

Challenges in Developing a Whole-Farm Safety Net

Whole-farm revenue insurance and farm income-stabilization accounts could provide a safety net to a broad range of farms. Because they would not be tied to the production of any particular commodity, such approaches could be more favorably regarded under trade agreements. The concept is simple—save when income is high, withdraw when income falls (in the case of stabilization accounts) or pay a premium based on the risk to guarantee a certain level of revenue (in the case of insurance). Still, important questions remain about the method and effectiveness of these approaches.

Use of Tax-Based Measure of Income

Both the major farm savings-account proposals and the whole-farm insurance pilot programs use a tax-based measure of farm income. While this measure is readily available, its use can have a significant impact on both the potential number of eligible farmers and the measured level and variability of farm income.

For tax purposes, an individual may be considered a farmer if he or she has either farm income or expenses related to a farming operation. Many taxpayers who meet these criteria have low or negative farm income but file a Schedule F Federal income tax return. Therefore, in the absence of a minimum-income threshold, these farms would be eligible for a tax-based farm-savings-account or insurance program. For instance, in 2000, there were about 2.1 million sole proprietors of farms who filed a Schedule F. Nearly 60 percent reported farm business receipts less than \$10,000, with an average just over \$2,700. These farmers on average reported a net farm loss of about \$600, but earned other income, primarily off-farm, of nearly \$72,000.

Because the Schedule F farm income measure is tax-defined, it may deviate substantially from an accrual measure of income or a measure of profitability. Since most farmers are eligible to use the cash method of accounting, farm income for tax purposes is generally recognized when money is received or paid. This flexibility with regard to the timing of income recognition, as well as other tax rules, especially those related to the recovery of capital investments, can greatly influence the level and variability of both gross and net taxable farm income. Farmers can accelerate or defer income or expenses to smooth income and avoid potentially higher marginal income tax rates. This would reduce apparent farm income variability. Thus, eligibility to contribute or withdraw funds based on Federal income tax data, especially if the eligibility criteria are based on net farm income rather than gross receipts, may not be a good indicator of the ability to contribute or the need to withdraw funds from an account. Despite the potential drawbacks of using farm income tax data, the administrative convenience is often viewed as an overriding advantage. Tax records might also facilitate targeting of benefits based on total or off-farm income.

Capacity To Make Deposits and Build Balances

A major concern with savings account programs is whether sufficient deposits would be made to stabilize income. The analysis of deposits presented thus far is based on potential deposits. It excludes factors that are likely to be important in determining actual deposits. For example, family living expenses, debt repayment, nonfarm income, returns to alternative savings accounts or investments, and levels of risk aversion are all likely to influence actual behavior.

Analysis of a term debt-repayment margin is one way to evaluate whether household net cashflow is a factor in limiting deposit ability. This approach combines cash net farm income (excluding depreciation) and nonfarm income, then subtracts family living expenses, income and self-employment taxes, and scheduled debt repayments. A positive amount indicates that the farm household generated cash in excess of living expenses, cash farm expenses, and scheduled debt repayments. This cash would potentially be available for deposits.

An analysis of North Dakota farms from 1998 to 2002 suggests that under the FARRM proposal, producers would be eligible to deposit far more often than they would be able to based on current cashflow (Swenson). For example, farms with gross farm income between \$100,000 and \$250,000 were eligible 82 percent of the time, but only were able to deposit in 52 percent of the time. Moreover, they were only able to deposit the full amount eligible under FARRM 45 percent of the time. However, if incentives for making deposits—such as tax advantages, matching contributions, or interest-rate bonuses—are strong, producers could hypothetically be encouraged to make deposits regardless of cash availability. Such deposits could be funded by borrowing or by shifting other assets into such accounts.

