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# Wealth and Income Contribute Jointly to the Economic Well-Being of Farm Operator Households

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Monitoring the levels and source of U.S. farm household income and wealth helps policymakers differentiate between those faced with long-term systematic problems versus short-term, market-driven problems. Such income and wealth measures could help extension agents and financial management specialists provide targeted information and financial planning assistance to farm families.

This article examines both the sources and the variation in the level of farm household income and wealth. It uses a farm typology—or classification system—developed by ERS to account for the differences in farm production and household characteristics. The typology sorts farms into more homogeneous categories based largely on sales of the farm and occupation of the operator

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*Economic well-being of the farm sector and farm households has been historically associated with incomes, especially income from farming. However, net income of the farm business may be a small percentage of the total income available to the farm family. Since the early 1990s, just under half of U.S. farm operators indicated in USDA surveys that their major occupation was something other than farming. Thus, the true economic well-being of farms must account for all income, both farm and off-farm, as well as the growing importance of wealth such as home equity and investments.*

(see “Farm Typology Group Definitions,” p. 13). Most of the information presented here is from the 1999 and 2000 Agricultural Resource Management Surveys (ARMS), conducted by ERS and the National Agricultural Statistics Service (NASS), both USDA agencies. The ARMS, collected annually, is the only source of farm business and farm household data complete enough to produce the typology. Operator household income from ARMS is defined here to be consistent with the Current Population Survey (CPS) definition of money income for all U.S. households (see “Defining Household Income,” p. 6).

## Trends in Household Income and Wealth

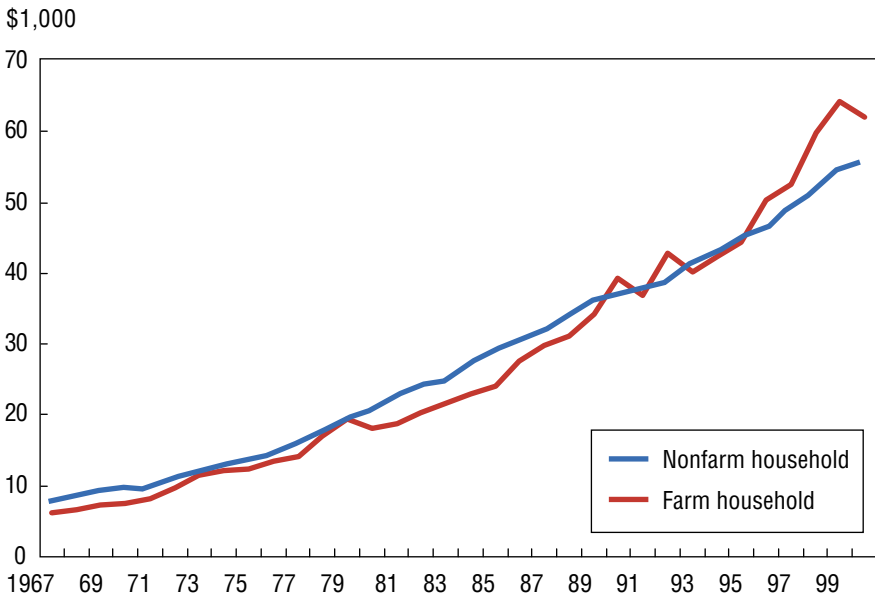
The average money income of farm operator households first exceeded the average income of all U.S. households in the 1990s and has been consistently higher since 1996 (fig. 1). Average farm household income in 2000 was \$62,019, compared with \$57,045 for the

average nonfarm household (table 1). Median income for farm households, which is less likely to be influenced by unusually large or small values, has also been roughly on par with the median income of all U.S. households in recent years.

What accounts for the ascendance of farm households with regard to average income? Earnings from off-farm sources have grown from \$10.1 billion in 1964 to \$114 billion in 2000. Sectorwide net cash income increased just three-fold during those same 35 years. Thus, the increase in farm household earnings has been substantially driven by the increase in off-farm earnings of farm families.

Wages and salaries still make up a significant portion of off-farm earnings. Though they declined from 65 percent (1964) to 56 percent of total off-farm earnings in 2000, aggregate wage earnings of U.S. farm households still grew nearly 9 times (in nominal terms) over that period. There are several reasons for this growth. First,

Figure 1  
**Mean income of farm and nonfarm households, 1967-2000**  
*In recent years, farm household income has exceeded nonfarm household income*



Source: Ahearn (1986) and Agricultural Resource Management Survey (ARMS), 1988-2000.

in 1999 was \$563,563, compared with \$300,000 for all U.S. households in 2000, \$291,000 for all U.S. households in 1999, and \$278,000 for nonfarm households in 1999. However, a majority of the wealth (net worth) is in farm assets, which are difficult to liquidate on short notice. Average farm household net worth has increased steadily over the years, partly from the appreciation in farmland values.

