A Dispersed or Concentrated Agriculture? —The Role of Public Policy

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armers and policymakers alike are expressing concern over the possible future direction of American agriculture. Prompting these concerns are the rapid changes that have occurred in production and marketing patterns as a result of technological improvements and certain institutional factors. In short, agriculture has evolved to the point where fewer, but larger, farms are producing most of the output and realizing the largest share of income. Moreover, many agribusiness firms are exerting pressure to more closely coordinate various production and marketing activities through contractual arrangements with producers. In fact, several commodities such as broilers, eggs, and most fruits and vegetables are presently handled in this fashion rather than through an open, competitive market.

In an earlier article, the agricultural sector of the economy was examined to determine the extent to which economic concentration has occurred in the production and marketing of farm commodities.' Although the evidence in that article showed that production is clearly becoming more concentrated in the hands of large producers, the fact remains that economic power in agriculture is relatively diffused as compared with many industrial sectors of the economy. Furthermore, despite well publicized developments regarding contractual arrangements for a few commodities, more than three-fourths of total farm output continues to move through an open market of many buyers and sellers. While significant changes in marketing practices may occur for individual commodities, it is generally expected that the bulk of farm marketings will be exchanged in open markets in the foreseeable future.

Nevertheless, a crucial issue for farmers, agribusinessmen, and consumers is the organization and control of agriculture in the future. In a dispersed system consisting of many proprietary units, control would rest in the hands of many individual decisionmakers; at the opposite extreme, control would be concentrated in a relatively small number of very large firms, greatly reducing the high degree of individual freedom afforded by a dispersed system.

^{1/}C. Edward Harshbarger and Sheldon W. Stahl, "Economic Concentration in Agriculture—Trends and Developments," Federal Reserve Bank of Kansas City, *Monthly* Review, April 1974.

The family farm-open market system that is so prevalent in agriculture today is a reflection of the stance taken by public policymakers since the early days of the United States. Shortly after the nation was founded, it was decided that the public interest would best be served by encouraging wide distribution of land ownership. Thus, laws were passed that facilitated the sale and homesteading of public land into family-sized units. Similarly, the open, competitive market is a derivative of the free enterprise system that has been espoused in this nation for so many years. Reflecting the cherished concepts of freedom and equal opportunity, early policymakers established various rules and regulations that heavily influenced the development of free markets in which each individual could compete to earn his just reward. Obviously, political philosophies and social goals have changed as the economy has evolved from an agrarian to a highly complex industrial structure. But the markets for agricultural products, some of which remain open while others are administered, still mirror the laws, customs, and institutions that have been supported by public policy. Hence, just as public policy has contributed to current agricultural production and marketing practices, so too will policy influence the future direction and control of American agriculture.

CONTROL AND THE PRESSURES FOR CHANGE

Unless significant changes in public policy occur, the forces affecting agricultural production and marketing trends are not likely to subside in the near future. Thus, farm numbers will continue to decline, production will become more concentrated, and further progress likely will be, made in coordinating production and marketing activities through contractual arrang ments. On the other hand, public policy can be a tool with which to counteract or redirect structural developments in agriculture. Before this can occur, however, a general understanding of the factors which have contributed to structural change in agriculture is required.

Market Developments and Pricing

Among those factors which have contributed to the shift from a dispersed agriculture to a more concentrated structure are the increased technical complexity of farming and the pressures to expand output to achieve lower unit costs. Technological developments have made it possible for farmers to improve production efficiency, but the sharp increase in the managerial skills required of farm decisionmakers has made it more difficult to operate successfully in a competitive agricultural environment. Moreover, in recent years, the capital requirements associated with the adoption of new technology have soared, and unfortunately, many farmers could not afford the investment. While the staying power of smaller, less technologically advanced, farmers is surprisingly strong, the price-cost squeeze has forced many to seek new jobs, retire, or live on very low incomes.

