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Fruit and vegetable marketing orders in the United States, 1937-1987, a review

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Summary

Marketing orders are legally binding marketing plans which permit fruit and vegetable growers in designated regions to control quantities, and qualities of products marketed and to engage in market support activities such as container standardization, research and advertising. Legislation authorizing such programs was established during the economic depression in the 1930s. Since then, the use of marketing orders has expanded to where about 90 different programs are now authorized under federal and state legislation. The volume-management programs and some aspects of quality controls have been controversial. Evaluation of the actual economic performance of marketing orders has proved difficult because of the complexity of factors involved, the dynamic nature of adjustments and the lack of agreement on economic criteria for judging performance. Some limited conclusions based on general observations and the few available studies are presented. During the past 50 years emphasis has shifted toward relatively greater use of quality controls and market support programs.

1. Introduction

Marketing orders are marketing plans designed by growers and handlers with the goal of achieving improved returns by establishing more orderly marketing conditions. The plans are called marketing "orders" because if a plan is approved by a vote of producers it is made legally binding on all members by an order issued by the Secretary of Agriculture (or Director of Agriculture for a state order).

Federal marketing orders affect more than half of the tree fruits grown in the United States and 15 percent of the vegetables. The farm value of the 33 crops covered was about \$5.6 billion in 1984 (U.S. Comptroller General, 1985). In California, the leading producing area for fruits and vegetables, commodities affected by marketing orders have accounted for more than 70 percent of the farm value of these crops (French, Tamimi and Nuckton, 1978).

In this paper I first describe how and why marketing order legislation developed, the types of programs authorized, and how they are established. I then briefly review the evolution of marketing

orders, the current extent of their use, and the economic controversy that surrounds them. Finally, I shall offer some comments on the past economic impacts and their likely future use.

2. How marketing orders developed

The legislation which authorizes marketing orders developed as a result of adverse conditions which existed in U.S. fruit and vegetable markets during the first quarter of this century. There were periods of gluts and shortages, variable quality controls and cases of unfair and discriminatory trade practices. By the early 1930s, these conditions plus large outputs and a depressed economy created an economic crisis for farmers.

Fruit and vegetable growers reacted initially by forming voluntary associations with the objective of obtaining greater control over their markets. However, they were not effective, in part because of antitrust restrictions, but most importantly because of the free market problem. Farmers outside of the voluntary association could reap the benefits of controls without bearing any of the restrictions.

To cope with this problem, Congress passed several laws which eventually were consolidated in the Agricultural Marketing Agreement Act of 1937. This act exempts certain types of market control programs from the antitrust laws and on their approval, makes compliance mandatory for all producers of the crop in a defined area. In the same year the state of California passed similar legislation and since then several other states have also passed laws of this type. State marketing orders permit some activities or include some commodities (e.g., fruits for processing) that were excluded in federal orders. However, they apply only to products marketed within that state whereas federal orders apply to commodities shipped both interstate and intrastate. The federal act has been amended several times to expand the list of eligible commodities and the activities permitted.

3. Authorized activities

Marketing orders permit three classes of marketing activities: volume management, quality regulations and market support activities. The types of programs permitted within each class are outlined in Table 1.

4. Establishment and administration

To establish a marketing order program, representatives of the industry group concerned submit their proposals to the U.S. Department of Agriculture (or to a state department of agriculture in the case of a state order) and request a public hearing. Following the hearing if the Secretary of Agriculture determines that the proposal meets legislative requirements, a producer referendum is held. Generally if two-thirds of the producers voting approve (either by number or volume of production), the Secretary issues the marketing order which requires the compliance of all members of the industry with the

provisions of the order. Marketing orders usually are for a specific period of years, but may be renewed.

Compliance with marketing order provisions is enforced at the first handler level such as a fruit packing house. Decisions pertaining to the operation of the program are made by a committee of producers and handlers subject to approval by the Secretary of Agriculture (or by the state director for a state order). Committee expenses are financed by assessments on handlers which are passed back to producers.

5. Use of marketing orders

In the first five years following enactment of the Agricultural Marketing Agreement Act 17 federal marketing order programs were established. In addition, another eight to ten were established under California legislation. The use of marketing orders was largely suspended or overridden by other controls during World War II. Following the war, these programs expanded rapidly. There were 29 federal marketing orders in effect by 1950, 36 by 1960 and 46 by 1970 (U.S. Department of Agriculture, 1981). The number of federal orders has since stabilized at about 46-48. The 47 federal programs in effect in 1985 and their authorized provisions are listed in table 2. In addition, about 30 marketing orders were established under California enabling legislation by the 1970s and about 15 more were established under legislation in nine other states (Garoyan and Youde, 1975). About the same number are in effect today.

