AGRICULTURAL COMMODITY PROGRAMS AND RISK MANAGEMENT

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This paper addresses the role of the Agricultural Stabilization and Conservation Service (ASCS) in risk management on the farm. Beginning in the 1930s, ASCS has administered a variety of commodity support programs whose primary goal has been to help farmers manage one of their greatest risks -- price risk.

Historical Perspective of ASCS Programs

When the USDA programs were implemented during the Great Depression, farm failures were widespread. Farm families everywhere were facing bankruptcy and foreclosure. The programs were designed to address these problems, not just because they were farm problems, but because they directly affected more than 25 percent of the U.S. population. The Agricultural Adjustment Act of 1933 and later legislation gave the Secretary of Agriculture the tools to undergird sagging farm prices and incomes, and in the process, protect the agricultural sector from total collapse.

These early programs identified several basic crops for support -- wheat, feed grains, cotton, rice, soybeans, tobacco and peanuts. Price support worked largely through the use of non-recourse loans, which farmers would repay by forfeiting their crop to the Commodity Credit Corporation if prices were low. The mainstay of the New Deal programs, this system remains a major component of commodity programs.

Over the years, commodity loan rates or support prices, have served in varying degrees as price floors, income support mechanisms, price stabilizers, and tools to promote orderly marketing.

However, it is apparent that growth in farm productivity, encouraged by higher and more stable prices, worked to expand farmers' capacity to produce beyond the market's capacity to absorb the production. Setting loan rates -- which essentially became the market price -- high enough to support incomes only aggravated the problem. Thus, supply control programs in the form of acreage or marketing restrictions were introduced to help prevent the accumulation of price-depressing government stocks. Acreage allotments or poundage quotas are still in use for tobacco and peanuts. During the 1980s acreage reduction and paid land diversion programs including PIK (Payment-in-Kind), were employed as supply controls for grains.

Income and price support activities were separated in the 1973 farm bill which introduced target prices and deficiency payments as income support measures. Loan rates were expected to be low enough to minimize the demand problems associated with artificially high commodity prices. Target prices were instituted as an income guarantee to program participants when market prices were low.

However, farm support programs continue to center on non-recourse loans, acreage reduction programs and direct income supplements. The benefits offered by these programs are among the many factors farmers weigh in making their planting and marketing decisions.

Farm policy tools remain virtually unchanged since the 1930s, but farmers and the environment in which they operate have changed dramatically. Farms in the 1980s are more specialized, more capital intensive, and more dependent on purchased inputs and foreign markets. Consequently, they are more affected by general economic developments and policies, both in the U.S. and abroad. These factors make it increasingly difficult to operate farm programs that are not in tune with market realities.

Farmers' capital needs are increasing sharply, and borrowing on the open market is the major source of funds. Farmers have become dependent on U.S. monetary and fiscal policies and the resulting interest rates. Farmers are also affected by the impact of inflation on their production and land costs.

Moreover, when export demand declined in the 1980s, the cost of maintaining support prices above market clearing levels increased dramatically. Foreign demand is price-responsive, and the decrease in U.S. exports -- due in part to price competitiveness -- triggered the largest acreage reduction program in history which was necessary to bring supplies in line with demand. This environment, in which agriculture is firmly linked to the world arena, is a far cry from the predominantly domestically-oriented agriculture of the 1930s.

The farm population has also changed. No longer does a quarter of the U.S. population live on farms. As the 1980s unfold only 3 percent of the population is classified as farm -- subdivided into three broad, but well-defined categories. Sixty percent of all farm operations rely on farming for only one-sixth of their income and account for only

10 percent of farm sales. Their most important activity is an off-farm job. Twenty-eight percent of farm operators obtain 60 percent of their total income from farming, and account for about one-fourth of all farm sales. These are bonafide farmers, but still rely to some degree on off-farm income. The top 12 percent of U.S. farms, which market two-thirds of all farm products, have an average family income of $65,000 -- well above the median income of nonfarm families.

Implications for Future USDA Commodity Programs

What do all of these changes mean for farm policy tools and their relevance to farmers and their economic environment in the late 1980s and beyond? First, we should recognize that efforts to balance supply and demand through conventional acreage reduction programs -- even sweetened with diversion payments -- have been only partially effective.

The current $50,000 payment limitation, while well-intended, tends to discourage participation by the largest farms whose participation is vital to meaningful programs to control production. Fitting programs to smaller farms -- as politically expedient as it sounds -- is not equitable and does not work. With the diversity of operations in farming in the 1980s, it is important that programs be flexible enough to attract the greatest number of farms with a range in size.

There is also the problem of program slippage, or the difference between the proportion of land idled and the actual decrease in total production. Farmers participating in the programs often work to intensify cultivation of the planted acreage to minimize their loss in output.

In many cases, non-participating farmers expand their cropland in an attempt to profit from the higher commodity prices likely with acreage programs in place. Both participating and non-participating farmers have also expanded their bases, which increases the acreage government programs must buy out to be effective. Many farmers have plowed up erosion-prone land, which increases conservation problems as well.

