

Composition of Farm Household Income and Wealth

Today it is rare for any household to receive all of its income from a single source. Even when only one household member is employed, it is possible to earn income from investments, such as interest received from bank accounts. Farm households, aside from their ownership of a business, also rely on a variety of income sources. The ability to distinguish between alternative income sources is necessary in order to appreciate farm household differences. Understanding the components of income is also important for monitoring the sensitivity of farm household income to economic events and evaluating the effectiveness of farm policy in supporting income.

Farm household wealth is also derived from a variety of sources. It ranges from physical assets of both the business and household to various types of financial assets, all differing in degree of liquidity, capital certainty, and visibility. For example, wealth held in a bank account is highly liquid, capital certain, and visible. In contrast, wealth held in real estate is illiquid, or not readily available on demand. Wealth not only

reflects the collective value of assets but also considers the business and consumer debt of households. Distinguishing between the various sources of farm household wealth allows a more comprehensive assessment of household well-being. The composition of household wealth may also be important in determining how changes in wealth affect household consumption.

Sources of Farm Household Income

Farm household income (see “Defining Operator Household Income and Net Worth” below) originates from both farm and off-farm sources (fig. 4). Off-farm income includes income from off-farm businesses, wages and salaries, interest and dividends, and sources such as Social Security. While off-farm wages predominate, income from other businesses—such as a machinery repair shop, seed agency, or insurance agency—can also shore up household income. Income from interest and dividends includes the interest income from savings and investment accounts. Dividends earned by the household are from investments in equities such as stocks or mutual funds. Additional sources of nonfarm income include pensions, annuities, military retirement, unemployment, Social Security, veterans’ benefits, other public retire-

Defining Operator Household Income and Net Worth

Household Income. The Current Population Survey (CPS), conducted by the Bureau of the Census, is the source of official U.S. household income statistics. Thus, calculating an estimate of farm household income from the Agricultural Resource Management Survey (ARMS) that is consistent with CPS methodology allows income comparisons between farm operator households and all U.S. households.

The CPS definition of farm self-employment income is net money income from the operation of a farm by a person on his own account, as an owner or renter. CPS self-employment income includes income received as cash, but excludes in-kind or nonmoney receipts. No adjustments are made to the CPS income measure to reflect inventory changes, since inventory change is a nonmoney item. The CPS definition departs from a strict cash concept by deducting depreciation, a noncash business expense, from the income of self-employed people.