The increased complexity in agricultural production and the attendant risks and financial requirements have led to greater specialization. Farmers frequently focus on one or two principal commodities in order to exploit the economies of volume production. Moreover, in those areas where they feel deficient, farmers increasingly are turning to outside specialists for the technical knowledge and financing required to operate efficiently. Sometimes it is even necessary to enter into formal contracts to secure the desired services, and when this happens, control often shifts from the farmer to the outside interests.

With few exceptions, however, most of these developments represent adjustments that would normally occur in a free, competitive market whenever new technology is introduced. As such, the role of public policy in this case should be to permit the forces in motion to operate freely unless other problems become apparent and are accorded higher priority.

The manner in which farm markets function must also be examined to explain the current structure of agriculture. The competitive market, as a socio-economic institution, has several inherent features that are desirable from a public policy standpoint. Offering an environment in which no single participant can affect price, the market brings together the disparate decisions of buyers, sellers, producers, and consumers to establish equitable market values on goods and services. In addition to guiding and directing production and consumption decisions, a competitive market affords a wide range of individual freedom in that it provides meaningful choices among alternatives and effectively limits barriers to entry or exit.

The performance of a pricing system in a competitive market can be evaluated in terms of how well it satisfies certain specified criteria. As far as agriculture is concerned, an effective pricing system is expected to facilitate the physical marketing of the commodity, yield acceptable returns to market participants, maintain reasonably stable prices, protect long-run demand by not pricing the product out of the market, assure equitable treatment of all participants, and clear the **market**.²

Most of the problems with pricing systems in agriculture revolve around the first three criteria. Probably the most important factor behind the decline of traditional open markets has been the growing inefficiency in physically moving and exchanging commodities. Direct selling, either through individual negotiation or formula pricing, as well as vertical integration have provided much greater efficiencies in assembling and handling several farm commodities. Consequently, the open market is often skirted altogether, coming into play only as a base for determining the "going price" in the negotiations. Obviously, if the central market slips in volume of sales, a question immediately arises about the validity of the reported base price as a signal of general market conditions for the industry as a whole. Where this problem has occurred, participants in the exchange must often depend upon their own abilities to acquire and translate general market news into a price.

Farmer dissatisfaction with open market results, perceived as not yielding equitable returns to market participants, represents another threat to the structural organization of agriculture. History provides several examples of farmers seeking out alternative pricing systems to gain better treatment. Owing to unstable prices, chaotic conditions, and inefficient handling, farm legislation established Federal marketing orders for fluid milk during the 1930's to instill greater stability and order in the industry. Virtually all of the selling is now done directly to the processor under a tight set of specifications. Consequently, milk prices are some of the most stable in agriculture today, thus satisfying the third criterion for successful performance of a pricing system; however, the markets do require close supervision under this arrangement.

In essence, the existence of marketing orders, formula pricing techniques, and vertical integration reflect not only the special characteristics of the commodities involved but also certain shortcomings of the market as viewed by the **participants**.³ While these alternative pricing systems have produced positive benefits for certain farmers, the results in other areas have been disappointing. For example, vertical integration in the broiler industry has transformed most producers into piece-wage workers and, at the same time, has virtually eliminated the market. In fact, quotations on farm prices for broilers no longer exist. Although consumers and some producers stand to benefit

^{2/}V. James Rhodes, "Pricing Systems—Old. New, and Options for the Future," *Bargaining in Agriculture*, North Central Regional Extension Publication 30, University of Missouri Extension Division, C 911, June 1971. p. 12.

^{3/}The characteristics of commodities typically produced under contract or by vertically integrated industries were discussed by the authors in the article cited in footnote I.

from greater price stability and more efficient production, certain costs as measured by the constraints placed on farmers in making production decisions and controlling marketings must be taken into consideration before a final judgment is made on a new marketing arrangement. Public policy can play an integral role in cultivating the changes that are needed in the future while correcting for errors made in the past.

