

October 22, 1984

THE HIGH COST OF FARM SUBSIDIES

INTRODUCTION

Bumper crops often are regarded as the hallmark of American agriculture. So are bumper subsidies. They seem to be shooting up faster than August corn. Government outlays for farm price stabilization programs alone increased from \$4 billion in 1981 to about \$20 billion in 1983. Many date back to the New Deal era.

Whether or not such programs were appropriate in the 1930s, today they are inconsistent with economic conditions in agriculture. Price support programs that raise domestic prices above world market levels are not compatible with the objectives of increasing agricultural exports and achieving a more open and prosperous domestic economy. The short-run benefits of farm programs are largely capitalized into higher prices for factors of production (especially land). And the regressive effect of these programs on income distribution within the agricultural sector is indicated by the fact that only 15 percent of farms receive about half of direct government payments. The result is that, although the programs ostensibly were instituted to support the incomes of low-income farmers, it is owners of large farms, with incomes quite high relative to nonfarmers, who receive most of the benefits. Consumers and taxpayers, meanwhile, bear the cost of farm programs through increased taxes and higher food prices. To make matters worse, these costly programs rarely achieve their goals. The record of the past 50 years suggests that federal intervention fails as much in agriculture as it does in other economic sectors. Government attempts to stabilize agricultural markets through "fine tuning" of current programs seldom succeed.

As the 1985 deadline approaches for a new farm bill, U.S. agriculture policy stands at a crossroads with a choice of two basic ways to go: (1) the nation can continue and expand existing

programs, in which farm income is heavily dependent on government through direct income transfers and government-sanctioned restrictions on competition; or (2) it can rely on the marketplace to bring about appropriate adjustments in production and resource allocation. The evidence is very clear on this choice. Government would make its greatest contribution by doing less. Policies aimed at creating general economic conditions of low inflation and a more open economy would be much more helpful to farmers than the host of programs now in place.

THE ORIGINS OF CURRENT AGRICULTURAL PROGRAMS

Prior to the New Deal era, government programs in agriculture were small and seldom directly affected the individual farmer. From 1862 to 1933, the United States Department of Agriculture (USDA) was mainly a scientific and statistical agency limited to research and its applications to the process of farming and some policing activities such as food safety. Federal intervention did not begin on a massive scale until the Great Depression, when President Franklin D. Roosevelt launched a host of New Deal action programs for agriculture.¹

The conventional wisdom was that the Great Depression had been caused by a failure of the market process and that government intervention was necessary to regulate and stabilize agriculture and other sectors of the economy. Within the agricultural sector, it was held that farmers were at a disadvantage in terms of bargaining power, both in buying the raw materials for their businesses and in selling farm products. Instead of attempting to increase competition in the allegedly monopolistic agribusiness firms handling the supplies and products of the nation's farmers, however, there was a deliberate government policy of restricting competition in agricultural product markets. Government-organized producer cartels were formed to raise the prices of cotton, tobacco, milk, peanuts, and other products above the competitive market-clearing level.

What actually happened is that government intervention in the form of high tariffs, high taxes, high wages, and restrictive monetary policies actually caused or greatly exacerbated the economic chaos. The Smoot-Hawley Tariff Act enacted in 1930, for example, raised tariffs to the highest levels in the 20th century--52.8 percent on the assessed value of goods. It was in large part because of this that U.S. farm exports fell by two-thirds from 1929 to 1933.

¹ It is true that the basic views underpinning the New Deal agricultural program can be traced to earlier years. The Capper-Volstead Act of 1922 (the beginning of the modern co-op movement), the McNary-Haugen two-price plans of the mid-1920s, and the Federal Farm Board created by President Herbert Hoover in 1929 were important antecedents of the Agricultural Adjustment Act of 1933.

The U.S. government also resisted the downward adjustment of wages and prices at a time of high unemployment. While President Herbert Hoover merely "jawboned" to keep wages up, President Franklin Roosevelt enacted the National Industrial Recovery Act (NRA), which legally prevented wages and prices from falling. Thus, the policy of keeping farm prices up through price supports, marketing orders, and various other measures was consistent with the NRA and other attempts by government to maintain high prices.

