A Safety Net for Farm Households

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Introduction

Low commodity prices have renewed the debate regarding the farm safety net provided by current Federal farm programs. Farmers received \$4.3 billion in direct government payments in 1997, \$6.0 billion in 1998, and \$8.7 billion in 1999. Payments are an important source of income to individual farmers and can be very high; for example, in 1997, the average large family farm recipient received over \$18,000 in benefits. Farm programs dating back to the Great Depression are unlike safety nets available today to nonfarmers in the United States. Safety net programs for the general public (including farmers) are constructed so that people have enough resources to maintain a minimum standard of living. Current direct government payments to farmers do not generally benefit the lowest income farmers but instead go to the most well-off.

In this report, we analyzed the implications of an alternative set of safety net programs for farmers. Unlike the present safety net programs, which generally target producers of major field crops, this alternative set of safety nets targets farm households that fall below certain income- and earnings-based criteria.

We identified four safety net scenarios based on different thresholds: median incomes; 185 percent of the poverty line; median household expenditures; and median earnings of nonfarm self-employed households. Assuming that all households with incomes below these thresholds qualify for benefits, we analyzed how the costs and distributional impacts of these scenarios differed from those of current farm safety net programs. We found that, while costs were roughly similar for some of the alternative scenarios, the distribution of benefits was markedly different.

What Is a Safety Net?

Secretary of Agriculture Dan Glickman called 1999 the "Year of the Safety Net." Yet most discussions of the concept for the farm sector consider only tradi-

tional farm program instruments, such as crop insurance, direct payments, and the Conservation Reserve Program. Some members of Congress even favor a return to price support policies. These concepts are decidedly different from the way the economics literature treats a safety net. For economists, a safety net is a policy that ensures a minimum income, consumption, or wage level for everyone in a society or subgroup. It may also provide people (or businesses) with protection against risks, such as lost income, limited access to credit, or devastation from natural disasters.

The construction of a safety net first requires some concept of a minimum standard of living. From Adam Smith in 1776 to Nobel laureate Amartya Sen, economists have linked poverty to the lack of "necessities," which Smith defined as "not only the commodities which are indispensably necessary for the support of life, but whatever the custom of the country renders it indecent for creditable people, even of the lowest order, to be without" (Smith, 1993 ed.). This minimum standard of living can be translated into a monetary figure, such as the poverty line.

Researchers in other fields have echoed these economic constructions with a particular emphasis on the social dimensions of the safety net. Sociologist Peter Townsend observed that people are "social beings expected to perform socially demanding roles as workers, citizens, parents, partners, neighbors and friends" (1992, p. 5). He defines economic security as sufficient income for people to "play the roles, participate in the relationships, and follow the customary behavior which is expected of them by virtue of their membership in society" (Townsend, 1992, p. 10).

Theoretical Rationale

Building on this concept of a minimum standard of living, the economics literature establishes several well-known arguments for the provision of a safety net. One class of arguments is based on people's preference to reduce income uncertainty and variability.

For example, people may favor a safety net as a form of social insurance that offers them protection against future income volatility (Buchanan and Tullock, 1962). As Haveman (1985) claims, "[T]he primary economic gain from the welfare state is the universal reduction in uncertainty faced by individuals." Thurow (1971) argues that if people's utility (or level of satisfaction) depends on other people's consumption as well as their own, they will favor a policy that ensures everyone a minimum standard of living. Thurow also asserts that if people are concerned about the way that income is distributed, they will receive satisfaction from the redistributive effect of safety net programs.

Another class of arguments for the provision of a minimum standard of living stems from social welfare considerations. The approaches in this class of arguments utilize the concept of a Social Welfare Function (SWF), which is obtained by aggregating over the utilities of everyone in a nation, society, or subgroup (for example, farmers). The utility of any person with respect to income is denoted by U(y) and the SWF by:

$$W \equiv \int_{0}^{\overline{y}} U(y)f(y)dy$$

where f(y) is the frequency distribution of income. Suppose that this SWF is additively separable (i.e., a person's utility is independent of others' utilities) and symmetric with respect to income (i.e., no person's utility is judged to be more important than another's). In terms of individual utility functions, suppose that U(y) is strictly concave (i.e., the marginal utility of an additional unit of income is positive but decreasing). Under these assumptions, any transfer of wealth from a richer person to a poorer person improves the social welfare of a country. (See Atkinson, 1970; Blackorby and Donaldson, 1978; Dalton, 1920; Dasgupta, Sen, and Starret, 1973; and Rothschild and Stiglitz, 1973.) A social safety net that makes this transfer will therefore improve societal welfare, as defined by this general SWF. Of particular importance to this report is the idea that this social safety net need not be available to all members of a society to ensure an improvement in social welfare; it need only transfer income from a richer to a poorer person. Thus, a social safety net designed for farmers, for example, will be welfare improving (under this general class of SWFs) as long as income is not transferred from poorer persons in the general population to richer farmers.