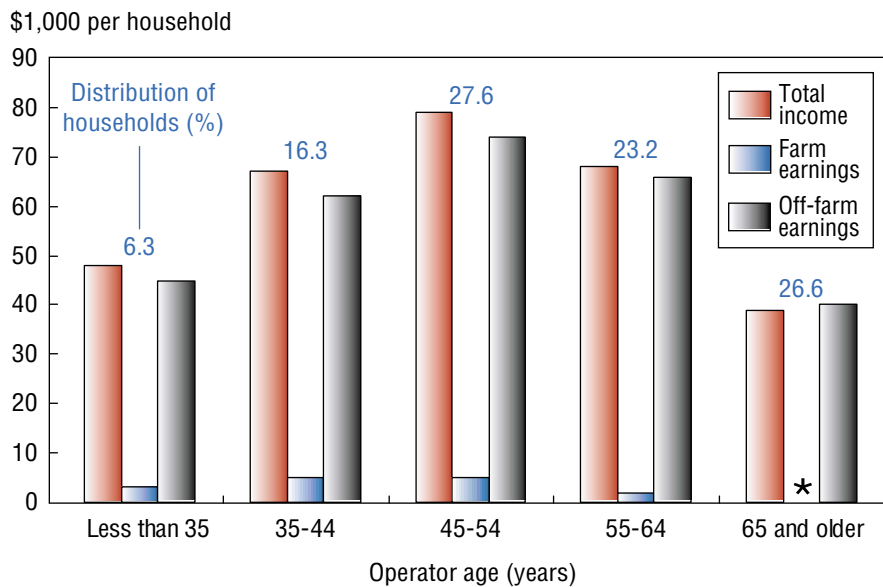
### Household Income and Wealth by Age of the Operator

Farm operator household income follows a traditional life-cycle pattern, rising, peaking, and falling with age (fig. 2). Earnings peak at age 45-54. These households received 93 percent (\$78,995) of their income from off-farm sources. Like total household

approximately 52 percent of rural farm people worked off farm in the 1960s, versus 65 percent in the 1990s. Participation by farm women more than doubled during the same period. And the economic boom of the 1990s created more jobs and higher wages in areas within commuting access to farm households.

The proportion of farm households' income originating from off-farm sources is not news. Off-farm income has made up the majority of farm household income for decades and almost all farm households have sources of income other than the farm business. More surprising is the role of wealth, which represents potential spending power. Two individuals with the same income but different amounts of assets will have different consumption possibilities. And the average net worth of farm families

Figure 2  
**Total, farm-related, and off-farm income per operator household, by operator age, 2000**  
*Farm operators depend on off-farm income for more than 90 percent of total income*



\*Earnings from farming activities suppressed because the standard error exceeds 75 percent.  
 Source: USDA, Economic Research Service, Agricultural Resource Management Study (ARMS) survey, 2000.

Table 1

**Operator household income, by farm typology group, 2000***Households operating limited-resource, residential/lifestyle, and lower sales farms rely the most on off-farm income*

Item	Farm typology grouping							48-State total
	Limited-resource	Retirement	Residential/lifestyle	Farming occupation/lower sales	Farming occupation/higher sales	Large	Very large	
<i>Number</i>								
Total households	127,390	319,297	913,088	455,984	172,720	78,256	54,841	2,121,576
<i>Percent</i>								
Distribution of households	6.0	15.1	43.0	21.5	8.1	3.7	2.6	100.0
<i>Dollars per household</i>								
Total household income	11,001	42,849	78,375	45,741	45,071	83,812	177,444	62,019
Farm income	*-2,979	*-1,621	-5,950	*-2,671	13,828	44,236	138,919	2,791
Off-farm	13,980	44,470	84,325	48,412	31,243	39,577	38,525	59,228
Earned <sup>1</sup>	5,911	11,987	75,578	25,015	20,645	23,495	25,485	43,269
Unearned <sup>1</sup>	8,070	32,483	8,746	23,397	10,598	16,081	13,040	15,959
<i>Percent</i>								
Operator household income compared with all U.S. households <sup>2</sup>	19.3	75.1	137.4	80.2	79.0	146.9	311.1	108.7
Share of operator household income from off-farm <sup>3</sup>	127.1	103.8	107.6	105.8	69.3	47.2	21.7	95.5
Share of off-farm income from earned sources	42.3	27.0	89.6	51.7	66.1	59.4	66.2	73.1
Income dependence:								
Loss from farming	64.7	63.8	75.2	46.4	13.2	9.4	7.8	57.4
0-24% from farming	17.0	25.3	20.6	19.0	9.9	7.5	5.7	19.0
25-49% from farming	na	5.4	1.9	12.1	16.1	10.8	7.0	6.4
50% or more from farming	na	na	*0.7	12.2	44.3	60.4	60.3	11.2
Negative household income	na	na	*1.6	10.3	16.5	11.8	19.2	6.0
<i>Dollars per household</i>								
Nonmoney income	2,541	5,394	5,295	6,257	4,498	4,951	5,313	5,274
<i>Dollars per farm</i>								
Depreciation	1,511	1,807	2,846	5,538	18,776	31,461	71,297	7,310
Net inventory change	*487	a496	*716	*2,652	*8,033	*7,406	*15,875	2,319

d = Data suppressed due to insufficient observations or standard error greater than 75 percent of the estimate.

\* = Standard error is between 25 and 50 percent of the estimate.

<sup>1</sup>Earned income comes from off-farm self-employment or wage/salary jobs. Unearned income includes interest and dividends, benefits from Social Security and other public programs, alimony, annuities, net income of estates or trusts, private pensions, regular contributions of persons not living in the household, net rental income from nonfarm properties, and royalties for mineral leases.<sup>2</sup>Average farm household income divided by U.S. average household income (\$57,045).<sup>3</sup>Income from off-farm sources can be more than 100 percent of total household income if earnings of the operator household from farming activities are negative.

Source: USDA, Economic Research Service, 2000 Agricultural Resource Management Study.