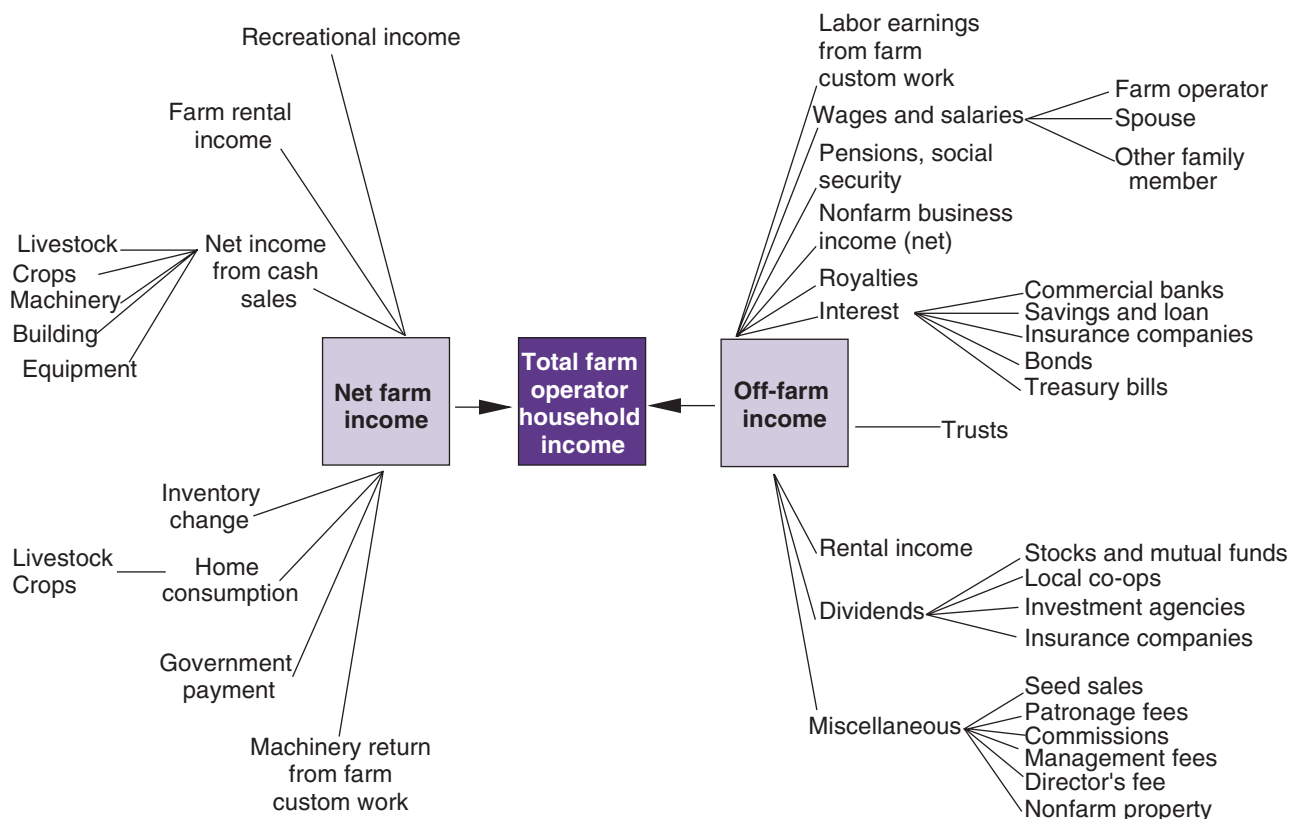
Farm self-employment income from the ARMS is the sum of the operator household's share of farm business income (net cash farm income less depreciation), wages paid to the operator, and net rental income from renting farmland. Adding other farm-related earnings of the operator household yields earnings of the operator household from farming activities. (Other farm-related earnings consist of net income from a farm business other than the one being surveyed, wages paid by the farm business to household members other than the operator, and commodities given to household members for farm work.)

Net Worth. ARMS is also the source of data for estimates of operator households' net worth. Farm operator household net worth is defined as the difference between the operator household's assets and liabilities. It is calculated as the sum of the operator household's farm net worth and nonfarm net worth. If the net worth of the farm is shared with other households (such as the households of shareholders in a family corporation), only the operator household's share is included.

Note that household income and net worth are calculated only for family farms, defined as farms organized as proprietorships, partnerships, and family corporations. Family farms exclude farms organized as nonfamily corporations or cooperatives, as well as farms with hired managers. Family farms are closely held (legally controlled) by their operator and the operator's household.

Figure 4

Sources of farm household income



ment and public assistance programs, and rental income from nonfarm properties.

The composition of farm household income has remained reasonably stable in recent years. For example, the share of off-farm income increased only two percentage points from 1993 (88 percent) to 1999 (90 percent) (fig. 5). The contribution of wages and salaries increased from 46 percent to 53 percent over this period. There was only a modest rise (1 percent) in the share of household income from off-farm businesses. The share of household income from the farm business decreased by 2 percentage points, remaining a small contributor to average household income.

The share of household income from farming increases with farm size (app. table 4), ranging from 50 percent of total household income for higher sales small farms to 60 percent for large family farms and 82 percent for very large family farms (see “Farm Typology,” p. 9). Even households associated with commercial farms earn substantial off-farm income. Households operat-

ing small (rural residence) farms often have a loss from the farm business and rely on off-farm sources for virtually all income.

