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Approach I

VERTICAL INTEGRATION

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What Vertical Integration Is

IT IS ONE OF THE ALTERNATIVE METHODS OF COORDINATING MANAGEMENT AND CONTROL OF FARM PRODUCTION FROM FARM SUPPLIER TO ULTIMATE CONSUMER. The alternatives are:

1. Self-sufficient type farms buying few supplies and selling direct to consumers. These are mostly individually owned and operated.
2. Independently organized separate firms for each supply, production, and marketing function buying from and selling to each other. These are growing larger and contract in advance for many supplies and sales. They may be individually, corporately, or cooperatively owned.
3. Vertically integrated firms each in control of performance of two or more functions in the chain of farm supply, production, and marketing of a specific farm commodity. Managerial control may be by individuals, partnerships, corporations, or cooperatives. Vertical integration has taken place more rapidly in recent years in agriculture.
4. Government action such as federal milk marketing orders.
5. Some combination of 1 through 4.

VERTICAL VS. HORIZONTAL INTEGRATION

Vertical integration is tying together the control or management of two or more stages in production of a single commodity anywhere between the farm supplier and the final retailer, inclusive. Example: A packing company with cattle feeding operations. In contrast, horizontal integration is using two or more plants of a firm to perform the same stage in the "production" process.

*The other members of the work group who reviewed the preliminary draft and assisted in the development of the final report were: Lawrence D. Rhoades (Chairman), Ronald Bauman, Thomas Brown, A. J. Cagle, Lewis Clark, Carl Frischknecht, and Robert W. Rudd.

THE ESSENCE OF VERTICAL INTEGRATION

The integrator furnishes additional capital and assumes added management responsibility and control ranging all the way from specifying type of breeding stock to deciding how much and in what way to produce a product, supervising day-to-day operations, and taking all production and price risks. His reward, if any, is increased return for his capital and management.

The integratee gives up part of his management and control in return for additional capital or know-how and price, income, or market guarantee.

MANY ARRANGEMENTS ARE NOT VERTICAL INTEGRATION

Such arrangements include: (1) standard loan arrangements, (2) open account credit, (3) contracts to buy this year's fertilizer, or sell products (hogs) to a given dealer at a price specified in advance. Why? Management or control is retained by each of the parties concerned.

How Vertical Integration Takes Place

1. By outright purchase by the integrator of facilities for additional stages of supply, production, or marketing; or
2. By various contractual arrangements through which the integrator achieves a degree of control of additional stages of "production."

Who Can Be an Integrator?

Any individual, partnership, company, corporation, or cooperative can be an integrator, e.g., farm supplier, farmer, assembler, processor, or retailer.

Why Vertical Integration Takes Place

CIRCUMSTANCES HAVE MADE POSSIBLE INCREASED MANAGERIAL PROFIT, THROUGH VERTICAL INTEGRATION, IN RECENT YEARS. These include:

1. New technology which has made profitable the application of more know-how and increased capital to the "production" processes.
2. Economies associated with size of enterprise.
3. Increasing numbers and changing location of consumers.
4. Change in demand for uniform supply of standardized products brought about by change in size and number of retail operations.

5. Development of market power (includes labor market).
6. Substantial capital accumulation in some segments of the food industry.
7. Reduced income of small individual operators.

CONDITIONS WHICH ENHANCE THE CHANCES OF MANAGERIAL PROFITS

1. Where increased control over a larger share of the supply can improve price (bargaining power). For example, closer control of supply may result in price advantages, through opportunity either to buy the supply cheaper from farmer-producers or to sell it at higher prices to consumers.
2. Where a special market opportunity exists for a new or different product. A farmer assumes many risks in producing on his own a large output of a product new to his area (feeder pigs, for example). If a merchandiser can see profit opportunity in guaranteeing a market for the farmer, he may enter into a contract with him to the advantage of both.
3. Where marketing costs or risks can be reduced by maintaining a uniform volume of operation. For example, closer control over an enterprise may give the feed dealer or farm product processor a larger, more certain volume of business and enable him to cut processing costs per unit of product.
4. Where the firm (farm or nonfarm) faces a major change in "production" technology. For example, integrators might see opportunity for profit by helping speed up adoption of new developments to capture the benefits of such new developments. The integratee would also be quite receptive since he recognizes that better ways are available but lacks necessary ability or resources to put them into effect.
5. Where increased use of capital and management resource per unit of labor or land would be profitable. For example, new developments frequently require substantial additional capital investment in more efficient machinery and equipment or supplies to cut production costs.
6. Where standardized and specialized production procedures can be substituted for the arts of production. For example, scientific advances tend to make production more of a science, less an art. Standardization in work routines makes possible specialization of tasks. Much management planning then is amenable to centralization and specialization.