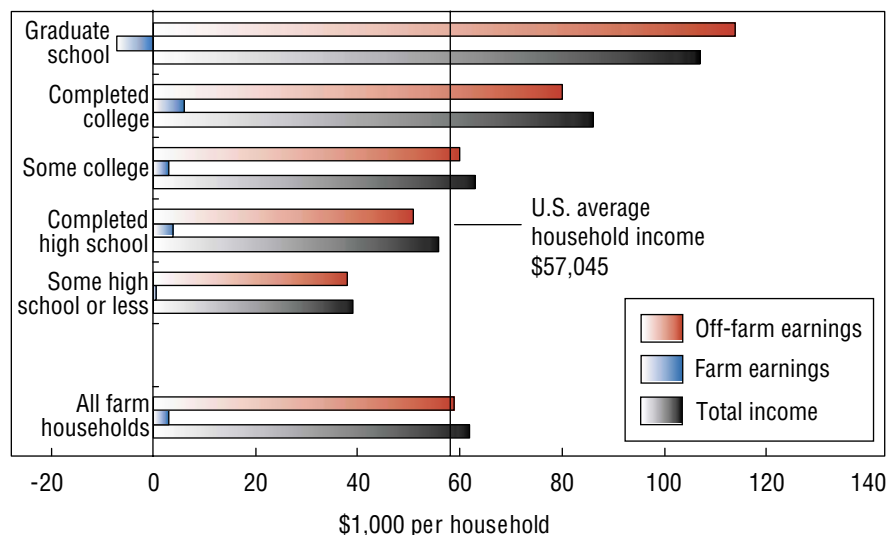
income, farm income rises, peaks, and falls with age. For example, the average income from farming decreases from \$2,878 for operators under 35 to approximately \$890 for those 65 and older. Conversely, the share of off-farm income (regardless of source) increases with age.

Younger farm operators (less than 35 years and 35-44 years) earn more than 85 percent of their income from off-farm sources (fig. 2) and derive most of their income from a variety of off-farm sources. There could be several reasons for this. First, with the strong nonfarm economy of recent years, younger farm operators have had the opportunity to engage in off-farm work, establishing the farm business while pursuing other work opportunities. Second, younger farm operators are in the wealth accumulation phase and are doing so by diversifying their portfolio, both on and off the farm. Third, modern technology enables farmers to increase their productivity and efficiency, which allows more time to work off farm. Finally, younger farm operators are motivated by farm business expansion plans or by raising a family to aggressively explore income earning alternatives.

Meanwhile, at the upper end of the age distribution, farm households have about 69 percent of the income of all U.S. households. Nevertheless, operators who are 65 or older have incomes 14 percent higher (\$39,233) than nonfarm households headed by a person in the same age group (\$32,852). For these older farm households, the majority of income is from unearned sources.

Farm household wealth also follows a distinct pattern over the life cycle. Farm household net worth peaks at age 55-64. These

Figure 3  
**Total farm-related and off-farm income per operator household by educational level of farm operator, 2000**  
*More educated farm operators earn most of their household income from off-farm sources*



Source: USDA, Economic Research Service, Agricultural Resource Management Study (ARMS) Survey, 2000

households tend to have almost 80 percent of their total net worth in farm assets (highest among all groups). Farming's contribution to household net worth increases with operator age until age 65. For example, the average net worth from farming rises from \$222,821 for operators under 35 to \$494,138 for those 55 to 64, then contracts again. Beginning farmers, those age 35-44, have the most debt, both farm and nonfarm. This is consistent with the view that, unless inherited, young and beginning farmers must borrow to finance farming operations.

### Household Income, Wealth, and Educational Level of the Operator

As emphasized many times in these pages, farm household income increases with the level of education. Farmers with more education tend to work more off farm. For example, households headed by

operators who have attended or completed graduate school (\$106,647) earned 2.7 times more in 2000 than operators who had less than a high school education (\$38,875), who in turn earned 32 percent less than the average for all U.S. households. As the level of education increases, income from farming decreases and income from off-farm sources increases (fig. 3). This suggests that farm operators allocate time and seek jobs that improve their earning capabilities, and these capabilities derive from educational attainments.

As with income, level of education is positively related with wealth (net worth). More educated farm operators tend to have higher levels of wealth. For example, operators with college degrees or higher have approximately twice as much wealth as operators who have not completed high school. Advanced education is also associated with a



## Defining Farm 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 Study (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 paid to household members for farm work.)

diversified portfolio. In 2000, operators with graduate degrees (6.5 percent) had a total net worth of \$776,929, of which one-third was in nonfarm net worth (\$222,583). However, it should be noted that this group had almost all of its income from off-farm sources.

## Income, Wealth, and Size of Household

Affecting both household income and expenditures is that household's size. Farm households with 3 to 5 members have the highest income, 28 percent higher than the average U.S. household. Most of their income (94 percent) comes from off-farm sources. Farm households with 1 or 2 members were the most dependent on income from off-farm sources. Households with 5 or more mem-

bers earned 16 percent of their income from farming and 84 percent from off the farm.

Household size is also important in wealth accumulation, with the expectation being that household size and wealth are inversely related. A large household makes more expenditures and leaves less money available for savings and wealth accumulation. Farm households with 1 or 2 members (58 percent of farm households) do have the most wealth (net worth of \$543,973 including farm and nonfarm). These households have one-third of their assets invested off the farm (and 97 percent of total household income from off-farm sources). On the other hand, larger farm households (5 or more members) had the lowest total wealth and nonfarm net worth. In all

cases, farming was the major source of debt, which increased with family size.

## Household Income and Wealth Differs by Farm Type . . .

Grain and soybean farms produce commodities covered by traditional commodity programs. These farm types, in addition to dairies, are relatively prominent among full-time (2,000 hours or more) operators. Beef /cattle and other livestock farms are prominent among part-time operators who work 200 days or more off the farm. Dairy farms received less than a third of their income from off-farm sources; cash grain, cotton, and oilseed farms received even less. Farm households with specialized enterprises such as dairy tend to have higher average farm income, which makes up a larger share of total household income. Dairy is also labor-intensive, limiting the hours that operators can devote to off-farm work. Despite their relatively high dependence on farm income, these farms have income above the average U.S. household.

