

# **DISTRIBUTION OF FARM INCOME BY SIZE AND TYPE**

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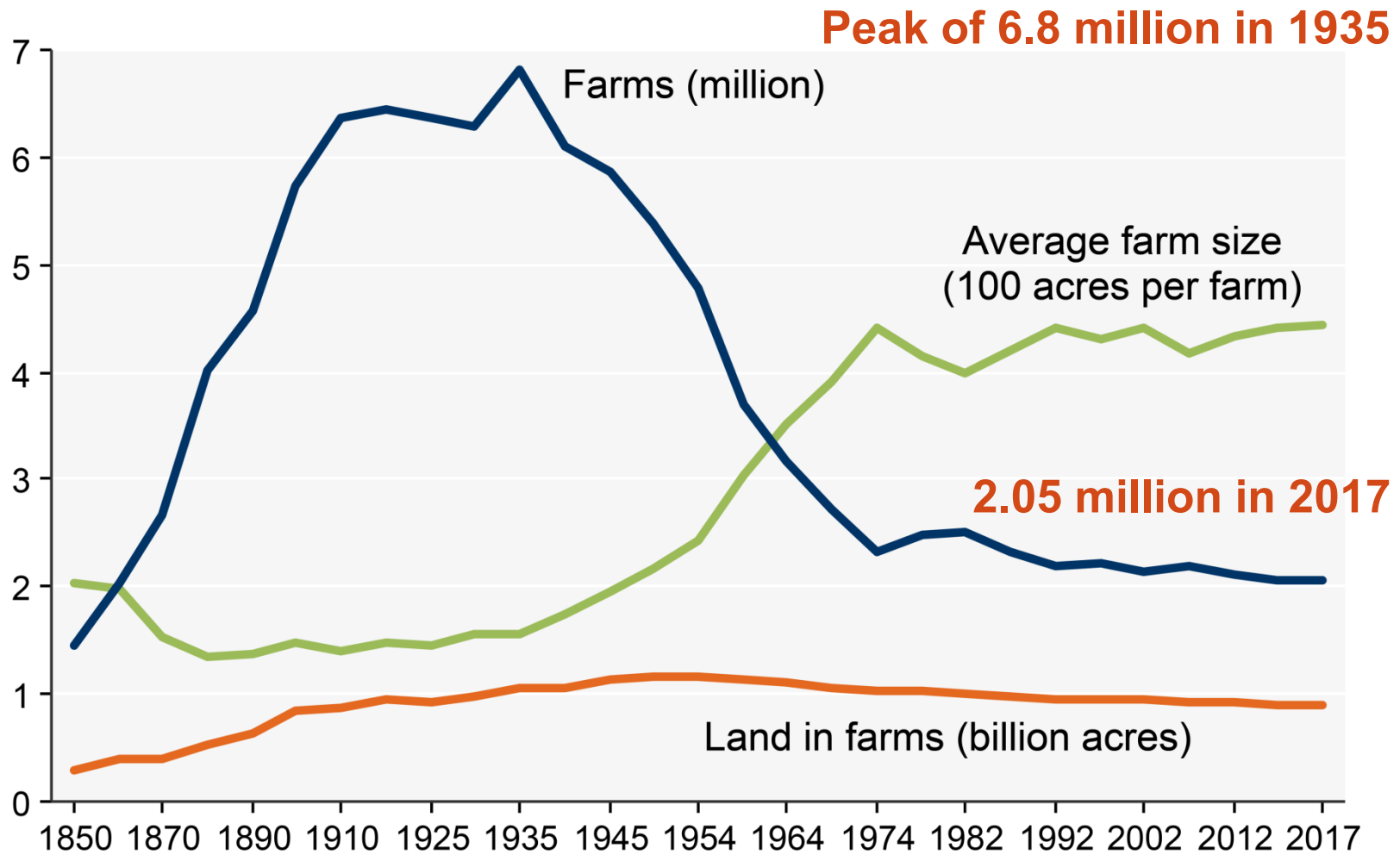
AAE 320

# Overview

- Most common USDA data on farm income and farm economy is always the averages
- Let's look at the distribution around these averages
- How do “small” farms do relative to larger farms?

