

Findings and Policy Implications

Despite the importance of income and wealth to farm households' economic well-being, existing literature on the subject has often emphasized the role of one measure to the exclusion of the other. For studies addressing the economic standing of a farm household relative to a household in the general population, the economic indicator of choice has been income. Analyses have typically focused on average income without considering variations in contributing sources.

This report advances the literature by framing farmers' well-being in the context of income, wealth, and consumption at the household level. In doing so, the report provides a broader basis from which to compare the economic status and well-being of farm operator households among different farm groups and with all U.S. households in general. Data from the USDA's Agricultural Resource Management Survey were used to examine the economic well-being of U.S. farm households. Comparison with nonfarm households is undertaken with data from the Federal Reserve Board's Survey of Consumer Finances and Current Population Survey (CPS). Among our findings:

- Farm households are no different than other households in pursuing two careers and diversifying earnings.
- The farm business as a source of income has become increasingly less important to farm households, especially noncommercial farms (sales less than \$250,000 per year).
- While farm income exhibits considerable variability, farm **household** income is relatively stable.
- Income available to farm households can support a standard of living equal to or above that of the average nonfarm household.
- For most nonfarm proprietorship households, the business is the main source of income; for most farm proprietorship households, the farm detracts from total household income.
- The average wealth of farm households has increased, and farm households have broadened their investment portfolio to include more nonfarm components.

- While the life cycle is a dominant influence on differences in the level and source of household income and wealth, other contributing factors include farm type and size, operator education, farm tenure, and household size.
- Even for farms in rural areas, off-farm income is still the dominant source of household earnings.
- Consumption expenditures by farm households are lower than for nonfarm households.
- Despite the fact that average incomes are similar for farm and nonfarm households, the corresponding income distributions are significantly different.
- Considerable differences in wealth exist between farm and nonfarm households both in terms of the reported averages and in how the wealth is distributed.
- The conventional wisdom that farm households are financially disadvantaged compared with other U.S. households does not hold.

Household Well-Being

Farm household economic well-being is affected both by the level of income and wealth available to the household and by its influence 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 have had a singular focus: determining how income levels of farm households compared with incomes of nonfarm households. This analysis develops a joint distribution of income and wealth for farm households. This more inclusive view better captures well-being since household income is subject to shocks such as falling or rising prices for agricultural commodities, changes in production due to weather, or changes in employment status or conditions in off-farm jobs. Access to financial or other assets, including savings, by the household can be used to level consumption. Assets can be drawn down to offset temporary shortfalls in income. Likewise, income that exceeds consumption can be added to savings or used to pay down debt.

In 2000, almost half of U.S. farm households had both higher incomes and greater wealth than all U.S. households (table 11). Of these farms, 97.5 percent reported household income greater than consumption expendi-

Table 11—Characteristics of farm operator households (based on U.S. median income and U.S. median wealth), 2000, by economic well-being

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:					
Limited-resource/retirement/residential farms	77.0	56.8	85.7	67.7	64.1
Farming occupation (low sales/high sales) farms	21.3	38.9	d	23.6	29.6
Large/very large/nonfamily farms	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
Household farm net worth	43,145	387,396	38,897	517,587	420,950
Household 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

Source: 2000 USDA Agricultural Resource Management Study. * Standard error of estimate > 25 percent and less than or equal to 50 percent. # Standard error of estimate > 50 percent and less than or equal to 75 percent. @ Standard error of estimate > 75 percent. d indicates insufficient information.

tures, on average three times higher (\$102,000 versus \$32,000). “Higher-income, higher-wealth” farms reported net worth of \$656,000, of which \$138,000 was nonfarm assets. An income measure that transcends cash to consider changes in inventory or accounts receivable would substantially increase resources available to farm households. Higher-income, higher-wealth farm 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 farm households operated the largest farms (455 acres), accounted for 62 percent of U.S. farm output, and received 60 percent of government payments. This group of operators also had, by far, the highest educational standing.