Even though cash grain farmers have benefited most from farm programs through capitalization of government payments into land values, producers of high-value crops (such as fruit, tree nuts, vegetables, nursery and greenhouse) have the largest net worth (\$792,675), and nonfarm net worth accounts for 15 percent of that. On the other hand, other livestock producers (such as poultry) have the lowest wealth (\$423,501) since much of poultry production occurs on relatively small farming operations on a contract basis. In addition to lower capital requirements, poultry producers are able to allocate more time to off-farm work. In

fact, off-farm earnings (103 percent of household income) offset negative farm income for farms specializing in beef and other livestock. As a result, one-third of their total net worth (wealth) is comprised of nonfarm assets. Many off-farm jobs have benefits that promote investment in options such as a 401K. Actually, an IRA is a benefit for people who don't have a job with benefits or other tax-deferred savings plans.

### ... By Farm Size

Although most U.S. farms are classified as small farms, agricultural production is highly concentrated among large and very large family farms. These two groups together made up only 8 percent of all

farms, but accounted for 57 percent of production. Level and sources of income varied widely by farm size (fig. 4). Households operating very large farms had the highest average household income, \$177,444, about three times the average for all U.S. households. These farms received approximately 22 percent of their income from off-farm sources.

Households operating residential/lifestyle farms or large family farms (see box, p. 13) also had income above the average for all U.S. households, but the sources of income differed between the two groups. Residential/lifestyle farms received virtually all of their income from off-farm sources, while households with large farms received over half of their income

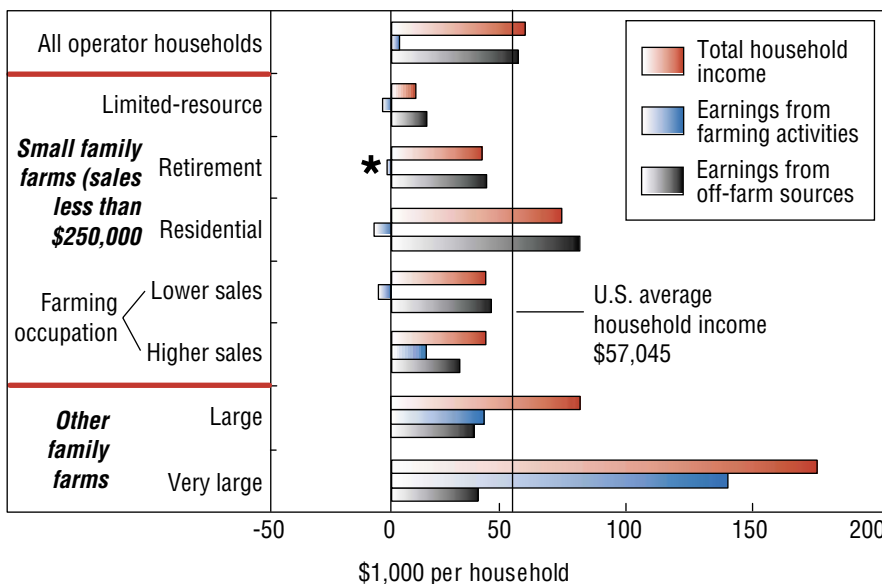
from the farm (fig. 4). Households operating higher sales small farms had an income below the U.S. average by a statistically significant amount. Seventy percent of their income came from off-farm sources.

Further, limited-resource, retirement, and lower sales farm households had average household incomes below the average for all U.S. households and relied heavily on off-farm income. Income for households operating lower sales small farms averaged \$45,741, or 80 percent of the average for all U.S. farm households. Practically all of their income came from off-farm sources. Nearly all the income of retirement farms came from off the farm, most of that (63 percent) from unearned sources such as Social Security and investment income. For 21 percent of retirement farms, the Conservation Reserve Program (CRP) was the primary source of farm income. Off-farm income averaged just \$13,980 for limited-resource farm households, and they lost an average of \$2,979 from farming. As a result, these small farms averaged only \$11,001 in total household income, or about one-fifth the average for all U.S. households.

Large farms have accumulated more wealth. The value of farm assets balloons from \$89,228 for limited-resource farms to \$2,224,522 for very large farms. Only limited-resource, retirement, and residential/lifestyle farms have farm assets below those of the average farm household (\$389,498). Farm debt follows a similar pattern. It increased from \$6,443 for limited-resource farms to \$403,039 for very large farms. Households operating very large farms (sales > \$500,000) had the highest wealth, both farm and nonfarm.

Figure 4  
Total farm-related and off-farm income per operator household by farm typology group, 2000

Small farm households depend heavily on off-farm income



Note: Household income data are not collected for nonfamily farms. Earnings from off-farm sources can be larger than total household income if earnings from farming activities are negative.

\*The relative standard error exceeds 25 percent but is no more than 50 percent.