Monetary and fiscal policies also contributed to the economic chaos. The Hoover Administration in 1932 enacted the biggest percentage increase in taxes in peacetime history, and President Roosevelt hiked taxes in 1935 and routinely thereafter. By 1938, the corporate tax rate had gone from 11 to 19 percent and the top income tax rate from 24 to 79 percent. The Federal Reserve reduced the money supply by two-thirds from 1929 to 1933 and hiked the discount rate by 2 percent in 1932. In summary, the government policies of high tariffs, high taxes, monetary mismanagement, and political manipulation of wage rates and prices could hardly have been designed better for bringing about economic stagnation or preventing economic recovery. The protectionist trade policies were especially damaging to agriculture because of its heavy dependence on exports and the adverse effects of even a small reduction in exports on domestic prices of farm products.

The major objectives of farm programs during the Depression and thereafter generally have been to increase farm income and to stabilize agricultural prices, and they have persisted regardless of agricultural conditions or of economic conditions in general. Proponents contend that farm programs are necessary because "agriculture is different" from other economic sectors. This view argues, for example, that the higher price paid for milk by consumers is a small price in view of the stabilizing aspect of the milk program. An opposing view points out that the dairy and other agricultural programs are merely examples of income redistribution.

THE STRUCTURE OF AMERICAN AGRICULTURAL PROGRAMS

1) Programs to Increase Farm Product Prices

Price support programs that reduce the quantity produced or sold affect wheat, feed grains, cotton, peanuts, tobacco, and other products. These programs vary widely. In the case of tobacco, for example, participation is mandatory, and an acreage allotment and marketing quota is assigned to each producer. For wheat, feed grains, and cotton programs, on the other hand, participation is voluntary, but participating producers must place some specified acreage of cropland in a "conservation reserve" to receive program benefits.

Legally binding quality or quantity restrictions are used in "marketing orders" to reduce the amount marketed by the individual

producer. Such marketing orders affect milk, California navel oranges, and some 50 other fruit, vegetable, and specialty crops. In the federal milk marketing order, the milk price is supported by government purchases of cheese, butter, and powdered milk. This has led to the accumulation of massive amounts of these products in government storage.

Other federal programs increase prices of farm products by increasing demand. Food stamps and school lunch programs are the best known of the thirteen domestic food assistance programs.² The P.L.480 Food for Peace program donates farm commodities to poor countries, funds the purchase of U.S. crops at low interest rates, and provides emergency food relief. There has been a decline in the relative importance of P.L.480 exports since the early 1970s, when the volume of U.S. agricultural exports began to mushroom.

2) Programs That Decrease Farm Product Prices

There are a number of programs that increase supply and, hence, tend to reduce farm product prices. The Farm Credit System (FCS), Farmers Home Administration (FmHA), and the Commodity Credit Corporation (CCC) provide implicit or explicit interest rate subsidies to qualifying borrowers. Subsidized irrigation, drainage, and conservation measures for land and water resources also reduce production costs. Under the subsidized crop insurance program, the government pays a portion of the premiums, and these premiums are set to cover only the expected indemnity payments--not the full operating costs of the program. The subsidy is estimated to be almost half of the insurance cost. In addition to subsidized credit and crop insurance, federal tax laws historically have extended special treatment to those engaged in agricultural production.³ And federally funded agricultural research and extension activities have contributed to the dramatic increase in the supply of agricultural products.

The demand for farm products tends to shift only slowly over time, reflecting increases in population and consumer incomes. As a country becomes increasingly developed economically, however, rising personal incomes have little effect on the demand for farm products, relative to such items as housing and recreation. As economic progress occurs, therefore, the large increases in supply relative to demand for farm products exert a downward pressure on farm prices. As such, the historic U.S. "farm problem"--characterized by falling prices and incomes per acre--to a considerable extent, has resulted from economic growth. Economic growth meanwhile has encouraged a shift of labor from the farm sector to

² James Bovard, "Feeding Everybody: How Federal Programs Grew and Grew," Policy Review, Fall 1983, pp. 42-51.

