REVITALIZING FAMILY FARM AGRICULTURE

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Family farms in the United States traditionally have enjoyed a status akin to motherhood, apple pie, and the Fourth of July. By significant majorities, public opinion polls indicate that citizens laud the past performance of family farms and want them to survive — better yet, prosper — in the future. Moreover, candidates for political office know that votes are to be won or lost, depending on their responsiveness to the problems of family farmers.

Economic Perspective on Family Farms

As economists, we have justified the existence of family-size operations primarily on the basis of technical production efficiency. Perhaps no other area of agricultural economics has been studied more than the economies of size of farm firms. Nearly 20 years ago, Madden [4] concluded after an extensive survey of relevant literature that crop farms requiring one or two man-years of labor could capture most of the available economies due to size. More recently, Miller et al. [5] found that middle-size commercial farms (gross incomes from $41,000 to $76,000) achieve most technical cost efficiencies and any further increase in size results in little benefit to society.

During the 1980s, family farm agriculture has been under more stress than at any time since the 1930s. Both the Economic Research Service [8] and Jolly and Doye [1] have found particular problems for midsize farms, i.e., those with sales of $40,000 to as much as $500,000. Such farms are considered to be the mainstream of family-size commercial agriculture. Farms with annual sales that fall below this range often have sufficient off-farm income to service their agricultural debt. For farms with sales above $500,000, available assets (and debt) seem to be used more efficiently to generate high levels of income. In part, this may be a function of the enterprises, such as poultry and fruits and vegetables, in which they tend to specialize. However, an increasing body of literature suggests that large farms have advantages that are not manifested as technical production efficiencies.

In particular, researchers have found a different result if pecuniary economies of size (defined as lower costs of purchased inputs or higher

returns to marketings as farm size increases) or economies from vertical integration are included in the analysis. Krause and Kyle [2], for example, found substantial advantages in both the purchase of inputs and product sales for Midwestern corn farms in the 5,000 acre range. Krenz, Heid, and Sitler [3] saw evidence of pecuniary economies in both input and product markets for large wheat farms in the Great Plains. Smith, Richardson, and Knutson [6] found that vertical integration between input markets and farm firms as well as pecuniary economies in product markets provided advantages to large cotton farms.

Tweeten [7], meanwhile, has taken a noncommodity approach to the question of economies of size. He concludes that resource costs per dollar of output decline as gross sales increase up to about $2 million — and perhaps beyond. Obviously, this size of operation is not usually thought of as a "family farm." (Tweeten acknowledges the methodological limitations to his approach in that the very large farms often offer an atypical commodity and market configuration that make comparisons to smaller farms difficult.)

The point of the brief overview above is to raise a question about the appropriateness of defending a system of family farms on the basis of technical production efficiency alone. Is it futile to consider revitalizing family farm agriculture for the long haul if larger operations consistently have an economic advantage? Is the advantage that larger farms apparently have even greater on an after tax basis? Or can family farms be defended using some other economic rationale, such as their favorable impact on other economic entities (e.g., farm supply firms) within their trade area?

If society collectively decides it is desirable to maintain a system of family farms, and if such farms do not achieve maximum economies of size, then targeted public policy initiatives will be necessary to assure the continuation of family farms. The present limitation of $50,000 in direct assistance through commodity programs may improve the competitive odds of middle-size farms compared to those with larger sales volumes. A wide variety of other initiatives could be devised.

While questions remain about the long-term prospects for family-size farms, most recent attention has been focused on current cash flow inadequacies, especially for family farms with high debt loads. Let's turn our attention now to the immediate future.

Income Prospects

Many family-size farms are experiencing stress because they have too much debt for the income stream that's being generated to pay off that debt. Furthermore, the problem is exacerbated by continuing declines in the value of assets on which the debt is encumbered. Stress can be alleviated only if income increases, debts are reduced, or asset

values are stabilized. Failure to do any of these will surely bring additional liquidations, foreclosures, and bankruptcies.

There are many dimensions to any analysis of farm income prospects. To make it manageable, I've selected three factors that are likely to be key determinants of farm income for the foreseeable future: 1) conditions in the macroeconomy; 2) prospects in the export market; and 3) the outlook for commodity price and income supports. These key factors often intermingle with each other, but each is still worth considering independently.

Macroeconomy. The single most important consideration in the macroeconomy is the continuing federal budget deficit. As long as the deficit remains in the $200 billion range, the Board of Governors of the Federal Reserve System apparently will feel obliged to keep *real* interest rates higher than the historic norm of about 3 percent. Lower interest rates would have many benefits: reduce farm operating costs; put downward pressure on the dollar; and make inventory holding more desirable, including land ownership.

I am not optimistic about a significant budget deficit reduction for several reasons, the most important of which are political. Many citizens support the concept of reductions in federal government expenditures or tax reform until they determine how such changes will affect them adversely. Then, more often than not, they undertake vigorous lobbying against proposed changes.