About 43 percent of U.S. farm households reported lower incomes and greater wealth than all U.S. households in 2000. Even so, a majority (58 percent) reported household expenditures below household incomes (table 11). “Lower-income, higher-wealth” households contain 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 contains a disproportionate share of limited-resource farm households. For many limited-resource farms, self-employment income is often negative. Yet, as a part of normal business operations, 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 expenditures drops from 42 percent to 38 percent. Thus, for farm households, as with other self-employed households, it is important to consider decisions with regard to stockholding, as well as funds owed the business from prior economic actions. Without taking these sources of liquid or near-liquid assets into account, the proportion of households considered disadvantaged could be substantially higher. This would have been particularly so for younger operators where money owed for crops or additions to farm inventories would have offset most farm income losses and helped fund household consumption needs without depleting savings or other sources of funds.

Meanwhile, lower-income, higher-wealth farms had the second highest level of household net worth, by far, of any group (\$450,000). Much of it is held in business assets. For the more elderly or retired farmers in this group who did not have sufficient current earnings from farming, two options are available to supplement current household incomes. They can secure access to their accumulated assets or they can begin to depreciate 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 consumption would require either disposing of the farm or finding alternative ways, such as renting and leasing to other farms or participating in government programs. A substantial share of lower-income, higher-wealth farm households do receive government payments, especially for conservation (land retirement).

Commercial-size farms in the lower-income, higher-wealth group likely reside there after a subpar production year. As such, income from farm self-employment likely eroded overall household incomes. For many of these households, this is likely a short-term farm earnings issue. Meanwhile, we would expect these households to maintain consumption levels that, on average, exceed current household incomes by drawing on savings or other assets.

Results of the joint income and wealth analyses also revealed a group of higher-income, lower-wealth households and a group of lower-income, lower-wealth households. The 2.6 percent of farms with higher incomes and lesser wealth are almost entirely focused on off-farm activities, with 84 percent reporting a primary occupation other than farming. This group of households is younger than average, and more had attended or completed college. Household incomes are almost entirely from off-farm sources and exceed consumption expenditures.

Six percent of U.S. farm households suffer both lower income and lower wealth. This group, which consists principally of small and limited-resource farms, on average, has little give between household incomes and consumption expenditures. Of this group of households, 21 percent report a farming occupation and nearly 38 percent are limited-resource households. Lower-income, lower-wealth households have a small asset base with which to counter an unexpected shortfall in household earnings. Nearly one out of three households

reported income less than consumption expenditures in 2000. So, for about 2 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 meager consumption and few assets to meet or enhance it (fig. 25).

On average, farm households have higher incomes, greater wealth, and lower consumption expenditures than all U.S. households. Incomes of farm households are, on average, sufficient to support a standard of living (defined as meeting consumption and basic household needs) that either is comparable to or exceeds that for all U.S. households. No longer do farm households inhabit one all-defining group that is considered either disadvantaged or without problems.

When the ability of income to support current consumption expenditures is taken as the measure of well-being, approximately 21 percent of U.S. 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, some of which appear to be beginning farmers, have relatively low levels of consumption, low incomes, and few resources to offset any unexpected income shortfall.

