The Role Of Marketing Orders
In Establishing And Maintaining
Orderly Marketing Conditions

Federal marketing orders are legally binding plans, designed and operated by growers and handlers of specific fruit, vegetable, and specialty crops (such as hops and nuts), and approved by the Secretary of Agriculture. Their primary goal is to establish orderly marketing conditions by alleviating supply/demand imbalances.

GAO reviewed 9 of the 47 federal marketing orders and found that 2 have the potential to restrict new farmers from entering the marketplace and 1 to produce waste (unused production), but that competitive forces appeared sufficient in 8 of the 9 orders GAO looked at to limit price increases. GAO found that the trend in marketing orders has shifted from an emphasis on controlling supplies to a focus on expanding demand.

The U.S. Department of Agriculture has overall responsibility for federal marketing orders. GAO noted that the Department's information on marketing orders was not always made available to interested parties and was not current, and that the Department had not measured the performance of marketing orders in terms of program goals. GAO's recommendations address these two issues.
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To the President of the Senate and the Speaker of the House of Representatives

This report discusses the role of federal marketing orders in creating and maintaining orderly markets for fruits, vegetables, and specialty crops. The report examines the use of quantity and quality control provisions and their impact on controlling supplies, the trend toward greater use of quality control and market support provisions and their impact on increasing demand, and the role of the U.S. Department of Agriculture in administering and reviewing marketing orders.

We made the review to provide the Congress with information on the benefits and shortcomings of this controversial program. We are sending copies of this report to the Secretary of Agriculture and the Director, Office of Management and Budget.

Charles A. Bowsher
Comptroller General
of the United States
DIGEST

Before the 1930's, the free market system was generally unable to solve the problem of alternating cycles of shortages and overages in fruit and vegetable markets. Increased output levels and declining consumer incomes during the Great Depression resulted in further disruptions to these markets, and the Congress responded by offering marketing orders as tools for improving order in the marketplace.

The Agricultural Marketing Agreement Act of 1937, as amended, authorizes the Secretary of Agriculture to establish federal marketing orders for fresh and dried fruit, fresh vegetables, and specialty crops, such as hops and tree nuts. Marketing orders are marketing plans designed by growers and handlers in a particular industry to collectively work out solutions to supply and demand problems that growers and handlers are unable to resolve individually. Once voted in by the industry and approved by the Secretary of Agriculture, marketing orders are issued as federal regulations and have the force and effect of law. In contrast to federal farm programs for such crops as wheat, corn, and cotton, marketing orders for fruits, vegetables, and specialty crops involve no federal subsidy costs and minimal federal oversight costs.

Over half the fruits and tree nuts produced in the United States and about 15 percent of the vegetables are covered by 47 federal marketing orders. The farm value of the 33 commodities covered by the 47 orders was about $5.6 billion in 1984. State marketing arrangements are authorized to cover virtually all of the remaining U.S.-produced fruit, vegetable, and specialty crops.

GAO reviewed 9 marketing orders covering 11 commodities. The orders used a cross section of all the marketing order tools that are used to influence the supply of or demand for a specific commodity. The commodities included celery, lemons, peaches, pears, plums,
nectarines, almonds, hops, spearmint oil, tart cherries, and walnuts. In particular, GAO addressed the

--controversies surrounding the program and the effect of each individual type of marketing order tool on commodity supplies,

--emerging trends in the use of marketing orders, and

--administration of the program.

MARKETING ORDER CONTROVERSY

The supply controls authorized in the 1930's allow growers of authorized crops to regulate the flow and total supply of products reaching the marketplace. These controls have always been controversial. Critics often oppose them on the grounds that economic efficiency is enhanced when commodity prices and the total supply of products reaching the marketplace are determined in competitive markets. They assert that consumer interests are undermined by policies that artificially and excessively raise food prices higher than free market conditions would allow. Proponents usually defend the use of supply controls as an efficient, limited-government method of reducing supply/demand imbalances for perishable commodities in markets that are typically volatile if allowed to operate under unregulated market conditions. Also, most marketing orders today reflect legislative changes since the 1940's that incorporate market-oriented goals beyond those of the early farm stabilization programs.

GAO examined the program from several standpoints to put the marketing order controversy in perspective. In summary:

--Two of the marketing orders GAO examined, hops and spearmint oil--restrict new growers from entering the marketplace, and one--lemons--typically results in waste. (See pp. 12-17.)

--Marketing orders for 10 of 11 commodities GAO examined determined when or whether supplies were put on the market. Such actions are restrictive, but as discussed below, can benefit both producers and consumers.
--For example, reserve pools are used to transfer excess supply from a good production year to a later poor production year. Consumers could benefit if a more consistent supply of the commodity was made available during both good and poor production periods. (See pp. 17-22.)

--Controls governing grade, size, and maturity of commodities can encourage farmers to improve their products and help assure consumers that products meet minimum standards. GAO did not find evidence of grade, size, and maturity standards being used to control supplies in an attempt to influence price. (See pp. 23-29.)

--For 10 of the 11 marketing order commodities GAO examined, competitive forces appear sufficient to limit price increases. (See pp. 32-34.)

MARKETING ORDER TREND

Like marketing orders of the 1930's, today's marketing orders allow growers and handlers to work together to solve marketing problems. However, the trend in marketing order operations today is toward greater emphasis on enhancing demand as opposed to controlling supplies. This trend reflects legislative modifications since the 1940's.

Marketing orders for 8 of the 11 commodities GAO examined used a mix of research, development, promotion, and advertising tools. When used in conjunction with quality standards that keep only unsalable products off the market, such tools can work in the interests of both the industries and consumers. Long-term demand can be created by discovering the attributes consumers desire most and developing improved products that match those desires.

For some commodities, such as California almonds and California tree fruits (peaches, pears, plums, and nectarines), consumer acceptance has been substantially increased, and industry growth has been stimulated by using effective mixes of marketing order tools. For other commodities, such as tart cherries and Florida avocados, the industries are in the early stages of shifting to programs focused on
increasing demand for their products. This trend is in line with the Secretary of Agriculture's October 1983 comments on agricultural policy at the 1984 Agricultural Outlook Conference on the need for market-oriented, long-range planning to assist producers in establishing new markets. (See pp. 36-48.)

PROGRAM ADMINISTRATION

The U.S. Department of Agriculture's (USDA's) Agricultural Marketing Service administers the marketing order program. Since the early 1960's USDA has provided guidance when asked by commodity groups and monitored marketing order committee operations. (See pp. 49-50.) GAO found that:

--USDA's Agricultural Marketing Service plays a limited role in informing the industry and public of the pros and cons of marketing orders. Communications of accurate program information would be improved if USDA were to take a more active role in industry education meetings. (See pp. 50-54.)

--USDA's program operations manual is a potentially useful tool for conveying information about changing policies and conditions to anyone interested in marketing orders. However, the manual does not include legislative changes, administrative policies, or guidelines implemented since its 1966 publication date. The manual also does not address many of the market-oriented issues such as demand-enhancement research and charitable causes that surfaced in the past two decades. (See pp. 54-55.)

--USDA has no criteria to measure marketing order performance. A system is needed to evaluate whether marketing orders meet the purposes of the act, to approve changes to existing marketing orders, or to justify changes in marketing order policies. Such measurements also would be useful in clarifying the impact of marketing orders so that all parties involved could more appropriately judge the merits and shortcomings of marketing orders. GAO suggests some criteria for USDA to consider in developing measures of marketing order performance. (See pp. 55-60.)
RECOMMENDATIONS

GAO recommends that the Secretary of Agriculture require the Administrator, Agricultural Marketing Service, to update the operations manual for marketing orders, to develop and apply criteria for measuring the performance of individual marketing orders, and to make the results available to USDA decision makers and other interested parties. (See pp. 60-61.)

AGENCY COMMENTS AND GAO'S EVALUATION

USDA stated that it supports the marketing order concept as long as the programs are consistent with statutory requirements and USDA guidelines. USDA added that the administration's position on marketing orders and farm programs in general is transcended by the belief in reduced government interference in Americans' businesses and lives; therefore, it does not plan to encourage the development of new programs. USDA also stated that it agreed with GAO's recommendations to update USDA's 1966 operations manual and to develop criteria for determining marketing order success and failure, although it noted the difficulty in developing such criteria. (See pp. 35, 48, and 61.)

Developing and applying such criteria should (1) improve the management of a program established to encourage the private sector to make business/marketing decisions at minimum government expense and involvement and (2) help provide supporters and critics of the program with better information, including whether individual marketing orders are meeting the stated objective of the legislation—developing and maintaining orderly markets.

USDA also provided a list of suggested changes to the report. GAO changed the final report, as it considered appropriate, to reflect these USDA comments. The complete text of USDA's comments appears as appendix VI.
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CHAPTER 1
INTRODUCTION

During the latter part of the 19th century and continuing through 1919, U.S. agriculture enjoyed a relatively uninterrupted period of rising prices made possible by increasing consumer incomes, growing population, and an improved transportation and distribution system. But even during these relatively prosperous economic times, the fruit and vegetable industries experienced a variety of problems marketing their products.

--The perishability of agricultural products and intense competition led to periods of shortages and high prices followed by periods of glut with low prices and waste.

--The distribution system was unable to adapt itself efficiently to the boom and bust cycle.

--Product perishability gave handlers, wholesalers, and retailers opportunities to engage in unfair and discriminatory trade practices.

--Buyers (handlers, wholesalers, retailers, and consumers) were not confident as to the value or quality of the perishable products offered from distant sources.

A sudden decline in farm prices between 1920 and 1922 compounded the boom and bust problems of the fruit and vegetable industries. Further economic stress emerged for growers as the relatively large plantings of trees and vines induced by the high prices during the preceding decade came into production. By the Great Depression, increased output levels and declining consumer incomes had caused an economic crisis in agriculture.

Since the unrestricted free market system and initial attempts by voluntary cooperative marketing associations did not adequately reduce the boom and bust cycles confronting growers, the Congress legislated farm programs, including marketing orders for many fruit and vegetable industries, to help stabilize agricultural markets and improve grower returns. In some farm programs the government guarantees minimum prices for certain commodities or pays farmers to remove cropland from production. Wheat, corn, cotton, grain sorghum, dairy, and tobacco operate under such price- and income-support and supply control arrangements and have been criticized for their cost to the government and their "interference" with the free market process. Like price- and income-support programs, federal marketing orders have come under criticism for their impact on free market competition and their potential to restrict supplies and thus raise consumer prices. In contrast to price- and income-support programs, federal fruit and vegetable marketing order programs involve no federal subsidy payments and limited federal program administrative costs; marketing
order operating costs are financed by industry assessments on the agricultural commodities being shipped.

WHAT IS A MARKETING ORDER?

A marketing order is a marketing plan that the growers and handlers of a particular agricultural industry design and operate to work out solutions to general industry problems regarding supply and demand. Once voted in by the industry and approved by the Secretary of Agriculture, marketing orders are issued as federal regulations and have the force and effect of law. The desired effect of marketing orders is to provide an "orderly market" that would

--reduce fluctuations in farm and retail prices and

--assure consumers a steady supply of quality products that meet consumer needs.

More than half of the U.S.-produced fruits and specialty crops (e.g., hops and tree nuts) and about 15 percent of the vegetables are covered under federal marketing orders. The estimated value to the farmer of the 33 commodities marketed under the 47 federal orders was about $5.6 billion in 1984. Not only does federal law authorize marketing orders, but state governments authorize a variety of similar marketing arrangements for other fruit, vegetable, and specialty crops. The combination of the federal and state marketing arrangements affects virtually all of the fruit, vegetable, and specialty crops sold in the United States.

HOW MARKETING ORDERS EVOLVED

Depressed farm conditions contributed to a rapid growth in the number of voluntary cooperative marketing associations--nearly 700 were formed in the United States between 1910 and the early 1920's. The cooperatives attempted to control production levels by limiting the quantity of a commodity that could be brought to market during a weekly time period. However, many of the cooperative ventures failed in this effort, because very few cooperatives were in a position to smooth out the boom and bust cycle by themselves, and attempts to do so by even the strongest cooperatives proved insufficient to solve the marketing problems. For example, as early as 1924 the Southern California Fruit Exchange undertook a program to allocate its members' lemon supplies between the fresh market and the less profitable processed market. In 1924 a large quantity of lemons was produced in relation to demand. Despite the Exchange's dominant position in the lemon industry, the market remained unstable because not enough growers and handlers participated in the cooperative's quantity control program. Nonparticipants, or "free riders," were able to produce as much as they wanted, ship whenever they wanted, and ship commodities that were immature or damaged or that generally did not have the same quality as the commodities the cooperative participants sent to market.
The failure of the voluntary efforts contributed to the development of marketing orders.

Congressional interest in the marketing order concept dates back to the 1920's, when the government's general posture on agricultural issues began to change from a largely passive role to one of more direct involvement. The basic marketing order principle of promoting orderly marketing to stabilize markets against boom and bust conditions was developed into proposals vetoed by President Coolidge in 1926 and 1928, then carried forward in government-sponsored voluntary marketing programs between 1929 and 1932, and incorporated into enabling legislation in 1933—the Agricultural Adjustment Act (Public Law 73-10). The Agricultural Marketing Agreement Act of 1937, as amended (AMAA) (7 U.S.C. 601 (19821)), which reenacted and amended the Agricultural Adjustment Act, serves as the enabling authority for marketing orders today.

The general policy enunciated by the Congress in the AMAA indicated that the Congress believed the public interest was not being met by an unrestricted free market system that was not adequately solving the problems confronting growers during the Great Depression. The act authorizes the Secretary of Agriculture to establish federal marketing orders as a means for improving the orderly marketing of domestically produced commodities, including fresh vegetables, fresh and dried fruit, and specialty crops. Originally, in 1937, the principal objectives of the act were to

--enable farmers to obtain parity prices\(^1\) for their commodities;

--protect consumers by prohibiting any marketing actions that would maintain prices to farmers above the parity level;

--establish and maintain orderly marketing conditions in the interests of both growers and consumers; and

--establish and maintain orderly marketing conditions to provide for a more orderly flow of a commodity, thus creating greater stability in supplies and prices.

The parity objectives of the act have been diluted through legislative modifications. Amendments since 1947 have allowed marketing orders to continue in most above-parity situations to avoid disruption of orderly marketing. Orderly marketing has become the act's primary objective.

\(^1\)Parity price is the price that gives the commodity equivalent purchasing power to the base price during the prosperous farm years of 1910 to 1914.
Amendments to the AMAA have included orderly marketing goals beyond those of the early stabilization programs. Programs that use research to develop products more acceptable to the consumer or that stimulate demand through promotion and advertising have been added to the AMAA as tools to be used in improving order in the marketplace.

Four separate proposals to include all agricultural commodities under the act have been defeated in the Congress. The most recent and broadest reaching of the four proposals was by the Kennedy Administration in 1961. In addition to making all agricultural commodities eligible for marketing orders, it would have authorized the Secretary to grant national marketing orders, subject to presidential approval and congressional review. Administration officials stated at the time that they hoped marketing orders would be used some day to control production and prices of major crops at minimum cost to the taxpayer. Marketing orders provide for private farm interests to make marketing decisions without government financial subsidy, as contrasted with government decisions on loan rates, target prices, and deficiency payments for price- and income-support programs. According to the 1966 National Commission on Food Marketing,2 "the proposed amendment involved a substantial departure from long standing administrative procedures and was rejected perhaps for that reason more than its lack of economic feasibility."

**HOW MARKETING ORDERS WORK**

Marketing orders involve various quantity, quality, and market support tools with the goal of using the mix of tools that can best lead to orderly marketing through influencing supply and/or demand. Quantity controls affect a product's availability and price. For example, one type of quantity control--prorates--specifies the maximum quantity that may be shipped during a stated period of time, usually 1 week. Reserve pools--another type of quantity control--reduce the supply available for sale in a primary (i.e., fresh) market by placing a portion of the crop aside to be sold when demand improves in the current or a subsequent season. Quality controls increase consumer demand by specifying product grade, size, and maturity to make the products more attractive to consumers by providing consistently predictable quality. Market support tools--such as research and development, promotion, and advertising--attempt to influence demand through improving both buyers' and sellers' knowledge of the products' availability and uses.