# Farms, land in farms, and average acres per farm, 1850-2017

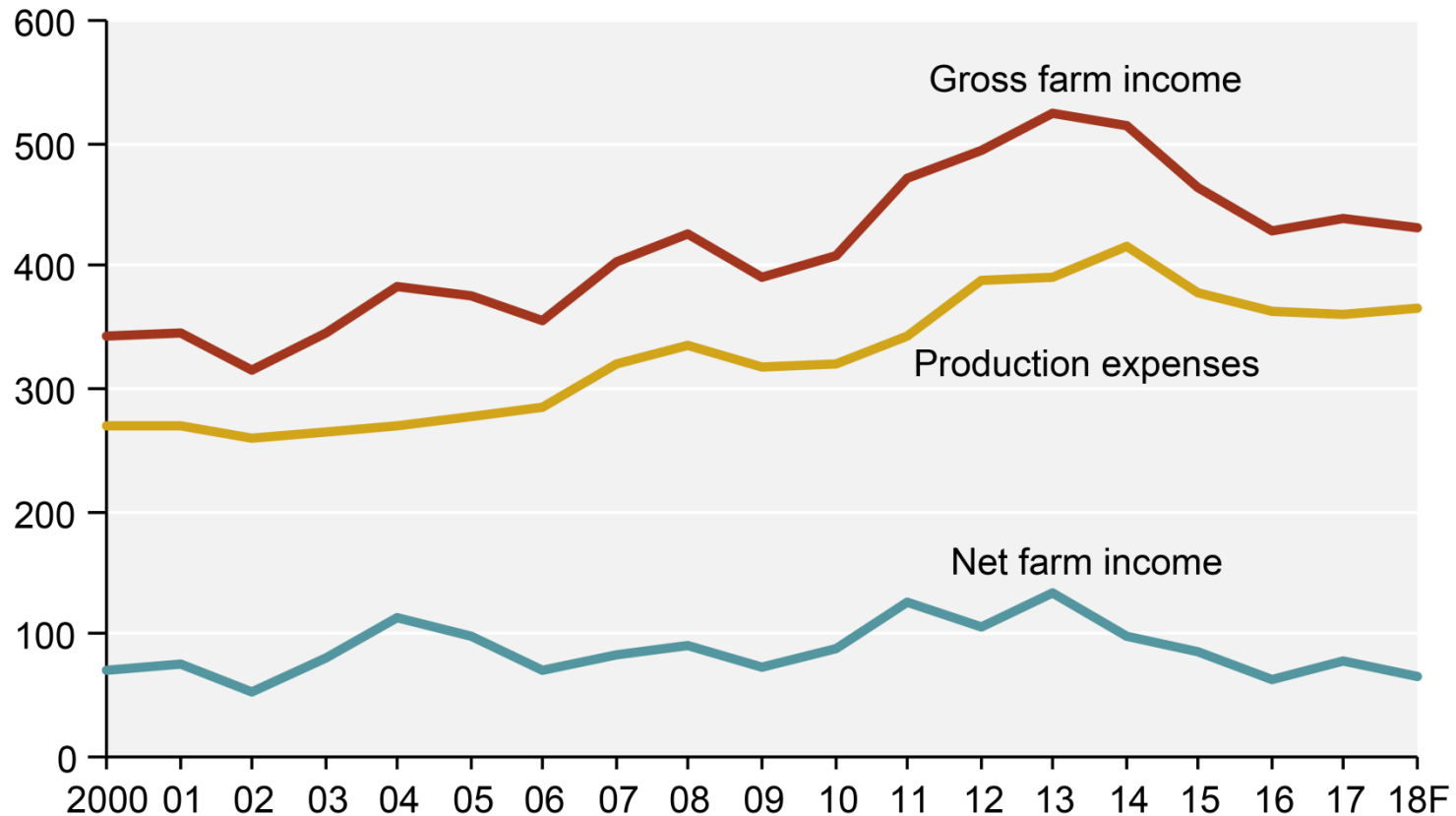
Million farms, billion acres, or 100 acres per farm



Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service, Census of Agriculture (through 2012) and *Farms and Land in Farms: 2017 Summary*.

## Gross farm income, production expenses, and net farm income, inflation adjusted, 2000-18F

\$ billion (2018)

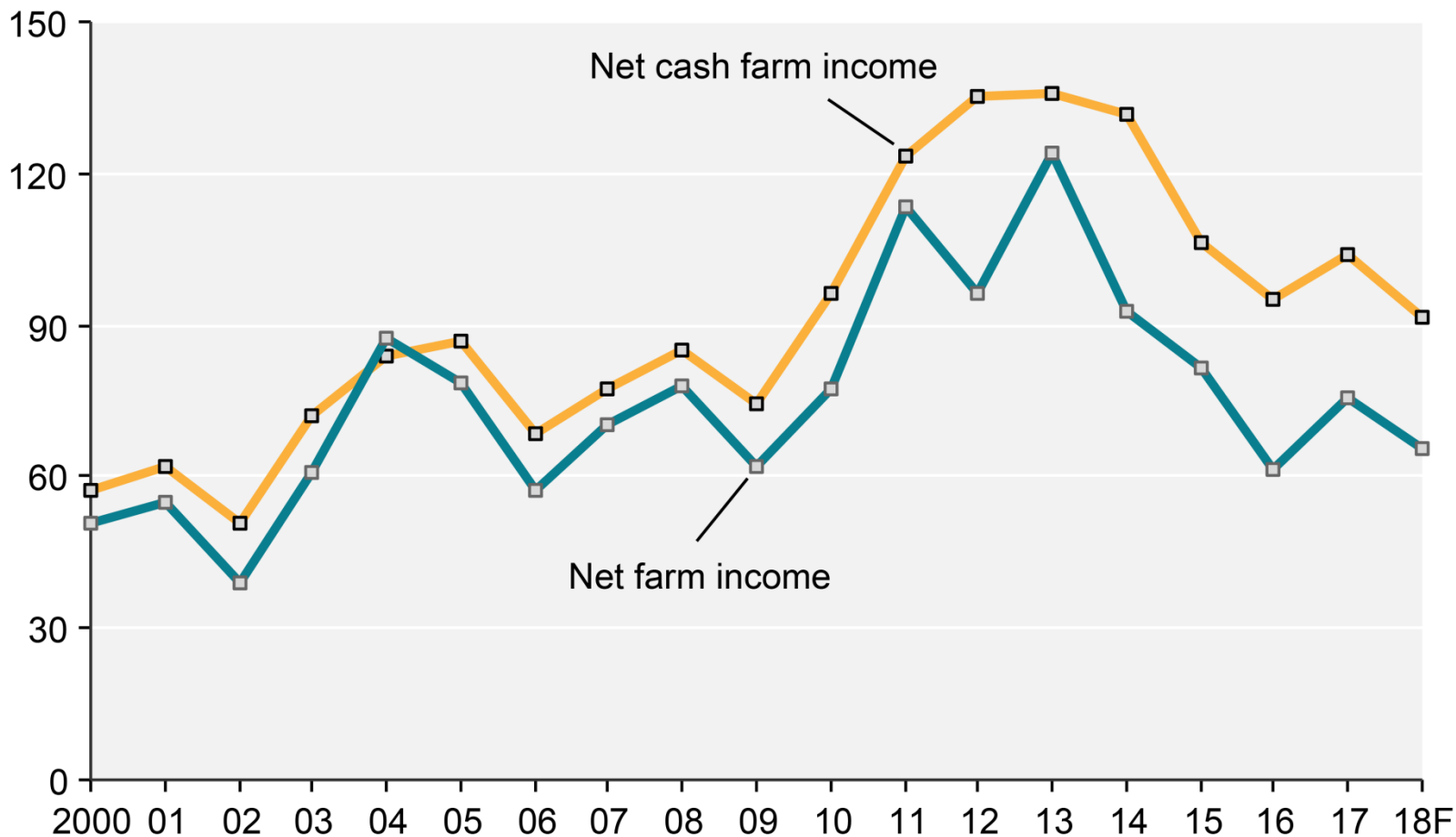


Note: F = forecast. Values are adjusted for inflation using the chain-type GDP deflator, 2018=100.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.  
Data as of August 30, 2018.