7. Where producing in a specified form and quality and/or on a pre-determined schedule would effect a real saving in production or processing costs. For example, many farm products are currently variable in quality and uncertain in supply. If by applying new technology through prescribed management practices these products can be standardized in form, package, quality, and time and amount of delivery, mass processors and merchandisers (supermarkets) would find such changes advantageous.
8. Where sufficient capital and know-how can be acquired to combine two or more stages of production, retain efficiency in each, and cut costs by eliminating certain market operators in the “production” process. For example, a farmer may produce corn and hogs on the same farm, thereby eliminating the marketing charge of getting the corn from where it is grown to where hogs are finished.

Factors Which Limit the Possibilities for Profits from Vertical Integration

1. Success in many stages of production still depends largely upon the arts and skills of the operator (e.g., raising baby pigs to weaning); hence, possibilities for the integrator to gain through use of scientific management are limited. In other instances, returns to superior management are not great enough to cover added costs.
2. For some large firms, public relations would suffer. Public opinion might demand anti-trust action against them.
3. Given present levels of management, additional capital will not be available for some firms to expand into integrated set-ups.
4. Many non-integrated firms or farms are large enough, well enough financed, and well enough managed to have adopted latest equipment, scale economies, and technology; hence, integration offers no economic gain.
5. Many individuals who might be taken into the integrated firm prefer to operate and manage their own business, even though their net income may be less.
6. Market organization for many products is already well developed and is “carrying signals” fairly efficiently from consumer to producer.
7. Increasing scale may result in diseconomies.

Consequences of Vertical Integration

This list of consequences applies to those segments of the agricultural industry where the advantages of the vertical integration outweigh its disadvantages. As indicated previously, numerous limitations to this method of organizing production may be expected to preclude its wholesale adoption throughout the entire agricultural system. This is not a forecast of how much vertical integration will take place.

EFFECTS OF VERTICAL INTEGRATION ON PRODUCTION AND DISTRIBUTION OF PRODUCTION (including farm supply and marketing service)

1. More rapid adoption of new technology, greater specialization of labor, more capital per man, increasing output per man, etc.
2. Reduction in number of firms with an increase in the size and business power of the remainder.
3. Concentration of management of the several stages of food production and marketing into the hands of fewer and fewer people, which should result in more efficient use of other resources.
4. More rapid shifts in areas of production, resulting in more highly specialized areas of production.
5. More uniform flow of products to market as: (a) fixed costs are invested in production facilities at various stages which must be used year-round to maximize profits and (b) profits and losses are transferred from one stage to the other at various times.
6. More uniform quality of products as a few well-informed managers controlling quality in larger and larger areas of production are substituted for a multitude of less well-informed managers.

EFFECTS ON CONSUMPTION AND THE DISTRIBUTION OF CONSUMPTION

1. Cost of food products to the consumer will be lower as a result of cost reduction achieved by integration.
2. Consumers will receive a more even flow of uniform, quality products.
3. Consumer tastes will be reflected more quickly through the marketing system.

EFFECTS ON THE MARKET SYSTEM

1. Integration well developed in certain areas will tend to reduce facilities that serve independent producers, i.e., producers who choose

to remain independent will have increasing difficulty in obtaining the services of suppliers or market agencies locally at favorable prices.

2. Less of the total supply of farm production will flow through terminal markets, thus more pricing will be done by negotiation.
3. Inefficiency and waste in the marketing system will be reduced.
4. Marketing power will be increased. Even though a firm may increase its market power, freedom of entry for other firms will be retained.
5. Control points in the marketing system will be shifted to fewer key decision makers.