The quantity, quality, and market support tools authorized under federal marketing orders are discussed in chapters 2 and 3. Appendix I identifies the tools that were authorized for each of the 47 orders that existed as of January 31, 1985.

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2Joint task force appointed by the President, Speaker of the House, and President of the Senate.
The legislation requires marketing orders to be limited to the smallest production area that the Secretary finds practicable and lists commodities for which marketing orders may be issued. (See app. II.) The list of eligible commodities has changed somewhat over the years. For example, soybeans were removed from the list in 1961, and eggs were added in 1983. The Congress has changed a commodity's status when the industry presented enough evidence to support the change.

The Secretary of Agriculture issues a marketing order after a public hearing where producers, handlers, and consumers voice their views and after approval by two-thirds (three-fourths in the case of California citrus) of the producers (either by number or by the volume of production) voting in a referendum. Proposed program changes must go through similar procedures. By law, a U.S. Department of Agriculture (USDA) decision to issue an order must be supported by evidence in the official hearing record.

Generally, the procedures follow this pattern:

--Representatives of producers, handlers, or consumers submit proposals and request a public hearing. Proposals may include quantity, quality, and/or market support tools.

--USDA analyzes the proposal and may invite anyone else interested to submit proposals.

--Notice is given of a public hearing.

--A public hearing is held, and a formal record is developed from testimony given at the hearing.

--The public is given time to submit written proposed findings and conclusions.

--A recommended decision is published in the Federal Register by USDA.

--The public is given time to comment on the recommended decision.

--A final decision is issued.

--A producer referendum is held to vote on the proposal.

--USDA issues the final marketing order.

When the Secretary gives final approval of a marketing order, it is issued as a federal regulation and has the force and effect of law. The Fruit and Vegetable Division of USDA's Agricultural Marketing Service (AMS) administers fruit, vegetable, and specialty crop marketing orders. Federal program administration costs in fiscal year 1985 are estimated by USDA to be about
$2.5 million. The Fruit and Vegetable Division consisted of 60 headquarters staff members and 20 staff members in six field offices as of January 1985.

Each order is operated by an administrative committee whose composition and functions are specified in the order. Each committee consists essentially of growers, or growers and handlers, of the regulated commodity. Committee members are nominated by the industry and are subject to approval by the Secretary. Some committees also have a public member to represent the consumer viewpoint. Public members are nominated by other committee members and approved by the Secretary. Each committee is given the authority through the Secretary to implement the order's provisions and recommend amendments to the Secretary. The committee must investigate and report violations to the Secretary and may employ the staff necessary to operate its marketing order.

Committee expenses are financed by assessments on handlers. The assessment is usually in terms of cents per box, bag, or ton. The Secretary of Agriculture approves the rate of assessment based on a budget recommended by the administrative committee.

MARKETING ORDER CONTROVERSY

Marketing orders have been controversial since their introduction. The underlying issue has concerned the degree of control and influence that growers obtain under marketing orders and the degree to which that control and influence could affect the amount of the commodity placed on the market and commodity prices.

Public concerns about marketing orders increased in the early 1970's after the oil embargo and the Russian grain deal made the public more aware of the impact of shortages on commodity prices. Such external factors, along with escalating food prices and news accounts of commodities going unharvested, being plowed back into the ground, or fed to animals brought about more interest in marketing orders.

Supporters claim that only a few of the 47 marketing orders use quantity controls that affect consumers and that these orders comprise such a small portion of farm production that food prices cannot be significantly affected. Supporters believe marketing orders are effective mechanisms for transforming industries that have traditionally focused on supply management to industries that focus on enhancing consumer demand. (See app. III, nos. 10, 12, 15, 20, 24, and 42.)

Critics of marketing orders cite specific economic analyses that conclude that marketing orders grant monopoly-type powers, raise prices above what would occur in a free market environment, lead to chronic overproduction and product waste by keeping inefficient growers in the marketplace, benefit less efficient firms, restrict new growers, or are administered with too little
consumer input. (See app. III, nos. 4, 7, 9, 11, 28, 34, 36, 37, and 46.)

Questions regarding monopoly potential have been addressed by the U.S. Supreme Court, which in 1939 held that marketing orders do not violate antitrust laws, provided that they are consistent with the provisions of the Agricultural Marketing Agreement Act of 1937.3 The Justice Department has not challenged any fruit, vegetable, or specialty crop marketing orders as violating antitrust laws, although its attorneys have recommended that the Secretary of Agriculture phase out the prorate quantity control tool in marketing orders where the attorneys believe its use is anticompetitive and contrary to the long-term interests of growers and consumers. (See app. III, no. 7.)

Due to their controversial nature, marketing orders have been extensively reviewed. Appendix III contains synopses of prior federal and other studies, including our reports entitled:

--Administration of Marketing Orders for Fresh Fruits and Vegetables (RED-75-273, Dec. 11, 1974).

--Marketing Order Program--An Assessment of Its Effects on Selected Commodities (ID-76-26, Apr. 23, 1976).


The most recent extensive federal study of marketing orders was done at the request of the President's Task Force on Regulatory Relief and was completed in November 1981. The report focused on marketing orders' effects on economic efficiency, costs, and production. Like the reports of two previous presidential commissions, the report cited benefits and shortcomings under marketing orders and suggested some changes in their operations (discussed on p. 56). As a result of the report, the Secretary announced guidelines in 1982 and 1983 to encourage those changes in marketing orders. (See app. V.)

Despite the new guidelines, marketing orders have continued to be controversial. One source of controversy stems from the review authority of the Office of Management and Budget (OMB) under Executive Order 12291, issued February 17, 1981. The Secretary of Agriculture is responsible for making the final decisions on actions relating to marketing orders. However, Executive Order 12291 requires the Secretary, in making any decisions that necessitate regulatory action, to consider factors such as the costs and benefits of the regulations to society and to submit the

proposed action to OMB for review before the Secretary makes a final decision. The Congress, dissatisfied with OMB's review authority under the executive order, prohibited OMB from using 1984 funds to review agricultural marketing orders or any activities or regulations under the AMAA. The prohibition was continued in fiscal year 1985.

OBJECTIVES, SCOPE, AND METHODOLOGY

The overall objectives of this review were to (1) assess the benefits and shortcomings of federal marketing orders and (2) examine whether the three types of marketing tools (quantity, quality, and market support) fulfill the congressional goal of creating and maintaining orderly market conditions. Specifically, we examined

--the use of quantity and quality control tools and their impact on controlling supplies (ch. 2),

--the trend towards greater use of quality control and market support tools and their impact on increasing demand (ch. 3), and

--the role of USDA in administering and reviewing marketing orders (ch. 4).

Because marketing orders have been considered as a private, low-federal-cost marketing alternative to high-cost price- and income-support programs for major U.S. crops (e.g., wheat, corn, and cotton), our goal was to obtain a better understanding of federal marketing orders by going beyond the economic studies of marketing orders conducted over the years. Most of the existing analyses focus on the issue of whether marketing orders have the potential to restrict the supply of commodities controlled by the orders. Although an important economic issue, the supply restriction issue only directly applies to the marketing orders that use quantity controls or use quality controls in a way that restricts supplies. We examined whether all the marketing tools available to marketing order committees (quantity, quality, and market support tools) fulfill the congressional goal of creating and maintaining orderly market conditions.

We reviewed numerous marketing order studies by government, industry, academic, consumer, and special interest sources that addressed marketing order controversies. (See app. III for a list of studies we reviewed.) We held discussions with and obtained documentation from (1) representatives from federal marketing order committees, (2) growers, handlers, and other industry representatives, (3) consumers, (4) academic researchers, (5) California and Florida state officials, and (6) several agencies within USDA, including the Agricultural Marketing Service, Economic Research Service, Extension Service, and Office of General Counsel. Discussions with USDA officials were held primarily at USDA.
headquarters in Washington, D.C., and field offices in Sacramento and Los Angeles, California; Portland, Oregon; and Lakeland, Florida. We selected these field offices because they are responsible for monitoring the commodities chosen for detailed review. We also interviewed OMB personnel and obtained reports and public hearing testimony prepared by the Department of Justice and the Federal Trade Commission to obtain their respective positions on controversial marketing order issues. Pricing, production, and cost data were obtained from marketing order committee files, USDA Agricultural Statistics Yearbooks and Crop and Livestock Reports, the Federal-State Market News, and the Commerce and Labor Departments.

We obtained quantitative information on the tools authorized and used by all 47 fruit, vegetable, and specialty crop marketing orders. We did not examine milk or tobacco marketing programs because they contain price-support clauses and other characteristics unique to those programs that we have evaluated in past and ongoing reviews.

We obtained detailed information on 9 of the 47 fruit, vegetable, and specialty crop marketing orders covering 11 commodities to determine what marketing order tools these commodities used and the results of their using these tools. These nine marketing orders gave us (1) a cross section of crops, ranging from those that last only a short period after picking (perishable) to those that can be stored for several years, (2) coverage of the quantity, quality, and market support tools available, and (3) coverage of the different types of commodities listed in the act (i.e., citrus fruit, tree fruit, fresh vegetables, nuts, and hops). The 11 commodities include celery, lemons, peaches, pears, plums, nectarines, almonds, hops, spearmint oil, tart cherries, and walnuts and had an estimated value to the farmer of $1.24 billion in 1984. We had federal/state inspectors examine rejected nectarines at five packinghouses to determine if salable fruit was being rejected by marketing order grade, size, and maturity standards or other standards. Our results only apply to nectarine rejection rates at the five packinghouses during the portion of the season the test was given.

We examined the trends from the 1930's to the 1980's in the use of the different marketing tools. We compared marketing order committee expenditures in 1971 and 1981 for the 11 commodities listed above plus Florida avocados to determine how much the committees were spending for market support tools (research, development, promotion, and advertising), to show how these cost-intensive expenditures compared with total marketing order expenditures. We prepared case studies showing how marketing order committees responsible for eight commodities (peaches, pears, plums, nectarines, almonds, tart cherries, lemons, and avocados) proposed to use or made increased use of market support tools. We chose these eight because they reflect the types of marketing order activities in this area and represent a cross section of
approaches that meet with varying degrees of success. We examined avocados because USDA marketing specialists told us the Florida avocado industry was debating a move away from the general trend of increased use of market support tools.

For most of our analyses we used data for the period 1971 to 1981. We selected this period for comparison purposes because data were most consistently available for all the commodities we examined. Data for 1982 and 1983 and for pre-1971 periods were included when available.

To assess the adequacy of USDA's marketing order activities, we concentrated on (1) communications between USDA and the parties affected by marketing orders and (2) the extent to which USDA has clarified marketing order goals and measured whether the goals are being met. We reviewed official hearing records on lemon and pecan proposals, which were involved in the procedural process during our review, as well as California apricots, which were considered in the early 1960's. We also reviewed USDA's marketing order operations manual, public information material, and decision papers prepared on individual marketing order proposals between January 1982 and October 1983.

We made our review between May 1983 and June 1984, in accordance with generally accepted government auditing standards.
CHAPTER 2

MARKETING ORDER QUANTITY AND QUALITY

CONTROLS: THEIR IMPACT ON SUPPLIES

A major controversy surrounding marketing orders relates to the fact that the quantity and quality controls affect when or whether supplies are placed on the market. Critics generally believe that growers use some marketing order tools to restrict supplies by limiting the entry of new growers or by controlling commodities entering the marketplace and that such activities can raise consumer prices or result in product waste. To determine the appropriateness of these concerns to the marketing order commodities we examined, we analyzed each of the five quantity and three quality controls used and determined their impact on supplies. We found that the impact of a particular marketing order on commodity supplies, and therefore indirectly on prices as well, depends on (1) the specific types and combinations of controls used, (2) the amount of the market covered by the marketing order, and (3) the presence of competition from substitute products or from other U.S. or foreign growers of the same commodity who do not participate in the marketing order.

Some marketing order quantity controls can affect supplies by limiting the number of new growers or the disposition of surplus production. Of the 9 marketing orders for the 11 commodities we examined, only the hop order keeps new growers from entering the market, while the spearmint oil order limits the entry of new growers. Only the marketing order for lemons typically resulted in supply restrictions that led to significant unused production. For the other 10 commodities, competition from additional quantities of the same commodity not under marketing orders or from substitute products appears to be sufficient to limit the effects of any supply restrictions.

Quantity and quality controls can affect supplies by diverting some products from the market. Ten of the 11 commodities examined do divert supplies, but such diversions can benefit both producers and consumers. For example, both might benefit from reserve pools, a quantity control that can help even out the market within or between growing seasons or be used to develop new markets. Quality controls governing grade, size, and maturity can encourage growers to improve their products and help assure consumers that products meet minimum standards.

The remainder of this chapter examines the impact on supplies of each type of quantity control and of each type of quality control, and then offers some general conclusions on the behavior of these controls in relation to supplies, prices, and competition.
MARKETING ORDER QUANTITY CONTROLS

Marketing orders use five types of quantity controls to determine the number of producers, the amount of a commodity that can be marketed, and the timing of marketing. The types of quantity controls include allotments, prorates, reserve pools, market allocation reserves, and shipping holidays. Quantity controls are authorized for 25 of the 47 federal marketing orders, but not all controls authorized for a given commodity are used. For example, quantity controls are authorized for 7 of the 11 commodities we examined, but only 4 of these commodities used quantity controls in crop year 1983. We examined each of the five quantity controls individually in order to understand better its potential impact on supplies and prices of specific commodities and the relative importance of competition for each commodity.

Allotments

Allotments, the first type of quantity control, determine the number of producers of a given commodity and the amount of that commodity that can be marketed. Producer allotments provide the strongest regulatory controls because they restrict total sales. After analyzing the expected demand for its product, the marketing order committee restricts sales to a percentage of a grower's historical production. Potentially, allotments are the most effective way available to producers to curtail supplies and raise prices. As of February 1985, however, only 2 of the 47 marketing orders--hops and spearmint oil--were using allotment programs that barred or limited new producers from entering the market. An allotment program for Florida celery is authorized, but the allotment is so large that it has not been filled by current producers. In effect, the celery marketing order has not barred any new producers from entry, and all requests for new allotments have been accepted. A cranberry allotment program is also authorized but has never been instituted.

None of the allotment programs specifies how much of the commodity can be produced. The committees control the amount that can be sold and require that all production exceeding the allotted amount be placed in a reserve pool. Producers are paid for commodities in the pool when they are sold. This gives both the producers and the committees additional flexibility in meeting demand and adjusting to changes in growing conditions.

The allotment control has been criticized because of its ability to bar the entry of new producers and because of its potential direct impact on supplies and indirect impact on prices. The following two examples detail how the two operating allotment programs, hops and spearmint oil, affect the entry of new producers, available supplies, and prices.
The hop marketing order
allotment program

The hop marketing order does not allow for the entry of new growers. The hop marketing order committee considered a limited entry provision in 1982 but dropped the proposal when the industry reduced the salable quantity in 1984 due to a glutted world market. However, the limited entry provision was considered again in May 1985, adopted by the hop marketing order committee, and forwarded to the Secretary for consideration.

Questions regarding the hop allotment's impact on supplies and prices must consider the unique nature of the hop industry. Hops are a flavoring ingredient used in producing beer; they have no significant alternative uses. Flavor varies by variety and such climate characteristics as soil type and humidity level. In addition, about 90 percent of the hops are sold to breweries under 3-to-5-year contracts because brewers want continued supplies of particular hop varieties to assure consistent flavor. Hop growers gain because locking in customers and prices reduces their operating risks.

Price competition is somewhat limited by the long-term contracts and brewers' preferences for particular varieties of hops. However, there are no curbs on the import and export of hops, and some brewers have changed varieties based on supply and price considerations. The largest shift occurred during the 1979-80 season when the European hop crop failed. With an international shortfall of hops, prices rose from about $1.50 to $5.25 per pound. According to USDA's headquarters marketing specialist responsible for hops, some breweries, both in the United States and overseas, which normally purchase only German hops because of their unique flavor, switched to U.S.-produced hops after U.S. producers expanded production during the season. He said that many U.S. growers locked in 3-to-5-year contracts with breweries at $2 per pound or more before the European crop recovered causing a global oversupply situation that depressed prices (as low as 20 cents per pound on the spot markets in 1982).

