



Find the full report at www.ers.usda.gov/ publications/eib-economic-informationbulletin/eib-110.aspx

A report summary from the Economic Research Service

## Updating the ERS Farm Typology

Robert A. Hoppe and James M. MacDonald

## What Is the Issue?

The USDA's Economic Research Service (ERS) originally developed a farm typology that sorted farms into seven homogenous groups for reporting and research purposes. Over the years, it has been used extensively in ERS publications and USDA analyses to help clarify the distributional impacts of policy, market, and technological developments.

Nearly 15 years have passed since ERS first released its farm typology. In this report, we update it for two recent trends: commodity price inflation and a shift in production to farms with sales of \$1 million or more. The original farm typology based its groups (in part) on the level of gross farm sales. Since then, inflation in commodity prices—for farm products as well as for farm inputs like feed, fuels, and fertilizers—has increased sales and expenses for farms even when they have had no change in production, shifting some farms into different typology groups solely because of price increases. Adjusting sales for price changes corrects for these shifts.

Meanwhile, shifts of production to million-dollar farms increase the need for information about farms at the upper end of the sales spectrum. We also introduce a technical change in the measurement of farm business size, shifting from gross farm sales to gross cash farm income (GCFI), a better measure of farm revenue given the prevalence of production contracts in livestock production.

Comparing the origina	I and revised typologies
-----------------------	--------------------------

Farm type	Operator's primary occupation <sup>1</sup>	Original typology	Revised typology
		Farm size measured by gross farm sales	Farm size measured by GCFI
Small family farms <sup>2</sup>	Varies	Less than \$250,000	Less than \$350,000
Retirement farms	Retired	Less than \$250,000	Less than \$350,000
Off-farm occupation farms <sup>3</sup>	Nonfarm	Less than \$250,000	Less than \$350,000
Farm occupation farms:			
Low-sales	Farming	Less than \$100,000	Less than \$150,000
Moderate-sales <sup>4</sup>	Farming	\$100,000- \$249,999	\$150,000-\$349,999
Midsize family farms <sup>2</sup>	Not a criterion	Category not used	\$350,000-\$999,999
Large-scale family farms <sup>2</sup>	Not a criterion	\$250,000 or more	\$1,000,000 or more
Large farms	Not a criterion	\$250,000- \$500,000	\$1,000,000-\$4,999,999
Very large farms	Not a criterion	\$500,000 or more	\$5,000,000 or more
Nonfamily farms <sup>2</sup>	Not a criterion	Not a criterion	Not a criterion

<sup>1</sup>Occupation at which the operator spent 50 percent or more of his or her work time.

<sup>2</sup>Family farms include any farm where the majority of the business is owned by the operator and individuals related to the operator. Nonfamily farms do not meet that criterion.

<sup>3</sup>Formerly residential/lifestyle farms.

<sup>4</sup>Formerly medium-sales farms.

food, the environment, and rural America.

ERS is a primary source of economic research and analysis from the U.S.

Department of Agriculture,

providing timely informa-

tion on economic and policy issues related to agriculture.



## What Are the Study Findings?

The earliest versions of the typology were based on data from a 1995 USDA survey. Between that year and 2010, the Producer Price Index (PPI) for farm products increased by 41 percent. The revised typology adjusts for this price inflation by increasing the cutoff between small and larger-scale farms from \$250,000 to \$350,000 and by increasing the upper bound on low-sales farms from \$100,000 to \$150,000. To address the shift in production, we add two sales classes for farms with sales of at least \$1 million—sales of \$1,000,000 to \$4,999,999 and sales of \$5 million or more.

GCFI focuses on the revenue actually received by the farm business and includes the farm's sales of crops and livestock, receipts of Government payments, and other farm-related income. Gross farm sales differs from GCFI by excluding other farm-related income and by including items that are not revenue to the farm: the value of production accruing to share landlords and production contractors, as well as Government payments accruing to landlords.

What's included?		
Item	Gross farm sales	Gross cash farm income
Revenue to the farm from:		
Crop and livestock sales	Yes	Yes
Government payments	Yes	Yes
Other farm-related income <sup>1</sup>	No	Yes
Value of production accruing to:		
Share landlords	Yes	No
Contractors	Yes	No
Landlord receipt of		
Government payments	Yes	No

<sup>1</sup>Receipts from custom work, machine hire, livestock grazing fees, timber sales, outdoor recreation, production contract fees, etc.

The difference between gross farm sales and GCFI is pronounced for farms with livestock production contracts. Contract growers provide labor, capital, and utilities. Contractors, who provide feed as well as young animals to be raised by the growers, pay growers a fee for their services, which is a fraction of gross farm sales. The share of farms with production contracts classified as small increases from 26 percent when using gross farm sales to 77 percent when using GCFI.

**The revised typology moderately increases the share of farms classified as small.** Raising the small-farm cutoff moves 46,400 formerly large-scale farms with sales from \$250,000 to \$349,999 into various small-farm groups. In addition, shifting the measure of farm size to GCFI adds another 17,900 farms to the small-farm categories. As a result, the small-farm share of all farms increases from 88 percent to 91 percent. Roughly 2 percentage points of the 3-percentage-point increase results from raising the small-farm cutoff, and another 1 percentage point results from the shift to GCFI.

**The increase in the small-farm share of production is more substantial.** The small-farm share of U.S. production increases from 16 percent under the original typology to 29 percent under the revised typology. Five percentage points of the 13-percentage-point increase result from updating the small-farm cutoff for commodity price inflation. The remaining 8 percentage points result from the shift to GCFI as the measure of farm size. Using GCFI in the revised typology moves \$22 billion of production to small family farms, virtually all of it associated with production contracts.

## How Was the Study Conducted?

Data in this report are from the Agricultural Resource Management Survey (ARMS) for 1996 to 2010 and the 1995 Farm Costs and Returns Survey, a predecessor to ARMS. ARMS is an annual sample survey designed and conducted by ERS and USDA's National Agricultural Statistics Service.

