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### armers' incomes vary with market conditions and yields. The Federal Agriculture Improvement and Reform Act of 1996 places more risk management responsibility on farmers. Savings accounts are one mechanism that could help farmers manage their income variability. Tax incentives have been proposed to encourage the use of such savings accounts, with benefits expected to accrue both to individual farmers and their communities. Participation rules tied to farm income may favor larger, more prosperous farmers. Because many farmers already save or use other methods to smooth household consumption, taxadvantaged accounts may largely substitute for existing risk management methods

and offer limited additional

overall benefits to the farm

sector and rural areas.

# Do Farmers Need Tax-Deferred Savings Accounts to Help Manage Income Risk?

Special accounts, known as tax-deferred savings accounts, that shelter savings and interest income from Federal and State income taxation could help some farmers manage variability in farm income much as Individual Retirement Accounts (IRA's) enhance retirement savings. By depositing income into these accounts during years of high net income, farmers could build a reserve fund for withdrawal during years with abnormally low income. Farmers would be better able to smooth their household consumption over time and self-insure some of their income risk. Taxpayers may benefit if additional financial diversification and liquidity reduce the need for farm disaster relief or continued income support programs.

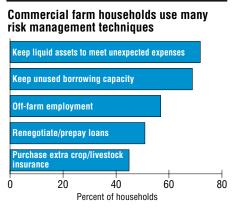
The Federal Agriculture Improvement and Reform Act of 1996 (hereafter referred to as the 1996 act) reduces the level of price supports and, in some cases, may increase the variability of net farm income by separating Government payments from market prices. Fixed cash transition payments have replaced deficiency payments, which were designed to increase as market prices decreased. Low loan rates for nonrecourse commodity loans will typically not increase farm income during most years. Farmers, therefore, have more responsibility to manage risk despite the availability of transition payments and are being encouraged to learn more about risk management alternatives. Marketing techniques, including futures and options contracts, are common ways to reduce risk. Private and public insurers are also developing new contracts for revenue, yield, and price insurance.

Although the 1996 act does not authorize a risk-management savings account program, it gives jurisdiction for any such program to USDA's new Risk Management Agency. Strong farm income from both high grain prices and the new transition payments encouraged such accounts to be proposed during the 1996 legislative session.

# Risk Management Not New to Farm Households

Saving money for a rainy day forms the foundation of risk management accounts, but is certainly not new, especially for many farmers. Even though farm income typically varies more than a salary or hourly wage, farm household consumption actually varies relatively little. USDA surveys reveal that most farm households already use one or more existing techniques that may substitute for tax-deferred risk management accounts (fig. 1). At the extreme, some farmers would use ac-





Source: Compiled by Economic Research Service from Farm Costs and Returns Survey, 1994-95.

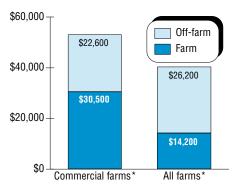
counts primarily to manage income tax liabilities, while others would be unable to benefit because of low taxable farm income.

Households respond to uncertainty by buying insurance, accumulating savings, reserving unused borrowing capacity, renegotiating or prepaying loans, and earning off-farm income. During years with low net income, farm households commonly delay the purchase of new capital equipment and "live off depreciation." That is, commercial farms (gross sales greater than \$50,000) often have several thousand dollars of depreciation charges annually. This noncash reduction from accounting income can easily be used in the short term to smooth household consumption or to pay other farm expenses. Many farm operators, even those who report farming as their major occupation, receive a substantial portion of their total income from off-farm sources, which provide a predictable component to household income (fig. 2).

Farm household consumption, however, may be more sensitive to declining Government payments than to an equal decline in farm income from prices or yields. Consumption from income varies greatly based on the source of income. Predictable sources of income are often spent more readily, while uncertain sources of

Figure 2

### Commercial farm households average more total income but less off-farm income



\*Reporting farming as major occupation. Source: Compiled by Economic Research Service from Farm Costs and Returns Survey, 1995.

### Canada's Experience

The Net Income Stabilization Account (NISA), a type of risk management account, is one component of Canada's farm safety net. Like proposals for tax-deferred risk management accounts in the United States, NISA is a farm-level risk management savings program. NISA, however, matches farmer deposits dollar for dollar with government contributions. It also adds a 3-percent interest rate subsidy on farmer contributions. Farmers make deposits with after-tax income, but government contributions and interest earnings are tax-deferred. They can deposit annually the smaller of \$5,000 or 2 percent of eligible farm sales. This limits the government match to \$5,000 per farmer. Farmers can also make additional nonmatched contributions of up to 20 percent of sales. Account balances may not exceed 150 percent of the farm's 5-year average sales. Withdrawals are allowed only when farm income falls below established thresholds.