According to USDA's marketing specialist, the fact that hop prices rose sharply when U.S. production increased and crashed when production was cut back shows that world market forces, rather than the marketing order allotment program, affect hop prices. Since the hop marketing order began in 1966, the hop committee has annually authorized the sale of more hops than estimated demand. Although the hop committee can withhold supplies to below demand levels, the competition provided by imports makes such activities impractical. No curbs exist on the import or export of hops, and many brewers are willing to use domestic or foreign-produced hops interchangeably. If the hop committee attempted to control supplies by limiting the amount marketed, foreign suppliers would offer hops to the U.S. growers' customers and potentially gain control of a larger share of the market. A short-run price rise for all suppliers would likely result, but
sales by U.S. hop growers and their market share would decrease, just as foreign growers' sales and market shares decreased in the early 1980's. As a result, the U.S. hop committee always tries to control the volume in the market to slightly more than is expected to be purchased by brewers so the U.S. growers will not lose market share. Other hop-producing countries seem to be following the same strategy.

The spearmint oil marketing order allotment program

The spearmint oil marketing order also restricts the entry of new growers. However, unlike the hop order, the spearmint order does allow for some entry of new growers each year. An amount equal to one-half of 1 percent of the total amount of oil allowed on the market (the allotment base) is made available each year to new growers.

The spearmint oil marketing order has been in operation since 1980. During the order's first four seasons, 32 additional growers entered the industry, taking all of the available additional base. The additional base was distributed through a lottery system, with at least 100 parties signing up for the lottery each year. Since only eight additional growers were chosen each year, entry is still restricted. However, 20 percent of the U.S. production of spearmint oil is not covered by the marketing order, and growers are free to enter the market outside the order's jurisdiction. If prices were substantially increased, new growers would enter the market outside the order. However, neither USDA nor the spearmint oil marketing order committee is aware that this is occurring.

The spearmint oil marketing order has affected supply. When the program started, a large supply of spearmint oil was in storage, and grower prices were low. Supplies have been slowly reduced by decreasing the volume of production authorized to be sold under the marketing order. Also, since 1980 varying amounts of production (e.g., 4 percent in 1982) have been placed in reserve when the industry produced more oil than could be sold. Spearmint oil, which can be stored for many years, is primarily used as a flavoring agent in chewing gum.

Prorates

The second type of quantity control, prorate, is the most controversial type due to allegations of waste and inefficiency. Prorates limit the quantity of fresh produce a handler may ship during a period of time, usually 1 week. Prorates have been used mainly in the citrus industry where fruit may be stored on the tree for a period up to 4 months without significant quality loss. Prior to each crop year, the marketing order committees adopt a marketing policy and a projected shipping schedule that reflect anticipated supply and demand factors. Each week during the season, the committees may recommend a maximum quantity of fruit.
that may be shipped by handlers, usually for the following week. Decisions are based on analyses of market conditions with a major factor being the volume of unsold commodities in the marketplace. The volume to be shipped is subsequently apportioned to handlers (i.e., prorated) on the basis of each handler's share of the total volume available for marketing.

Nine marketing orders are authorized to use prorate, but only three—California-Arizona navel oranges, valencia oranges, and lemons—have regulated weekly shipments over an entire season during the past few years. Other marketing orders, such as Florida limes and Florida interior grapefruit, have used their prorate authority at times during the past decade, but only for limited periods of time within a season. Of the 11 marketing order commodities we examined, only the California-Arizona lemons used weekly prorate authority during 1983.¹ Prorate authority is authorized for Florida celery but has never been used.

Opinion on the impact of prorates is divided. Opponents of prorates have said that full-season prorates create artificially high prices in the primary (fresh) market and artificially low prices in secondary (processed) markets by diverting greater supplies into the processed markets. In contrast, supporters of prorates state that the tool has succeeded in reducing price volatility in the domestic market. According to supporters of prorates, part of the problem stemming from excess production stems not from prorates, but can be blamed on large orchard plantings for tax shelter and land speculation purposes. Although tax shelter provisions may have been intended to benefit the growers, they attracted numerous investors who, while speculating on increased land values, developed orchards in order to take tax write-offs of the costs against nonfarm income. According to industry representatives, these investors did not usually become operators but sold the orchards when they became ready for commercial production. The effect on the citrus industry has been long-term oversupply and low grower prices. The Tax Reform Act of 1976 (section 464 of Public Law 94-455) required capitalization of orchard development costs, stopping the practice of immediate write-offs of development expenses against other ordinary income.

The discussion below provides more detail on the impact of lemon prorates.

**The lemon prorate**

Demand for fresh lemons peaks during the lemonade and iced tea months of summer, while lemon production peaks during the

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¹ For a discussion of the use of prorates by the navel orange marketing order, see our July 1981 report entitled *Analysis of Certain Aspects of the California-Arizona Navel Orange Marketing Order* (CED-81-129).
winter. However, fresh lemons can be stored on the trees only up to 4 months. This short storage period coinciding with low demand can result in excess supplies that bring low prices.

The prorate is designed to deal with this situation. The California/Arizona lemon marketing order is divided into three production districts—northern central California, southern central California, and southern California/northern Arizona. The lemon marketing order committee uses weekly prorates to control the maximum quantity of lemons available from the three districts on the domestic fresh market (primary market) to avoid low prices. The residual lemon crop goes to the less profitable lemon juice market, is sold abroad, or is left unharvested on the trees.

The lemon prorate is not used to bring overall production in line with demand. The lemon industry regularly produces substantially more lemons than can be sold fresh to consumers. The excess ranged from 37 to 65 percent of the total annual lemon production between 1971 and 1981. In 1982, a typical production year for lemons, about 45 percent of the crop was sold on the fresh market, about 16 percent was left unharvested on the trees, and 39 percent was sold abroad or was processed into lemon juice.

Research on the lemon prorate's market effect is limited, and the results are mixed. A 1981 USDA task force (app. III, no. 1) noted that the order resulted in excess resources being devoted to lemon production but added that to a limited extent, the order served to smooth out product flow over a season. A 1975 interagency task force report (app. III, no. 9) found "price enhancing implications" for lemons, but no specific evidence for this position was provided. A 1981 USDA study did not find any price-enhancing effects for lemons. (See app. III, no. 31.)

The controversy over the season-long lemon prorate has been growing for years and came to a head in January 1984 when 3 weeks of preliminary public hearings were held to discuss 44 proposed amendments. Many of the growers' and consumer groups' proposals offered significant changes such as (1) terminating the entire marketing order, (2) eliminating the present prorate authority and promulgating a new order for one of the three existing districts for research, development, promotion, and size and grade standards, and (3) terminating the existing order and promulgating two separate marketing orders that could result in a more competitive and efficient industry.

As of May 1985, USDA had not reached a decision concerning the future of the lemon marketing order. Both the Department of Justice and the Small Business Administration filed comments on the proposals. The Department of Justice urged that the season-long prorate be disbanded because it results in "reduced consumption of fresh lemons, misallocation of resources due to chronic overproduction, reduced firm growth, and reduced price competition." The Small Business Administration told USDA that prorate
"perpetuates the dominance of major marketing organizations" and that "virtually no economic analysis has been done on the impact of prorate on small entities or to support the continued use of prorate regulations."

Reserve pools and market allocation reserves

The third and fourth types of quantity controls, reserve pools and market allocation reserves, both withhold a portion of the crop in reserve for later use. Reserve pools can be used to supplement the supply of commodities during subsequent crop shortfalls. Market allocation reserves are similar to reserve pools except that they divert supplies from the traditional domestic market and are used to develop new markets and new products. The reason for two types of reserves is that growers of some commodities are seeking to avoid gluts and shortfalls, while others are trying to build new markets for rapidly expanding production. Six of the 47 marketing orders are authorized to issue reserve pools, and 5 are authorized to issue market allocation reserves. Of the 11 marketing order commodities we examined, 3 used reserve pools and 2 used market allocation reserves during crop year 1983.

The hop, spearmint oil, and tart cherry marketing orders used reserve pools during the period we reviewed. The hop order provisions create a reserve pool when estimated production exceeds projected demand. This happened in 10 of the 12 years from 1971 through 1982. Most of the reserves were quite small, less than 1 percent of the crop harvested. The spearmint oil committee manager said that the spearmint oil order is patterned after the hop order and it created reserves in each of its first 3 years of operation (1980-82). The reserve amounts were small in relation to the existing supply. Between 1971 and 1981, the tart cherry order created reserves in 3 years when bumper crops occurred. Cherries placed in reserve were sold in subsequent short crop years, keeping supplies more consistent.

The almond and walnut marketing orders use market allocation reserves. Such reserves are generally created when expected supplies exceed estimated demand by a significant amount. From 1971 through 1983, the almond order had created one large reserve because of a huge crop and three small reserves to develop a new product, almond butter. The almond committee created its only large reserve in the period when the expected supply for the 1981-82 season exceeded the previous year's sales by 40 percent. The reserve was set at 25 percent of the crop and was released within the year in two increments. According to the manager of the Almond Board of California (the almond marketing order committee), the reserve had a braking effect on falling prices. The market allocation reserves created to build future demand for almond butter ranged from 2 to 3 percent of the 1978, 1982, and 1983 crops. According to USDA's Sacramento field office specialist, the last
three almond butter reserves were not large enough to have much of an effect on supplies or prices.

The walnut industry has routinely used reserves in recent years to divert excess production to develop foreign markets as the almond industry did in the 1950's and 1960's. One significant difference is that the U.S. almond industry did not have significant competition when it first entered foreign markets, and the U.S. walnut industry must now deal with foreign competition and import tariffs. In 1981, the walnut marketing order created a market allocation reserve that required handlers to sell 25 percent of the walnuts in foreign markets at prices lower than domestic and world prices in order to be competitive with foreign suppliers after tariffs are added into the price. U.S. walnut handlers now have an active foreign market where they regularly supply customers.

The following two examples dealing with tart cherries and almonds show in greater detail how the reserve pool and market allocation reserve systems work.

Use of reserve pools by the tart cherry marketing order

The tart cherry marketing order's major purpose is to even out wide variations in supply and prices from one season to another through use of a reserve pool. The marketing order covers about 90 percent of total U.S. tart cherry production. Tart cherries are highly susceptible to weather conditions that result in large variances among total annual harvests, as seen in figure 1.
The tart cherry reserve pool provision was implemented in 1972, 1975, and 1980. The 1975 reserve pool was probably the most successful for growers. Nearly all the growers chose to pool some of their cherries. When the 1976 crop was small, the entire stored crop was sold to meet market demand, thereby covering part of that year's shortfall.

In June 1982 the Cherry Administrative Board (the marketing order committee) estimated that the 1982 crop would be about 335 million pounds, or 2-1/2 times greater than the 1981 crop. The Board estimated that total demand would be 235 million pounds, or about 1-1/2 times greater than the prior year's demand. The Board recommended to USDA that 275 million pounds, 40 million pounds more than the Board's demand estimate, be put on the market in 1982 to allow for market growth. In addition, the Board requested that USDA approve placing any part of the crop over 275 million pounds in a reserve pool to be made available at a later date.

Two weeks into the 1982 summer harvest season, USDA told the Board that it would not approve the reserve pool request. USDA's decision followed OMB's review of all proposed marketing order regulatory decisions under Executive Order 12291. According to OMB's Administrator for Information and Regulatory Affairs, the executive order requires that "regulatory action shall not be
undertaken unless the potential benefits to society . . . outweigh the potential costs to society." OMB review officials told us that their office is concerned with any provisions that result in season-long supply restrictions because of their belief that such restrictions result in efficiency losses and higher prices to the consumer.

In its July 1982 letter, OMB recommended that USDA disapprove use of the reserve by the tart cherry marketing order committee and stated that

"A regulation that induces growers to abandon part of their crop in the field is certainly at odds with both Executive Order 12291 [on reducing federal regulation] and the Department's Marketing Order Guidelines."

Although we agree it is theoretically possible that some producers may have chosen not to harvest their crops and participate in the pool because of concerns that there would not be a market for the pooled cherries, it is by no means certain that the reserve pool alone would have been responsible for abandonment, since high interest rates, expected low prices, and other financial conditions affect a decision to harvest or abandon a crop. According to USDA's 1981 marketing order task force, a tart cherry reserve pool could lead to some crop abandonment, but low prices in the absence of a reserve pool could lead to greater crop abandonment.

In April 1984 a Michigan State University professor of agricultural economics, who has studied the tart cherry industry for 18 years, estimated that the tart cherry industry lost $13 million to $15 million as a result of OMB's not allowing the reserve pool--$10 million lost due to depressed grower revenues and $3 million to $5 million lost in building long-run markets. After the productive 1982 year, 1983 was a short crop year, but no reserve was available to help average out supplies or prices. The professor told us that he agrees with OMB and a USDA study that found that tart cherry prices increase when a reserve pool is put into effect. According to the professor's calculations, frozen cherries would have sold for 44¢ a pound if the reserve had been implemented in 1982 versus 39¢ a pound without the reserve. However, the professor said that OMB considered only the first-year effects and not the effects of the short crop in the second year. His 2-year analysis of averaged 1982 and 1983 crop year data shows that although frozen cherry prices averaged almost the same without the reserve as they would have had a reserve been implemented (55¢ vs 56¢ a pound), the range in prices for frozen cherries was 3 percent greater without the reserve.

Although the federal government declined to use the marketing order to establish a reserve, after supply and price variability depressed demand and the cherry industry suffered lost revenues, USDA helped the industry by purchasing 28 million pounds of cherries in 1982 for use in the school lunch program; 20 million
pounds were ordered prior to the harvest and 8 million after the harvest at a total commodity cost of almost $12 million.

The Cherry Administrative Board believes that some benefits resulted from the experience in that industry-wide discussions on how to make better use of pooled cherries had occurred. For example, such things as using a two-tier pricing system to make cherries competitive in foreign markets, allowing greater price flexibility on cherries sold for new uses, and developing a new generation of tart cherry consumers through sales to schools have gained greater support since the 1982 reserve pool controversy as industry members began to realize short-term sacrifices may be needed to increase long-term profitability.

Use of market allocation reserves by the almond marketing order

Under the almond marketing order, the industry used market allocation reserves in the 1950's and 1960's to establish a two-tier pricing system. In order to develop foreign markets, the export price for almonds was set lower than the price for domestic markets.

According to the Director, Reserve Market Research Programs, California Almond Growers Exchange (CAGE), a cooperative of 5,500 producers that accounts for over 50 percent of production, the program allowed the industry to grow because it allowed development of foreign markets. He said this could not have been done without the marketing order because individual producers were reluctant to sell in a lower price market. The marketing order process helps develop a new market by spreading the cost of market development among all producers.

The manager of the Almond Board of California told us that the industry began the two-tier price system in the mid-1950's. By the mid-1960's, the domestic and export price differential dropped to within a few cents per pound (see fig. 2) and since 1972, with market outlets rapidly expanding, the almond industry rarely issued the market allocation reserve. The market for almonds had matured and become a world market. Exports jumped from about 68 million pounds in 1970 to 224 million pounds, or 60 percent of total production, in 1979.
The almond market allocation reserve program insured U.S. consumers against shortages and resulting high prices by an inventory that averaged 24 percent of production during the period 1970 to 1981. In 1978, total sales exceeded production by almost 40 million pounds with the balance being made up from the inventory.

Prospects for a record-breaking crop in 1981, coupled with increased European competition from a record foreign crop and the increased strength of the U.S. dollar, resulted in the Almond Board's recommending to the Secretary of Agriculture a 25-percent reserve requirement for the 1981-82 season. USDA approved the reserve, but it was short-lived. The market demand for almonds exceeded expectations, and prices fell less than expected. When final production totaled less than had been estimated, the entire reserve was released and sold.

**Shipping holidays**

Shipping holidays prohibit commercial shipping during periods following certain calendar holidays, usually for 3 to 7 days after Thanksgiving and Christmas when demand is historically low. According to USDA's Lakeland, Florida, field office marketing specialists, shipping holidays are useful because they allow employees a few days of vacation without giving the plants that
stay open an advantage and give a break in the marketing cycle that allows the market to "clean out any old, tired fruit." Ten of the 47 marketing orders are authorized to use shipping holidays. Four—Florida citrus fruit, Southeastern California grapes, South Texas onions, and South Texas lettuce—used the authority during the 1983 crop year. Studies by USDA (1981) and the Florida Department of Citrus (1980) have found that the data are not sufficient to prove whether shipping holidays are used to materially restrict seasonal supplies or result in higher consumer prices. Because existing data are insufficient to prove causality and the trend has been toward shorter shipping holidays, it is doubtful that a relationship will be found in the future.