³ For instance, farmers are allowed to use the cash accounting method as opposed to the accrual method of accounting.

other sectors of the economy, as capital substitutes for farm labor.

EFFECTS OF FARM PROGRAMS

In a market system, prices coordinate and transmit information to participants in the marketplace, and expected profits provide incentives for decision makers to use the information conveyed by prices. Agricultural production and marketing under real world conditions is characterized by constantly changing market conditions, which allow alert entrepreneurs to take advantage of profit opportunities. In this system, profits and losses are a measure of how accurately the decision maker has anticipated market conditions. When price signals in agriculture are consciously distorted or ignored through price supports, credit subsidies, and other farm programs, however, farmers have no objective basis for setting prices or for allocating resources efficiently.

Domestic Protectionism and International Trade

The value of U.S. farm exports jumped from \$8 billion in 1972 to about \$44 billion in 1981, a dramatic rise even after adjusting for inflation.⁴ This increased dependence of U.S. agriculture on international trade has important implications for agricultural policy, since there is a fundamental incompatibility between domestic agricultural price support policies and free international trade. When domestic prices are raised above the world price, imports must be limited to prevent domestic users from buying lower priced products from abroad. As a result, consumer prices of dairy, tobacco, peanut, sugar, and other products in the United States are considerably higher than they would be without import controls. The sugar import quota system, for example, protects the target price of about 17¢ per pound for domestic producers; prices on the world market are only 4¢ to 7¢ per pound. This import quota system, imposed by the world's biggest sugar market, is highly detrimental to Caribbean producers and is inconsistent with U.S. foreign policy in the Caribbean, including the ambitious Reagan economic development initiative.

In addition, subsidies affecting product prices, easy credit terms, or reduced interest rates are used to increase U.S. agricultural exports. An export subsidy results in an increase in domestic production and a decrease in domestic consumption. Regardless of the type of subsidy, sellers receiving an artificial advantage in the export market are often accused of "dumping" by the recipient countries. Following the decrease in agricultural

⁴ A decrease in U.S. farm exports since 1981 can be attributed to the world recession and, more recently, to an increase in the price of U.S. exports because of the strong value of the dollar relative to other currencies.

exports since 1981, pressures have intensified to increase the use of export subsidies to strengthen the market for U.S. farm products.

Winners and Losers from Farm Programs

In 1982, more than \$11 billion was spent on price support programs for milk, wheat, feed grains, and other products. At the same time, an even larger amount was spent by the USDA for credit, conservation, research, extension, and crop insurance programs that had the effect of increasing output and decreasing prices.⁵ If the two ways of spending dollars to affect product prices were equally effective, expenditures on price support programs would offset an equal amount of expenditures on programs that increase production (and decrease price). This suggests that more than \$20 billion may have been spent by the USDA in 1982 on activities that cancelled each other, thus having little actual net impact on food costs, farm prices, or farm incomes.

Such programs do have distributional effects within agriculture. Subsidized credit, conservation, crop insurance, and research and extension programs reduce production costs for those producers receiving the benefits. The increase in supply and the resulting decrease in price penalize producers not receiving the program benefits. Consumers would gain from such programs that led to lower food prices, but support programs which then push up prices often negate the potential benefits from decreases in production costs. Also negating the consumer benefits, of course, are the higher taxes needed to pay for the programs.

The major gainers from agricultural price support programs are, in fact, owners of land and various specialized factors of production. When prices are supported above the market level, production becomes more profitable at the existing production costs. Prices of specialized inputs are bid up high enough so that the expected return is similar to that for other assets of comparable risk. Consequently, although owners of land and other specialized inputs receive windfall gains when a price support program is initiated (or price support levels increased), the benefits to later producers are largely negated by higher production costs (such as higher land prices). Price support programs thus result in what has been called a "transitional gains trap."⁶ Once a price support program has been in operation, its elimination imposes windfall losses on owners of specialized resources, regardless of whether they benefited from the initial windfall: owners of land and production rights today often are not the same people who received the windfalls when the programs were initiated.

