

Discussion and Implications

The information presented above has four major implications important to understanding farms and farm operator households today and in the future:

- U.S. farms are diverse, and much variation within the industry is hidden by U.S. averages.
- Production of farm products is more concentrated than in the past, but concentration is not entirely a recent development.
- The share of operators at least 65 years old is large, but finding replacement farmers may not be as severe a problem as suggested by operator age statistics.
- Farm operator households, on average, depend heavily on off-farm income, but dependence on off-farm income varies by farm and operator characteristics.

U.S. Versus Group Averages

One should be cautious when using broad descriptions of farm businesses based on U.S. averages, which can hide much variation among various groups of farms. For example, U.S. farms averaged \$73,700 in gross sales in 1993. But, the averages for farms run by operators reporting farming or hired manager as their major occupation (\$135,000 and \$546,300, respectively) were much more than the averages for farms run by operators reporting another occupation or retired (\$19,300 and \$7,600, respectively) (table 8). Operators reporting farming or hired manager as their major occupation also accounted for 88 percent of U.S. gross sales (fig. 14).

Using U.S. averages makes sense for some purposes. When following trends in farm size, for example, examining changes in U.S. average gross sales (or average acres) over time is reasonable. For other purposes, however, focusing on a particular group may be more appropriate.

Which group should be the focus depends on the topic under consideration. Farm policy discussions, for example, may focus on the farms that produce the bulk of farm output, such as farms whose operators report farming as their major occupation, commercial farms, or full-time commercial farms. This does not mean that smaller farms should be ignored. Separate information for other groups of farms can also be presented.

Concentration and Industrialization

In farm structure discussions, concentration of production is now a bigger issue than the declining number of

farms (Stanton, 1993b). Compared with earlier years, farm production has become much more concentrated. As shown by census of agriculture data, 17 percent of U.S. farms produced 50 percent of farm sales in 1900 (Peterson and Brooks, 1993, pp. 3-5), compared with only 3 percent of farms in 1992 (U.S. Dept. Comm., Bur. Cen., 1994a, p. 47). The FCRS and census of agriculture are consistent with each other regarding the current level of concentration, measured as smallest share of farms necessary to account for 25 percent, 50 percent, and 75 percent of agricultural production.

Industrialization of agriculture is one facet of the increasing concentration in farming, and the FCRS provides current data about one aspect of industrialization: contracting. Farms with contracts produce a disproportionately large share of U.S. agricultural output. Farms with production or marketing contracts accounted for 40 percent of gross sales in 1993, which is disproportionately large, considering their 11-percent share of farms (fig. 7).

The industrialization of agriculture, including the increasing use of contracts, is likely to continue. Among the possible positive effects of industrialized farming are more efficient production, less dependence on government assistance, and greater global competitiveness. Possible adverse effects include further depopulation of rural areas still dependent on farming, damage to the environment (especially in the case of livestock production), reduction in the family farm's independence, abuses of market power, and the disappearance of open market price signals (Drabenstott, 1994; Erin and Smith, 1994; Hamilton, 1994; Council on Food, Agricultural and Resource Economics, 1994). In addition, teaching and research institutions serving agriculture may need to adapt in order to survive as the number of farms declines (Stauber, 1994).

The ultimate effects of concentration and industrialization will be clearer in the future. In the meantime, examining historical data and reviewing changes in other industries help keep discussions of present or future concentration in perspective. The 17 percent of U.S. farms that produced 50 percent of U.S. production in 1900 indicates that some concentration already existed nearly 100 years ago. In addition, farming is still much less concentrated than other industries. As pointed out by Stanton (1993b, p. 66):

The current policy debate about farm structure in part relates to how rapidly the largest farm units will come to dominate production and marketing of key commodities within commercial agriculture. It is important to remember that the competitive structure of agriculture, characterized by many thousands of farms, stands in stark contrast to most industries in the United States, including those that sell inputs to farmers on one side and those that buy farm products on the other. Structural change, so important in farming, is still modest when compared to the changes in farm machinery, meat packing, or the grain trade.