MARKETING ORDER QUALITY CONTROLS

In addition to using the five types of quantity controls, marketing orders can use three types of quality controls to set standards for size, maturity and grade. Of the 47 marketing orders, 44 include authority to regulate such standards. Quality standards were used during the 1983 crop year for 8 of the 11 commodities we examined: lemons, peaches, pears, plums, nectarines, almonds, hops, and walnuts. We examined each of the three quality controls individually in order to understand better its impacts on supplies and prices of specific commodities and the relative importance of competition for each commodity.

We also examined the quality standards used for each of the eight commodities from 1971 to 1981 to determine how the standards had changed and what effect those changes had on the marketing of each commodity. Some quality standards remained consistent during the period. In other cases new standards were developed, and some were dropped. For the eight commodities we examined, we did not find evidence that quality standards were being used to control supplies in an attempt to influence price.

Size standards

Size standards, the first type of quality control, establish minimum physical dimensions for the commodities. Size standards potentially could be used as quantity controls by raising standards to remove greater quantities during large crop years and lowering standards to remove lesser quantities during small crop years. Of the 40 orders authorized to use size standards, 37 used them in crop year 1983.

Of the 11 marketing order commodities that we examined, 5 used a size standard. Use of size standards by the California tree fruit (peaches, pears, plums, and nectarines) and the California-Arizona lemon industries is discussed below.
California tree fruit

Fruit size is a result of the amount of time spent growing on the tree, growing conditions, and the variety involved. Generally, at maturity early season varieties are smaller, and later season varieties are larger. The marketing order committees examine the shipment records for each variety and establish minimum size standards depending on the time of the season. The practice results in larger minimum sizes of fruit as the season progresses.

The marketing order committees' records showed few changes in the size standards for California tree fruit from 1973 to 1978. According to the records, the changes that were made removed the smaller sizes that had very low consumer demand. For example, the minimum sizes for peaches, plums, and nectarines were increased in 1978, a small crop year. Such behavior illustrates that size standards have not been used to control supplies in an attempt to influence price. If such controls were used, one would expect more restrictive standards in large crop years and less restrictive standards during small crop years.

The nectarine committee increased the minimum size from 1-3/4 inch to 1-7/8 inch in diameter. By increasing the minimum size, the committee removed fruit that was not in demand and prevented growers from marketing fruit before it gained size. Figure 3 illustrates this point over the time period 1975-82. Nectarines of size 126 and smaller were discontinued in 1976, and size 118 was discontinued in 1978. The size 126 and 130 nectarines are very small, about 1-3/4 inch in diameter, and had very little or no marketability. As the figure shows, most of the crop shipped in 1975 through 1982 was in sizes 50, 60, and 70, while 112 and smaller (108 and smaller for 1978-82) accounted for less than 1 percent of the shipments. We found similar patterns for the other tree fruits with few changes in size standards and small volume impact.

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2The size represents the number of pieces of fruit in a standard 25-pound box.
### Figure 3
Size Distribution of Nectarines

#### Percentage Shipped by Size

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<td>.1</td>
<td>3.5</td>
<td>14.5</td>
<td>20.4</td>
<td>30.4</td>
<td>8.0</td>
<td>11.8</td>
<td>3.2</td>
<td>7.8</td>
<td>.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1977</td>
<td>.3</td>
<td>4.9</td>
<td>14.4</td>
<td>17.0</td>
<td>28.8</td>
<td>8.5</td>
<td>11.0</td>
<td>4.9</td>
<td>8.4</td>
<td>1.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1976</td>
<td>.2</td>
<td>3.9</td>
<td>12.9</td>
<td>17.5</td>
<td>26.6</td>
<td>7.1</td>
<td>11.2</td>
<td>6.3</td>
<td>11.0</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1975</td>
<td>-.2</td>
<td>3.2</td>
<td>14.4</td>
<td>18.6</td>
<td>27.2</td>
<td>8.3</td>
<td>8.1</td>
<td>7.1</td>
<td>9.5</td>
<td>3.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Annual reports of California Tree Fruit Agreement.

### Lemons

The lemon committee has not used quality standards to control supplies. During 1971-81, quantity controls had caused as much as 65 percent of a crop to be withheld from the domestic fresh market, while minimum size standards had caused only 3 percent to be withheld.

### Maturity standards

Maturity standards, the second type of quality control, apply primarily to tree fruit and dictate the required ripeness. The storable commodities—almonds, walnuts, spearmint oil, and tart cherries—are harvested in a fully ripe stage. As a consequence, maturity standards do not apply to them. Lemon maturity standards are independent of the marketing order. Only cooperatives use a maturity standard for their lemons.

Research has been done to determine scientifically when tree fruits will ripen after picking. Because fruit that is too green (too immature) or too ripe will not satisfy consumers, maturity standards allow fruit to be picked firm enough to be shipped but ripe enough to satisfy consumer taste. According to the manager of the California Tree Fruit Agreement (CTFA), which oversees the California pear, peach, plum, and nectarine marketing orders, fruit maturity is the most important aspect to the consumer who wants tasty, ripe fruit. Of the 11 commodities we examined in detail, only the four tree fruits have maturity standards. All four had maturity standards in crop year 1983.

Maturity standards control market timing, not market value. Thus, although these standards determine how much fruit is available at any particular time, generally they were not changed from...
season to season when available supplies varied. Therefore, they did not appear to be used to control supplies in an attempt to influence price.

Before 1980, the basic standard followed for peaches, pears, plums, and nectarines was the U.S. number 1 mature fruit standard, which was supposed to measure minimum ripeness for shipment while ensuring ripeness when the commodity reaches the consumer. However, according to the CTFA manager, consumers were dissatisfied with U.S. number 1 fruit, particularly peaches that would often not ripen. Concerned that immature fruit was hurting sales, the marketing order committees, in combination with research done with the California Federal/State Inspection Service, which makes inspections of fruit quality, implemented a "more mature" fruit standard in 1980. Our examination of the maturity standards for tree fruits from 1973 to 1982 showed that maturity standards changed little before the "more mature" standard was developed in 1980.

Grade standards

Grade, the third quality standard, refers to the physical features and wholesomeness of a commodity. Color, shape, scarring, insect damage, rot, foreign material, and blemishes are some of the factors affecting grade. Of the 11 commodities we examined, 8 used grade standards: almonds, walnuts, hops, peaches, pears, plums, nectarines, and tart cherries. We noted minor changes in grade standards for four of the commodities--peaches, pears, nectarines, and plums--over the 1973 to 1981 period.

The first type of grade standards relates to wholesomeness or cleanliness. Almonds, walnuts, and hops are examples of commodities for which such standards are used. The standards used are the same as or closely parallel the USDA standards for insect damage, rot, and foreign material. The second type of standards addresses appearance. Peaches, pears, plums, nectarines, and tart cherries fit in this group. Lemon and spearmint oil marketing orders do not have grade standards. The Florida celery marketing order has authority to set a grade standard, but the marketing order committee does not use its authority.

The grade standards' impact on available supplies of almonds, hops, and walnuts during 1971-81 was minor. Applying the hop standards caused about 1 percent of the hops to be withheld from the market, while the almond and walnut standards caused up to 6 percent of the quantities harvested to be withheld from the market for lack of wholesomeness.

Tree fruit grade and size regulations have stabilized since about 1970. CTFA's manager wrote in the 1982 annual report that before the 1970's, the marketing order committees used grade and size standards as indirect quantity controls to fit seasonal crop variations.
Application of size, maturity, and grade standards

In addition to reviewing the standards for size, maturity, and grade, we tested the application of these standards to one commodity, nectarines, to determine if salable fruit was being rejected by marketing order or other standards. We selected nectarines because they were typical of commodities using all three of these standards. We had federal/state inspectors examine nectarines that were rejected and removed from commercial channels by five California central valley packer/shippers during mid-July 1983 to determine if wholesome fruit was being rejected and what standards caused the fruit to be rejected. Our results only apply to nectarine rejection rates at the five packinghouses during the portion of the season the test was given. From least to most strict, the standards applied to nectarines in the production area covered by the marketing order are: (1) state standards that remove unwholesome fruit, (2) U.S. number 1 grade standards that remove unwholesome and blemished fruit, (3) marketing order standards that remove small sizes and green fruit in addition to unwholesome and blemished fruit, and (4) packer/shipper standards that cater to gourmet markets.

The inspectors examined a total of 24,000 rejected nectarines during the period July 19–23, 1983. As shown in figure 4, about 45 percent had been rejected based on state standards because the nectarines either were soft or decayed, had split pits, or were otherwise unshippable. The rejected nectarines would not satisfy a supermarket shopper, according to the inspectors and food brokers we interviewed. Application of the U.S. number 1 standard removed an additional 47 percent of the rejected fruit because the fruit was odd shaped or scarred or had been mechanically damaged by picking or packing equipment. This U.S. number 1 standard would be used by interstate shippers in the absence of the marketing order standards. The marketing order standards removed an additional 4 percent of the fruit because the fruit was either undersized or less mature. The final 4 percent of the rejected fruit met the marketing order’s existing maturity, size, and grade standards but had been rejected by the packer/shippers for unknown reasons (probably a combination of packer/shipper standards and human error). Therefore, the standards other than the marketing order standards were responsible for rejection of all but about 4 percent of the nectarines, making the marketing order standards only a minor factor in keeping nectarine supplies off the market during the test period.
Figure 4
Test of Rejected Nectarines
July 19-23, 1983

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rejection due to California standards</td>
<td>10,872</td>
<td>45</td>
</tr>
<tr>
<td>Additional rejections due to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. number 1 standard</td>
<td>11,172</td>
<td>47</td>
</tr>
<tr>
<td>Marketing order standards</td>
<td>1,072</td>
<td>4</td>
</tr>
<tr>
<td>Packer/shipper standards or human error</td>
<td>884</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>24,000</td>
<td>100</td>
</tr>
</tbody>
</table>

The packer/shippers we visited told us that the nectarine rejection rates varied from 10 to 30 percent of the total amount of fruit delivered by growers during the test period. They said that they do not ship scarred fruit because consumers reject fruit with cosmetic defects, and it is less expensive to reject this fruit at the packing plant.

The rejected fruit is either dumped or marketed in non-competing market outlets. The noncompeting outlets include state-certified farmers' markets, drying, animal feed, and charitable donations. For example, one packer/shipper told us that he sells 10 percent at farmers' markets and that the remainder is dried, dumped, used for feed, or given to charitable organizations willing to pick up and transport the rejected fruit. According to several packer/shippers we interviewed, more fruit would be donated, but distance, the lack of well-organized charitable groups to pick up, transport, and deliver the donated fruit, and other reasons limit the quantity donated.

We asked all of the packer/shippers we visited about donating unneeded commodities to charities. They indicated that donations are regularly made on a case-by-case basis. According to some, a larger volume of donations is possible, but donations are hampered by the lack of adequate demand and the distance from large metropolitan centers.
The California apricot industry does not operate under a federal marketing order. Although some elements of the industry proposed a federal marketing order for grade, size, and maturity in the 1960's, the proposal was unsuccessful because many growers were concerned about paying the administrative costs and benefiting nonparticipants in the production area (free riders).

Apricots are grown and sold under existing California and federal (USDA) standards. A federal supervisor in the Federal/State Inspection Service told us that these standards are not very strict when compared with the federal marketing order standards for nectarines. Although both fresh apricot and nectarine standards appear very similar in regard to defects and bruises, the nectarine standards do not allow soft or bruised fruit to be shipped, while 10 percent of fresh apricots can be soft or bruised.

These conditions could contribute to consumer dissatisfaction. The production and sale of apricots is declining, a condition that contrasts with that of other fruits that use quality controls.

**QUANTITY AND QUALITY CONTROLS' IMPACT ON SUPPLIES**

The controversy surrounding marketing orders has centered on the potential impact of quantity and quality controls on supplies, and thus indirectly on prices. For the commodities we examined, we are able to ascertain the impact of the quantity and quality controls on (1) the volume of unsold commodities and (2) the amount of each commodity withheld from the market that can be attributed to marketing orders.

Figure 5 summarizes the estimated percentage of production withheld from the market by the operation of marketing order quantity and quality controls. Included in the volume on which the percentages are based are amounts sold in foreign markets as well as the amounts diverted to processing and waste.
### Figure 5

**Production Withheld From the Fresh Market--1971 to 1981**

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Quantity control</th>
<th>Quality control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>Disposition</td>
</tr>
<tr>
<td></td>
<td>(percent)</td>
<td></td>
</tr>
<tr>
<td><strong>Perishable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fla. celery</td>
<td>0</td>
<td>a</td>
</tr>
<tr>
<td>Calif. nectarines</td>
<td>a</td>
<td></td>
</tr>
<tr>
<td>Calif. peaches</td>
<td>a</td>
<td>b</td>
</tr>
<tr>
<td>Calif. pears</td>
<td>a</td>
<td>b</td>
</tr>
<tr>
<td>Calif. plums</td>
<td>a</td>
<td>b</td>
</tr>
<tr>
<td><strong>Semi-storable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calif./Ariz. lemons</td>
<td>37-65</td>
<td>Left on tree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Used in processing or exported</td>
</tr>
<tr>
<td><strong>Storable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calif. almonds</td>
<td>0-25</td>
<td>Sold later</td>
</tr>
<tr>
<td>Hops</td>
<td>1</td>
<td>Sold later</td>
</tr>
<tr>
<td>Spearmint oil</td>
<td>4</td>
<td>Sold later</td>
</tr>
<tr>
<td>Tart cherries</td>
<td>0-22</td>
<td>Sold later</td>
</tr>
<tr>
<td>Calif. walnuts</td>
<td>20-33</td>
<td>Sold in export</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Used in processing and feed markets</td>
</tr>
</tbody>
</table>

N/A: not available

*No controls authorized.*

*Data are not typically collected by CTFA committees on quality control impacts on supply. 4% for nectarines is based on GAO's test of rejected nectarines. CTFA committee officials expect similar results would be found for peaches, pears, or plums.*

*Tart cherry quality standards apply only to commodities placed in reserve. Almond quality standards apply to almonds received by handlers from producers as well as almonds placed in reserve.*

*Source:* GAO calculations using data from the marketing order committees.
The only order we examined where application of a quantity control resulted in unused production was the lemon marketing order. Only the lemon order resulted in significant amounts being left unharvested on the tree, reflecting significant unused production capacity. Both the tart cherry reserve, which was implemented three times, and the almond reserve, which was implemented once, were released later on the domestic market. For walnuts, the significant quantities withheld through quantity control were sold in export or processed markets.

For the commodities we examined, quality controls kept only small amounts off the market (6 percent or less). The quality controls were not altered when the crop sizes changed from year to year. This suggests that quality controls were not being used to restrict supplies in years having large crops.

Criticism of marketing orders has centered on the issue of crops, such as lemons, being left unharvested on the tree or being used for nonhuman consumption. Although this criticism has some merit, we noted that commodities in non-marketing order industries also are subject to overproduction. This helps to illustrate that the issue of waste has connotations broader than marketing orders and can be viewed in the broader context of the basic nature of agricultural production.

To compare how surpluses of a non-marketing order commodity were handled, we examined wine grapes, the product of one of the largest fruit industries in California not covered by marketing orders. We found that the amount of wine grapes wasted in 1982 (400,000 tons) was similar to the amount of lemons (274,455 tons) left unharvested on the trees in 1982.

According to the President, California Association of Winegrape Growers, in 1982 the California wine grape industry experienced very favorable growing conditions resulting in a large grape crop. At the same time, California wine sales in the United States were not increasing because of price competition from imported European wines. The result was more grapes than wineries were willing to buy. The wine makers had large inventories of wine because wineries were forecasting about a 5-percent-per-year sales growth that did not occur in 1982.

The portion of the grapes not needed for wine was not diverted to make juice as occurs in the lemon industry. Instead, the grapes were left on the vines to rot. The President, California Association of Winegrape Growers, said the total amounted to about 400,000 tons (about 14 percent) out of a 2.9-million-ton crop in 1982.