Within this social welfare framework, economic theorists such as Harsanyi (1953, 1955), Vickrey (1960), and Rawls (1971) explored other conditions under which a society would be better off with a social safety net. They found that, if its members are uncertain as to their income potential and are averse to risk, society is better off with a social safety net. These arguments relate closely to the concept of safety nets, discussed above, as a form of social insurance.

Precedents in Existing Federal Programs

Under the assumptions of the SWF established above, an improvement in social welfare is garnered whenever income is transferred from someone higher to someone lower in the income distribution. In this section, we review some of the methods used by current Federal assistance programs to obtain this improvement. In particular, we describe the safety net thresholds (i.e., persons with well-being below this threshold qualify for assistance) defined by these programs.

Many programs use a household's position in the income distribution to target benefits. Several examples can be drawn from Federal housing assistance programs. Freddie Mac and Fannie Mae subsidize mortgage loans for families whose income is less than or equal to an area's median family income. USDA's Section 502 Single Family Direct Loan Housing Program, which assists rural residents in the purchase, construction, repair, or relocation of a dwelling, targets households with incomes below 80 percent of the area's median income, as does HUD's Public Housing/Section 8 Program in providing rental assistance to households.

Rather than defining the safety net threshold with respect to the income distribution, some programs use the exogenously set poverty line as a starting point for the threshold. Most of the child nutrition programs, including the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and the National School Lunch and School Breakfast Programs, are targeted to those with incomes less than

¹ The poverty line in the United States was originally defined as the income needed to purchase three times the cost of the Thrifty Food Plan, a minimally adequate, food-sufficient diet constructed by the U.S. Department of Agriculture. Since then it has been updated annually by the Consumer Price Index. See Orshansky (1965) for more on how the poverty line was originally defined.

185 percent of the poverty line. The Food Stamp Program targets households with gross incomes below 130 percent of the poverty line.²

The above thresholds are defined with respect to income; other methods use consumption to define thresholds and benefits. USDA's Rural Rental Housing Assistance Program, which provides rental assistance to low- and moderate-income rural families, is targeted to households spending more than 30 percent of their income on rent. The Food Stamp Program sets benefit levels such that recipients can afford the Thrifty Food Plan, a USDA-established food plan composed of suggested amounts of foods that make up a nutritious diet and can be purchased at a relatively low cost.

Federal programs also use household earnings to set safety net thresholds. The best-known example of this standard is the minimum wage, which ensures that workers in covered occupations earn at least \$5.15 per hour, or the equivalent of \$10,700 in earnings from full-time, full-year employment. Another illustration is the Earned Income Tax Credit, which provides a refundable tax credit to low-income workers. As earned income increases, benefits increase to a certain point and are then phased out.

There is one further important precedent for a farm safety net within many existing Federal programs. Just as only farmers qualify for a farm safety net, many Federal programs are available to only a subset of the population. For example, the Temporary Assistance to Needy Families Program (TANF) is primarily intended for single parents with children. WIC is available only to pregnant and postpartum women and children under the age of 5. Public policymakers decided that these subgroups need program assistance and, historically, policymakers had made a similar argument for farmers (Effland, 2000).

Farmers' deep poverty was a rationale for assistance in the past. In the 1940's, per capita income of farmers was, on average, 50.7 percent that of nonfarmers (Gardner, 1992; table 1). Moreover, given that most people lived on farms in the first half of the 20th century, efforts to alleviate poverty among farmers likewise eased the burden of poverty for a large segment of the population.³ Following the next section, where we describe the farm sector, we define four scenarios based on the theoretical foundations described in the previous section and precedents in other government programs described in this section.

These programs use additional criteria beyond income, however. For example, a recipient of WIC must either be a child under the age of 5, a pregnant woman, or a postpartum woman and deemed to be at nutritional risk.

 $[\]overline{^3}$ Both of these arguments are less tenable today. By the 1970's, the ratio of farm to nonfarm income had risen to 87.3 percent, and the number of farmers as a proportion of the population had declined markedly.