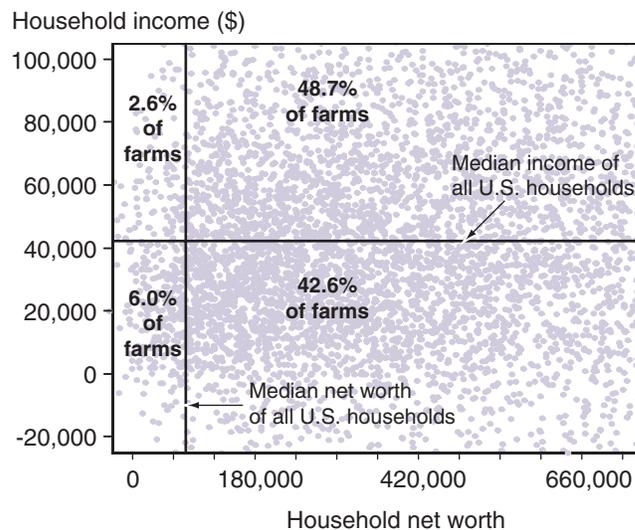
Policy Implications

Using Houthakker's (1967) definition of the farm problem, which is precipitated by low and stagnant incomes, resources must leave agriculture for growth to occur. Farm programs, while unable to prevent this transition, compensate for the resistance to this shift and have eased the movement of human resources out of agriculture. During the 20th century the number of U.S. farms fell by more than 60 percent. Today, less than 3 percent of the population is engaged in farming. At the same time, there has only been a small decline in productive acres as expanding operations absorbed farmland. Rapid technological advancements have made it possible to substitute machines and other forms of capital for people. Farm programs made it possible for most of the migration away from agriculture to occur through the retirement of farm operators and other types of voluntary business closures. Recent evidence on farm business closures suggests that the annual dissolution rate for farming is 2 to 3 percent,

Figure 25

Economic well-being of farm households compared to all U.S. households

A small proportion of farm households are disadvantaged when using income and wealth jointly as a measure of economic well-being.



Source: Economic Research Service, USDA.

much lower than for nonfarm businesses (*Agricultural Outlook*, June/July 2001). In recent history, the highest farm bankruptcy filings (4.2 percent) and closures (6.0 percent) occurred in the aftermath of the 1980s farm financial crisis.

The migration away from agriculture has been broader than the closure of farm businesses. Younger farm family members often moved to more promising economic opportunities long before their parents retired. More importantly, dual career choices by farm operators and the explosion of off-farm employment by spouses brought about an even larger shift of human resources to nonagricultural employment. Rural population growth and relative stability in farm numbers suggests net migration to rural areas in the 1990s, reversing what was believed to be a dominant long-term trend. Many of these newcomers made farming a second career choice.

Today, farm households are virtually indistinguishable from nonfarm households in their levels of income and the diversity of employment. As a result, government policies that influence general economic conditions have a much more profound impact on farm families. Even though farm families may suffer low incomes in a given year, policy must look to whether low incomes

are chronic and involuntary. For example, the seeming immobility of farmers may in fact be voluntary and simply reflect the nonmonetary valuation of farm ownership and rural living in comparison with wages and benefits from nonfarm employment. Similarly, a relatively low household income may result from an unusual weather event in that particular year.

Federal support of farm income warrants continued scrutiny. A limited number of households depend on farming for a majority of farm household income. In addition, household incomes for the farms most dependent on farming are well above the average for all households. Given the large size of these farms and their use of labor, it would be difficult to characterize those most dependent on farming as the traditional small family farms. During low-income years, many farms are able to maintain consumption by using their own savings or borrowing. In fact, government policies that reduce credit constraints or increase farm household wealth may better address a farm household's yearly needs. Some may even argue that by reducing market risk, government programs create a disincentive for farmers to accumulate cash reserves for unexpected income shortfalls.

Farm families with off-farm employment (the majority), like everyone else, are protected by a social safety net comprised of unemployment insurance, the earned income tax credit, and food stamps. One way to minimize any adverse and unintended effect of farm payments is to pursue policies aimed at increasing off-farm job opportunities. One such policy tool is the 1997 tax legislation that increased the number of Empowerment Zones (i.e., areas with pervasive poverty and unemployment targeted for economic development where tax incentives are provided for the purpose of attracting private-sector investment).

A related issue is the role of human capital. This report reinforces the importance of education to the income and the wealth of farm operator households. Yet, nearly one-quarter of U.S. farm operators, particularly older farmers, have less than a high school education. Less educated farmers tend to miss out on higher paying jobs and job advances. This suggests the need to revisit legislative authority for USDA to administer national grants to promote public secondary education curricula and enrollments in agriculture-related studies. Such programs might provide for formal off-farm

job preparation, particularly by older and less educated farmers.

The results of this study also have implications for policies aimed at income stabilization as well as redistribution. Much of the acknowledged risk associated with commodity production is now insurable. Both the scope of commodities covered and the available levels of coverage are increasing. Minimum levels of coverage are subsidized through Federal crop insurance programs. While farm income variability surely exists and can jeopardize farm household income in any given year, we do not have empirical evidence on how insurance affects both farm and household income variability.