Uses of Farm Household Income

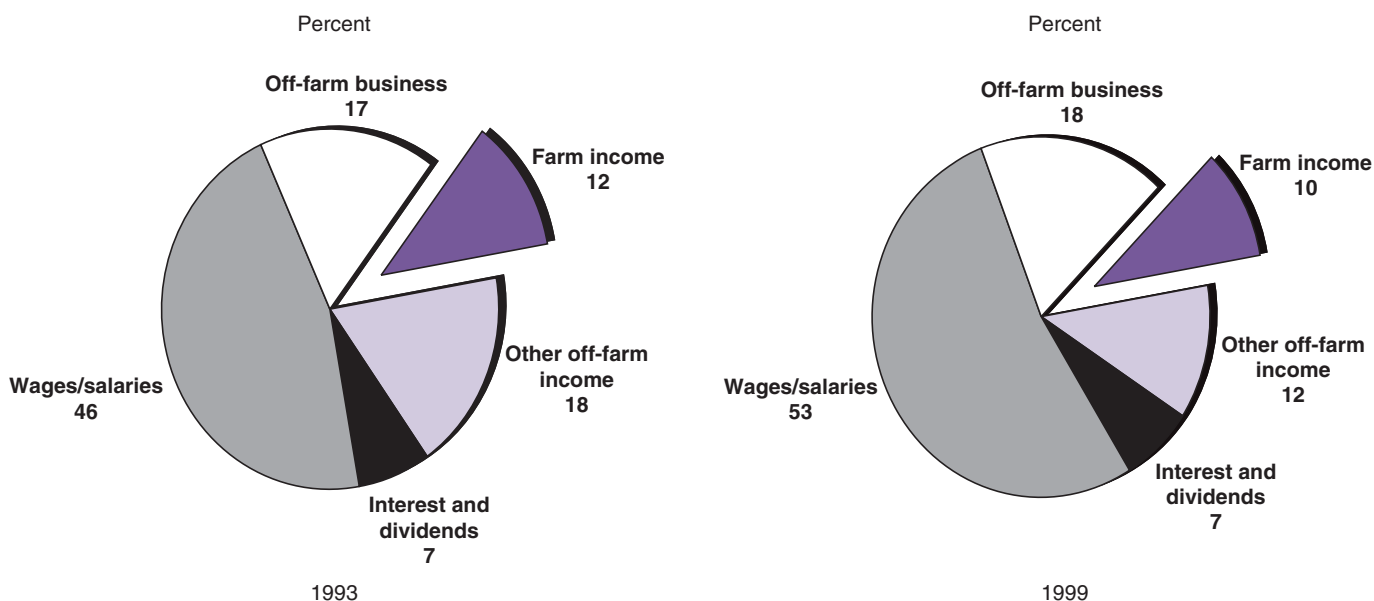
Even though the living standards of farm families have become comparable to those of nonfarm families, farm households appear to manage expenditures differently from nonfarm households in several ways. For example:

- Family housing expenditures, like mortgage and utility bills, often are lower than for nonfarm families because these costs and rental costs may be considered as farm business expenses.
- Food expenditures may be lower for families that produce some food for their own use, although in recent years farm families have tended to, like nonfarm families, buy personal and convenience foods.
- Health insurance coverage is usually more costly since there is no employer to absorb a portion of the

Figure 5

Sources and share of total household income, 1993 and 1999

Most operator households receive a majority of their income from off-farm sources, and this share has been increasing.



Source: USDA, Economic Research Service, Agricultural Resource Management Study (ARMS) survey, 1993 and 1999.

insurance premium. The need for insurance is magnified because farmers face a greater risk of injury, disability, or death.

- Self-employed and farm households are more prone to save out of current income (precautionary motive).
- While some transportation expenses can be allocated to the business, overall costs may be higher for rural farm families because of the greater distances they must travel to reach services in the local community.
- Any differences in consumption expenditures could be due to preference, social, and other demographic factors.

Farm households spend the majority of their income on food and household supplies, followed by household rent/mortgage and other household expenditures such as clothing, education, recreation, hobbies, and charitable contributions (fig. 6). The share spent on medical expenses, insurance, and retirement increased from 18 percent in 1996 to approximately 22 percent in 1998.

On average, farm families spent \$25,073 on goods and services in 1999, up 7 percent from \$23,512 in 1996.³ This is about 50 percent of the average income earned from off-farm sources. The \$25,073 spent by farm families on living expenditures in 1999 was approximately \$11,000 lower than the average U.S. household. The size of the farm business was positively related to family living expenses: limited-resource farms spent just \$5,922 and very large family farms spent \$32,095 in 1999. Farm families do not adjust living expenditures in reaction to shortrun income changes since many costs are relatively fixed. However, families with low or negative family income have to finance living expenditures by reducing inventories, selling farm assets, withdrawing savings, or borrowing.