Another factor affecting the ability to build account balances is withdrawals. Our analysis of IRS farm tax returns suggests that between 1998 and 2000, farmers would have had the potential to build stabilization-account balances to cover shortfalls, even after allowing for withdrawals. For instance, under the IRMA program, farmers would have been able to accumulate as much as \$3.8 billion in deposits and matching contributions over the 3-year period. Nearly 70 percent of all farms in the panel would have had an account balance. However, IRMA balances would have averaged only about \$3,300. Under the FARRM account program, annual contributions would be more variable. Nevertheless, farmers could still have accumulated an estimated \$2.5 billion in deposits over the 3-year period. Since the FARRM account proposal is more narrowly targeted, only about 30 percent of all farms would have an account balance to draw upon in a low-income year.

While some farms could build positive account balances, many that experience a drop in income sufficient to trigger a withdrawal would have no account balance to draw upon or would have less than needed to raise income up to 90 percent of the 3-year average. Although the short period of analysis limits any conclusions about the building of adequate balances, some trends are clearly evident. While significant shortfalls in individual account balances remain, with each passing year the amount of the shortfalls (the difference

between current income and 90 percent of the 3-year average and the amount in the account) consistently declined. This is true for all farm sizes, but especially for commercial farms with gross receipts over \$250,000. By the end of 1998-2000, most farms had the potential to accumulate sufficient balances to fill an income gap below 90 percent of their 3-year average. This supports the view that protection from income variability under a savings-account approach is limited in the early years but can improve as farmers build account balances.

Ability To Generate New Savings

Would a subsidized savings-account program enhance farmers' ability to manage risk by creating new savings? If deposits came from existing savings or from borrowing, they would serve more for tax management, benefit maximization, or wealth development than for risk management.

New savings—if deposited in income-stabilization accounts—must come from reduced household consumption or from funds that would have been invested in the farm business or off-farm investments. IRS data suggest that, at least initially, many farmers who are eligible to contribute to a farm savings account program would have ample resources to shift existing savings into a new farm savings account instead of creating new savings (Monke and Durst). Shifting is especially attractive if benefits can be captured without restricting the availability of funds, as is the case with the FARRM account proposal.

Saving for a rainy day is not a new concept for farmers. Nearly three out of four farmers keep liquid assets in reserve to meet unexpected expenses (Monke). To the extent that farmers are able to shift these assets to a farm savings account, the effectiveness of the program will be reduced. Shifting assets from one account to another would provide little if any additional protection from variability in farm income. The extent to which this actually happens is dependent upon a number of factors including the availability of existing savings, the incentives or benefits available for depositing funds into an account, and the accessibility of the funds actually deposited to a farm savings account.

While U.S. farm households on average have incomes roughly comparable to nonfarm households, they typically have much greater levels of wealth (Mishra et al., 2005). For 2004, average farm household wealth (defined broadly to include the household's current value of farm and nonfarm assets less the current value of farm and nonfarm debt) was \$747,000, compared with average nonfarm household wealth of \$448,000. The difference is mostly attributed to the concentration of business equity held by farm households. The portfolio of assets held by farm households is heavily weighted towards farm assets relative to housing and other nonfarm assets. However, farm households also have significant amounts of nonfarm assets, about \$240,000 on average in 2004. Of these assets, liquid assets represented about 16 percent of total nonfarm assets while stocks, mutual funds, and other financial assets accounted for an additional 17 percent of nonfarm assets. Thus, on average, farmers have considerable capacity to fund new farm savings accounts from existing assets.

Development of Whole-Farm Insurance Policies

Accurately measuring the risks that would be covered under a whole-farm income insurance policy is essential to the transfer of risks that justifies insurance. The complexity and variety of U.S. farm operations suggest that, though farm income is a simple concept, the factors that determine income for a particular farm are complex.