⁵ Clifton B. Luttrell, Down on the Farm with Uncle Sam (Los Angeles, California: International Institute for Economic Research, 1983).

⁶ Gordon Tullock, "The Transitional Gains Trap," The Bell Journal of Economics and Management Science, Autumn 1975, pp. 671-678.

Government employees also gain from farm programs. The Department of Agriculture staff, for example, now numbers 125,000, five times its size in 1929. At the same time, the number of farms in the U.S. has dropped from 6.5 million to 2.3 million.

Consumers and taxpayers bear the major costs of government programs. Consumers face higher prices for milk, sugar, peanuts, tobacco, fresh oranges, and other products. Taxpayers face higher tax bills in financing the \$35 billion in USDA outlays for FY 1984.⁷ Farmers who rent or buy land or rights to produce also face increased costs of production.

Indirect Effects of Farm Programs

Restrictions on competition reduce the efficiency of resource use in agriculture. In the case of the wheat, cotton, and feed grain programs, for example, farmers are being paid by Washington not to till some of the world's most productive farmland. Restrictions on domestic competition distort the pattern of production and resource use within the U.S. and between the U.S. and other countries. At the same time, higher prices for bread, milk, sugar, and other items produced under price supports increase the pressure and need for food assistance to lower income groups. And restrictions on output and resulting higher product prices also adversely affect consumers in other countries.

The interest rate subsidies of the Farm Credit System, the Farmers Home Administration, and the Commodity Credit Corporation also promote the trend toward fewer and larger farms. By decreasing the cost of capital relative to labor, these policies encourage the substitution of machinery and other capital inputs for labor, resulting in more highly mechanized farms. In view of widespread public concerns about farm size and capital requirements in commercial agriculture, it is ironic that federally operated and sanctioned credit programs are actually contributing to the trends toward larger and more highly mechanized farms.

Effect on Income Distribution

Perhaps the most controversial aspect of farm policy is the effect of farm programs on incomes within agriculture. Farm programs historically were justified to a large extent on the basis of comparisons of farm versus nonfarm incomes. The concept of "average farm income," however, has little meaning since income per farm operator varies widely depending on the size of the farm. On commercial farms with sales of more than \$100,000 per year, for example, the average family income exceeds that of nonfarmers. On small farms, on the other hand, most family income now is derived from nonfarm sources. From 1980 to 1982,

⁷ About \$6 billion were off-budget Rural Electrification Administration (REA) and FmHA expenditures.

farmers with farm sales of less than \$20,000 per year, on average, obtained all of their disposable income from, off-farm work such as in the retail sector, farm products distribution, and other businesses.⁸ More generally, during the same period, off-farm income accounted for over 99 percent of farm operator family income for 72 percent of U.S. farms.⁹

Although per capita disposable income of farmers, on average, has increased over time relative to those of nonfarmers, the policy implications of such income differences are unclear. Income is the primary means by which labor resources are allocated both within the farm sector and between agriculture and other sectors of the economy. As farm size increased and machinery, pesticides, and other capital inputs were substituted for labor and land during the 1950s and 1960s, higher incomes from nonfarm jobs induced a large shift of labor out of agriculture. When public policies are instituted to equalize wages in different sectors for similar work, irrespective of underlying economic trends, however, there is little incentive for labor to adjust in response to changing economic conditions.

Farm programs have important effects on income distribution within agriculture. When prices are increased by price supports, small farmers are affected relatively little since benefits vary with sales.¹⁰ Even though the benefits of various programs differ widely, even for farms of a given size, depending upon the crops grown, means of financing, and other factors, it is estimated that just 13 percent of farms obtain 45 percent of direct government payments, while 71 percent of the farms receive only 22 percent of the payments.¹¹ This is not some maldistribution that can be improved by tinkering with the programs. It is an inherent defect of such bureaucratic policies. U.S. agricultural programs thus disrupt domestic and international agricultural markets in the name of supporting the low-income farmers--who receive little benefit from the programs.¹²

⁸ J. Bruce Bullock, "Future Directions for Agricultural Policy," American Journal of Agricultural Economics, May 1984, p. 235.