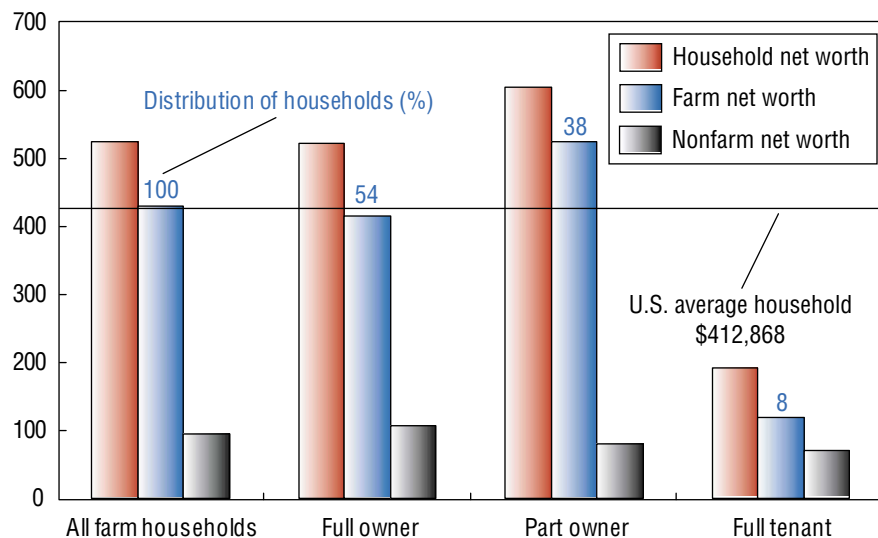
Source: USDA, Economic Research Service, 2000 Agricultural Resource Management Study, version 1, for farm operator household data. U.S. Bureau of Census, Current Population Survey, for all U.S. households.

Figure 5

**Total farm and off-farm net worth per operator household by farm tenure, 2000**

*Farm households, full owners, and part owners have more wealth than the average U.S. household*

\$1,000 per household



Source: USDA, Economic Research Service, Agricultural Resource Management Study (ARMS) survey, 2000

The wealth of residential/lifestyle farm households is equally divided into farm and nonfarm sources, reflecting the importance of off-farm income.

**... By Farm Tenure**

Farm tenure describes the farm operator's ownership interest in the land he or she farms. They can be (1) full-owners, who own all the land they operate; (2) part-owners, who own some and rent the remainder of their land; or (3) tenants, who rent all of their land or work on shares for others. The majority of farms reported full ownership in 1999 (58 percent), while 34 percent owned part and rented part of the farmland they operated. Only 8 percent of operators reported renting all of their land.

The composition of farm household income differs among tenure groups. In 2000, full-owner households earned \$64,885 on average, with nearly all of their income coming from off-farm sources. This is consistent with the fact that full-owners make up a large share of the limited-resource (64 percent), residential/lifestyle (62 percent), and lower sales (50 percent) groups, which depend primarily on off-farm income. The average part-owner household earned \$59,411 from both farm and nonfarm sources. Part ownership was the most common form of tenure among higher sales small farms, large family farms, and very large family groups, accounting for about two-thirds of each group. Full tenants earned \$52,335 in average income, about \$4,700 less than the average for all U.S. households.

Leasing land has been traditionally viewed as the bottom rung of the tenancy ladder. Young farmers would begin their careers by leasing land, often from relatives. As they grew older, they would buy some land, but continue to rent. The oldest farmers would cut back on farming by no longer leasing and concentrate on the land they owned. However, recent studies have concluded that farmers who rent/lease land were more successful in farming than other farmers. The choice between ownership, renting land, and any combination of ownership and lease options reduces the need for capital financing. Approximately 30 percent of the total income of full tenants comes from farming, indicating their dependence on off-farm income.

Since land is the principal farm business asset, the composition of farm household wealth differs significantly among farm tenure groups. In 2000, only part-owner households had above-average farm net worth. They also had the highest level of net worth (\$592,995), with 87 percent in farm and 13 percent in nonfarm net worth (fig. 5). However, these farm households have the largest farm debt. Full-tenant households have the least amount of wealth (\$186,595), with a greater proportion in non-farm sources due to lack of farmland holdings.

**... And by Location**

Since off-farm income is a major source of income to farm households, the farm's proximity to off-farm jobs is crucial. It is assumed that farmers near urban areas have access to more active labor markets and would be expected to work more off-farm hours.



Two-thirds of all U.S. farms are located in nonmetro counties (see “Geographic Units,” p. 12). Even farm households located in rural areas depend heavily on off-farm work. Total household incomes of these households are on par with all U.S. households (fig. 6). Farm households located in metro areas (central city, fringe, medium metro, and small metro) had the highest level of income (\$72,549), and 95 percent of this income is from off-farm sources, mostly wages and salaries. Metro farm households earned 27 percent more income than the average U.S. household. Finally, nonmetro farm households in urban (adjacent and nonadjacent) areas tend to have nominal income (almost \$3,000) from farming, with off-farm income crucial (fig. 6).

Wealth for farm households in different locations follows the same pattern as income. Farm households located in or near a metro area had the highest level of wealth (\$599,912) in 2000. This is consistent with the fact that this group of farms has the highest income and off-farm income. One-third of their wealth comes from nonfarm net worth. Further, farm households located near or in metro areas have the highest farm assets and lowest farm debt. This could suggest that they are full-owners and may be renting land and machinery to part-owners and tenants. At the other extreme are rural farm households, with just one-fourth of their net worth invested off the farm. Rural farm households have the highest farm debt and considerable farm assets (at \$461,660, 12 percent higher than the average U.S. farm household).