Because wine producers contract for a grower's grape crop by the acre, they do not know the exact quantity of grapes they will receive until the grapes are harvested. The contracts are written to give the winery the option to set delivery dates for grapes.
According to the President, California Association of Winegrape Growers, this option works well in most circumstances. However, in 1982, the wineries used the contract delivery dates to avoid taking grapes they did not want. The wineries did this by delaying delivery of grapes until after the fall rains began. This permitted the wineries to refuse the grapes because of rot.

In the case of the 400,000 tons of grapes whose delivery was delayed until they began to rot (14 percent) and of the 23 percent of the lemon crop that was left on the trees, the commodity's production exceeded demand. However, in the critics' view, the lemon marketing order caused the waste, while the grape industry was a victim of the weather conditions.

**QUANTITY AND QUALITY CONTROLS' IMPACT ON COMPETITION AND COMMODITY PRICES**

Competitive factors in the marketplace help determine the price of a commodity because competition brings prices down to the lowest practical level. Except for the lemon marketing order, which controls about 99 percent of lemon supplies, essentially all the marketing order commodities have competition from commodities grown in areas not covered under marketing orders, other marketing order commodities, imports, or substitute commodities.

In most cases, a marketing order does not cover all the domestic production of a commodity. An example is the California peach marketing order, which covered about 36 percent of the total U.S. peach production in 1981. Other peach production areas, some covered and some not covered by marketing orders, are significant sources of peaches and compete in the domestic market with the California marketing order peach. The same is true for other commodities. Competition comes not only from non-marketing order products, but also from substitutes for most commodities. For example, for many purposes consumers can choose to substitute a nectarine, plum, or pear for a peach.

The range of sources for a commodity and its substitutes does several things for the marketplace and the consumer. It ensures the availability of (1) a wide selection of the commodity and its substitutes, (2) an adequate supply, and (3) competition among suppliers on price and quality. The competitive situation for the marketing order commodities we examined is summarized in figure 6.
### Figure 6
### Competition in Commodity Markets

<table>
<thead>
<tr>
<th>Marketing order</th>
<th>Substitutes&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Marketing order's percent of the domestic market</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excluding substitutes</td>
<td>Including substitutes</td>
</tr>
<tr>
<td>California/Arizona lemons</td>
<td>limes 99</td>
<td>96</td>
</tr>
<tr>
<td>California peaches</td>
<td>nectarines 36</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>pears</td>
<td></td>
</tr>
<tr>
<td></td>
<td>plums</td>
<td></td>
</tr>
<tr>
<td>California pears</td>
<td>nectarines 31</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>peaches</td>
<td></td>
</tr>
<tr>
<td></td>
<td>plums</td>
<td></td>
</tr>
<tr>
<td>California plums</td>
<td>nectarines 90</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>peaches</td>
<td></td>
</tr>
<tr>
<td></td>
<td>pears</td>
<td></td>
</tr>
<tr>
<td>California nectarines</td>
<td>peaches 98&lt;sup&gt;c&lt;/sup&gt;</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>pears</td>
<td></td>
</tr>
<tr>
<td></td>
<td>plums</td>
<td></td>
</tr>
<tr>
<td>Florida celery</td>
<td>none 27</td>
<td>27</td>
</tr>
<tr>
<td>California almonds&lt;sup&gt;b&lt;/sup&gt;</td>
<td>walnuts 99</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Brazil nuts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>filberts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>pecans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>cashews</td>
<td></td>
</tr>
<tr>
<td>Domestic hops&lt;sup&gt;b&lt;/sup&gt;</td>
<td>imported hops 66</td>
<td>66</td>
</tr>
<tr>
<td>Far West spearmint oil</td>
<td>peppermint oil 82</td>
<td>28</td>
</tr>
<tr>
<td>California walnuts&lt;sup&gt;b&lt;/sup&gt;</td>
<td>almonds 99</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>filberts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>pecans</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brazil nuts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>cashews</td>
<td></td>
</tr>
<tr>
<td>Tart cherries</td>
<td>apple slices 90</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>blueberries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>peach slices</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>This list of substitutes a consumer might consider does not exhaust all possibilities, but includes actual substitutes considered by the marketing order committees.

<sup>b</sup>Almonds, hops, and walnuts are sold in an internationally competitive market.

<sup>c</sup>Nectarines are a relatively new commodity, and California is the dominant producer. Production had begun in several other states and amounted to slightly less than 2 percent of total production in 1982.

Source: GAO calculations using data from the marketing order committees and USDA Agricultural Statistics yearbooks.
The nine marketing order committees (California peaches, pears, and plums are covered under one marketing order) took into account the production of the same and substitute commodities from other U.S. producing areas as well as foreign areas when estimating demand for the commodity. Of the 11 commodities, only lemons have limited competition in the marketplace. Some lemons are imported, but the quantity is small, and therefore the competition is weak. Limes, while offered as a substitute for lemons, have one-twentieth the lemon production, are higher priced for most of the year, and therefore do not act as strong substitutes.

In brief, price is generally a competitive factor along with grade, size, and other product attributes considered when buyers weigh purchase decisions. Prices are set largely by supply and demand in markets that, with the exception of lemons, are reasonably competitive. Competition acts as a check on marketing order supply controls, because competitors can take over any market niches that are left unfilled.

CONCLUSIONS

Marketing orders can affect the quantity and/or quality of supplies. Marketing orders for 10 of the 11 commodities we examined affected supplies through limiting the number of new growers, limiting the disposition of surplus production, or diverting some products from the market. Such activities, although restrictive by nature, are not necessarily harmful to consumer interests. Some quantity and quality controls can benefit both producers and consumers.

For the marketing orders we examined, only the lemon prorate resulted in significant unused production. The other 10 marketing order committees, although they can and have diverted some supplies, cannot effectively control prices because competition exists in domestic and world markets thereby minimizing the effects of order-imposed restrictions.

Two marketing orders that use allotments—hops and spearmint oil—restrict the entry of new growers, although the spearmint oil order allows for limited new grower entry.

An example of a quantity control that can benefit both producers and consumers is the reserve pool. This control tool helps to minimize gluts and shortfalls in the market and helps to develop new markets. For example, amounts put in reserve under the almond marketing order have kept supplies at a more consistent level than would have occurred in the order's absence, helped open up foreign markets, and helped build demand for new products. Attempts by the tart cherry industry to obtain such benefits were hampered in 1981 when USDA, following OMB's recommendation, did not approve a reserve pool request. Some benefits have resulted from the experience as tart cherry industry officials have begun to examine alternate ways to expand demand for their product.
Quality controls governing grade, size, and maturity, which (1) ensure uniform quality over time regardless of crop size and (2) prohibit shipments only of clearly unsatisfactory products, contribute to an economically efficient marketplace. When uniform quality standards are applied, marketing costs should be lower, fewer shipments should be rejected, and less marketing-channel spoilage and waste should occur. On the other hand, if quality standards divert wholesome commodities that could be marketed to willing consumers, they would act contrary to consumers' interests. However, for the 11 commodities we examined, we found that little basis exists to conclude that handlers' quality standards are used to control supplies because quality controls were not changed when crop sizes changed from year to year. Such behavior would be expected if such controls were being used to restrict marketing in years having large crops.

AGENCY COMMENTS AND OUR EVALUATION

In response to our draft report, USDA's Acting Assistant Secretary for Marketing and Inspection Services wrote on June 11, 1985 (see app. VI), that our report represents a positive assessment endorsing the use of marketing orders by growers and handlers to solve today's marketing problems. She stated that USDA supports the concept of marketing orders as long as the programs are consistent with statutory requirements and USDA guidelines but that its position is transcended by the administration's strongly held belief that all Americans would benefit most by a significantly reduced level of government interference in their businesses and lives. The letter stated that this belief is the foundation of farm programs generally, adding that USDA's goal is to develop and implement policies in the public interest but that it does not seek to encourage the development of additional government programs.

We do not endorse the use of all marketing order tools to solve today's marketing problems. We point out that marketing orders encourage the private sector to make marketing decisions at minimum government expense and involvement. In contrast to high-cost price- and income-support programs for major U.S. crops such as wheat, corn, and cotton, marketing orders offer a reduced level of government intervention in private business decisions.
CHAPTER 3

THE EMERGING TREND IN THE USE OF MARKETING ORDERS

Marketing orders of the 1980's are very different from the simple supply control mechanisms of the 1930's and 1940's. Industry groups of the 1980's propose marketing orders for the same basic reason as in the 1930's. Marketing orders still allow growers and handlers of a commodity to work out compatible solutions to general industry problems that they lack the incentive or capability to do individually. The difference is that instead of joining forces with a primary goal of impacting supplies, contemporary marketing industries, reflecting legislative modifications, work together to research the market, improve crop varieties, or promote the products.

Thirty-seven of the 47 marketing orders have research and development or promotion and advertising authority, and 8 of the 11 commodities we examined used a mix of research, development, promotion, and advertising tools under marketing orders in 1983. When used in conjunction with quality controls that keep only unsalable products off the market, such tools can work in the interests of the industries and the consumers because quality products and accurate product information improve a market's operation. However, the process of transforming traditional production-oriented industries to contemporary marketing industries takes time and usually requires extensive research on consumer needs, consumer tastes, and product development. Industries that emphasize marketing tools have experienced varying degrees of success.

LEGISLATIVE CHANGES ADDED DEMAND-ENHANCING TOOLS

Over the years, amendments to the AMAA strengthened quality controls and added additional market support tools. In 1947, Public Law 80-305 expressed congressional intent that USDA allow the use of minimum standards for grade, size, and maturity. Other amendments authorized marketing orders to

--establish marketing research and development projects and container standards (added by Public Law 83-690 in 1954);

--provide for marketing promotion, including paid advertising for specified commodities (first commodity added by Public Law 87-703 in 1962); and

--establish production research projects (added by Public Law 91-292 in 1970).

Interest in marketing orders that focus on enhancing demand has grown during the past few years. Between January 1978 and February 1985, representatives of 22 fruit, vegetable, or specialty crop commodity groups expressed interest in obtaining federal marketing orders. (See app. IV.) Only proposals by the
spearmint and peppermint oil industries contained quantity control provisions.

STATE MARKETING PROGRAMS ALSO EMPHASIZE DEMAND-ENHANCING TOOLS

The federal marketing order emphasis on enhancing demand is paralleled by similar state programs that also emphasize market support. For example, California, which stopped using quantity controls for its fruit, vegetable, and specialty crop programs in the 1970's, has 26 marketing order or check-off programs in place that assess individual industry members for advertising, promotion, or research and development functions.

California state marketing specialists told us that most commodity groups that have chosen to pursue California market support programs did so because the state is more receptive to such market support tools. USDA and California state marketing specialists also said that other commodity groups have chosen to obtain state marketing programs to avoid going through the federal legislative process. For example, because the AMAA authorizes advertising only for specified commodities, each time a marketing order committee wanted to add advertising as an authorized activity, the act has been amended. They added that state programs are generally less controversial because most are voluntary or have refund provisions. In voluntary programs only those growers or handlers who sign up for the program share in the operating costs. In programs with refund provisions, all growers in an area covered can receive a refund at the end of the year.

CHANGES IN PUBLIC ATTITUDES AND THE IMPACT ON MARKETING ORDERS

In the early 1970's, consumers began to question whether marketing orders properly considered their interests. The concerns grew out of the consumer movement that spread during the 1960's and into the 1970's, calling for strengthened consumer "rights" and power in relation to sellers.

Some marketing order committees have recognized the opportunity to address new consumer concerns, such as protection against questionable products and marketing practices, through providing more information and education. For example, the California Tree

1The question of allowing all the commodities listed in the AMAA to be eligible for advertising authority was discussed during hearings in 1965 and 1970 before the House Agriculture Committee's Subcommittee on Domestic Marketing and Consumer Relations, but no action was taken. At the 1965 hearing the Director of AMS' Fruit and Vegetable Division said that USDA would not object to such an amendment but recommended that the existing policy continue in order to avoid potential controversy.
Fruit Agreement committees (for plums, pears, peaches, and nectarines) have expanded their industries by using quality standards and by emphasizing consumer education in their advertising and promotion campaigns. According to a market research director who has worked in the almond industry for over 50 years, the Almond Board of California has turned a troubled industry into a stable and dominant world supplier of an increasing variety of almond products through new product development and promotion programs. Other commodities are following their lead but, as is the case of the California wine grape industry described below, industries frequently wait for a crisis situation before taking action to address their problems through the use of marketing order tools.

The California Association of Winegrape Growers estimated that in 1983 U.S. operating expenses for wine grapes would exceed revenues by over $600 million. According to the association's president, the great acreage increases of the 1970's were to meet increased demand that did not materialize because nobody predicted the share of the wine market that is now being taken over by "subsidized" imports. He said that California wine grape growers have petitioned the U.S. International Trade Commission and Department of Commerce to stop Italy and France from "dumping" wine into this country at prices below foreign production costs. California wine grape growers and vintners voted in a state marketing order in the fall of 1984 to establish market research, promotion, and education programs to counter similar programs implemented in this country by the Italian and French wine industries.

DEVELOPING MARKETING PROGRAMS TAKES TIME

Quality control and market support tools are generally less controversial than quantity controls because of the resulting "public good" that comes from high-quality products, increased research, market information, and advertising that does not include brand names (generic advertising). In October 1983 the Secretary of Agriculture addressed these types of issues in a speech at the 1984 Agricultural Outlook Conference on the need for market-oriented, long-range planning to assist producers in establishing new markets.

However, the process of developing marketing-oriented programs takes time. Unless a marketing order committee first defines its consumer markets, researches the attributes consumers desire in the products, and then makes sure the products placed on the market meet consumer wishes and expectations, the level of consumer acceptance is left to chance.

According to CTFA's promotional director, the basic advice he gives to commodity marketers interested in expanding demand through advertising and promotion is first to make sure the product placed on the market is what the consumer wants. He said that developing a long-term marketing orientation through a committee
takes time because individual producers' sole concern has traditionally been to maximize the current year's production. He added that in the fresh fruit and vegetable industries, where it takes years to alter crop varieties to match consumer tastes, the process takes longer.

Expenditures for research and development, promotion, and advertising broadly increased over the 1971 to 1981 period for most of the marketing order commodities we reviewed. Figure 7 compares expenditures for these activities in 1971 and 1981 for the commodities we examined and shows how these expenditures compared with total marketing order expenditures.

![Figure 7](Comparison of Marketing Order Expenditures for Advertising, Promotion, and Research and Development with Total Marketing Order Expenditures)

The following sections discuss quality and market support tools that five industries have used or proposed under federal marketing orders with varying degrees of success.

**California tree fruit**

The California tree fruit example shows that the process of transforming a program focused on production control to a market-oriented one focused on increasing demand is a long-term and continuing process.

The original (1933) California tree fruit agreement established prorate and market allocation programs limiting the amount
of California pears, peaches, plums, cherries, apricots, and persimmons to be sold in the market. After the Congress emphasized the use of quality controls in 1947, CTFA's three committees--peaches, plums, and pears--turned away from dealing with surpluses through quantity controls in favor of expanding demand.

In the 1982 CTFA annual report, the CTFA manager summarized the first 50 years under federal regulation. He stated that by 1949, CTFA committees

"had turned away from how to deal with surpluses through allotment or flow to market regulations and toward longer range solutions designed to improve the quality of the offerings and thus expand the market."

Today, quantity controls are no longer used by CTFA, but programs to improve quality and expand markets are still developing.

Research, ongoing during most periods since the 1930's, has produced standards to measure maturity for the more than 350 varieties of peaches, plums, pears, and nectarines. According to the CTFA manager, although maturity standards have improved, room for further quality improvement exists.

The CTFA manager told us that committees focus their efforts on improving maturity standards, research, and market development. For example, production research paid off during the 1982 season when an extended heat wave caused plum centers to darken, rendering the fruit off grade. The plum crop was saved, however, after researchers, using quick-ripening techniques, found that the color would dissipate when the fruit fully ripened.