Our study highlighted the importance of the life cycle when examining the economic well-being of farm households. With nearly 70 percent of farm household assets currently tied to real estate, the question of succession and of the tax laws governing it, particularly for older farmers, is important. Our findings that "medical expenses, etc." contribute the largest portion of variability in expenditures among farmers 55 and older shows that the burden of medical insurance is not equal across the population. Policy might consequently focus on the health care needs of this segment of the farming population.

Whether intended or not, the capitalization of government payments into higher prices for farmland, production and marketing rights, production facilities, and other specialized resources has helped to create wealth (*Agricultural Outlook*, Nov. 2001). Farm operators only see a portion of this additional wealth, and those who do are often the same operations that receive the largest share of direct payments. In addition to further concentrating wealth, the capitalization of payments into farm real estate values creates a larger gulf between asset values and the market returns that are required to support them. Higher farm real estate values also make it more difficult for new and beginning farmers. Thus, direct income transfers that ultimately make purchasing farmland more expensive are at odds with other programs designed to assist beginning farmers.

Because so much of the value (estimates range between 8 and 25 percent) of farmland is attributable to government payments, a key concern is that removing the direct link could cause severe adjustment problems. Interestingly, this study demonstrates that farm families have diversified their asset holdings beyond

the farm business, in effect helping to insulate them from potential impacts of farm asset deflation.

Rural development policy is not synonymous with agricultural policy, yet the results of this study suggest that perhaps more important than the price of corn (or any other commodity) is the vulnerability of farm families to recession in the general economy. Recognition of the importance of household income diversity and the contribution of off-farm employment should not underestimate the overall benefits and opportunities that agriculture provides to local economies. This balance is ultimately found through the free flow of resources creating an environment that will attract and sustain private investment, job growth, and income generation activities in rural America.

There is a need for further study. The importance of joint household-farm decision-making will challenge analysts to organize data and research issues into manageable and comprehensible frameworks. By showing how all these decisions are related to each other and to the economic environment surrounding the household, household economics models will provide analysts with a conceptual understanding of the multifaceted lives that rural people live. At the level of full empirical specification, however, household economics models have only hinted at the quantitative significance of the internal decisionmaking relationships. This shortcoming results partly from the difficulty in obtaining precise data on actual time allocations within households. More important, judging the real opportunity cost of time is both conceptually and empirically difficult because its true value lies within the mind of the decisionmaker.

This study shows that farm households have a higher propensity to save than nonfarm households. Current efforts by the USDA to collect more thorough information on the decisionmaking processes of the household should shed some light on the reasons behind farm households' affinity toward savings. While this

report posits production uncertainties and a stronger precautionary motivation to save, additional information from ARMS survey responses should provide the means to test this hypothesis more fully.

In addition, there is a need to collect additional information that will be rich enough to reveal from among U.S. farm households who were the winners and losers under the 1996 Farm Act, and who are most vulnerable to nonfarm economic shocks. While the metric that will be used to assess the economic well-being of farm households will be similar to what has been used in this report, future data collection will have to anticipate this more meaningful concept of well-being. Specifically, it would be prudent that information collected to allow for the measurement of the household's economic well-being be supplemented to assess whether the resources used to generate households' income and wealth also contributed toward improving rural amenities. This issue is becoming more relevant as farm size and absentee ownership continue to increase and the number of family farms dwindles.

Information collected in future ARMS surveys with regard to the type and location of off-farm employment should remedy some of the shortcomings inherent in this report. In particular, in the face of rising levels of self-employment, our data do not allow for an assessment of whether this self-employment is farm related or not. Data limitations also mask whether the growth in self-employment is a reflection of growth in value-added enterprises related to the farm, or whether the growth is more likely to be in nonfarm enterprises. Yet another important question left unanswered here because of a lack of survey information concerns the manner in which farm program payments get used by the farm household. Policy options could be more enlightened with information on whether farm program payments are used to expand the size of the operation, repay existing debt, invest in new machinery, or mitigate some of the risks from farming.