### Household Well-Being Depends on Income and Wealth

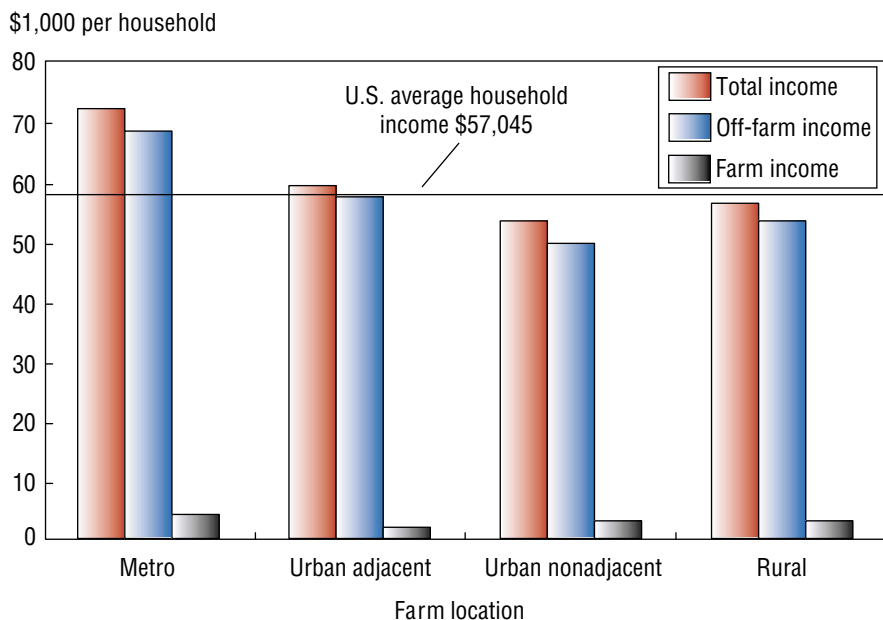
Farm household economic well-being is affected both by the level of income and wealth available to the household and by how income and wealth influence the household’s command over the consumption of goods and services. In this context, well-being has both an absolute component, which compares income and wealth to a selected standard, and a relative component, which measures the ability of households to meet consumption needs.

Traditionally, assessments of farm household economic well-being (and attendant policies) have had a singular focus: how income levels of farm households compared with incomes of nonfarm households. By developing a joint

distribution of income and wealth for farm households, we can better intuit a farm household’s ability to withstand income shocks that arise in either the farm or nonfarm economy. Falling/rising commodity prices, production shortfalls due to weather, a sectoral shift, and lack of off-farm jobs can all beset farm households. And changes in economic conditions such as interest rates can have competing effects on farm and off-farm incomes. Any of these can contribute to income rising or falling in a given year. Access to financial or other assets, including savings, by the household can forestall a tightening in consumption. Likewise, income that exceeds consumption can be added to savings or used to pay down debt. Either or both income and wealth levels for U.S. farm households can

Figure 6  
**Total farm and off-farm income per operator household by farm location, 2000**

*Farm households, even in rural areas, derive substantial income from off-farm sources*



Source: USDA, Economic Research Service, Agricultural Resource Management Study (ARMS), 2000.

Table 2

**Characteristics of farm operator households (based on U.S. median income and U.S. median wealth), 2000, by economic well-being**
*Based on income and wealth criteria only, a small proportion of farm households are economically disadvantaged*

Item	Economic well-being				U.S. total
	Lower income-lower wealth	Lower income-higher wealth	Higher income-lower wealth	Higher income-higher wealth	
Number of farms	127,501	903,802	56,123	1,034,151	2,121,576
Percent of farms	6.0	42.6	2.6	48.7	100.0
Percent of total value of production	2.2	34.1	1.3	62.4	100.0
Percent of crop value of production	2.6	32.4	1.5	63.4	100.0
Percent of livestock value of production	1.8	35.8	1.0	61.4	100.0
Distribution by farm typology (percent):					
Limited-resource/retirement/residential	77.0	56.8	85.7	67.7	64.1
Farming occ. (lower sales/higher sales)	21.3	38.9	d	23.6	29.6
Large/very large/nonfamily	1.7	4.3	*4.1	8.7	6.3
Farm size (operated acres)	175	435	*197	455	423
Average government payment (\$)	3,523	6,115	*3,143	9,014	7,294
Farm income	*-5,325	-10,551	@1,351	15,530	2,791
Depreciation	3,398	7,561	*3,131	7,800	7,310
Change from 1999 in accounts receivable	@561	916	#-1,192	*-882	@-38
Change from 1999 in value of inventory	#1,805	3,878	@557	2,744	3,113
Off-farm income	23,321	24,800	82,269	92,493	59,228
Wages and salaries	18,338	11,495	63,340	52,236	33,137
Off-farm business income	*627	1,843	*5,718	17,429	9,470
Interest and dividends	*204	1,856	*1,719	6,863	4,194
Social Security and other public programs	3,009	7,010	#4,828	5,341	5,898
Other passive sources of income	#525	1,554	*5,334	*7,992	4,730
Farm operator household income	17,995	14,249	83,619	108,023	62,019
Total household expenditures	17,118	19,994	29,018	32,073	25,948
Distribution of households (percent):					
Household income < Household expenditures	31.8	42.4	d	2.5	21.3
Household income < Household expenditures (income adjusted for government payments)	37.0	47.6	d	6.7	25.9
Household income < Household expenditures (income adjusted for accounts receivable and inventories)	28.1	37.5	d	4.6	20.1
Household income < Household expenditures (income adjusted for depreciation)	24.2	30.8	d	3.4	16.4
Household net worth (\$)	39,503	449,521	*21,034	656,040	514,212
Farm net worth	43,145	387,396	38,897	517,587	420,950
Nonfarm net worth	@-3,643	62,125	#-17,863	138,453	93,263
Farm operator age	48	59	44	53	55
Farm operator education (percent):					
Some high school or less	*21.1	22.0	d	8.7	15.1
Completed high school	34.5	47.3	44.9	35.2	40.6
Some college	30.0	20.8	*26.5	28.4	25.2
Completed college (BA, BS)	*11.5	6.6	*18.7	17.8	12.7
Graduate school	d	3.3	d	9.9	6.5

\* indicates that the standard error of the estimate is greater than 25 percent and less than or equal to 50 percent.