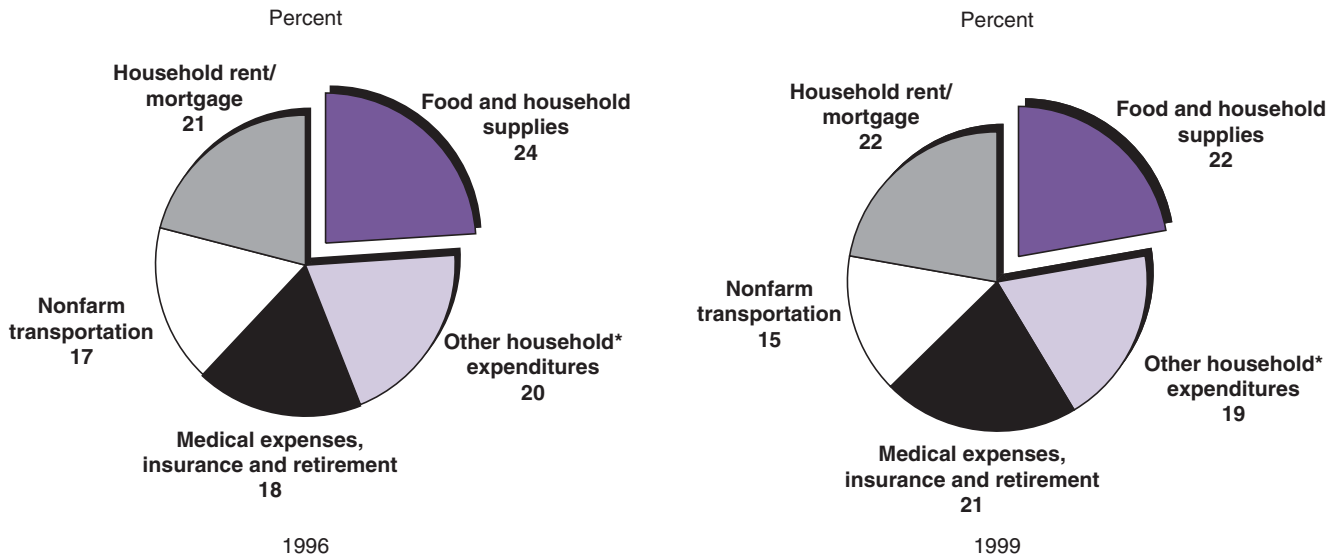
Expenditures of farm households track similarly by income level with those of nonfarm households. Farm households earning less than \$5,000 spent \$11,594, while equally poor nonfarm households spent \$17,983. On the other hand, farm households with \$100,000 or

³These estimates are comparable to those found in the 1999 *Family Living Expenditures of Iowa Farm Families* (Iowa State University, 2000) and in farm business management records from Minnesota and Illinois (see Center for Farm Financial Management).

Figure 6

Composition of household expenditures, 1996 and 1998

Farm household expenditures have risen, but their makeup is largely unchanged.



*Includes expenditures on clothing, education, hobbies, recreation, and charitable contributions.

Source: USDA, Economic Research Service, Agricultural Resource Management Study (ARMS) survey, 1996 and 1998.

more in income had \$67,531 in household expenditures, while equally prosperous nonfarm households spent \$76,742. Generally, expenditures of farm households were lower than those of nonfarm households in 1999. Whether this reflects a long-term trend or the economic environment during 1999 is yet to be determined.

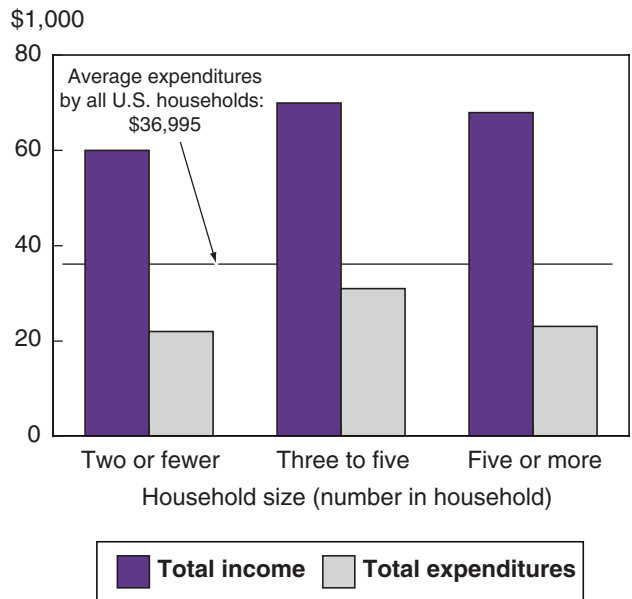
Farm household consumption trends were somewhat different than income over the life cycle. Instead of starting at low levels, rising gradually, peaking, and then declining slowly toward the latter stages, consumption is high at the beginning of the life cycle and declines gradually. Households headed by operators 35 or younger had the highest average living expenditures (\$35,652); households headed by those 65 or older had the lowest (\$10,079). Younger households, which are accumulating goods and members, face higher expenses for education, clothing, and personal items. On the other hand, families nearing retirement are better able to align their minimal consumption needs with income.