Research and promotional budgets for CTFA fresh fruit crops have greatly increased since the early 1970's--from about $500,000 to over $3.5 million in direct expenses per year in the 1980's. CTFA's manager emphasized that consumer research is a continuous process because consumer tastes change. He said, for example, that pear consumption, especially of canned pears in syrup, had fallen in recent years as consumers became more health conscious. He said that research is underway to identify the attributes consumers most desire in pears in order to help offset the declining canned pear market.

CTFA's promotional director told us that both trade and consumer promotion occur. He said that trade promotion, including incentive activities for the wholesale and retail trade (i.e., sales contests) can produce some short-term measurable benefits but is basically done to compete with other commodities involved

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2Nectarines became subject to a marketing order in 1958 after research produced a more colorful and firmer variety that shipped better than the older white-fleshed varieties that were not visually appealing.
in such activities. He said that consumer promotion and advertising have had little or no immediate payoff but are considered an investment for the future. He said that the goal of consumer campaigns is to increase long-term market demand by educating consumers.

The promotional director emphasized that CTFA did not become involved in major advertising campaigns until the committees were satisfied with product quality. He said that a quality product is its own best advertisement and a necessity for an effective marketing program. He said that advertising can move a consumer to purchase fruit once, but unless the quality is there, resales will not occur.

California almonds

The California almond marketing order permits both supply control and demand-enhancing tools. A market allocation reserve pool provision has been in effect since the order developed in 1950. Market support tools—research, development, and promotion—were added in 1972. Before that time, only the California Almond Growers Exchange (CAGE), an almond cooperative, did any significant amount of research or promotion. Quality controls, previously administered as a voluntary program, were added in 1976.

A primary use of the reserve pool is to keep supplies adequate from one season to the next. California almond production can vary greatly from season to season, depending on the timing of the winter rains and the pollination period. Reserve pools have also been used to distribute the costs of developing new products across all growers and handlers. The goal of market support tools has been to keep demand high through new product and market development so that natural production increases can be absorbed without significant price declines.

During most of the 1970's, the almond industry was able to keep demand ahead of production through increased foreign sales, particularly to western Europe. The industry has kept demand high in the 1980's through development of the Japanese market and increased domestic consumption—up 45 percent from 1978 to 1983. Successful entry into Japan occurred after extensive study of the workings of the Japanese market during the 1970's. Japan is now the second largest importer of U.S. almonds. CAGE's sales director has credited lower prices as the major factor behind increased almond consumption but emphasized that market development and promotional efforts have resulted in greater public recognition, acceptance, and popularity of almonds in the United States and Japan.

In 1983, over 75 percent of the domestic almonds crop was used as an ingredient in other foods, reflecting the success of almond promotion in food manufacturing industries such as the ice cream industry, where the almond is the most widely used nut, and
the cereal industry. The remaining 25 percent was consumed in an increasing variety of almond products being developed to match consumer tastes, ranging from dry roasted almonds to almond paste for cooking and almond butter.

Almond butter is in the new product development stage. Because almonds have always been more expensive than peanuts, even in low price years, individual almond growers have not been willing to sell almonds at a price that could compete in the peanut butter price range. For the 1982-83 marketing season, the Almond Board proposed and USDA approved a 2-percent reserve pool to keep prices low for new product development, including almond butter and almond products for school lunch outlets.

**Tart cherries**

The tart cherry industry is an example of where supply variability due to weather conditions or other unknowns can impede industry growth. Food manufacturers hesitate to commit to new products if there are added risks in dealing with volatile supplies. A more flexible supply control tool is needed if demand-enhancing tools are to be effective.

The tart cherry reserve helped even out supplies when it was applied in peak production years. However, disapproval of the reserve proposal in 1982 (see pp. 18-21) stimulated the industry to rethink its future. The industry is now examining new options for expanding demand.

Almost 70 percent of the tart cherry crop is frozen and sold for remanufacturing into pies, tarts, and other prepared desserts. The remainder is canned or made into pie-filling or juice. Commercial bakers, who use most of the crop, have substituted other pie fruits such as apples or blueberries during periods of short supplies and high prices. As figure 8 shows, frozen processed cherry prices were generally higher and more volatile than frozen apple slice prices during the 1960-81 period.
As figure 9 shows, tart cherry producers have been unable to maintain their share of the market. Figure 9 compares frozen tart cherry sales with three competing pie fruit commodities—frozen apples, blueberries, and peaches.

**Figure 9**

**Sales Comparison of Frozen Tart Cherries, Apples, Blueberries, and Peaches**

<table>
<thead>
<tr>
<th>Commodity</th>
<th>1975</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tart cherries</td>
<td>176</td>
<td>113</td>
</tr>
<tr>
<td>Apples</td>
<td>117</td>
<td>200</td>
</tr>
<tr>
<td>Blueberries</td>
<td>58</td>
<td>46</td>
</tr>
<tr>
<td>Peaches</td>
<td>49</td>
<td>53</td>
</tr>
</tbody>
</table>

According to a Michigan State University professor of agricultural economics who has studied the tart cherry industry for at least 18 years, attempts to expand existing markets have been hampered because of food manufacturing firms' reluctance to spend the necessary dollars to introduce new cherry products if cherries are likely to be in short supply with high prices every second or third year. He said that in short-supply, high-price years, cherries of the desired quality either are unavailable in sufficient quantities or are so high priced that the manufacturers' profits on a new cherry product are likely to be eliminated. He said that this is particularly true when a new cherry product is part of a product line (e.g., a group of prepared fruit desserts) because manufacturers may prefer a uniform price for all items in such a product line.

The Cherry Administrative Board made some procedural changes in the reserve pool program in 1983 that it believes will encourage the expansion of minor tart cherry markets such as those for juice, dried cherries, and jam. According to the Michigan State University professor, the procedural changes will provide the growers with incentives in the form of diversion credits against their pool requirements for the cherries sold for minor uses. In the past, grower options consisted of participating in the pool or leaving a portion of the regulated cherries unharvested in the orchard. The professor said that the intent of the diversion option is to add flexibility that can encourage expansion of juice, dried cherries, and other minor cherry uses. He said that such market expansion is needed to keep up with expected production growth through the 1980's.

**Florida avocados**

The Florida avocado marketing order program provides an example of how an industry attempted to promote and advertise its product before it thoroughly researched the needs of potential customers and adjusted its products to address those needs.

The Florida avocado marketing order began as a quality control order in 1954 when grade and size standards were authorized. The industry began to emphasize the development of demand in 1975, when provisions for production research and marketing research and development, including paid advertising, were added to the order. The only quantity control authorized under the order is shipping holiday authority, but it has never been implemented.

Florida avocados compete primarily with California avocados. The California season overlaps with the Florida season on both the front and back ends. California avocado growers produce about seven times as many pounds as the Florida avocado growers produce. Florida avocados are generally larger than California varieties and have a more favorable flesh-to-pit ratio, but California avocados are generally perceived to be a higher quality than Florida avocados and attract a premium price.
The Florida avocado marketing order manager told us that because of the Florida crop's limited size versus the larger California crop, promotion efforts have been limited to merchandising incentives for retailers, wholesalers, and brokers; grocery store flyers; and food page publicity in newspapers and magazines. The goal has been to help stimulate peak-season consumer purchases. An experimental television advertising campaign in 1981 temporarily increased consumer demand for the fruit; however, the avocado committee concluded that the advertising was too expensive to do on a regular basis. Florida producers have been content to let their California competitors attempt to increase the long-term demand for avocados through consumer advertising.

In January 1984 the Florida avocado committee voted to cut out all promotion efforts under the marketing order. According to USDA's field office marketing specialist responsible for avocados, the decision was based on the belief that producers and handlers would receive a better return for their promotion dollar through programs run by individual packinghouses outside the marketing order's jurisdiction instead of through the marketing order-sponsored generic program.

USDA's field office marketing specialist told us that he agrees with the committee members who believe the committee made a mistake in dropping industry-wide promotion efforts for the 1984-85 season. He also said that he believes the decision will be reversed within a year or two. He said that the handlers are salespeople and do not have interest in the types of promotion that will result in long-term demand growth.

The committee's decision to drop promotion under the marketing order was based on the results of a December 1983 contracted study for the committee. (See app. III, no. 47.) The study recommended that promotion efforts be limited to peak-season price advertising during the 1984-85 season and that other trade promotion efforts and any consumer promotion efforts be stopped until after market research identifies how consumers rank Florida avocados with California avocados.

USDA's field office marketing specialist told us that he agreed with the study findings on the need for additional market research. The committee undertook market research efforts in 1976 and 1977, but only preliminary data were collected. For example, researchers found that consumers were concerned primarily with taste and flavor in their purchase decisions, but the researchers did not define these attributes. The USDA field office marketing specialist told us that the committee needs to do additional market research to find out what attributes consumers perceive as most important in making avocado purchase decisions. He said that the committee then would be able to compare how existing varieties match up with consumer tastes and, if necessary, fund production research to develop new varieties.
In addition, the 1983 study recommended trying brand advertising due to the success of the California Hass variety avocado, which accounts for over 50 percent of California production. The California Hass variety has a longer shelf life than most varieties and is distinguishable from other avocados on the basis of color. Accordingly, the Hass variety has developed its own brand recognition from which consumers can expect a consistent product.

In Florida, the top four varieties account for 52 percent of Florida avocado shipments with no single variety accounting for more than 16 percent. The study concluded that generic advertising was counterproductive. It said that because Florida avocados differ greatly by variety, consumers cannot be assured of consistency from one variety to the next. The study recommended that the marketing order committee or individual packinghouses experiment with brand advertising.

USDA's field office marketing specialist told us that he disagreed with the study's brand advertising recommendation. He said that taste differences do exist among Florida varieties but that, if any differentiation is made, it should be between the two basic taste categories, the early season (West Indies) and late season (Guatemala), nutty-tasting varieties. He said that California has been able to reach a point, after years of experience, where only the best selling varieties are marketed. He said that with proper market research, Florida producers could begin the long process of weeding out the varieties that fail to meet consumer expectations.

Lemons

Consumers have placed great importance on fresh, natural products during the past decade; yet fresh, unprocessed lemons are one of the few agricultural commodities that have experienced reduced per capita consumption during the period. Some independent producers told us that if the industry is to reverse this trend, it must move from relying on supply controls to more aggressive marketing.

The lemon marketing order has authority for research and development but does not have advertising authority. According to the Lemon Administrative Committee's manager, research studies have been funded in the past by industry members to identify new products and uses for lemons, but no directed effort has been made to identify characteristics of lemon consumption such as the respective roles of price, promotion and advertising, and health concerns in consumer purchasing decisions.

The committee manager told us that most committee members believe that consumers will only purchase as many lemons as they need regardless of price and that costs of programs aimed at increasing demand would exceed expected benefits. However, according to a committee member who has worked for the two largest cooperatives, more aggressive marketing could pay off if lemon quality could be kept high.
The committee member told us, for example, that a lemon advertising and promotion campaign aimed at the foreign hotel market showed successful results until the industry could not deliver high-quality lemons throughout the year as advertised. He said that he believes great potential exists for expanding demand through promotion and advertising; however, the problem of shifting lemon quality characteristics during the year must first be resolved. He said that a quality standard has been discussed within the industry, but had been discarded as impractical because only in-season (winter) lemons could meet quality standards similar to those used by California tree fruit industries. Off-season (summer) lemons are lower quality due to a drier growing season. Two major cooperatives in the industry—Sunkist and Pure Gold—have their own standards but, according to an industry marketing specialist, the standards only grade the lemons and do not address the problem of developing a high-quality lemon throughout the year. Evidence presented in February 1984 hearings before USDA on lemon marketing order operations indicated that export sales are not as high as they might be because foreign buyers are concerned about the lack of consistency in quality.

In October 1983 the committee agreed to contract for a new marketing research study with the University of California, Davis. One of the university's researchers told us that the research team would try to evaluate the potential for increasing market share through increased promotion, advertising, and new product development. He said that possible study areas include

--identifying the demographic and socio-economic characteristics of present lemon users;

--evaluating export market potential by identifying the attributes foreign consumers perceive as important in making purchase decisions;

--studying the potential of joint advertising with industries with complementary products such as tea or tomato juice; and

--evaluating the impact on supply and demand of new products, such as individually sealed (shrink wrapped) lemons that extend shelf life or organically grown lemons.

The study appears to have potential in moving the industry toward emphasizing marketing aspects. It does not, however, address problems in establishing quality controls.

CONCLUSIONS

The 1954, 1962, and 1970 AMAA amendments reflect congressional desire for marketing order committees to use research, development, and promotion tools for creating and maintaining more orderly marketing. In theory, when these marketing-oriented tools
are properly used, demand for the commodities should increase because the products offered better match consumer needs. The trend is toward increased use of such demand-enhancing marketing-oriented tools.

Industries using demand-enhancing tools are sometimes helped if the tools are used in conjunction with certain quantity control tools. For example, in the California almond and tart cherry industries, where weather conditions or other unknowns can cause annual supply variations, judicious use of reserve pools can help create the stability necessary if controlled market growth programs are to succeed.

The transformation of industries from a production control focus to a marketing orientation emphasizing increasing long-term demand over production is a multiyear process. This transformation usually requires extensive market research and product development to ensure not only offering quality products but providing products that reflect consumer needs. The California tree fruit and almond industries, which have led the move toward more marketing, have found that the process is an ongoing one, reflecting changing consumer tastes and desires. For example, the California tree fruit committee has been researching the pear market to identify what factors today's consumers consider in their pear purchasing decisions. Industries in the early stage of making the transformation such as tart cherries, Florida avocados, and lemons can benefit by (1) realizing the payback period for money invested may sometimes be long term, (2) staying current with consumer perceptions of their products, and (3) learning from the experiences of commodities further along the process. Efforts to promote or advertise products that do not reflect current consumer expectations will prove counterproductive because repeat purchases will not occur.

AGENCY COMMENTS

USDA commented that of the various different types of marketing order tools, it views research and promotion programs as the most beneficial for producers, handlers, and consumers alike.
CHAPTER 4

USDA ADMINISTRATION OF MARKETING ORDERS

USDA has overall responsibility for the marketing order program, but its role, at least since the 1960's, has been more passive than active. USDA relies on industry-led marketing order committees to initiate all marketing order actions and attends industry education meetings only when specifically invited by industry groups. USDA does not have a formal system for measuring marketing order performance, and its program operations manual, a potentially useful tool for conveying information about the program to interested parties has not been updated since 1966.

In view of the controversial environment surrounding marketing orders and the rather widespread misconceptions concerning what marketing orders can or cannot do, USDA should take steps to improve the communication of accurate marketing order program information. In addition, a formalized system to measure market performance will allow USDA to evaluate whether marketing orders meet the act's orderly marketing objectives and should help USDA and other interested parties judge the merits and shortcomings of marketing orders.

USDA's EARLY INVOLVEMENT IN ADMINISTERING MARKETING ORDERS

During the 1930's, USDA actively promoted marketing orders for various commodities. The Great Depression was underway, and the agricultural sector was in turmoil. Producers and handlers of farm products experimented with marketing orders to put some stability back in their industry.

During and following World War II, USDA took a less active role in developing marketing orders. Events in 1961 and 1962 entrenched a policy whereby, today, USDA does not approach an industry having problems marketing a commodity until formally contacted by interested producers or handlers.

A furor arose in the spring of 1961 about a USDA telegram and letter, which commended the proponents of the California wine grape marketing order proposal. The telegram was introduced into the public hearing record by the proposed order's opponents, and the letter was mailed from Washington the day the hearing closed in California. The opponents charged USDA with impropriety on the grounds that USDA employees violated rules prohibiting them from discussing the merits, issues, or evidence on a proceeding with any interested persons following the close of the hearing and prior to the issuance of the order.

USDA ruled that no violation had occurred and denied the petition. The Assistant Secretary of Agriculture for Stabilization said that the USDA documents did not discuss the evidence,
issues, merits, or proposed order nor commit the Secretary to an order but that they offered encouragement to an industry group, commending their efforts on behalf of the industry and encouraging them to continue such efforts, if need be, in the interests of stabilizing the grape industry in California. He concluded that the USDA documents were not improper and did not constitute a prejudgment of the issues.

No current AMS Fruit and Vegetable Division officials have been involved with marketing orders for long enough to provide insight into the incident. However, a 1965 doctoral dissertation on federal marketing orders (see app. III, no. 50) gives one individual's independent views of the incident's impact.