Elderly Operators and Their Replacements

Some analysts express concern over the high percentage of operators over age 65 (table 8) and worry about replacement farmers. Eventual replacements for operators currently reporting farming as their major occupation are particularly important, since these farmers account for most of gross sales (fig. 14).

Some replacements could come from the pool of operators with a major occupation other than farming. Switching their major occupation to farming would only be a temporary solution to the shortage of younger farmers, however, for operators reporting a nonfarm occupation could hardly be described as young. Their average age was 48 years in 1993, only 5 years younger than that of operators reporting farming as their major occupation (table 9). In any event, few operators with a nonfarm major occupation are likely to switch occupations, because these operators currently have adequate income from off-farm sources (table 10). Few are likely to be interested in a greater commitment to farming.

The traditional pool of replacement farmers has been young people raised on farms (Gale, 1994, pp. 6-7). Beginning full-time farmers are generally limited to people raised on farms, because much of the knowledge necessary to farm can be gained by growing up on a farm. The pool of people raised on farms has declined because of off-farm migration and declining number of children born to farm women during recent decades. Nevertheless, finding replacement operators may not be a real problem, according to Gale (RDP, p. 22):

Although farm production will likely continue to grow at a modest pace, fewer farm operators will be needed to produce any given amount of food and fiber. The large number of farmers

who are 65 or over can be adequately replaced with a smaller number of new young farmers, because older farmers generally have smaller farms and produce less than younger farmers.

Gale concluded that the number of farms will continue to drop modestly and gradually without large increases in agricultural prices (1994, p. 34). Relatively stable demand for food and growing productivity will keep agricultural prices low and continue to force some producers out.

Finding replacements may be less of a problem than suggested by operator age statistics. Retired farm operators do not need to be replaced as they leave farming. They already have left farming. These operators classify themselves as retired and account for very little production (fig. 14), but they still are counted as farmers because of the \$1,000 cutoff. Any replacement of these operators by younger operators has already happened.

In addition, U.S. farm statistics undercount the number of young operators. Information is collected about only one operator per farm. At least some replacement farmers are currently working alongside older operators.

Operator Household Income

Most operator households rely heavily on off-farm income (table 11). About 48 percent of operator households had positive household income in 1993 but a loss from farming. Another 20 percent had positive household income but received less than 25 percent of their total household income from farming. Off-farm income allows many farm operator households to maintain an adequate total income and remain in farming.

Depending on off-farm income means that operator households have an interest in the nonfarm economy. The health of the local economy, nonfarm job growth, and the level of nonfarm wages are vital to many operator households. The status of retirement programs and returns on investments are also important to retired operators.

Dependence on off-farm income, however, varies with farm and operator characteristics. Households that depend the least on off-farm income have: larger commercial farms, operators reporting farming as their major occupation, farms organized as family corporations, and dairy farms (table 10). For these households, commodity prices and other factors affecting farm business income are important. Farm programs may also be

important to these households, if their farm businesses produce commodities covered by the programs.

The current farm definition—a place that sells (or normally would sell) at least \$1,000 of agricultural products—ensures that most farm households receive little (or negative) farm income. Only 8 percent of operator households have farms that generate \$35,000 in household income, an amount similar to or above the average total income for all U.S. households (table 13).

The small number of farms producing \$35,000 or more in household income may help explain why farm operators express relatively low satisfaction with farming as a

source of income (table 12). Nevertheless, farm operators apparently got more from farming than just income. Regardless of their dependence on farm income, operators expressed more satisfaction with their involvement with farming (table 15) than with farming as a source of income (table 12).¹⁶

¹⁶The difference between satisfaction with involvement in farming and satisfaction with farming as a source of income was significant only at the 90-percent level for operators receiving 25 to 49 percent of their income from farming.