## Net farm income and net cash farm income, 2000-18F

\$ billion, nominal



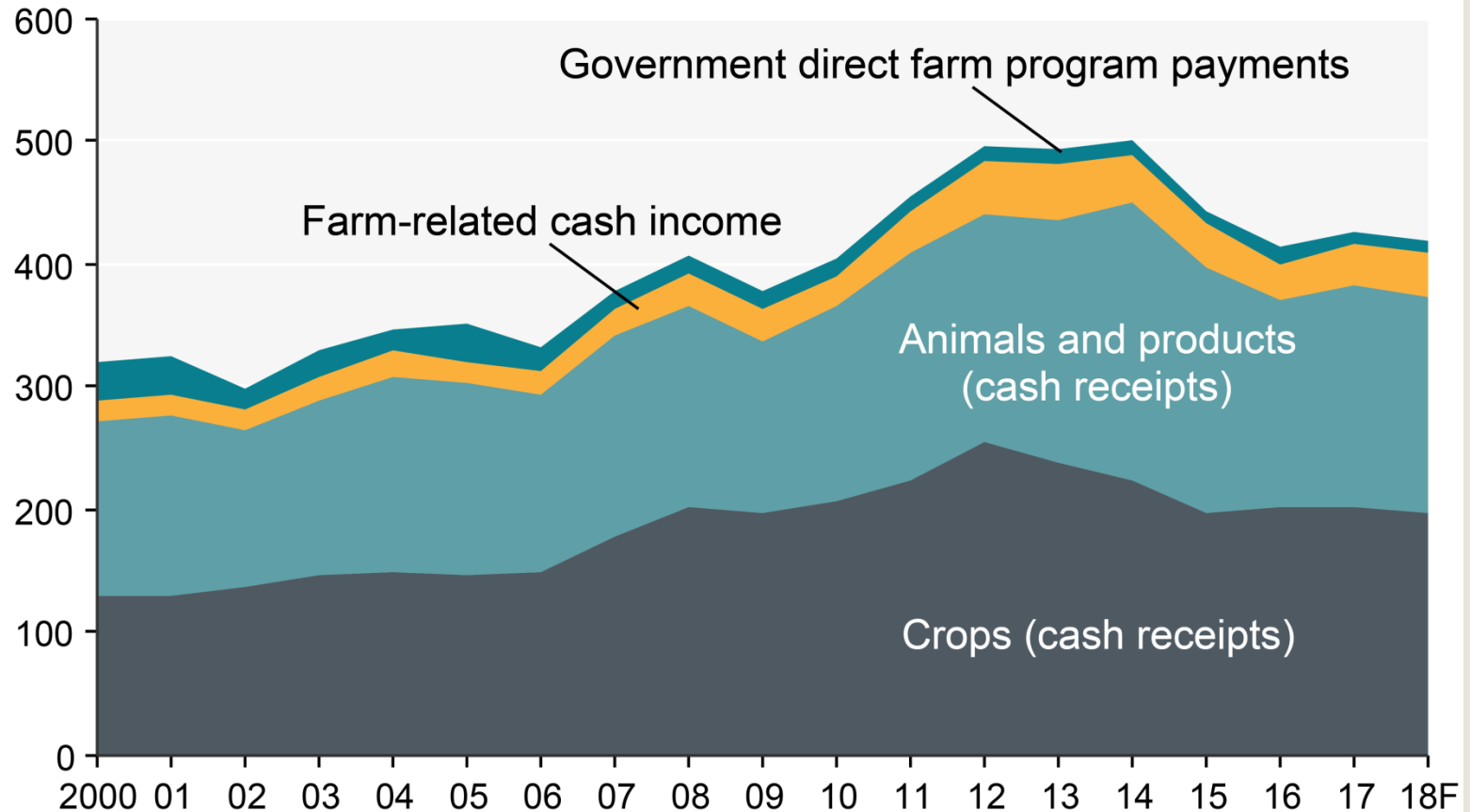
Note: F = forecast.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.

Data as of August 30, 2018.

# Gross cash farm income components, inflation adjusted, 2000-18F

\$ billion (2018)