The dissertation states that although the petition was denied, the controversy and the damaging publicity were sufficient to produce a change in policy toward new proposals for marketing orders. Although USDA retained the authority to initiate marketing orders, this fact was removed from guidance documents and information pamphlets. Revised guidance documents instructed personnel within the Fruit and Vegetable Division not to seek new marketing orders but to consider only specifically developed industry requests. According to the dissertation:

"... the ramifications were more widespread and probably more lasting than the actual incident warranted. Irrespective of whatever the political machinations might have been, the results, as far as federal marketing orders were concerned, were direct and obvious. Personnel within the Department today are very cautious in even discussing the possibilities of more marketing orders. Whether a change in the political affiliation of the Secretary of Agriculture would change the attitudes of the career civil servants is very doubtful. Caution is apt to remain the byword for some time."

According to the Director of AMS' Fruit and Vegetable Division, USDA provides input on individual orders to responding to information requests and assuring that new regulations and marketing order committees' annual policy statements comply with current administration objectives and federal law. In almost all cases, USDA limits its assistance to providing technical guidance when requested by industry groups.

USDA's INVOLVEMENT IN MARKETING ORDERS TODAY

Marketing order activity has been rather significant since the early 1960's. Of the 47 current marketing orders, 15 have been added since the California wine grape proposal incident, and numerous amendments have changed orders. Seven orders failed in referendum during the same time period.
USDA does not keep a file of marketing order proposals that do not reach the referendum stage. However, USDA officials were able to compile a list for us of the 22 marketing order proposals since 1978: as of February 1985, 3 proposals had become marketing orders, 2 were rejected by USDA, 3 failed in referendum, 8 were pending, and 6 had been dropped by the industry. (See app. IV for details of these 22 proposals.)

Our discussions with USDA, industry, marketing order committees, and academic personnel led to the identification of a common problem with communicating accurate program information among the various parties involved in marketing order proposals. Accurate information is particularly important due to the controversies and the varied viewpoints of the parties involved. For example, some consumer groups are against all types of quantity or quality control tools because they believe that any regulations that may enhance producer prices are contrary to consumer interest.

We identified two marketing order proposals that indicated the various types of misconceptions about marketing orders: a California apricot proposal that did not pass a producer referendum in 1962, and a 16-state pecan marketing order proposal that USDA did not approve in October 1983.

California apricots

The California apricot industry's major problem in the early 1960's was poor quality fruit reaching the marketplace, particularly immature fruit at the beginning of a season. Green fruit at the beginning of the season tended to diminish consumer demand for the ripe fruit that was available during the remainder of the season.

A producer referendum was held in May 1962 covering one of the four California apricot production regions, but it did not pass. After the referendum was defeated, a USDA Sacramento field office marketing specialist met with the proposed order's proponents to discuss why they believed the proposal did not pass. In a June 1962 memorandum to USDA headquarters, he reported that the referendum's defeat was a result of "completely distorted and, in some cases, completely fabricated untruths concerning the role of the Department in a marketing order once the program became effective." He wrote that at the meeting he learned that prior to the vote, the marketing order's opponents were stating that

--USDA would tell the committee what regulations to institute;

--USDA would require acreage controls in connection with the program;

--once the program was instituted, it could never be terminated; and

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--the salaries of government personnel would be included in the assessment rate.

According to the marketing specialist, not one of these statements was correct.

Pecans

In February 1982 the Federated Pecan Growers' Association of the United States proposed a marketing order for pecans to cover 16 states. The proposed order would have authorized a marketing research and development program, including promotion and paid advertising, to improve the marketing, distribution, and consumption of pecans.

Public hearings were held in four cities. The hearing record contains a wide range of views. The Federated Pecan Growers' Association, which led the supporters, stated that record plantings, which had doubled the number of trees since 1974, had produced an oversupply situation that would increase when all the trees planted began to produce.\(^1\) The Growers' Association called for an industry-wide research and promotion program so that demand could be increased to a level where an oversupply situation would not occur. The National Pecan Shellers and Processors Association, which led the opposition, stated that an order would be counterproductive because the industry had remained profitable without federal regulation.

USDA received thousands of postcards and letters on the proposed order from pecan growers, processors, and users (e.g., confectioneries). Most comments were against the proposed order, but many of the reasons cited for opposing the order were not applicable to the proposed order.

For example, some of the opponents wrote that they were against the order because they did not want to set aside a portion of their crop in a reserve pool, as the almond industry had done in the past. However, the proposed order did not include any quantity control tools such as a reserve pool, which would require a separate rulemaking process. According to the AMS headquarters' marketing specialist who oversaw the process, the cards and letters showed that miscommunication was a big problem.

In October 1983 USDA's Deputy Assistant Secretary for Marketing and Inspection Services ruled that evidence of need for the program was not sufficient; therefore, the Federated Pecan Growers' Association proposal was not placed in referendum. In the ruling, USDA stated that production may increase in the future, but because surpluses did not exist at that time and pecan

\(^1\)Pecan trees produce nuts in 7 years and cover farm expenses in 10 to 12 years.
producers were still profitable, a marketing research and development order was not needed.

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Our examination of the 1962 apricot proposal, the 1983 pecan hearing record, and USDA's correspondence file on each indicated that in both time periods, incorrect statements were made by parties involved in the controversies concerning what marketing orders can do or cannot do.

Our discussions with USDA, marketing order committees, industry, and academic personnel identified two areas where USDA could improve the communication of accurate marketing order program information. These include (1) increasing USDA involvement in marketing order education and (2) providing a common, up-to-date set of marketing order rules and policies for all interested parties.

USDA involvement in marketing order education

USDA and academic personnel expressed concern about whether the pros and cons of marketing orders were being adequately communicated to the growers, handlers, and consumers of eligible marketing order commodities. The AMS Fruit and Vegetable Division's Marketing Agreement and Order Operations Manual (discussed on pp. 54-55) emphasizes the importance of, but does not require, early meetings with industry groups to assure industry has full information concerning marketing order programs and the applicability of a program to a particular commodity and area.

AMS Florida field office staff told us that they believed that much of the misunderstanding about the 1983 pecan proposal as well as a 1983 floral marketing order proposal for advertising and promotion that was defeated in a referendum could have been avoided if USDA marketing specialists had attended industry education meetings during the marketing order formulation stage. The vegetable and specialty crop branch chiefs of AMS' Fruit and Vegetable Division told us that USDA officials did not attend pecan or floral marketing order industry education meetings because they were not invited by the industry groups.

AMS Florida and Sacramento field office staff told us in early 1984, that for the sweet pepper and kiwi marketing order proposals that were pending at that time, the commodity groups invited USDA staff to attend industry education meetings where the staff responded to questions about what a marketing order can or cannot do. Florida field office staff expressed the belief that much of the misunderstanding about the pecan and floral proposals could have been avoided if USDA had held similar meetings with the industry early in the process. They said that USDA fact sheets and brochures on marketing orders that are distributed to parties
requesting information only cover the broad issues such as the types of activities allowed under marketing orders and the major steps required in establishing an order. They added that getting all the facts out early is important because, by law, once a notice of hearing is issued, USDA cannot discuss the merits of an order with any party.

Over the last several years, USDA has taken a number of steps to involve consumers in the marketing order process and thereby provide them with insight as to the working of marketing orders. USDA began encouraging the addition of "public or nonindustry" members to marketing order committees in 1978, but did not provide a mechanism to ensure that the administrative committees recommend individuals whose primary interest is, in fact, as a consumer of the product. USDA believes the marketing order committees are responsible for selecting qualified individuals. In addition, USDA added a prenotice step in the rulemaking process that gives the public the opportunity to comment on marketing order proposals. However, since the prenotice step went into effect, few public comments had been received. For example, USDA received a total of five letters during the prenotice period for the kiwi order in 1983. The Director, Fruit and Vegetable Division, said that some high-level USDA officials interpreted the low response rate as a reflection of lack of consumer interest. Headquarters marketing specialists told us that they believe consumer interest is reflected in the controversies surrounding marketing orders and that USDA will not benefit from consumer input until consumers are educated better about the basic economic and marketing principles involved.

Marketing order operations manual has not been updated to reflect current policy

The AMS Fruit and Vegetable Division's Marketing Agreement and Order Operations Manual contains detailed information on the programs, including background information on the AAMAA and step-by-step explanations of the marketing order promulgation and administration processes. The manual states that it was written primarily as a guidance document for AMS headquarters and field office marketing specialists; most of the specialists we contacted use it as a reference document. In addition, the manual's preface notes that the manual contains guidelines that committee managers and industry groups may find useful for gaining insight into marketing order programs.

However, guidelines developed since the manual's February 1966 publication date have not been incorporated into the operations manual, nor have any legislative changes or administrative policies implemented since then been incorporated. In addition, the manual does not address the many consumer-oriented issues that have grown in the past two decades. For example, the existing manual would not assist:
An industry group interested in learning about different options for establishing a research and development program in order to expand demand for its product.

A new USDA field office representative interested in the types of marketing order production research projects allowable under 1970 legislation or USDA's policy concerning consumer representation on marketing order committees.

A committee manager interested in USDA's policies on relaxing regulations to allow increased goods to reach farmers' markets or charitable institutions.

A branch chief in the Fruit and Vegetable Division told us that updating the manual has been planned for years but that it has a low priority and the people with the knowledge to do it are busy handling day-to-day crises.

USDA SHOULD DEVELOP CRITERIA FOR ASSESSING THE PERFORMANCE OF FEDERAL MARKETING ORDERS

USDA has overall responsibility for program administration, including the authority to approve orders and to suspend or terminate provisions or entire orders that do not tend to effectuate the declared policy of the act (7 U.S.C. 608c (16)(A)(1982)). USDA, however, has not established criteria for judging when orders meet or do not meet the declared policy of the act. During the last 20 years, concerns raised about whether marketing orders are creating orderly markets and whether they operate in the public interest have prompted each new administration to initiate major studies of marketing orders. Each of the studies has concluded that marketing orders generally serve a useful purpose, but concerns are still being raised with regard to individual orders. We believe that USDA should measure the impact of individual orders on meeting the legislative purpose of creating and maintaining orderly market conditions, but needs specific criteria for doing so. Such evaluations would be useful in clarifying the impact of marketing orders so that all parties involved could more appropriately judge the merits and shortcomings of marketing orders.

Federal reviews of marketing orders

Every administration since President Johnson's initiated major studies to evaluate marketing order issues. For example:

--A 1966 national commission examined the potential to extend marketing orders to other commodities and the adequacy of the federal role in reviewing marketing order functions.

--A 1975 interagency task force on marketing order price effects examined consumer and inflationary impacts.
Each study expressed support for the programs but called for modifications for improved oversight. For example, the 1966 National Commission on Food Marketing, comprised of House and Senate members and presidential appointees, recommended that (1) periodic reviews of marketing order operations be conducted and made public, (2) standards other than parity price be developed, and (3) USDA provide more effective and imaginative leadership in working with marketing order committees to develop information and education programs. The 1975 interagency task force report recommended that USDA (1) analyze the adequacy of the data available for each commodity and (2) evaluate the inflationary impacts of marketing orders on consumer prices. Only the latter recommendation to evaluate consumer impact was implemented by USDA as part of marketing order impact analysis studies. However, consumer impact analyses were not kept as a requirement by the present administration because it said that lower inflation reduced public concerns regarding fruit and vegetable prices.

The most recent comprehensive study of the marketing order program was in 1981. The program was one of 27 regulatory programs targeted for reassessment and possible modification in March 1981 by the President's Task Force on Regulatory Relief, headed by the Vice President. The review team's mandate was similar to prior studies' mandates, to study the program's effects on economic efficiency, costs, and productivity, focusing on marketing order provisions that allow procedures to control the quantity of the product marketed. The November 1981 report discussed four options: (1) continuing marketing orders as they are, (2) eliminating marketing orders, (3) replacing marketing orders with another program, and (4) modifying marketing order provisions and administration to reduce certain effects and strengthen others. As discussed in the following section, the fourth option has been adopted.

USDA role in reviewing marketing order performance

USDA primarily relies on the individual marketing order committees to decide whether a marketing order needs to be changed or discontinued. Since the committees are primarily made up of growers and handlers, such decisions may not always be (or be perceived to be) in the public and consumer interests.

In 1982 USDA issued guidelines to marketing order committees based on the 1981 study. The guidelines were amended in 1983. According to the Secretary, the guidelines were established to give industry and the general public a better understanding of what the orders should and should not do. According to the Director of AMS' Fruit and Vegetable Division, the guidelines are advisory and are not binding on the committees. With regard to monitoring marketing order operations, the Deputy Director of AMS' Fruit and Vegetable Division told us that he relies on AMS field office specialists to track committee activities relating to the legislative objectives and to keep management informed of these activities through informal contacts such as through telephone conversations.
USDA's guidelines suggest some potential market performance criteria. For example, the guidelines state that market allocation programs "must allow individual incentive and product innovation" and that "advertising and promotion can contribute to economic efficiency by helping consumers make better informed decisions." However, USDA does not systematically evaluate marketing orders against such criteria.

The only written analyses of the impacts of individual marketing orders AMS personnel supplied to us were decision papers, prepared to brief high-level decision makers on controversial issues. According to the AMS Deputy Director, each new administration has trouble understanding marketing orders, and the decision paper format is an attempt to respond to the questions raised by the present administration. Sixteen papers were prepared between January 1981 and October 1983. An assistant to the Director, AMS, told us that the decision papers are prepared to give the decision makers information on whether marketing orders are fulfilling the guidelines and the AMAA's objective.

We found, however, that the decision papers discuss only selective parts of the guidelines. For example, a decision paper on California raisins explained in detail why the raisin marketing order did not inhibit long-run market expansion. The paper did not address a related guideline concerning the need to allow individual incentives and product innovation. A paper on the California-Arizona lemon marketing order generally addressed the individual incentive and innovation issue, but it only states that the order has flexibility that allows for individual incentive. No mention was made of the types of flexibility allowed.

The only written analysis USDA provided us in regard to the controversial lemon marketing order was a September 1983 position paper that concluded that the lemon order should be reaffirmed because the program "tends to minimize intraseasonal price instability and result in higher season average grower returns than would be realized without regulation." No analyses were provided regarding such factors as the competitive nature of the lemon order, whether the order's geographical area met the act's requirements of being limited to the smallest production area practicable, whether consumers were paying higher prices for prorated lemons than would occur in the order's absence, or whether the order allows for individual incentives and product innovation. In brief, the position paper did little to respond to basic concerns that have been expressed by consumers about the market performance of the lemon marketing order. In 1984 the controversy over the lemon prorate was at a peak. Three weeks of public hearings in January 1984 resulted in 44 proposed amendments. As of February 1985, USDA had not made a decision on the future of the lemon marketing order.

Headquarters marketing specialists, committee representatives, and academic personnel expressed the belief that part of
the reason why marketing orders are misunderstood is that when approving or disapproving an order, USDA always justifies its action with language that is acceptable within USDA but does little to add to an overall understanding of the issues. USDA states only that an action complies or fails to comply with the act's objectives.

For example, in the October 1983 pecan decision, USDA ruled that a research and promotion marketing order was not needed "to effectuate the declared policy of the act," apparently because there was not a surplus of pecans. According to the AMAA, the principal objective of marketing orders is to create and maintain orderly marketing conditions, and amendments to the act adding research, promotion, and other market support tools help achieve that objective. Unlike supply control tools, which can have immediate impact on grower incomes through altering supplies, it takes years for research and promotion programs to increase demand. Under the pecan decision, USDA would not allow the industry to hold a referendum for a research and promotion marketing order unless surpluses detrimentally affected producer incomes. USDA did not explain how orderly marketing can be maintained in an environment where chronic surpluses and the resulting market disorder are a prerequisite for action.

Potential performance measures

We believe that much of the controversy surrounding marketing orders might be abated if USDA clearly spelled out criteria for approving, amending, or disapproving marketing orders. Our examination of the major marketing controversies in chapter 2 indicated one criterion that should be considered by USDA in reviewing all marketing orders—the level of competition and its effect on prices. We also believe that the AMAA's requirement that all orders cover "the smallest production area practicable" be analyzed, especially in instances when nearly 100 percent of domestic production is covered under one marketing order as in the case of lemons.