⁹ Ibid.

¹⁰ Again, it should be emphasized that it is agricultural landowners rather than producers who are the major beneficiaries of price support programs and other programs affecting land values.

¹¹ William G. Leshner, at the Conference on Alternative Agricultural and Food Policies and the 1985 Farm Bill, sponsored by the Giannini Foundation and Resources for the Future, Berkeley, California, June 11, 1984.

¹² There is a \$50,000 per farmer annual maximum payment limitation from all programs, but legal loopholes limit its effectiveness. For example, in the dairy diversion program enacted in late 1983, which pays dairy producers not to produce, some individual dairy producers will receive more than \$1 million. See also Bruce Gardner, "Agriculture's Revealing and Painful Lesson for Industrial Policy," Heritage Foundation Backgrounder No. 320, January 1984.

IMPLEMENTATION PROBLEMS

The regressive effect of farm programs on income distribution is but one of a large number of implementation problems that inevitably arise when central direction is substituted for market signals. Among the most important of these are incentive and information problems.

Incentive Problems

Difficulties arise when decisions about resource use are made through the political process, which separates power from responsibility. Policy decisions in agriculture, as in other areas, often are influenced by short-run political considerations. Before the 1976 election, for example, decisions to raise the support price of wheat and to triple the tariff on imported sugar "were basically political ones."¹³ The 1983 dairy program that pays farmers not to produce milk is another example of economic reality succumbing to political pressure. Economist Edward Tufte demonstrates that such examples are not unusual, as incumbent administrations frequently confer short-run economic benefits on politically powerful groups to improve the party's standing in upcoming elections.¹⁴

Conservation programs provide another example of the allocation of funds on the basis of politics rather than on economic factors. Soil erosion is not a national phenomenon, since erosion that matters occurs on particular farms in specific locations. The implications are clearly drawn by Nobel Laureate T. W. Schultz: "This being the case, a nationally administered soil conservation program that is politically designed to provide funds and services to all parts of agriculture, is bound to be a model of inefficiency."¹⁵

Having outgrown the clientele they were originally designed to aid, government agriculture programs have now expanded into other areas. Subsidized credit in agriculture, for example, was originally designed for farmers and ranchers. Today, Federal Home Administration loans are available for such nonfarm activities as fire departments, hospitals, and recreational facilities. The Agricultural Extension Service originally focused its efforts on production agriculture but is now providing information to urban interests on such topics as nutrition, home and lawn care, and turf management for golf courses. These services--typically

¹³ Bruce Gardner, The Governing of Agriculture (Lawrence, Kansas: The Regents Press, 1981), p. 118.

¹⁴ Edward A. Tufte, Political Control of the Economy (Princeton, New Jersey: Princeton University Press, 1978).

¹⁵ T. W. Schultz, "The Dynamics of Soil Erosion in the United States: A Critical View," Agricultural Economics Paper No. 82 (Chicago: Department of Economics, 1982), p. 17.

provided at no cost to the user--are overused and consequently often in short supply.

"Moral hazard," which means that individuals or firms are encouraged to engage in high risk activities because they are protected from its consequences, is another incentive problem that is important in federal crop insurance and credit programs. Under high risk conditions, land is less likely to be farmed. The availability of a subsidized insurance program means that lands especially subject to wind or water erosion are more likely to be farmed and eroded because the decision maker does not bear the full cost of his actions. A similar situation exists in the case of the Farmers Home Administration "limited resource loans" for farmers who "need a lower interest rate to have a reasonable chance of success." Since a lower interest rate is paid until the borrower is "able to pay" the regular rate, the incentive to be able to pay the higher rate is reduced.