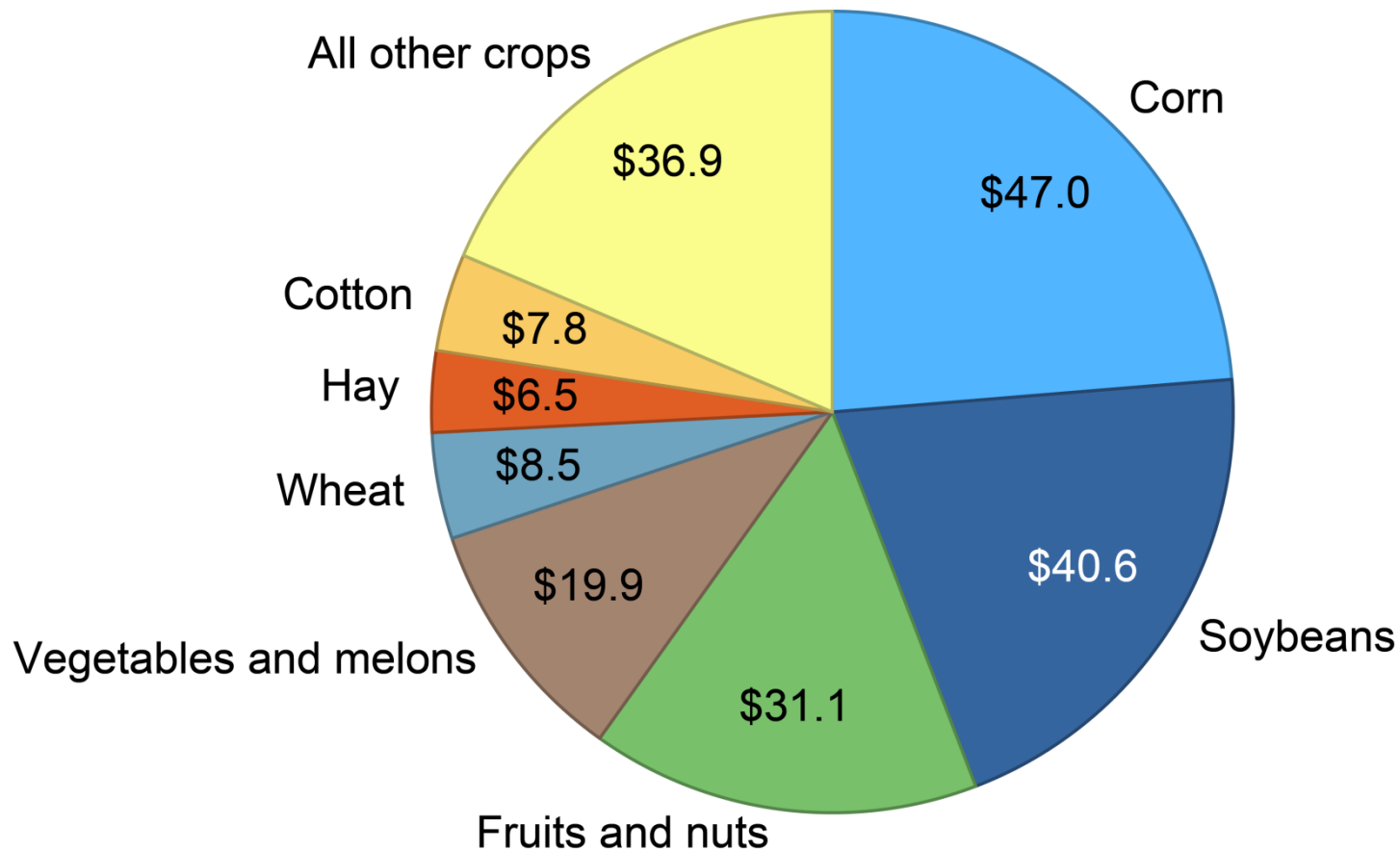


Note: F = forecast. Values are adjusted for inflation using the chain-type GDP deflator, 2018=100.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.  
Data as of August 30, 2018.

## 2017 crop cash receipts (\$ billion, nominal)

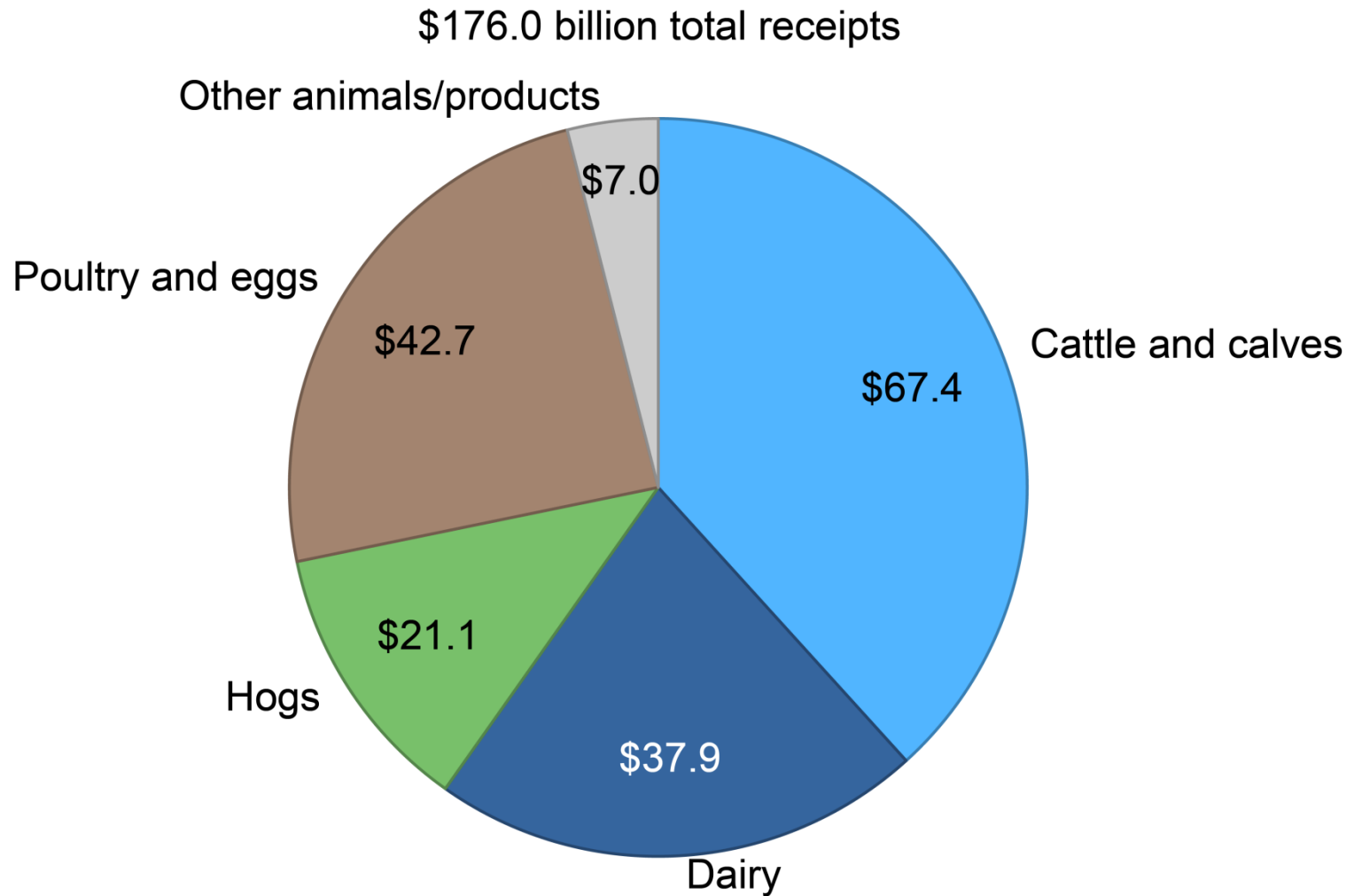
\$198.3 billion total receipts



Data as of August 30, 2018.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.