Institutional Factors

Previous research suggests that the increase in economic concentration in agriculture has also been influenced by several institutional factors. Government farm programs, for example, have probably given an unintended boost to larger farms even though various direct actions have been taken to support the smaller family units. According to one report, several important reasons for believing that price and income programs speed the trend to concentrated holdings are(1) wealthy investors, either farm or offfarm, presumably are highly responsive to protected income, (2) the stability of income promised by programs may provide improved access to big capital markets, and (3) small farmers probably have more difficulty accumulating capital for expansion even with commodity support programs.⁴ Although it is difficult to specify the extent to which government programs have contributed to economic concentration in agriculture, the overall impact has been to help finance growth to larger operations that might not have occurred otherwise.

Income tax laws have also introduced an institutional bias that has accelerated the trend toward larger farms. According to Professor Levi, three features in the tax laws give preferential advantages to wealthy taxpayers who make investments in agriculture even though the system presumably is progressive in nature.⁵ For example, the graduation of income tax rates, the special rates for income from capital gains, and the treatment of depreciation as a "paper loss" all work to the relative advantage of people in high tax brackets because, in essence, a larger proportion of the investment ultimately is subsidized by the Treasury. Meisner and Rhodes recently examined the changing structure of the cattle feeding industry, giving special attention to the rapid influx of outside investors who have found cattle feeding to be an attractive tax shelter.⁶ For this reason and others, cattle feeding in large commercial lots expanded sharply during the 1960's. Moreover, as outside investment funds continued to roll in during the early 1970's, the industry expanded further even though the returns, without tax considerations, may not have warranted it. Certainly, part of the crisis now confronting the cattle feeding industry-not to mention its concentrated structure--is traceable to the response of outside investors to attractive concessions in the tax laws.

Aside from the obvious loss of revenue to the Treasury, tax-subsidized investments in agriculture have several other effects, not all of which are desirable. It is widely accepted that tax concessions tend to bring more risk capital into farming, especially for large scale enterprises such as cattle feeding, poultry, and orchards. They also have the effect of expanding production, thus lowering farm prices and incomes in most cases. Furthermore, because the concessions make it possible for the tax-subsidized investor to make money even though the enterprise itself shows no profit, ownership and control are frequently shifted out of the hands of farmers who may find it difficult, if not

^{4/}L. R. Kyle, W. B. Sundquist, and H. D. Guither, "Who Controls Agriculture Now? — The Trends Underway," *Who Will Control* U.S. Agriculture? North Central Regional Extension Publication 32, University of Illinois Cooperative Extension Service, Special Publication 27, August 1972, p. 11.

^{5/}Donald R. Levi, "Federal Income Tax Law-A Powerful Policy Tool," *Economic and Marketing Information for Missouri Agriculture*, Department of Agricultural Economics, University of Missouri-Columbia, Vol. 19, No. 7, (July 1971).

^{6/}J. C. Meisner and V. James Rhodes, "The Changing Structure of U.S. Cattle Feeding," Department of Agricultural Economics, University of Missouri-Columbia, Special Report 167, November 1974.

impossible, to compete under these conditions. Clearly, the tax rules do affect structural developments in agriculture and the ability to compete for resource ownership. Preserving a dispersed agriculture will likely require, among other things, a fundamental reappraisal of the tax system by policymakers with a view toward reform in certain areas.

Maintaining Control

Assuming that managerial skills are not a limiting factor, the key to whether agriculture remains dispersed or becomes more concentrated is control. If control is to rest in the hands of the traditional farmer, certain conditions regarding access to markets and to 'important resources, such as land, technical knowledge, and credit, must prevail.

With respect to farmland, various policies in the past have been designed to augment a wide distribution of ownership. However, the competing demands for farmland for urbanization and recreational purposes, coupled with new laws on zoning, conservation, and pollution controls, threaten to restrict this privilege. Furthermore, the upward trend in land prices has markedly reduced the opportunities for many young farmers to purchase farm real estate despite credit policies that have generally favored farm ownership.