# indicates that the standard error of the estimate is greater than 50 percent and less than or equal to 75 percent.

@ indicates that the standard error of the estimate is greater than 75 percent.

d indicates value is not available due to insufficient information.

Source: 2000 USDA Agricultural Resource Management Study, version = 1 only.

exceed or fall below income and wealth measures for all U.S. households.

Almost half of farm households have both higher incomes and greater wealth than all U.S. households and so cannot be considered disadvantaged. Of these farms, 98 percent reported household income greater than consumption expenditures. On average, household income for this half of farms (\$108,000) was more than three times higher than consumption expenditures (\$32,000). This group of higher income, higher wealth farms reported net worth of \$656,040, of which \$138,453 was household assets held outside the farming operation (table 2). Modifying the cash income measure to include changes in inventory or accounts receivable would substantially increase the amount of resources with which to fund consumption, add to savings, or fund business growth or investment.

The group of higher income, higher wealth households contained a disproportionate share of larger farm operations and farm operators who reported a primary occupation other than farming. On average, this group of households operated the largest farms as measured by acreage at 455 acres, accounted for 62 percent of farm output, and drew 60 percent of government payments. This group of operators also had, by far, the highest educational attainment.

About 43 percent of farm households report lower income and greater wealth than all U.S. households. A majority (58 percent) reported annual household expenditures below their annual household incomes. This group contains a disproportionate share of intermediate-size farms and farmers who report that they are retired.

More than 40 percent of farm operators in this group were 65 or older. The group also contained many limited-resource farms. For many of these farms, self-employment income is often negative. Yet, as a part of normal business practices, some may be owed money and others may hold crop and livestock outputs as additions to their business inventories at year-end. On average, money owed from sales and additions to inventory would have been sufficient to offset half of this group's income shortfall. Taking these assets into account, the proportion of households with incomes less than consumption drops from 42 percent to 38 percent.

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***Without accounting for these sources of liquid or near-liquid assets, the proportion of households considered disadvantaged could be substantially higher. This would have been particularly true for households of younger operators.***

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Thus, for farm households as with other self-employed households, it is important to consider their decisions with regard to stockholding within their businesses as well as funds owed the business from prior economic actions. Without accounting for these sources of liquid or near-liquid assets, the proportion of households considered disadvantaged could be substantially higher. This

would have been particularly true for households of younger operators.

Lower income, higher-wealth farms hold a vast majority of net worth (\$450,000 on average) in business assets. For the more elderly or retired farmers in this group who do not have sufficient current earnings from farming, they can access their accumulated assets or begin to consume capital assets (such as their machinery or equipment whose useful life is either extended or not replaced as it wears out). Generating a flow of income from the household's asset base to support household consumption would require either disposing of the farm, renting/leasing to other farmers, or participating in government programs. Many lower income, higher wealth households do report receipt of government payments.

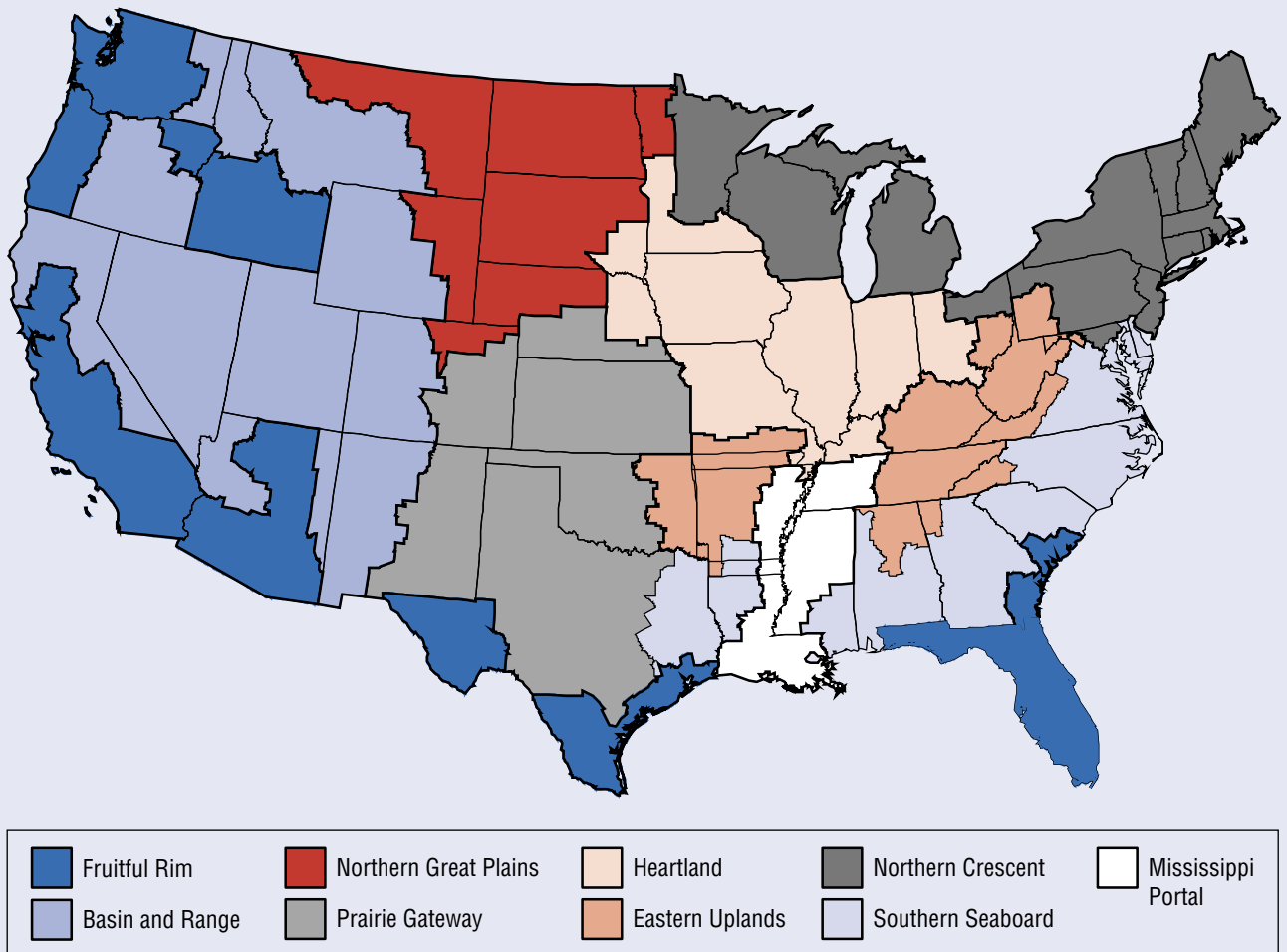
The group of lower income, higher wealth households also contains commercial-size farm businesses that have likely encountered a difficult year due to prices received or production shortfalls. For many of these operations, this categorization is likely short-term. Meanwhile, these households can maintain consumption levels by drawing on savings or other assets.