6. Economic issues

The United States Congress granted farmers the right to engage in monopolistic practices through marketing orders because it felt that uncontrolled competitive markets were not working well. Some price enhancement through such practices was regarded as socially desirable, provided prices were not raised too fast or so as to achieve excess profits. A more orderly market process was viewed as consistent with the long-run public interest even if it required some departure from free market conditions. (For further development of this point see Polopolus et al., 1987.)

Almost from the beginning, marketing orders have been controversial. The early critics focused on issues pertaining to their realized benefits and usefulness to farmers. They noted especially the problem of controlling quantities marketed without production controls, the use of marketing orders to try to solve problems for which they were not suited, the possible adverse effects on handlers of the product and differing impacts on individual farmers (Farrell, 1966). Later, consumer groups became aware of marketing orders and expressed concerns about their effects on prices and food availability. Finally, staff members of federal agencies such as the Federal Trade Commission, the General Accounting Office, and the Office of Management and Budget have expressed concerns about the monopoloid practices permitted under marketing orders and insufficient government oversight in administering the orders.

A major problem in evaluating marketing orders is that there is no general agreement on performance criteria. There have been some attempts to evaluate the social desirability of these programs in terms of their economic efficiency as measured by gains or losses in consumer and producer surplus or consumer utility and producer rent. These studies, which have been mostly theoretical rather than empirical, have shown that who gains and loses in this sense may depend on a wide range of factors such as the source of instability, the shape of supply and demand functions, the effects of control programs on supply response, substitutions in consumption and production, the degree of risk aversion, and the dynamics of economic adjustments. Since many of these factors are either unknown or very difficult to measure, it has not been possible to reach clear welfare conclusions concerning marketing orders based on the economic efficiency literature. For further elaboration see Berck and Perloff (1985), French (1981), U.S. Department of Agriculture (1981), and Kilmer and Armbruster (1987).

In view of the problems with applications of economic efficiency criteria and the concern by some as to their appropriateness in any case, a study team appointed by the U.S. Department of Agriculture has established a set of more pragmatic criteria for evaluating marketing order performance. The study team argued that it is sufficient to show that a marketing order regulation (a) does not permit farmers to earn persistent above normal profits, (b) does not increase price variability and uncertainty, (c) does not impose disproportionate burdens on particular classes of growers or handlers, (d) does not contribute to chronic surpluses, (e) does not result in a waste of resources and (f) does not reduce net revenues to producers. And, of course, there should be convincing evidence or arguments that the marketing plan contributes to the plan's stated objectives. (Polopolus et al., 1987).

Determining whether particular orders have conformed or will conform to these evaluation criteria is difficult and there have been only a few empirical studies of marketing order performance (see French, 1981, for further review). What follows are some summary impressions of the economic effects of the several types of programs based on these few studies and my general observations.

Market allocation programs have been used directly for almonds, walnuts, filberts, dates and raisins (table 2) and indirectly for citrus products. The almond, walnut and raisin allocations have in some years elevated the short-run U.S. price in relation to the export price but they have also provided a means of expanding foreign sales and have provided outlets for excess supplies in large crop years. The net impact is not fully clear but it seems likely that any adverse short-run impacts on consumers may have been outweighed by longer run gains to the industry.

The effects of the citrus allocations, on the other hand, have been to maintain persistent differences in net prices in the fresh and processed product markets, especially for lemons. Consumers of processed lemon products have benefited at the expense of buyers of fresh lemons. A study by Kinney, Green, Carman, and O'Connell (1987) suggests that the public interest would be better served by less restrictive allocations in the fresh market.

Reserve pools have been used for almonds, walnuts, spearmint oil, raisins, dates, prunes, hops, cranberries and tart cherries in years of unusually large crops (see U.S. Department of Agriculture, 1981 for historical allocations). In some cases the reserve quantities were returned to the market in following periods when production was reduced; in others, most of the pool was disposed of in nonfood uses, exported, or in some cases left unharvested.