Evidence from NISA suggests that most farmers deposit only enough money to earn the maximum matching government contribution. This suggests that the matching contribution is relatively more important than the interest rate subsidy and that similar saving behavior may be achieved by only partially matching the deposit. Observations also suggest that some farmers do not withdraw as much money as expected during low-income years. This indicates that many farmers prefer to manage income variability by other means rather than stop receiving government benefits on accumulated balances.

income usually produce relatively greater savings. Farm families, however, often consume off-farm income and Government payments at twice the rate of farm income.

Because household consumption is more sensitive to predictable Government payments than it is to uncertain farm income, reduced Government involvement may cause farm household consumption to vary more noticeably. Tax-deferred risk management accounts may eventually help reduce this variability if they promote greater saving.

### Program Details Would Determine Level of Benefits and Their Distribution Among Farmers

Tax-deferred risk management accounts could be targeted to farmers based on transition payments or some measure of farm income. If farm income is the target, producers who were ineligible to receive program payments (for example, on livestock or specialty crops) under previous farm programs could nonetheless

participate in tax-deferred risk management accounts.

Because the goal is to safeguard farm families from risks unique to agriculture, rules for deposits and withdrawals would likely be related to farm income. A practical method may tie program eligibility to common income tax measures, such as business capital gains and net farm income on Schedule F of Internal Revenue Service (IRS) Form 1040. This approach, however, would cause most of the benefits to be realized by established farmers with higher incomes.

If deposits into risk management accounts are limited to positive net farm income reported for taxes, many farmers will be unable to participate in the program because of insufficient income. Based on 1993 IRS data, which is fairly typical of other years, median farm net income reported for tax purposes was only \$11,300 for farmers who received more than half of their total taxable net income from farming. In fact, nearly one out of every five of these farmers reported a net farm loss for tax purposes, and another third had positive net farm income

under \$10,000. Transition payments under the 1996 act, however, may increase farm income above historical levels for some farmers.

In addition to defining the types of income that may be tax deferred, rules for qualified withdrawals are also important in determining program effects. If withdrawals are made at times other than low-income years, farmers could be assessed a penalty in addition to their deferred taxes because they would be using the fund for reasons other than managing risk. Economic definitions of low-income years may be difficult to implement on Schedule F. Commodity price triggers may be incorporated into tax forms, but would not necessarily reflect farm-level income variability. Historical averages of taxable farm profits might allow individual income testing, but may not reflect income or consumption variability targets. Farm income reported for taxes is different from other definitions of economic income because of accounting practices, such as prepaid expenses, deferred sales, accelerated depreciation, and capital expensing.

The Value of Tax Deferment May Be Large for Some. The value of tax deferment over a regular account can be quite large, especially if farmers can defer income until it can be taxed in a lower bracket upon withdrawal (fig. 3). The value of deferral increases further for people in the higher brackets. Because each of the five Federal income tax brackets covers a wide range of income, many farmers will be unable to reduce their bracket during high-income years. For example, deferring as much as \$5,000 of income would have reduced the marginal tax rate for only about one out of every five farmers in 1993. Many farmers may have too little income to save that much after paying living expenses.

Two factors increase the value of tax deferment over similar savings accounts, such as IRA's. Risk management accounts could defer self-employment taxes in addition to regular income

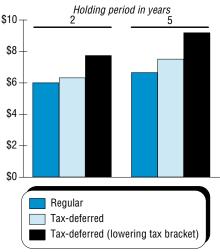
taxes. Self-employment taxes may be a substantial part of a farmer's total tax liability, depending on off-farm income. Farmers would also benefit during low-income years when withdrawals would allow them to use deductions or exemptions that would otherwise be lost if no tax were due. On the other hand, the value of tax deferral would be less than that associated with IRA's because the funds would typically be invested for a much shorter time.

Financial Incentives Affect Farm Management. Farmers do respond to tax incentives, as indicated by their widespread use of cash accounting tax laws to defer income and capital expensing to reduce the cost of equipment purchases. Tax incentives seem to have less effect on saving behavior, however; only 12 percent of farmers contributed to tax-deferred retirement accounts in 1993. Risk management accounts may attract more savers, though, because funds could be withdrawn from such accounts during low-income years.