Total expenditures were highest in farm households with three to five people (fig. 7). This group spent an average of \$31,011, compared with \$21,503 for house-

Figure 7

Total income and expenditures per operator household, by household size, 1999

Expenditures were highest in households with three to five people.



Source: USDA, Economic Research Service, 1999 Agricultural Resource Management Study, version 1, for farm operator household data.

holds of one or two members. Average living expenditures for households with five or more members was \$22,501. This is expected since this size group has lower average household income, whether farm or nonfarm.

Income not used for consumption is available for savings and other investment opportunities both on and off the farm. Savings can be used to finance unexpected future needs in agriculture, retirement income, or unexpected health expenditures. Mishra and Morehart (1998) investigated factors affecting farm household savings, especially the important role of farm income uncertainty. The marginal propensity to save (MPS) for farm households was 0.81 (consistent with Langemeier and Patrick (1993) and Leon and Rainelli (1976)), while average propensity to save (APS) for their sample of U.S. farm households was 0.45 (Mishra and Morehart, 1998) (Leon and Rainelli in their study found an APS of 0.42 for Swiss farmers and 0.56 for French farmers). An MPS higher than an APS ensures a high degree of responsiveness of savings to disposable income changes. The relatively high MPS found

in the Mishra and Morehart study is attributed to production uncertainties coupled with strong precautionary motives.

Sources of Farm Household Wealth

Household wealth may be acquired through savings, inheritance, or appreciation of household assets. Farm household wealth combines farm assets (minus farm debt) and nonfarm assets (minus nonfarm debt) (fig. 8). Farm household wealth is dominated by farm real estate (76 percent), while physical assets (e.g., non-farm real estate, off-farm houses, recreational vehicles, etc.) capture the biggest share of nonfarm wealth (31 percent).

In 1993, the total net worth of an average farm household was \$365,445, with farm net worth comprising 85 percent (fig. 9). By 1999, a farm household averaged \$563,562 in total net worth, with farm net worth contributing 69 percent. The dramatic increase in the share of nonfarm wealth, which is partly attributed to a strong economy, may also indicate that farm households are becoming more astute at recognizing the