Consumer groups have been especially vocal concerning what they view as wastage of food. Where diversion to very low use or abandonment of a portion of a crop becomes persistent, as in the California cling peach industry some years ago (see Minami, French and King, 1979) such concerns seem valid. However, supporters of marketing orders argue that in the occasional years when production greatly exceeds planned quantities, they should not be forced to sell the excess on inelastic markets that may yield prices below costs. It is also likely that in such years some abandonment would occur even without controls.

Critics of reserve pools also question why the stabilization goal cannot be achieved by private entrepreneurs who would be motivated to undertake storage operations in anticipation of higher prices later. Marketing order supporters argue this is because private entrepreneurs are risk averse and they fail to store quantities that maximize social welfare. These issues merit further study.

Intraseasonal regulations apply primarily to fresh citrus products and some vegetables (table 2). Supporters argue that without prorate or shipping holidays, markets would be unstable with periods of gluts and depressed prices. Indeed, this may well have been the case many years ago before such controls were established. Opponents argue that conditions are different today and point out that commodities such as apples seem to flow smoothly to markets without any regulations.

Two recent empirical studies provide conflicting evidence concerning the effects of prorate termination. A study of the California-Arizona orange prorate by Power, Zepp, and Hoff (1986) found only minor differences in the stability of shipments and prices in a year when the prorate was suspended compared to similar years when prorates were in effect. But a study of the lemon prorate by Carman and Pick (1987) concluded that "there is substantial evidence

that both sales and prices were more stable during years when the prorate was used than during the 1986 year when prorate was not used" (p. 18).

Producer allotments have been criticized primarily because they may restrict entry of new producers into an industry. This was the case for some years in the U.S. hop industry. The allotment program for hops was terminated recently and the remaining usage of this provision is minor.

Quality control programs may improve the consumer image of a product and potentially may reduce losses in marketing channels. Critics argue that grade and size regulations may also deprive consumers of a full range of choices and that these standards may be used as a means of regulating quantity marketed.

Bockstael (1984) has shown that where quality characteristics are clearly discernible by consumers upon inspection, setting minimum quality standards reduces social welfare. The issue then is whether or not consumers are able to distinguish quality differences at the point of purchase. Jesse (1979) and others have argued that while wholesalers and retailers may purchase on grade specifications these often are not observable in consumer selections. Of course consumers can readily observe size differences so restricting sizes appears socially justified only in so far as it reflects immaturity. But if lower grades and small sizes are priced separately, they may not be shipped even without controls.

The limited evidence on the use of quality controls to regulate quantity suggests that it has not been a significant factor. To illustrate, a study of the quality control program for fresh nectarines showed that marketing order standards were responsible for rejection of only about four percent of the nectarines and the percentage did not vary significantly in relation to the crop size (U.S. Controller General, 1985).

Market support programs appear generally to have provided benefits in excess of costs. Some aspects such as improved information exchange and better industry organization are intangible, but appear significant. There have been some conflicts on the sharing of costs of advertising programs where there is a large cooperative marketing firm that spends substantial funds promoting its own product. There appear to be few, if any, adverse effects on consumers.

7. Future developments

Many of the marketing orders established under California legislation in the 1950s and 1960s emphasized volume management. Commodities affected included apples, asparagus, brussels sprouts, cantaloupes, lettuce, cling peaches, olives, potatoes, grapes and lemons. All of those programs were terminated, mostly because they did not solve the problems perceived to exist or they created new problems that were not foreseen. While volume management programs continue to exist, primarily under the federal act (see Table 2), the total use of marketing orders has shifted to proportionately greater emphasis on quality controls and market support programs.

Criticisms of volume management programs and some aspects of quality control continue. More economic analysis and more careful scrutiny by the Secretary of Agriculture under new guidelines may resolve some of the issues but the pressure on volume control programs is likely to continue. It perhaps would be rash to forecast the elimination of volume management programs but I see little likelihood of any expansion. Meanwhile, quality control and market support programs seem likely to be maintained and possibly even increased. Many of these programs could be established under other legislation even if the federal Agricultural Marketing Agreement Act were to be repealed.

There are very few measures of the dollar value of economic benefits or costs that have resulted from marketing order programs.

It is my opinion that, with perhaps one or two exceptions, if we could measure these values we would discover that they have been relatively small--and certainly small relative to the costs and transfers involved in federal support programs for dairy products, grains and field crops. The fruit and vegetable marketing system remains highly competitive even with marketing order interventions.

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