Because tax-deferred accounts transfer income and taxes across time, they share similarities to income tax averaging. Risk management accounts,

Figure 3

## Future value of account balances with and without tax-deferral, by account type



Note: Assumes \$10 of pretax self-employed income; 28-percent marginal Federal tax, self-employment tax, and 3-percent State tax; and 5-percent rate of return. Source: Compiled by Economic Research Service. however, may be more powerful because they can defer taxes for many more years than allowed by former or proposed income tax averaging rules.

Any type of risk protection can create moral hazards. For example, farmers might buy less insurance, manage with less diligence, or not diversify or rotate crops. Risk management accounts may cause relatively smaller moral hazards, however, because of the self-insurance nature of the program. Income stabilization is possible only when balances have been accumulated out of the farmer's own profits. Those profits and balances are directly at risk if poor management develops. Nonetheless, farmers in regions with more production variability or with less diversification would stand to benefit more than producers with less income variability.

Direct subsidies are usually preferable to indirect subsidies because they do not distort economic decisionmaking as much. Tax incentives are less distorting than acreage, loan, and deficiency payment provisions of previous farm acts, but are more distorting than the transition payments under the 1996 act. Given Federal budget pressures and objectives of the 1996 act, targeted tax incentives seem the most likely way such accounts would be subsidized, rather than with more direct Federal outlays such as interest rate subsidies or matching Government contributions.

Another difficult question arises from balances remaining in tax-advantaged accounts when the farmer retires. Converting the funds from risk management into a retirement account ignores the original targeting objective. Abuse may be limited by placing ceilings on deposits and balances that reflect reasonable amounts to cover basic living expenses for 2 or 3 consecutive low-income years. A more aggressive approach may be to require accounts to be liquidated and fully taxed when the taxpayer stops farming. By comparison, legislation passed in 1996 for medical savings accounts allows balances to

be converted into retirement use after age 65 without additional penalties.

# **Small Effect on Rural Economies Likely**

Beyond the farm gate, other groups may be affected by risk management accounts. If household consumption in the past was smoothed by delaying the purchase of certain items, merchants in rural communities may benefit from more stable sales. In the short term, however, some farmers may delay capital or consumption purchases while they build their reserve fund. Widespread use of risk management accounts may also result in less reinvestment in agricultural assets and a greater allocation to off-farm investments. The net effect would be small compared with the total amount of farm investment.

The aggregate effect on farmers' consumption and investment decisions will also depend on future expectations about Government programs. If farmers believe program benefits will be transitory, they will tend to consume less of that income than if future payments are believed to be permanent and reliable. Consequently, risk management accounts may be more actively used if long-term consumption and investments are reduced because of these expectations.

Rural economies are more likely to benefit from the potential for smoother consumption than from additional incentives to save. Integrated capital markets may channel additional savings out of the local community. More predictable farm household consumption will provide only limited benefits to rural economies because of the decreasing importance of farm income relative to other sources of income.

#### **Conclusions**

Tax-deferred risk management accounts could offer a unique potential for farmers to self-insure part of their income risk. Many issues, however, confront policymakers: tax accounting and targeting issues, the potential for long-term tax avoidance or retirement savings, the proportion of farmers who would use them, and the concentration of benefits to more prosperous farmers.

Tax advantages of risk management savings accounts are clear, especially for farmers who, by participating, could avoid higher marginal tax brackets in high-income years or more fully use tax deductions by taking withdrawals in low-income years. Many farms with low net income, however, may be kept from sharing in these benefits because of restrictions targeting farm income.

Most farm households are already able to smooth consumption by earning off-farm income, delaying capital purchases or principal repayments, using additional short-term borrowing, and drawing cash flow from depreciation expenses. Risk management accounts may help educate farm households about the value of saving and serve as another useful management tool. But, such accounts may also encourage farm households to shift currently taxable savings to tax-sheltered savings or to substitute saving for other consumption-smoothing techniques. These effects are likely to dominate farm household behavior. Thus, additional benefits to rural economies would be relatively small. Finally, tax incentives for risk management savings accounts are not likely to significantly reduce the demand for special disaster relief from the Federal Government.

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### **Further Readings**

Chen, Kevin, and Karl Meilke. "A Reevaluation of Canada's Safety Net Programs for Agriculture," Canadian Journal of Agricultural Economics. Dec. 1996.

Coble, Keith. "Canada's NISA Program: A Strategy for Stabilizing Farm Incomes," *Agricultural Outlook*. USDA/ERS. May 1995.

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