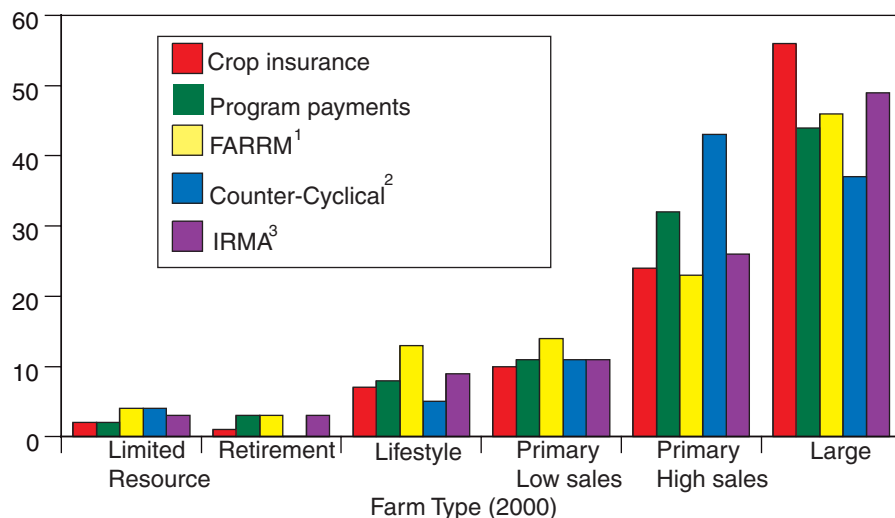
The measurement of insured income under the AGR and AGR-Lite policies starts with a farm business's tax records, Form 1040 Schedule F filings. Adjustments are made so that the income data reflect production activities in a single year and exclude income from farm product processing activities. Adjustments are also made to account for changes in farm income that are due to changes in farm size and or commodities produced. The adjustment procedures and the data that are used tend to make the underwriting rules of AGR and AGR-Lite complex.

Expanding the AGR and AGR-Lite pilot programs to become a major farm safety net program would require covering income risks from more farm enterprises, which would likely add complexity. While such complexity is necessary for the accurate risk classification and measurement that underlies insurance contracts, it may make it more difficult for producers and insurers to understand the coverage, which could hamper participation. Given the large development and administrative costs of whole-farm insurance policies, a whole-farm income insurance program may be infeasible without government subsidies.

Figure 2

Distributions from proposed accounts parallel distributions from existing programs

Percent of payments/benefits



¹Farm and Ranch Risk Management Accounts

²Counter-Cyclical Accounts

³Individual Risk Management Accounts

Source: ERS analysis of Internal Revenue Service (IRS) 2000 tax data.

Distribution of Program Benefits

While universal coverage is often identified as an advantage of farm savings accounts and whole-farm insurance, is farm-income stabilization important for farms where farm income is an insignificant component of total household income? For instance, for farms with less than \$10,000 in farm business receipts, variability in farm income has only a minor influence on total household income. These farms—which represent 58 percent of all U.S. farms—account for about 4 percent of total farm business receipts, typically report a loss in farm income for tax purposes, and have business expenses nearly four times their gross farm-business receipts. But because of nonfarm income, these small farms have adjusted-gross-household income that, on average, exceeds that for all other farm operators and also for all other U.S. households.

As the size of the farm increases, so does the proportion of household income from farming. Fluctuations in farm income are responsible for more than half the variability in farm household income for farms whose operators' primary occupation is farming and for commercial farms. Other sources of income are of equal or greater importance in explaining household-income variability for all other farm types.

Comparing the distribution of benefits under savings-account proposals with the current distribution of farm program and crop insurance payments illustrates the potential for such plans to supplement or replace current programs. Based on 2000 IRS tax data, we estimate that about 90 percent of all program payments and crop insurance indemnities are received by primary-occupation and commercial farms. The distribution of potential farm savings account deposits would be very similar. The distribution of potential farm savings account program benefits, however, reflects only potential deposits. Experience with similar savings account programs suggests that actual deposits would be well below potential deposits, and that large farms and primary-occupation farms are more likely than other farms to make deposits. Higher participation by primary-occupation and large farms would result in a larger share of benefits accruing to these farms.

Concentration of benefits would not necessarily be inconsistent with the objectives of an income stabilization program. While the proposed programs would provide income support through a tax subsidy or matching deposits, their primary expressed purpose is to reduce the variability of income. To accomplish this, deposits in proportion to the size of variability of annual income would be necessary. While less than 10 percent of total benefits would accrue to farms other than primary-occupation and large farms, a program for stabilization of farm income for these farms would need to consider that most of these farm households rely on nonfarm income for essentially all of their household income.