## 2017 animals and products cash receipts (\$ billion, nominal)



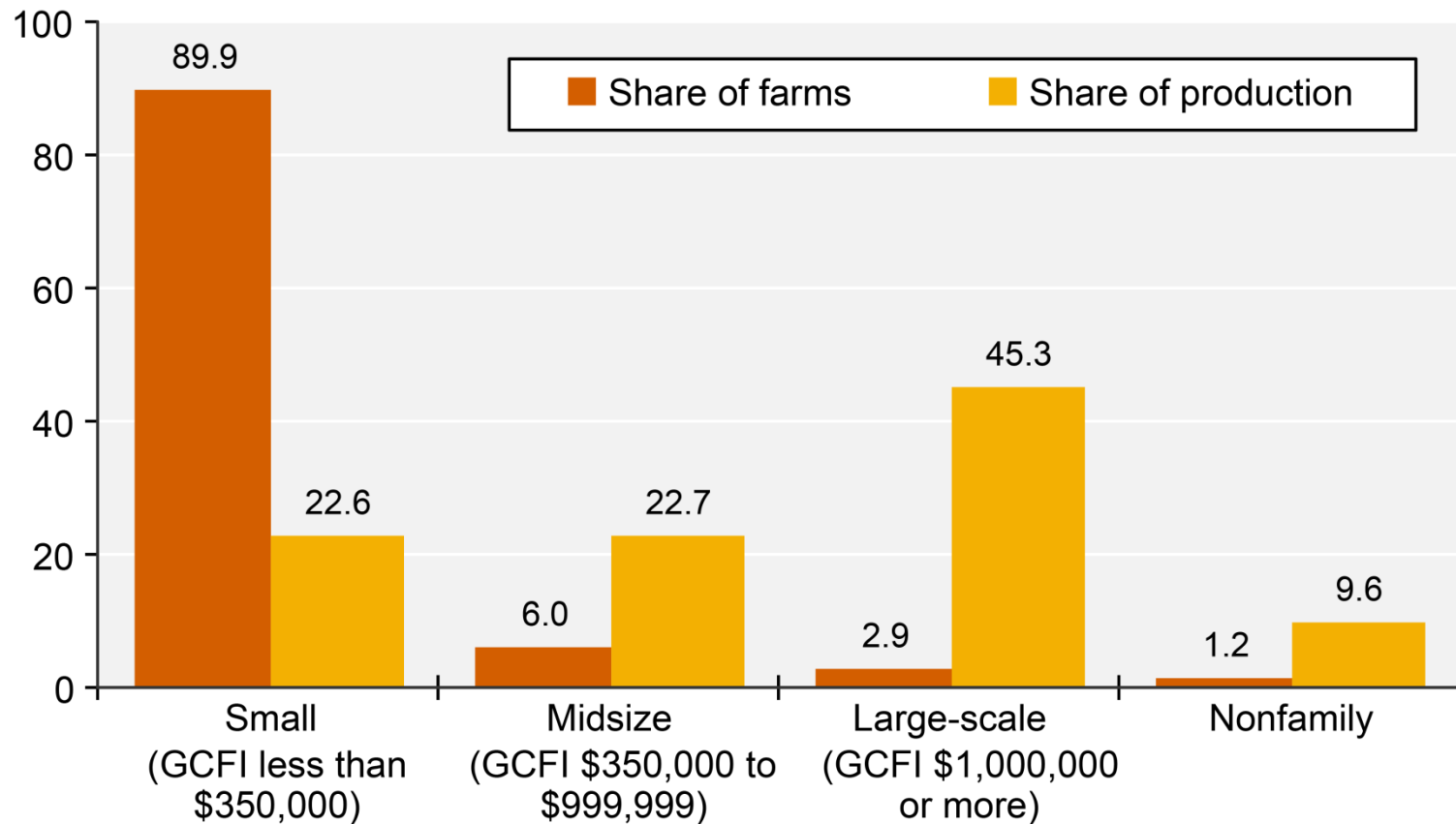
Data as of August 30, 2018.

Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.



# Farms and their value of production by ERS farm type, 2016

Percent of U.S. farms or production



Note: GCFI refers to annual gross cash farm income before expenses; ERS refers to Economic Research Service. Nonfamily farms are those where neither the principal operator, nor individuals related to the operator, own a majority of the farm business. Source: USDA, Economic Research Service and National Agricultural Statistics Service, Agricultural Resource Management Survey. Data as of November 29, 2017.

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

**Non-Family Farms**  
**25,000**  
**1.2%**

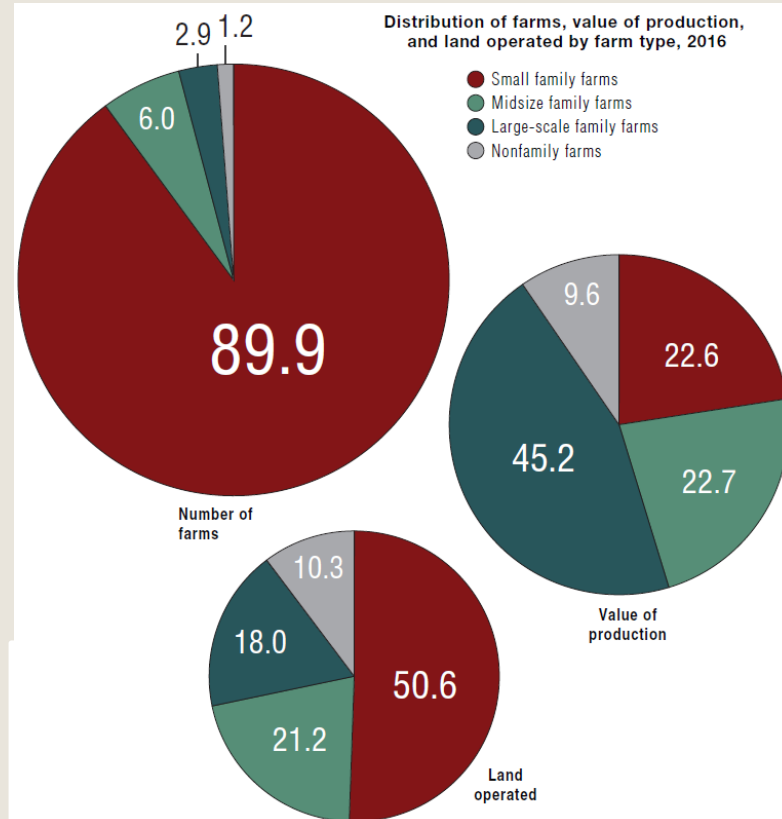
**123,000 6.0%**      **53,800 2.6%**      **6,500 0.3%**