Exports. Increased exports would seem to be an essential part of any improvement in the financial status of the family farm sector. Domestic demand is not sufficiently large now, nor is it projected to be in the future, to absorb the production potential of American farms at desirable price levels.

Without question, the most positive factor is that worldwide population continues to increase at the rate of 75 million per year. However, this population growth does not translate directly into food demand (in an economic sense) because most of this increase is occurring in less developed countries. Opportunities for new commercial sales on the basis of population growth will be fairly limited.

In addition, it must be acknowledged that the United States is facing new competition nearly everywhere we turn. Some examples are Argentina selling to the Soviet Union, the European Community selling to countries in northern Africa and the Middle East, and China selling to Japan. It will be difficult to regain market share in these cases unless it is accomplished on the basis of lower prices or other favorable trade terms. There are three reasons for more price competition: (1) the relatively high value of the dollar; (2) large export subsidies, such as in the European Community; and (3) increased use of relatively cheap labor in countries such as Argentina. In short, there seems to be no alternative but to be a tougher competitor.

If the United States is unwilling to be price competitive, then the only other alternative is to be prepared to fully exploit our role as a residual supplier. In the event of a major crop failure elsewhere in the world, the United States would be about the only country prepared to make massive sales. We would benefit at least for a year or two. However, unless the conditions noted above change, we ought to be forewarned that any spurt in exports will be temporary, not permanent.

Price and Income Supports. Raising price and income supports is often proposed as a cure for the financial ills of agriculture. In the context of current stress, the forthcoming 1985 farm bill has taken on particular importance. However, expectations for any farm bill should be modest with respect to its ability to alleviate financial stress for at least two reasons:

- Prosperity in American agriculture is closely correlated to how *little*, not how much, support programs have had to be used. Prosperous periods in the last 50 years have included the World War II era, the early 1950s, and the 1970s. Programs weren't used much in any of these periods. It is difficult to identify a prosperous period when supports were used extensively. Supports have been most useful in providing an economic "safety net," not an economic rejuvenation for agricultural producers.

- For producers encountering stress (i.e., those having debt/asset ratios of 40 percent or more), price or income supports might have to be increased substantially (30 percent or more) to provide sufficient cash flow to service all debt [8]. This would mean higher costs to the government and a larger accumulation of commodities in government storage. The present administration is trying mightily to avoid either eventuality.

Overall, I believe it is difficult to make a case for higher income through 1990. Perhaps the best chance would come from weather aberrations that cause the United States export share to increase. Hopefully, the macroeconomy will treat farmers less negatively than in the first five years of the current decade. But expectations of assistance from farm price and income supports should not be overblown, especially if a transition to a greater market orientation occurs and budget restraints prove meaningful.

Balance Sheet Adjustments

If incomes can't be improved, then it may be necessary to consider debt restructuring or reduction as a public policy option. While there are no easy alternatives for dealing with excess debt, a "do nothing" public policy will simply cause the magnitude of the problem and the cost of adjustment to grow. To do nothing is policy by default. Farm foreclosures and bankruptcies would increase, as would agricultural

bank failures. Major structural changes could be expected in both farming and institutions providing credit to farmers.

Among the policy initiatives that have been suggested to address the excess debt problem in agriculture are government loan guarantees, principal forgiveness or buy-downs, interest buy-downs, a foreclosure moratorium, and a federally chartered agency that would buy land and, in so doing, help stabilize farm real estate prices. Several issues are common to each of these alternatives: How should debt burdens in agriculture be shifted? What would be the cost of shifting debt burdens? Who would have operational control of agricultural production after the shift occurred? Should public policy toward debt in the agricultural sector attempt to "buy time," or should any initiatives taken be considered permanent?

If debt restructuring occurs in the family farm sector, it is almost a tautology to suggest that assets will be restructured as well. A likely prospect is that there will be increased separation of ownership and operation of agricultural assets. This, in turn, raises a number of important questions: What should be the property rights of tenants versus landlords? How much outside equity should be allowed in agriculture? Will new institutional structures need to be found to assure efficient operation of farm firms?

Concluding Comment

There's a tendency for many of us — especially those of us who are economists — to project the future on the basis of current conditions. In the 1950s and 1960s, this method of prognostication worked quite well for the agricultural sector. It has not worked well in the 1970s and 1980s because of the sector's growing dependence on the macroeconomy and international markets. Perhaps some "bolt out of the blue" (such as the Russian grain purchases in 1972) will improve financial conditions more quickly than expected. Even then, however, one has to wonder how much benefit would permanently accrue to family farms, given the competitive cost structure that they face and a future demand function that is uncertain at best.

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STATUS OF THE 1985 AGRICULTURAL AND FOOD LEGISLATION