Access to knowledge, whether technical or market related, is another factor which can affect the structure of agriculture. Even the so-called "free" market depends on effective government regulation and information to make it workable. Each year millions of dollars are spent by public and private institutions to provide market participants with information on production estimates, expected disappearance, and the latest price developments in domestic and international markets. Competitive marketing systems cannot function effectively without good information.

Equal access to research findings from scientific experiments by public-supported insti-

tutions, such as land grant universities, has enabled many family farm units to remain technologically efficient and competitive. Any restrictions on access to this knowledge will give a special advantage to those who acquire it first. Thus, a policy to confine research mainly to private firms would likely lead to greater concentration in agriculture, especially if the research happened to focus on product development and promotion in vertically integrated industries.

In the last few years, one of the chief concerns in agriculture has been the sharp increase in capital requirements as land values and the amount paid out for purchased inputs have skyrocketed. Because of these developments, the risks in farming are such that, if prices received drop even modestly below costs, severe financial stress can result unless precautionary measures are taken. Sometimes these risks can be shifted to others through the use of futures markets or crop insurance. Price support programs and tax shelters also offer protection. However, some producers are finding it necessary to form contractual arrangements with processors to reduce risks, which frequently results in some loss of managerial control.

Similar problems exist with credit. Any policy that makes credit more available or less expensive to certain groups will affect the future structure and control of agriculture. The traditional sources of credit, while they have been sufficient to date, could encounter problems which may make it more difficult to finance agriculture at competitive rates. Many farmers have already boosted their borrowings to levels that seem precarious, given the high risks noted earlier. Hence, a future problem may be finding ways to increase equity capital to solidify a farmer's financial position. If increases in farm income prove inadequate, outside sources of equity capital will probably take on greater importance. There are several ways to acquire outside capital, including the sale of common or preferred stock if the farm is incorporated,

but virtually all of the methods entail some loss of control. However, if these measures fall short, a higher incidence of direct ties between producers and vertically integrated organizations in order to secure funds for agriculture can probably be expected, in which case much of the control likely would shift out of the farmers' hands. Obviously, public policy may face a formidable challenge in the future in assuring that the growing credit needs of individual farmers are met within reason.

The shift in emphasis from marketing commodities to merchandising food through product development and promotion by processors and retailers suggests that several farm production units will or could be absorbed into large corporate enterprises, resulting in a more concentrated agriculture. Thus, maintaining access to markets is essential to a dispersed proprietary farming system.

Two different approaches can be used to keep marketing options open. In short, farmers may try to preserve access, as individuals, to an open market system, or they may seek to protect market access by grouping together.' In the group approach, certain individual prerogatives would probably be relinquished, but for some commodities, individual access may not always be attainable.

Many farmers are examining group action because they are becoming increasingly concerned about the fairness of price-making forces in deteriorating open markets and because they feel at a disadvantage in individual negotiation. While there are various ways in which group action can occur, most of the attention has focused either on vertical integration through farmer cooperatives or on horizontal bargaining associations.

A common misconception is that the primary reason for group bargaining is to raise prices above their free market level. While this objective exists, farmers may actually use bargaining just to discover a fair and stable price thought to be absent in the present pricing system.

Much of the impetus behind the cooperative movement has emanated from the Capper-Volstead Act of 1922 which explicitly allowed farmers to form cooperative associations without fear of violating the antitrust laws. But in no sense does Capper-Volstead permit farm cooperatives to do things that are otherwise illegal, such as monopolizing or restraining trade enough to unduly influence prices. Reflecting this call for surveillance, the Justice Department has recently filed civil antitrust suits against a few very large regional dairy cooperatives, charging them with illegal practices. Thus, there are limits to the power that cooperatives can exercise in behalf of their membership.

Public policy clearly encourages the cooperative concept as a means of equalizing the bargaining power of the individuals belonging to the cooperative and the large firms with which they must do business. As such, co-ops have become quite important as a means of preserving the producer's access to commodity and input markets. Furthermore, farmers are able to gain some of the benefits of industrial organization without being enveloped into a big corporate structure.