The 2.6 percent of farms with higher incomes and lower wealth are almost entirely focused on off-farm activities, with 84 percent reporting a primary occupation other than farming. This group is younger than average, with more having attended or completed college. Household incomes are almost entirely from off-farm sources and exceed consumption expenditures by a wide margin.

At the extreme portion of the distribution are the 6 percent of farm households with both lower

## Geographic Units

**Resource Regions.** The Economic Research Service (ERS) has developed new resource regions based on characteristics of the land and the commodities produced. These regions cross State boundaries, but are more homogeneous with respect to resources or production than regions based on combinations of States.



**Metro-Nonmetro Status.** *Metro* areas are defined by the U.S. Office of Management and Budget (OMB) as geographic areas with a large population nucleus (generally at least 50,000 inhabitants), plus adjacent communities that are socially and economically integrated with that nucleus. Metro designations as of 1993, which identified 813 metro counties, are used in this report.

*Nonmetro* counties are a residual, the part of the Nation lying outside metro areas. Nonmetro counties are diverse, however, and the 2,276 nonmetro counties can be categorized into smaller groups with common characteristics. Nonmetro counties are sorted into two groups: those *adjacent* to metro areas (991 counties) and those that are *not adjacent* (1,285 counties). One would expect urban influences to be stronger in adjacent counties than in nonadjacent counties.

**Economic Specialization.** Nonmetro counties can also be categorized according to their economic specialization. There are 556 *farming-dependent* counties where farming accounted for at least 20 percent of earned income over the three years from 1987 to 1989.

incomes and lower wealth. Principally small and limited-resource farms, on average, this group shows little difference between household income and consumption expenditures. Of these households, 21 percent report a farming occupation and nearly 38 percent are limited-resource households. Moreover, their small asset base can be insufficient to meet any unexpected shortfall in household earnings whether from the farm or nonfarm sources. Nearly one out of three of these households reported income less than consumption expenditures in 2000. So, for about 6 percent of U.S. farm households, reported income and wealth levels imply a very difficult set of economic circumstances, with insufficient income to support even relatively low levels of current consumption and few assets to meet or enhance consumption.

## Conclusion

On average farm households have higher incomes, greater wealth, and lower consumption expenditures than all U.S. households. Farm households, on average, are better able to support their consumption needs with income. It is no longer accurate to class farm households into any one all-defining group that is considered either disadvantaged or without problem with regard to household well-being. Indeed, while the economic well-being of a vast majority of farm households can be considered superior to all households, 6 percent clearly suffer difficult circumstances, falling short in both income and wealth measures.

## Farm Typology Group Definitions

### Rural Residence Farms

- **Limited-resource farms.** Small farms with sales less than \$100,000, farm assets less than \$150,000, and total operator household income less than \$20,000. Operators may report any major occupation, except hired manager.
- **Retirement farms.** Small farms whose operators report they are retired.\*
- **Residential/lifestyle farms.** Small farms whose operators report a major occupation other than farming.\*

### Intermediate Farms

- **Farming-occupation farms.** Small farms whose operators report farming as their major occupation.\*
  - **Lower sales farms.** Sales less than \$100,000.
  - **Higher sales farms.** Sales between \$100,000 and \$249,999.

\*Excludes limited-resource farms whose operators report this occupation.

### Commercial Farms

- **Large family farms.** Sales between \$250,000 and \$499,999.
- **Very large family farms.** Sales of \$500,000 or more.
- **Nonfamily farms.** Farms organized as nonfamily corporations or cooperatives, as well as farms operated by hired managers.

When the ability of income to support current consumption expenditures is taken as the measure of well-being, 21 percent of farm households might be considered to have some short-term disadvantage. As our analysis revealed, however, the vast majority of these households have wealth levels, including liquid or near-liquid assets held in their businesses, that could be used to sustain consumption. For the lower income, lower

wealth households this is not so. These households, many of whom appear to be beginning farmers, have relatively low levels of consumption, low incomes, and few resources to offset any unexpected income shortfall either from farming or elsewhere. **RA**