Information Problems

Information problems, too, arise in the collective choice process because of the separation of power and knowledge. In the problem of determining the level of price supports, for example, the concept of "parity price" was developed during the New Deal era as a basis for setting price support levels for wheat, cotton, tobacco, and other crops. The parity price approach assumes that a bushel of wheat, for example, should have the same purchasing power as it had in a base period (originally taken to be 1910-1914). But if price is to perform its role in coordinating economic activity, it must reflect current supply and demand conditions rather than be set on the basis of outdated economic relationships.

The Food and Agriculture Act of 1977 embraced cost of production as a primary guide in determining the level of price supports. The cost of production, however, is no more defensible than parity as a guide in setting price support levels. Any effective price support will increase cost of production as the increased price is capitalized into prices of land and other specialized resources. The higher the price is set, the higher the cost of production. Thus, if the price of wheat were set at \$10 per bushel, the price of specialized resources in wheat production would be bid up because farmers competing for the resources could count on a higher output price, and this would make the expected cost of production \$10. Cost of production and parity price are subject to the same shortcomings as the long discredited "just price" idea, in that there is no objective basis for saying what the price should be.

A similar information problem arises in the case of subsidized credit. In the absence of the market mechanism, there is no objective procedure for determining the "optimal amount" of credit for individual borrowers or for agriculture as a whole. Interest subsidies are income transfers, and since there is no

objective basis for income redistribution, there is no objective procedure for determining what the amount of the interest subsidy should be.

Interest subsidies provide a good example of the importance of recognizing the "seen and unseen" effects of government intervention.¹⁶ The "easy credit" is deemed to be beneficial by borrowers obtaining the credit, but other effects are much less obvious. Since less productive producers are kept in production, nonusers of subsidized credit within agriculture are harmed because of lower product prices resulting from the increased output. Credit users in nonagricultural sectors of the economy are also disadvantaged because of the reduction in credit availability.

CONCLUSION

The choices confronting U.S. agriculture are either reduced government intervention and increased reliance on market forces, or still further dependence on government attempts to bring supply and demand into balance through costly supply control and export subsidy programs. Economic conditions in the U.S. have changed dramatically since most of these agricultural programs were initiated during the New Deal era.

There is a strong a priori case for decentralized competitive markets as the most effective means of coping with changing economic conditions.¹⁷ The burden of proof thus should be on those advocating the continuation or expansion of programs that limit the scope of competition. Indeed, the ability of government to stabilize individual markets is limited by the same factors that thwart government attempts to stabilize the overall level of economic activity. As its dependence on international trade increases, moreover, U.S. agriculture becomes increasingly beyond the reach of domestic price support policies.

The effect of price support programs, import quotas, and other government-enforced restrictions on competition is to increase income to small groups at the expense of overall productivity and output. Even if it is granted that farm programs were once needed because of relatively low farm incomes, this justification is no longer valid.¹⁸ Government attempts to stabilize

¹⁶ Frederic Bastiat, Selected Essays on Political Economy (Irvington-on-Hudson, New York: The Foundation for Economic Education, 1964).

¹⁷ F. A. Hayek, "The Use of Knowledge in Society," in Individualism and Economic Order (Chicago: University of Chicago Press, 1948), pp. 77-91.

¹⁸ "Per capita disposable income of farm operators has averaged 88% of nonfarm income over the past ten years....Given the favorable tax treatment of farmers, there is no longer any basis for arguing that farm incomes need to be supported relative to nonfarm incomes." J. Bruce Bullock, "Future Directions for Agricultural Policy," op. cit., p. 235.

the overall level of economic activity during the past 15 years suggest that government policies, as they are implemented through the political process, often introduce artificial instability into agricultural markets. That government might make its greatest contribution to economic stability by attempting to do less is an important lesson for agriculture.¹⁹ Noninflationary monetary and fiscal policies plus a more open economy would benefit agriculture far more in the long run than the host of costly action programs now in place.

Prepared for The Heritage Foundation
by E. C. Pasour, Jr.*

¹⁹ Paul Heyne, The Economic Way of Thinking, Fourth ed. (Chicago: Science Research Associates, Inc., 1983), p. 448.

* Professor of Economics and Business, North Carolina State University. The author wishes to thank M.A. Johnson and W.N. Thurman for helpful comments.