The bargaining association differs from the cooperative in that it serves as the producers' representative in contractual negotiations over prices and other terms of trade. In some cases, however, a cooperative may not only integrate forward but also serve as the bargaining agent for its members. At any rate, the greatest gains from bargaining thus far in the United States have been mainly in fluid milk and processing fruits and vegetables—both of which involve cooperative bargaining in the establishment of government marketing orders.

In essence, the overall strategy is for farmers to turn to group action as a replacement for the

^{7/}Rhodes, "Policies Affecting Access to Markets," Who Will Control U.S. Agriculture?, p. 39.

open market. Producers would likely forego some of their individual freedoms for the privilege of gaining greater security and less risk through their cooperatives or bargaining associations. However, some hazards are involved. For example, when a cooperative becomes large enough to compete with strong corporate interests, will it remain responsive to its membership, or has it moved beyond the farmers' ability to control it?⁸ Clearly, when a cooperative becomes the only viable access to a market, the policy implications are far different than when it represents just another choice in an open market of many competing firms. Furthermore, there is evidence that some "corporate" farmers are invading the Capper-Volstead shelter in order to bargain for, or "discuss," higher prices with each other and escape antitrust prosecution. One danger is that if this practice becomes widespread, not only will these corporations lose their privileges but the whole cooperative system could be placed in jeopardy. Moreover, if agriculture becomes concentrated with limited marketing opportunities, public policy would inevitably be forced to consider regulation of pricing practices to protect the consumer.

IMPLICATIONS FOR PUBLIC POLICY

From the foregoing discussion, it is apparent that the agricultural sector of the economy is a complex amalgam of many different organizations and ways of doing business. The relatively dispersed system that has survived in agriculture for so long has been supported by various national policies. The dissemination of information, an agricultural credit system, price support programs, and the authority for farmers to group together for bargaining purposes are but a few of the measures sanctioned by public policy. Clearly, organizational structure has historically been a public policy issue, and it will no doubt continue to be. From the consumers' standpoint, most of the evidence suggests that under either a dispersed or a concentrated agriculture, adequate food supplies would be available. However, the implications for prices are likely to be quite different under the two systems. With a concentrated agriculture in which a few large, vertically integrated or corporate firms would dominate, monopolistic pricing could easily surface and offset the potential gains to consumers arising from closer market coordination. In this event, policymakers would find it necessary to police the performance of the pricing system very diligently—probably a cumbersome process—to protect the interests of the public.

The defense of the dispersed, competitive market system rests heavily on its socio-economic qualities of freedom and fair play as well as its ability to guide and direct resource use. As noted, obstacles arising from the complexity of many industrial processes, and problems associated with the control of markets in which merchandising techniques are emphasized, pose a serious threat to the dispersal concept. By the same token, it is becoming increasingly clear that the degree of freedom in present farm operations may have to give way to the requirements of market coordination for best meeting the demands of a sophisticated economy. Some sacrifice in individual freedom may be in order for the common good.

Nevertheless, the present structure of agriculture is very competitive with control resting largely in the hands of individual producers. Furthermore, there is still considerable room to move in the direction of greater concentration for the sake of efficiency without losing these desirable features. Certainly, the competitive system—while far from perfect—possesses several admirable features that merit the continued loyalty of policymakers. Probably no other system is capable of giving so much positive direction to the economy with so little need for policing the performance.

If there is a danger, it is that control of agri-

^{8/}Ibid, p. 40.

culture may shift out of the hands of individual producers, not because the family farm-open market concept is an anachronism in a complex industrialized economy, but because public policy may not perceive the ultimate impact of the forces in motion until it is too late. For farmers to lose control by default would be most unfortunate, but if the trends now **under**- way in agriculture continue unchecked, this may happen. In the final analysis, the question about the future direction and control of agriculture can be settled in a number of ways, depending on how public policy views the problem. In all probability, the final decision will hinge more on social and political viewpoints than on economic ones.