### 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).

Farm Size	% of Farms	% of Land	% of Production \$
Small	89.9%	50.6%	22.6%
Mid-Sized	6.0%	21.2%	22.7%
Large Scale	2.9%	18.0%	45.2%
Non-Family	1.2%	10.3%	9.6%

- Most of the Farms and Land are small family farms
- Large scale family farms use 18.0% of the land to produce 45.2% of the production value
- Small family farms use 50.6% of the land to produce 22.6% of the production value

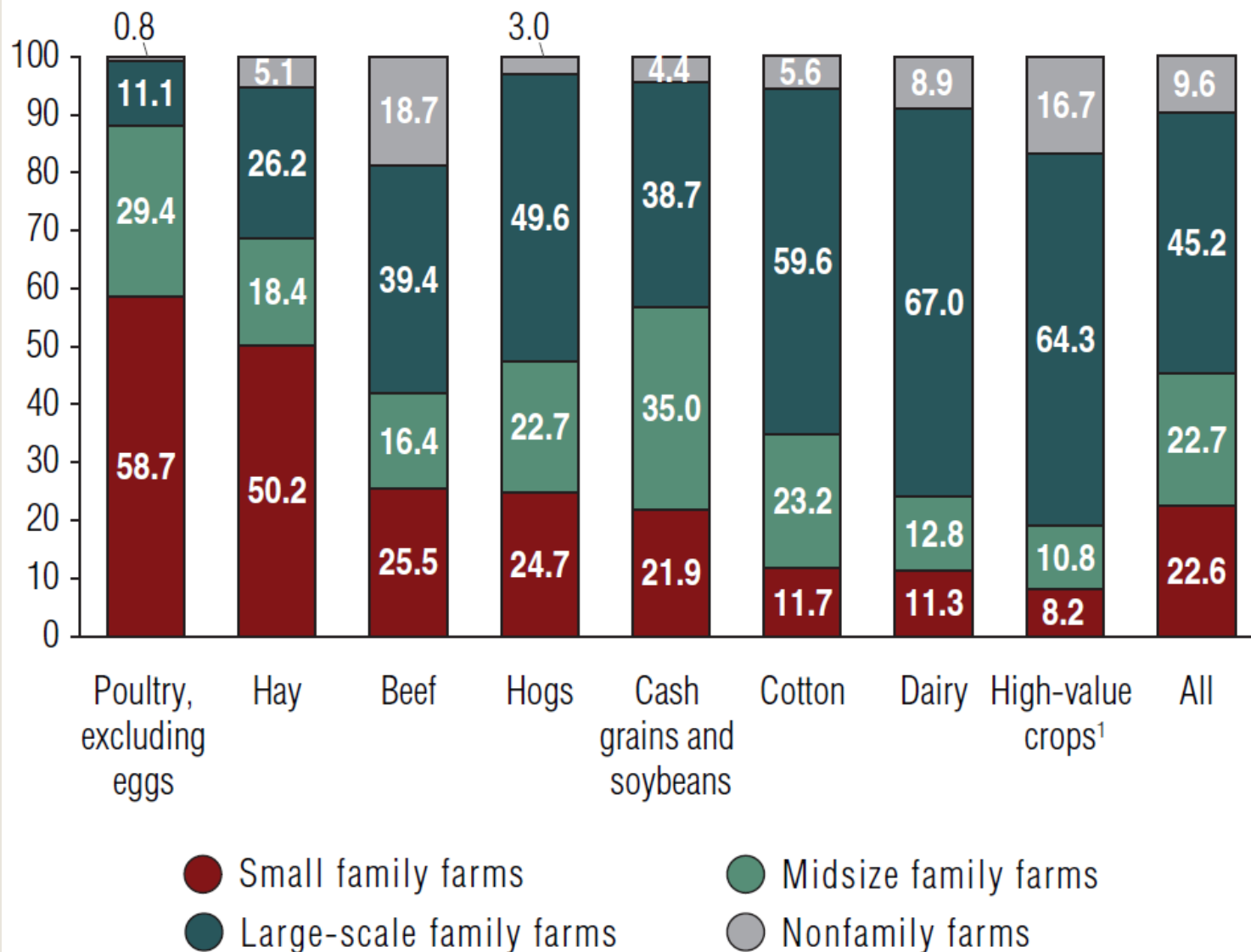


# % of Farms by Farm Type

Farm Type	% Farms	Category	Gross Revenue
Retirement	17.9%	Small	< \$350k
Off Farm Job	41.9%	Small	< \$350k
Low Sales	24.7%	Small	< \$150k
Moderate Sales	5.4%	Small	\$150k - \$350k
Mid-Sized	6.0%	Mid-Sized	\$350k-\$1 million
Large	2.6%	Large	\$1 - \$5 million
Very Large	0.3%	Large	> \$5 million
Non-Family	1.2%	Non-Family	Non-Family

