premium subsidy that lowers farmers' payments for the insurance. ARMS does not collect information about premium subsidies.

To measure financial assistance, we use data from the ERS Farm Income and Wealth Statistics for commodity-related payments and conservation payments and USDA, Risk Management Agency's Summary of Business Reports for premium subsidies. Both of these sources are based on administrative records from the agencies responsible for the payments. Administrative data are comprehensive and report actual Federal Government outlays.

The ARMS is sampled based on a comprehensive list of all U.S. farms and provides detailed data on farms and farm households. This enables the examination of relationships—such as the distribution of Government payments by farm type—that cannot be studied with administrative data.



Conclusions and Implications

- **Farming is still overwhelmingly comprised of family businesses.** Ninety-nine percent of U.S. farms are family farms, and they account for 90 percent of farm production.
- **Small farms make up 90 percent of the farm count and operate half of the farmland.** The largest share of farm production (45 percent), however, occurs on large-scale family farms, although small farms account for half of poultry and hay production.
- **Small farms are much more likely than larger farms to have an OPM of less than 10 percent, an indicator of high financial risk.** Between half and three-fourths of small farms have an OPM that low—depending on the farm type—compared with 31 to 42 percent of midsize and large-scale farms. Households operating small farms often receive substantial off-farm income to support their farms and living expenses. Nevertheless, some small farms in each type operate in the low-risk zone, with an OPM greater than 25 percent, as do more than 40 percent of large and very large farms.
- **Farm households in general are neither low income nor low wealth.** Only 38 percent of farm households had income less than the median for all U.S. households in 2016, and 3 percent had wealth less than the U.S. median. Small-farm households rely heavily on off-farm sources for their income, so general economic policies—such as tax or economic development policy—can be as important to them as traditional farm policy.

- **Conservation Reserve Program (CRP) payments go to different farms than other Government payments.** CRP targets environmentally sensitive cropland; its payments largely go to retirement, off-farm occupation, and low-sales farms. Commodity-related and working-land payments, in contrast, go to family farms with GCFI of \$150,000 or more. Most U.S. farms, however, do not receive Government payments and are not directly affected by them, although they may be affected indirectly by changes in land values and rents.
- **Federal crop insurance has grown in importance over the past 25 years, increasing its share of farm financial assistance to 31 percent by 2016.** Policy emphasis has shifted to a greater reliance on risk management and less reliance on income support through commodity programs.

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