Figure 8
Sources of farm household wealth

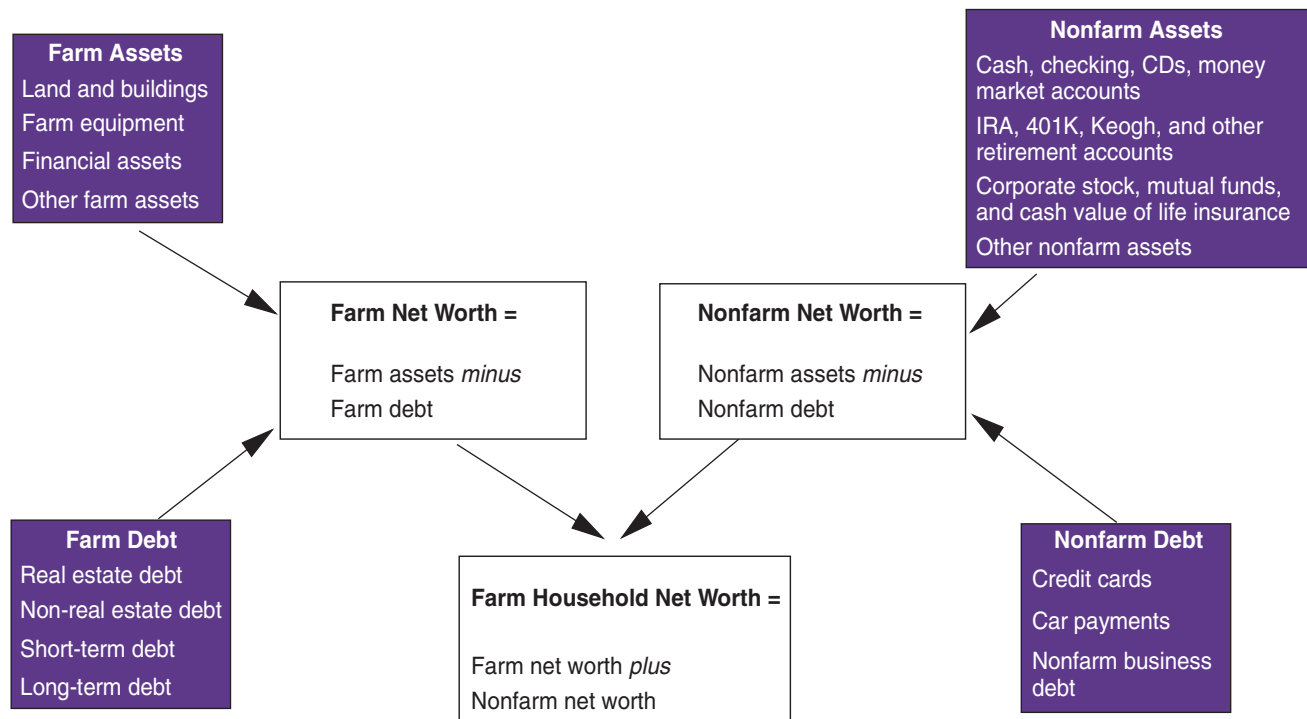
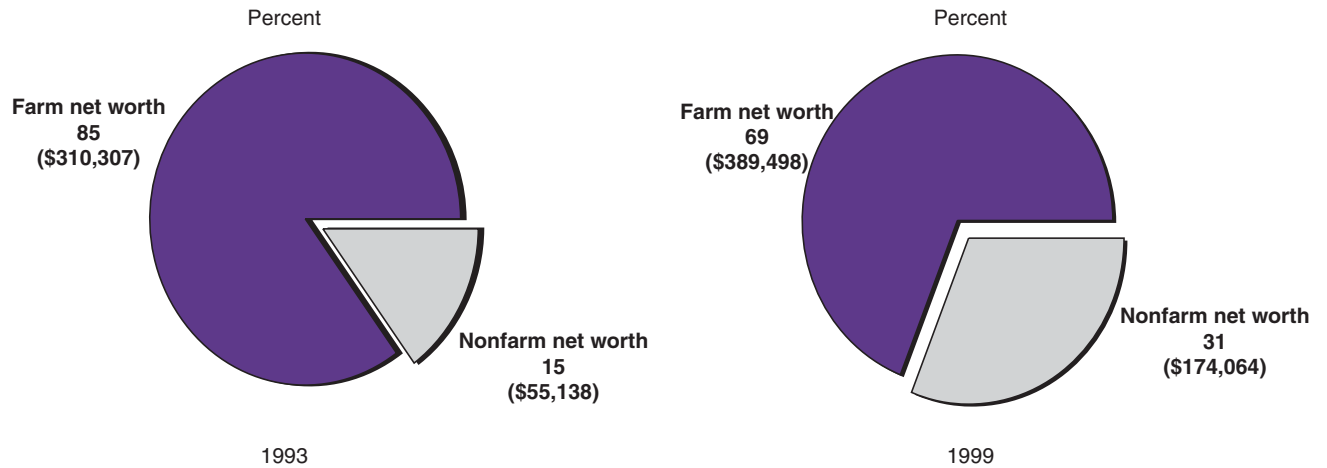


Figure 9

Sources and share of farm household wealth, 1993 and 1999

Most operator households derive the majority of their wealth from farms assets; however, the share of nonfarm net worth has increased of late.



Source: USDA, Economic Research Service, Agricultural Resource Management Study (ARMS) survey, 1993 and 1999.

opportunity for higher returns from their stock of wealth by investing off-farm. The low interest rates and rapid economic growth of the 1990s were especially favorable to wealth accumulation.

The relative shares of farm and nonfarm net worth vary with size of farm. Although most farm households rely heavily on off-farm sources for income, much farm

household wealth comes from the farm, regardless of size or type. The farm operation accounts for the smallest share of household net worth in the limited-resource, retirement, and residential/lifestyle farms. At the other extreme, 85 percent of the household net worth of higher sales farms, large family farms, and very large farms comes from the farm business.