EFFECTS ON INCOME AND DISTRIBUTION OF INCOME

1. For some small producers who have the basic abilities for efficient production, but have been handicapped by lack of financing, etc., integration will offer a way to operate larger, more profitable enterprises. For others, integration will simply speed the day when they will be forced to seek more advantageous employment. Some individuals may look to integration as a chance for survival. However, if they cannot grow in efficiency and business volume, they may sustain a loss in the effort.
2. In some instances, integration will shift the areas in which job opportunities are available.
3. Potential for unionization of agricultural labor will be greater as more of the labor for farm production becomes hired.
4. The income of many farmers and others will fluctuate less annually due to guaranteed fixed payments for services. Many will become employees.
5. Profit margins per unit at all stages of the production and marketing process will tend to be reduced.
6. In the short run, to the extent that integration speeds up the application of new technology in agricultural production, it will increase farm production, reduce prices of farm products, and aggravate the income problem in agriculture. It does not provide for governmental control of agricultural production, hence, is not a public policy solution to the general price and income problem in agriculture.
7. In the longer run, the change in cost structure of agriculture as a whole tends to result in quicker adjustment to changing price conditions.

8. As farm labor becomes more "industrial" in character, a higher percentage of farm producers will come under unemployment compensation laws.
9. Greater income premiums will be paid for special skills.

SOCIAL AND POLITICAL IMPLICATIONS

1. Pressure will increase against the combination of owner-manager-laborer in one man as the typical institutional pattern of farm operation. We have departed from this pattern in the majority of other major business sectors of America. When such changes have occurred, opportunities for profit have increased for owners, for managers, and for workers. Some individuals were injured in the adjustment, but on the whole, society gained.
2. Vertical integration in agriculture will be resisted. Political pressure for maintenance of small family farms will continue, even though modern technology dictates strongly that family farms become larger.
3. Our typical system of fee simple ownership by individual operators will be under increasing pressure. More farms will be under family ownership managed by professional managers. More will be operated on a multiple tract basis. Problems of transfer will increase as the size of unit grows, as financing becomes more difficult.
4. Fewer farmers inevitably means decreased political power for agriculture. Chances are, however, that farmers remaining in agriculture will be better organized. And some political support for farm oriented measures will always come from communities and businesses closely allied with agricultural production.
5. Governmental aid, perhaps through the Extension Service, will become available for producers to organize bargaining units to deal with processors on matters affecting price and production arrangements.
6. The amount of regulation over the entire marketing structure will increase. This growing maze of market regulation will move us further and further away from the traditional concept of the free competitive market.
7. Governmental discrimination will grow against the larger processors and marketing agencies who attempt to initiate integrated arrangements. Larger concerns which attempt integration, especially under direct arrangement with producers, will face continuing harassing action from the Federal Trade Commission, the Department of Justice, and Congress itself.

BIBLIOGRAPHY

Abrahamsen, Martin A., and Engberg, Russell C., "Integrated and Related Operations," Central Carolina Farmers Exchange, General Rpt. 44, U. S. Department of Agriculture, June 1958.

Bailey, John M., and Engberg, Russell C., "A Study in Economic Integration," General Rpt. 45, U. S. Department of Agriculture, June 1958.

"Contract Farming and Vertical Integration in Agriculture," Agr. Information Bul. 198, U. S. Department of Agriculture.

Engelman, Gerald, "Integration in the Livestock Industry," Agricultural Marketing Service, U. S. Department of Agriculture, April 4, 1958.

"The Impact of Integration on Animal Agriculture," Proceedings, Eighth Annual Meeting of the National Institute of Animal Agriculture, Purdue University, April 20-22, 1958.

Kohls, R. L., "Decision-Making in Integrated Production and Marketing Systems," Paper delivered at the American Farm Economic Association meeting, August 1958.

Larson, Nellie G., "Contract Farming and Vertical Integration—A Selected List of References," Library List 64, Agricultural Research Service, U. S. Department of Agriculture, 1958.

Mueller, Willard F., "The Economics of Vertical Integration," Speech given at Thirtieth Annual Meeting of the American Institute of Cooperation.

Report of Subcommittee No. 6 of the Select Committee on Small Business of the House of Representatives, Hearings held in 1957 on Integration in the Broiler Industry.

Saunders, Richard F., "Contract Broiler Growing in Maine," Maine Agr. Expt. Sta. Bul. 571, May 1958.

PART II

*Major Problems and Trends
in Farm Policy*