# Value of production for selected commodities by farm type, 2016

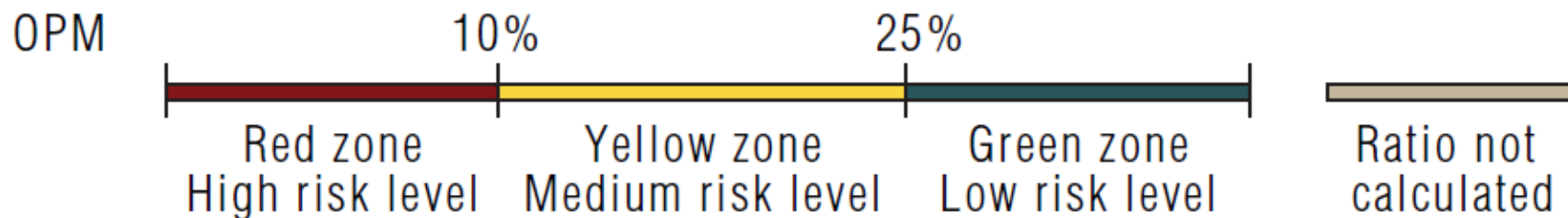
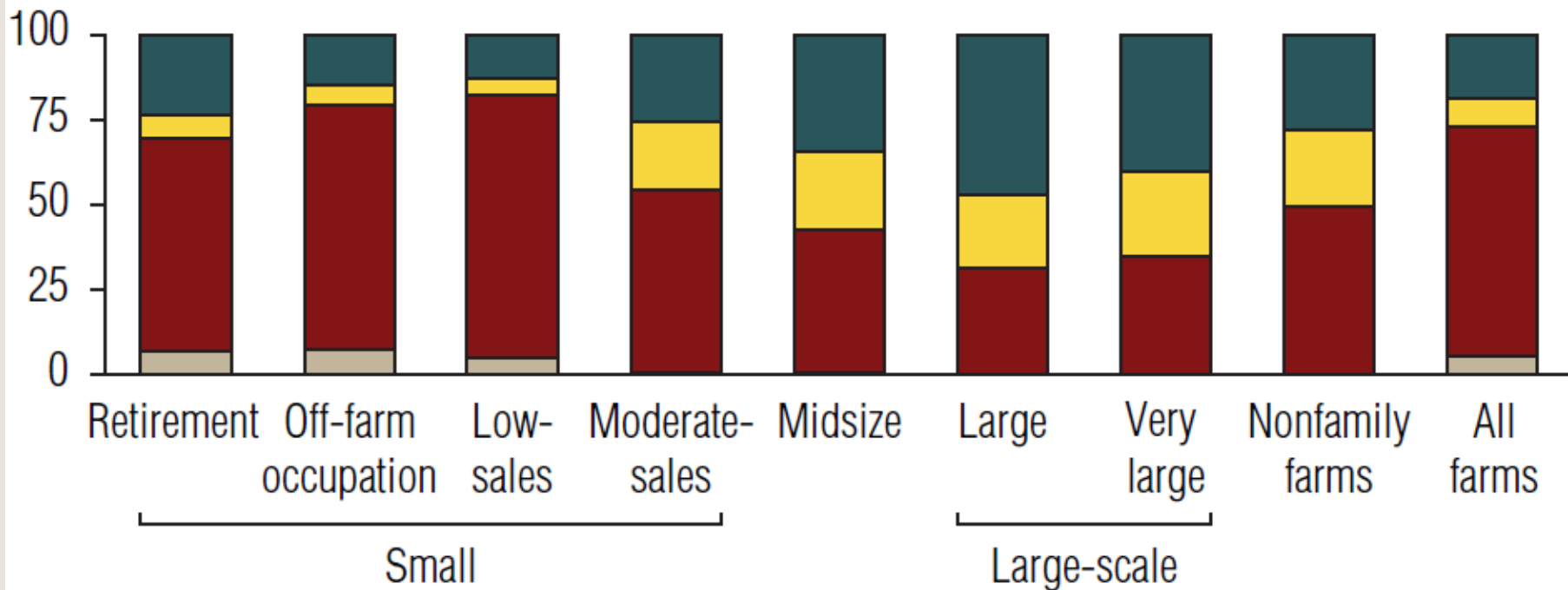
Percent of value of production