For example, cropland in the Delta and Southeast has been increasing at the rate of 5 percent per year since the beginning of the 1980s. This increase in cropland, especially on the more erodible land, at a time of excessive supplies is cause for concern. Existing programs offer farmers incentives to expand solely to obtain larger program benefits.

The impacts are not always confined to program crops. Increased wheat price support rates in the 1981 farm bill apparently provided an incentive to expand wheat and soybean double-cropping in the Southeast U.S. USDA has estimated that loan rates now cover average variable costs for about 98 percent of all corn and wheat production -- which makes target prices well above variable costs. This reduction in risk encourages farmers to expand production contrary to developments in the market. Southeastern producers double-cropped wheat and soybeans on 11.5 million acres in 1982, compared with 3.2 million acres in 1978. The result has been increased production of both commodities.

In addition, closer ties to world markets make it far more difficult for an acreage reduction program in the United States to significantly affect the world supply-demand balance. From 1982 through 1984, for example, U.S. wheat farmers idled 55 million acres. However, producers in other major exporting countries expanded plantings by nearly 20 million acres -- and cut deeply into U.S. export shares.

A second factor pertinent to U.S. farm programs is the ability to compete in world markets. U.S. agriculture depends on foreign customers for about 60 percent of the wheat, 45 percent of the soybeans and rice, one-third of the feed grains, and over 50 percent of the cotton production in the 1980s. The U.S. accounts for nearly half of the world grain trade and three-fourths of the soybean trade. However, when support levels exceed market prices, U.S. competitiveness erodes. Moreover, competitors expand production based on the price umbrella the U.S. creates with support programs.

During 1981-83, the volume of U.S. rice exports declined by a third while those of Thailand, a major competitor, increased by more than a third. U.S. tobacco exports decreased nearly one-fourth between 1978 and 1983. The U.S. 14-million-bale cotton crop is only about 20 percent of the world production in the 1980s, compared with more than half of global output in the 1930s.

Loan rates are not the only culprits. Target prices set substantially above market-clearing levels, such as those mandated by the 1981 farm bill, nearly guarantee that acreage reduction programs will be required to reduce budget exposure. A vicious cycle is set in motion as budget considerations force cutbacks to enhance farm prices. Consequently, other countries increase production and erode U.S. markets. As export markets dwindle, even larger cutbacks are needed.

Unfortunately, the rest of the world observes the same forces at work. They see price floors to protect downside risk and they see budget pressures that ensure production controls designed to push market prices higher. Reduced risk, smaller competing U.S. supplies, and potentially higher market prices are an open invitation to competitors to increase production. The losers in this sequence, inevitably, are the farmers U.S. programs were designed to help.

It is time those concerned with agriculture take a hard look at the programs of the 50 years 1934-1984, and ask whether or not these programs are still in agriculture's best interests. What really has been the long term impact of reducing supply to increase price?

An example of particular relevance comes to mind. In 1930, the U.S. harvested 1.1 million acres each of two different crops --

peanuts and soybeans. Prior to 1977, the peanut program operated continuously under a program of strict acreage controls, high price supports, and with little regard for world markets. Conversely, soybean producers opted for no production controls, minimal price supports and exposure to world market conditions. By 1980, the United States was harvesting about 1.4 million acres of peanuts, up only slightly from 1930, and about 68 million acres of soybeans. The farmer value of peanut production was about $500 million while the value of soybean production was about $13.5 billion. While there are differences between these two sectors, there is a lesson to be learned.

The economic realities faced by U.S. farmers in the 1980s are vastly different from those of the 1930s -- or those of the 1940s, 1950s, and 1960s. USDA economists conjecture the next several years will be characterized by ample production capacity and highly competitive export markets compared to the unusually bullish 1970s. Faster economic growth abroad could help the export picture, but if the U.S. is to increase its share of the market, U.S. policies should not inhibit productive capacity or the ability to compete. Traditional farm programs and tools such as acreage reductions, loan rates, target prices and reserves may not meet the future needs of an agriculture more dependent on external forces -- at least in their present forms.

The circumstances of the 1980s -- and the mammoth surpluses that necessitated the PIK program -- amplify the need for more flexible farm programs. As a short-term, emergency measure, PIK did the job it was intended to do. It bought time for many farmers, and time for policymakers.

The U.S. Department of Agriculture is determined to use that time to develop more balanced policies that offer reasonable risk protection without inhibiting the ability of U.S. agriculture to adjust to changing market conditions. A Cabinet Council Working Group on Future Food and Agriculture Policy is addressing the issues presented in this paper in preparing for the 1985 farm bill.

Farmers, farm businesses, and citizens of the entire nation have a stake in the outcome of these legislative debates. Agriculture is the largest, most productive, and most efficient industry in the U.S. and the 1985 farm bill will likely determine its future course for years to come.

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