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The Changing Organization and Well-Being of Midsize U.S. Farms, 1992-2014

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What Is the Issue?

Midsize farms—defined as those with gross cash farm income (GCFI) between $350,000 and $1 million—represent an important link in the U.S. chain of family farms; many are the result of successful small commercial farms that grew in size. The number of midsize farms declined by about 5 percent between 1992 and 2012. Coupled with a significant increase in farms with very low sales and farms with more than $1 million in GCFI over the same period, the decline has led to an interest in whether midsize farms are disappearing. Most midsize farm operators receive the majority of their household income from the farm operation. Thus, their well-being is heavily influenced by the broader farm economy, as well as by agricultural policy. The authors examine how midsize farms and their households changed from 1992 to 2014 and how economics and Government policy influenced their well-being.

What Did the Study Find?

Declining midsize farm numbers could have implications for farm sector and farm household well-being. ERS examined farm-level data to capture how they are unique relative to small and large-size farms. This study addressed the following questions:

How do midsize farm numbers, total production, and acreage compare to other farm sizes? Midsize farms accounted for about 21 percent of total production and 6 percent of U.S. farms in 2014. Together, very-low-sales and small commercial farms—those with less than $10,000 in GCFI and those with $10,000-$350,000 in GCFI, respectively—represented 90 percent of farms but produced only about 22 percent of total agricultural output. Large farms—those with GCFI greater than $1 million—accounted for only 4 percent of farms but almost 57 percent of total production.

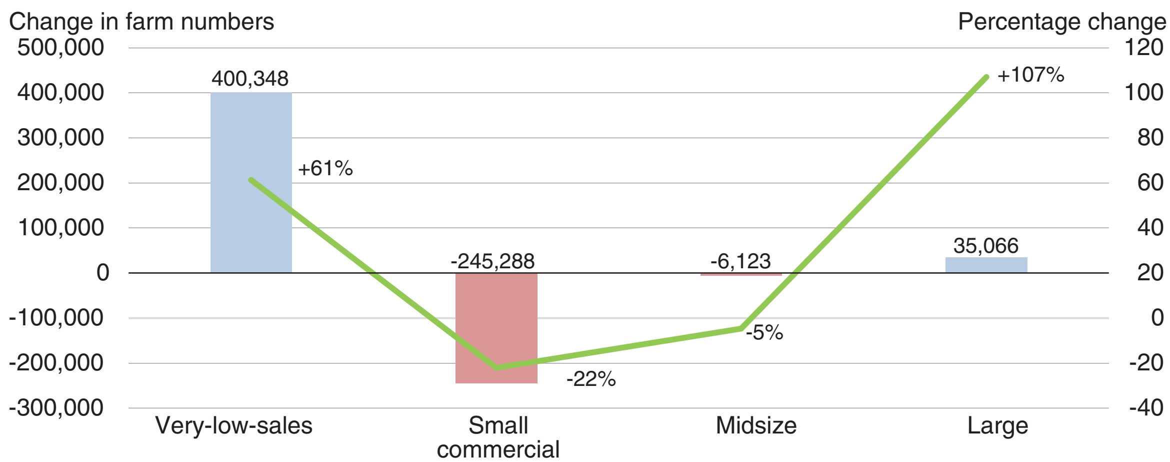
How did midsize farms and their households change from 1992 to 2014? Principal operators of midsize farms are older today and more experienced, and a higher share have some college or a college degree. There has been a trend toward a greater proportion of female principal operators since 2002. Midsize farms generated more net farm income and operated with higher levels of financial efficiency in 2014 than in 1992. Household net worth has also increased dramatically, driven by rapid appreciation in farmland values over the latter half of this period. In 2014, production on midsize farms that specialized in dairy, high-value crops, or other crops (e.g., peanuts, tobacco, hay, and cotton) represented a smaller share of total production on midsize farms compared to 1992. In contrast, production on midsize farms that specialized in cash grains and oilseeds, hogs, and poultry represented a greater share of total production.

Are midsize farms "disappearing?" If so, where are they going? While their numbers fluctuate from year to year, census data show that the number of midsize farms has declined about 5 percent from 1992 to 2012.

There is evidence that the decline in midsize farms is due to farm exits and farm transitions (moving to another size category). More midsize farms exited than entered in the periods 1992-97 and 2007-12. Most continuing midsize farms (i.e., those that did not exit farming between periods) remained midsize between the same time periods. However, they were more mobile than large or small commercial farms. About 42 percent of continuing midsize farms transitioned to another size category (measured by change in GCFI) between census years, though this may partially reflect the GCFI range used in the midsize farm definition.

What are the characteristics of continuing midsize farms? What role does Government policy play in their survival? Midsize operations with beginning farmers, retired farmers, or those that rented most of their land (tenant renters) were more likely to exit farming in the years 2007-12 in comparison to operations without those characteristics. We find that midsize cash-grain and oilseed farms that received Government fixed direct payments in 2007 had a small but significantly greater probability of survival through 2012. Fixed direct payments were a commodity-based program that paid farmers based on enrolled acreage and historical production of specific commodities—mostly field crops such as barley, wheat, corn, and soybeans.

Change in farm numbers by size category[1] from 1992 to 2012
Midsize farm numbers decreased by about 6,000 during this period.



[1]We define a very-low-sales farm as having less than $10,000 in GCFI, a small commercial farm as having between $10,000 and $350,000 in GCFI, and a large farm as having $1 million or more in GCFI.
Source: USDA, Economic Research Service calculations based on the USDA, National Agricultural Statistics Service, 1992 and 2012 Census of Agriculture.

How Was the Study Conducted?

The authors used the updated ERS typology to define a midsize farm, based on gross cash farm income (GCFI). GCFI is a measure of the total revenue accruing to the farm in a given year. GCFI is measured in constant 2012 dollars using the Producer Price Index (PPI) for Farm Products. In this report, the analysis of farm numbers, exits, and entries is based on the Census of Agriculture (1992-2012), which is administered by the USDA's National Agricultural Statistics Service (NASS). Analysis of farm households, farm finances, and production is based on the 1992 Farm Costs and Return Survey (FCRS); the 1996-2013 Agricultural Resource Management Survey (ARMS); and the 2014 Tenure, Ownership, and Transfer of Agricultural Land (TOTAL) survey. These three surveys are jointly administered by NASS and ERS.