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

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

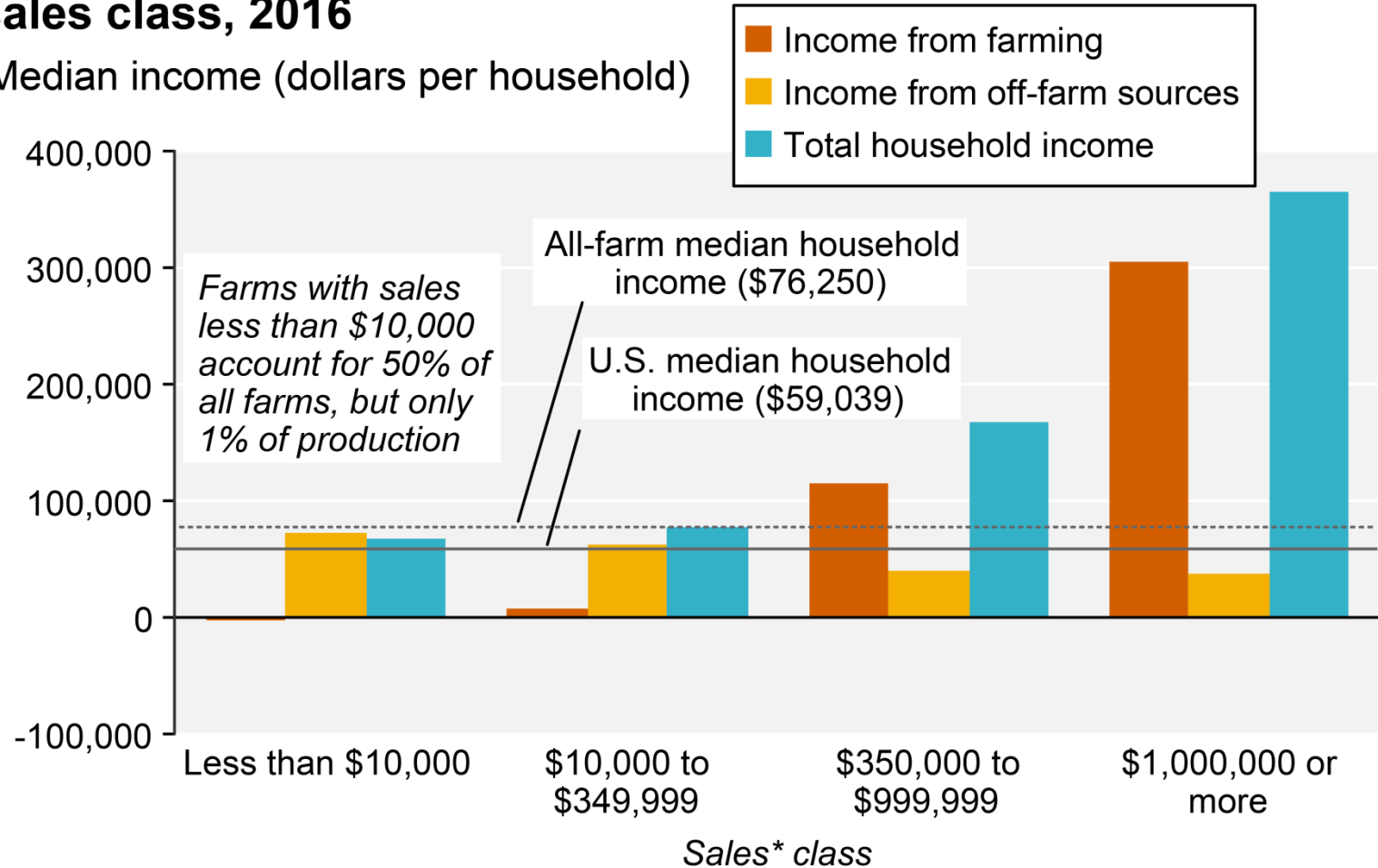
Percent of farms in each group



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.

# Median household income of farm operators by source and sales class, 2016

Median income (dollars per household)



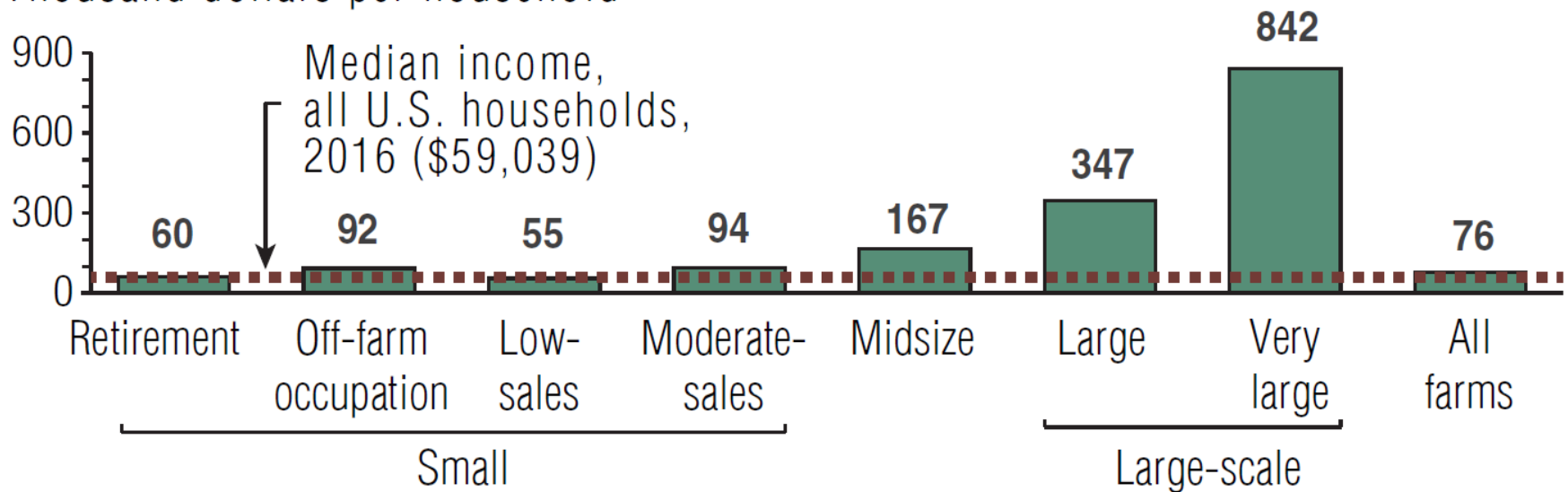
\*Sales = Annual gross cash farm income before expenses (the sum of the farm's crop and livestock sales, government payments, and other cash farm-related income).

Source: USDA, Economic Research Service and National Agricultural Statistics Service, Agricultural Resource Management Survey and U.S. Census Bureau, Current Population Reports. Data as of November 29, 2017.

# Median Household Income by Farm Type

## 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.



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

Farm type	Total average income	Income from farming		From off-farm sources		
		Amount	Negative Percent of households	Total	Earned <sup>1</sup>	Unearned
	Dollars per household			Dollars per household		
Small family farms						
Retirement	83,512	4,705	54.6	78,807	41,624	37,183
Off-farm occupation	127,784	-1,513	66.3	129,297	102,209	27,088
Farming-occupation						
Low-sales	60,074	-1,086	54.4	61,161	35,027	26,133
Moderate-sales	102,130	50,720	21.2	51,410	35,395	16,015
Midsize family farms	185,684	119,140	16.9	66,544	45,725	20,820
Large-scale family farms						
Large family farms	422,261	357,203	11.6	65,058	45,001	20,056
Very large family farms	1,737,715	1,674,839	13.9	62,876	35,665	27,211
All family farms	117,918	24,731	54.2	93,187	65,680	27,506

Source: <https://www.ers.usda.gov/webdocs/publications/86198/eib-185.pdf>

# Summary

- Most of the focus is on averages for farm income
- The reality is that there is a lot of variation around the average and median
  - Many farmers do better and many do worse and it varies from year to year