Other measures of market performance can be developed and implemented for specific marketing order tools. These might include potential measures mentioned in USDA's 1982 guidelines, such as:

--Under prorate, market allocation, producer allotment, or reserve pool programs, the degree of market innovation and incentive allowed individual growers should be analyzed periodically.

Other potential measures not mentioned in USDA's 1982 guidelines could also be included, such as:

--Under all promotion and advertising programs, the basis of the marketing effort should be analyzed to assure that the promotion and advertising are based on effective research
and quality products, otherwise the costs of demand-enhancement efforts may exceed any industry or consumer benefits.

The suggestions of others, including USDA's Economic Research Service, which has suggested similar market performance criteria, such as the rate of industry progressiveness or the reliability of supplies can also be considered.

We do not believe, however, that the parity price formula should be used as a criterion for approving, amending, or disapproving a marketing order. USDA used parity price as the basis of its January 1985 decision to suspend the navel orange marketing order's prorate authority. Our position, as stated in our 1976 marketing order report (see app. III, no. 17), is that parity is not an adequate measure of price impact because it cannot adequately protect grower or consumer interests. If USDA is to improve marketing order communications, decisions should be based on market performance criteria that can measure the impact of marketing orders on growers and consumers. Performance criteria that are applied and made public should help USDA's decision-making process and should help address some of the marketing order controversies.

CONCLUSIONS

AMS' Fruit and Vegetable Division plays a limited role in informing the industry and public of the pros and cons of marketing orders. Brochures are available on request but cover only the broad issues. USDA's most knowledgeable information sources, the marketing specialists most familiar with individual farm commodities and consumer groups' problems, could be more helpful. For example, our analysis of the 1962 apricot and the 1983 pecan proposals showed that incorrect information concerning marketing orders existed in both time periods. Although we only looked at a limited number of orders, we found that USDA's marketing order specialists do not always attend industry education meetings or

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3For a discussion on the parity price formula and marketing orders, see our April 1976 report entitled Marketing Order Program--An Assessment of Its Effects on Selected Commodities (ID-76-26). For a general discussion on parity as an evaluation tool, see our October 1980 report entitled An Assessment of Parity as a Tool for Formulating and Evaluating Agricultural Policy (CED-81-11).
widely distribute literature explaining what marketing order tools can and cannot do, or the impact such tools have on growers and consumers. We do not know to what extent this has been a problem. However, communication of accurate program information would be improved if USDA were able to participate in all industry education meetings.

The program's operations manual is a potentially useful information tool but needs to be updated and expanded. It does not include recent legislative and administrative policies and guidelines or contain USDA's position on the many consumer issues that developed since its 1966 publication date. It also does not focus on ways to develop the types of market-oriented programs the Secretary mentioned at the 1984 Agricultural Outlook Conference (as discussed on p. 38) as being necessary for establishing new markets.

USDA does not have a formalized system to measure whether marketing orders are performing in accordance with the orderly marketing objectives of the AMAA. Without such criteria, USDA is not in a position to evaluate marketing order performance or to appropriately judge the merits and shortcomings of marketing orders.

USDA should consider a number of factors in developing criteria for measuring market performance. The level of competition and its effects on prices should be considered by USDA as one possible criterion for measuring all marketing orders. Other types of criteria, such as the potential for market innovation or the basis of promotion and advertising efforts could be measured for applicable marketing order tools. Studies by USDA's Economic Research Service and others have suggested market performance criteria that should also be considered.

USDA's 1982 guidelines address some of the suggested criteria such as the potential for market innovation. However, USDA decision papers on individual marketing orders have limited distribution, only selectively discuss applicable guidelines, and supply little information to decision makers. Such information could help clarify the benefits and shortcomings of existing marketing orders or justify changes in marketing order policies. Until USDA takes the lead by developing measurable criteria for evaluating the performance of marketing orders and making the findings public, program criticism is likely to remain a dominant force in setting the marketing order debate agenda.

RECOMMENDATIONS

We recommend that the Secretary of Agriculture require the Administrator, Agricultural Marketing Service, to:

--Develop and apply criteria for measuring the performance of individual marketing orders and make the results available
so that USDA decision makers and other interested parties can appropriately judge the merits and shortcomings of marketing orders.

--Update and keep current the operations manual for marketing orders. The manual should (1) incorporate the above criteria for measuring the program's principal objective of creating and maintaining orderly marketing, (2) incorporate legislative and administrative policy and guideline changes, including 1982 and 1983 marketing order guidelines, and (3) focus on ways to develop market-oriented programs that can improve the quality and variety of available products.

AGENCY COMMENTS AND OUR EVALUATION

USDA stated that developing measurement criteria has long been viewed as a critical but elusive area of concern and that the manual has long been in need of revision.

USDA said that AMS will work with other USDA agencies, academicians, and others to develop appropriate criteria and to make meaningful measurements of marketing order effectiveness. USDA said that it has been seeking criteria since the 1930's and that prior analyses, such as a 1981 attempt to measure marketing order effectiveness (see app. III, no. 31), have been inconclusive and demonstrate the difficulty of measuring marketing order performance. USDA also stated that many of the past evaluations have concentrated on specific issues and shed little light on overall order performance.

We noted, however, that the 1981 study cited by USDA focused on price impacts, an important variable but not the only one pertinent to orderly marketing. On pages 58-59 we suggest other criteria, such as the level of competition and the potential for market innovation, for USDA to consider in developing measures of marketing order performance. Without such criteria, USDA is not in a position to measure whether marketing orders are performing in accordance with the orderly marketing objectives of the AMAA.

USDA agreed to implement our recommendation to update the marketing order operations manual in a practical and expeditious manner.
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<td>967</td>
<td>Florida celery</td>
<td>X</td>
<td>X</td>
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<td>971</td>
<td>S. Texas lettuce</td>
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<td>979</td>
<td>S. Texas melons</td>
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<tr>
<td>981</td>
<td>California almonds</td>
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<td>982</td>
<td>Oreg.-Wash. filberts</td>
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<tr>
<td>984</td>
<td>California walnuts</td>
<td>X</td>
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<tr>
<td>985</td>
<td>Far West spearmint oil</td>
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<td>California dates</td>
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<td>989</td>
<td>California raisins</td>
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<td>991</td>
<td>Wash.-Idaho.-Oreg.-Calif. hops</td>
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<tr>
<td>993</td>
<td>California prunes</td>
<td>X</td>
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</table>

Source: Agricultural Marketing Service, USDA.
COMMODITIES ELIGIBLE FOR FEDERAL MARKETING ORDERS

COMMODITIES ORIGINALLY ELIGIBLE FOR MARKETING UNDER AUTHORIZING LEGISLATION

As originally enacted, the AMAA specified that marketing orders could only apply to the following agricultural commodities and their products or to any regional or market classification of any such commodity or product:

--milk;

--fruits (including pecans and walnuts but not including apples and not including canning fruits, other than olives);

--tobacco;

--vegetables (not including canning vegetables, other than asparagus);

--soybeans; and

--naval stores (not including products of naval stores).

COMMODITIES ELIGIBLE UNDER PRESENT LEGISLATION

A number of amendments to the act have modified the list of eligible commodities. As amended, the act now classifies commodities into two groups with respect to their eligibility for a marketing order: (1) specified commodities and their products and (2) all other commodities but not their products.

As of the time of our review, the specific commodities and their products to which marketing orders could apply included:

--milk,

--fruits (including filberts, almonds, pecans, walnuts, and apples produced in Washington, Oregon, Idaho, New York, Michigan, Maryland, New Jersey, Indiana, California, Maine, Vermont, New Hampshire, Rhode Island, Massachusetts, Connecticut, Colorado, Utah, New Mexico, Illinois, and Ohio) (not including fruits for canning or freezing other than pears, olives, grapefruit, cherries, cranberries, apples produced in the states named above but not Washington, Oregon, or Idaho; not including the products of canned or frozen pears, grapefruit, cherries, apples, or cranberries);
--tobacco;
--vegetables (not including vegetables, other than asparagus, for canning or freezing and not including potatoes for canning, freezing, or other processing);
--hops;
--honeybees (not the products of honeybees);
--naval stores (not the products of naval stores); and
--eggs.

All other commodities (but not their products) not covered in the specified list above are eligible to adopt marketing orders, with the following exceptions that are prohibited:

--honey;
--cotton;
--rice;
--wheat;
--corn;
--grain sorghums;
--oats;
--barley;
--rye;
--sugarcane;
--sugar beets;
--wool;
--mohair;
--livestock;
--soybeans;
--cottonseed;
--flaxseed;
--poultry (turkeys are allowed);
--fruits and vegetables for canning or freezing;
--potatoes for canning, freezing or other processing;
--apples;
--peanuts produced in more than one production area.

Source: Congressional Research Service.
### Marketing Order Studies Reviewed by GAO

<table>
<thead>
<tr>
<th>Author</th>
<th>Title and Publisher</th>
<th>Date</th>
<th>Commodities studied</th>
<th>Synopsis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Agricultural Marketing Service</td>
<td>A Review of Federal Marketing Orders for Fruits, Vegetables, and Specialty Crops--Economic Efficiency and Welfare Implications, Agri. Econ. Rept. #77, U.S. Dept. of Agriculture</td>
<td>1981</td>
<td>General</td>
<td>Evaluates policy options for orders ranging from no change to eliminating orders entirely. Concludes that season-long prorates, market allotments, and market allocation quantity control programs are most likely to result in resource misallocations. Presents options such as only using quantity controls as &quot;safety valves&quot; during excessively burdensome years, leaving markets unregulated at other times.</td>
</tr>
<tr>
<td>2. Armbruster, W. E., D. R. Henderson, and R. D. Knutson</td>
<td>Federal Marketing Programs in Agriculture--Issues and Options, The Interstate Printers and Publishers, Inc.</td>
<td>1983</td>
<td>General</td>
<td>Describes federal marketing programs including chapters on fruit and vegetable marketing orders; advertising, promotion, and research; cooperatives and bargaining; and changing agricultural marketing programs. Analyzes today's marketing system, identifies unresolved issues, and assesses the consequences of options for dealing with unresolved issues.</td>
</tr>
<tr>
<td>4. Booker, D.</td>
<td>&quot;Statement to the U.S. Department of Agriculture Advisory Committee on Regulatory Programs, U.S. Department of Justice (mimeo)</td>
<td>1976</td>
<td>General</td>
<td>Asserts that marketing orders are anticompetitive (favor one group over another), increase consumer prices, lead to chronic overproduction, and restrict entry.</td>
</tr>
<tr>
<td>Author</td>
<td>Title and publisher</td>
<td>Date</td>
<td>Commodities studied</td>
<td>synopsis</td>
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<tr>
<td>6. Bushnell, P. G.</td>
<td>Dynamic Analysis of the World Almond Market and the United States Almond Marketing Order, University Microfilms Int'l.</td>
<td>1978</td>
<td>Almonds</td>
<td>Studies the relationship between the federal marketing order and world demand for almonds. A deterministic simulation model is developed to assess the impact of Spanish entry into the European market. The model shows that Spanish entry tends to have a destabilizing effect on variables of interest to the United States.</td>
</tr>
<tr>
<td>7. Cohen, G. M., P. H. Eisenstat, Department of Justice</td>
<td>U.S. Department of Justice Testimony on Proposed Amendment of Marketing Agreements and Orders 907 and 908</td>
<td>1983</td>
<td>Navel and valencia oranges</td>
<td>Concludes the prorate provisions of navel and valencia oranges do not raise farmers' incomes. Any short-run farmer gains are eroded over time, and therefore, the Secretary of Agriculture should suspend or terminate the prorate provisions.</td>
</tr>
<tr>
<td>8. Dash, S. L.</td>
<td>&quot;An Economic Analysis of the Marketing Orders for Walnuts and Almonds,&quot; unpublished Master's thesis, University of Wisconsin, Madison</td>
<td>1982</td>
<td>Walnuts, almonds</td>
<td>Evaluates market allocation provisions of the walnut and almond orders. An econometric model is developed and a simulation is run to compare &quot;marketing-order&quot; conditions with &quot;no-marketing-order conditions.&quot; Concludes (1) the orders have been an effective means of raising producer revenue and (2) the variability of returns was not substantially greater when no-order conditions were simulated.</td>
</tr>
<tr>
<td>10. Farrell, K. E.</td>
<td>&quot;Marketing Orders and Agreements in the U.S. Fruit and Vegetable Industries,&quot; in Organization and Competition in the Fruit and Vegetable Industry, Tech. Study 94 Nat. Comm. on Food Marketing</td>
<td>1966</td>
<td>General</td>
<td>Theoretical discussion of supply control aspects of orders and description of how some exemplary orders work. Details why orders cannot, in general, lead to a monopoly situation. Defines conditions where orders are most effective, and marketing problems most effectively addressed by orders. Supplement #3 contains discussion of federal and state enabling legislation.</td>
</tr>
<tr>
<td>Author</td>
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<tr>
<td>11. Federal Trade Commission staff</td>
<td>Federal Trade Commission Staff Report on Agricultural Cooperatives</td>
<td>1975</td>
<td>General</td>
<td>Part IV evaluates the influence of marketing orders on the economic power of agricultural cooperatives. Appendix to part IV evaluates potential economic harm to consumers. Concludes marketing orders have potential and actual effects counter to consumer interest.</td>
</tr>
<tr>
<td>12. Polwell, R. J., P. M. Hennessey, R. C. Mittelhammer, and A. H. Harrington</td>
<td>United States Hops Industry and the Volume Control Provisions of the United States Federal Hop Marketing Order, Agricultural Research Center, Washington State University</td>
<td>1982</td>
<td>Hops</td>
<td>Empirical analysis of the hop committee's projected supply and demand data with actual market results is undertaken. Concludes that the committee has not unduly used its market power because more supply is generally placed on the market than needed, the actions of the hop committee appear to have developed an orderly marketing program, and the degree of price variability under the order has been less than half that experienced otherwise.</td>
</tr>
<tr>
<td>13. Frank, G.</td>
<td>&quot;Programs in the U.S.,” unpublished doctoral dissertation, University of Nebraska-Lincoln</td>
<td>1980</td>
<td>General</td>
<td>Evaluates the market-oriented framework of U.S. agriculture, the history of federal and state legislated farm commodity promotion programs, and the economic and political impact of such legislation. Appendix B lists all state marketing order programs.</td>
</tr>
<tr>
<td>14. French, B. C.</td>
<td>&quot;Fruit and Vegetable Marketing Orders: A Critique of the Issues and State of Analysis,&quot; American Journal of Agricultural Economics</td>
<td>1982</td>
<td>General</td>
<td>Evaluates findings of 1981 USDA review team study. Concludes that 1982 guidelines were consistent with the review teams' findings, but current theoretical analyses are limited and incomplete, and without further empirical work, the controversies will continue.</td>
</tr>
<tr>
<td>15. Geller, G.</td>
<td>California Tree Fruit Agreement--1933-1983, 1982 Annual Report</td>
<td>1983</td>
<td>Pears, plums, peaches, nectarines</td>
<td>Describes history of marketing California tree fruit from the first fresh fruit agreement under the 1933 Agricultural Adjustment Act through 1983. Notes change in emphasis during the early 1950's from controlling supplies to increasing demand through quality and market support functions. Credits effective use of such functions as the reason for increased production and greater consumer acceptance of products.</td>
</tr>
<tr>
<td>Author</td>
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<tr>
<td>General Accounting Office</td>
<td>Administration of Marketing Orders for Fresh Fruits and Vegetables, RED-75-273.</td>
<td>1974</td>
<td>Tomatoes, navel and valencia oranges,</td>
<td>Evaluates (1) USDA consideration of consumer interests in administration process, (2) USDA research on marketing order effects on retail prices, (3) research on alternatives to marketing orders, and (4) factors affecting tomato quality.</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>celery</td>
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<tr>
<td>General Accounting Office</td>
<td>Marketing Order Program--An Assessment of Its Effects on Selected Commodities, ID-76-26</td>
<td>1976</td>
<td>Potatoes, onions, raisins</td>
<td>Evaluates the costs and effects of federal orders. Concludes the orders benefit some producers and handlers by improving farm-level prices and assists industries through improving the knowledge base, but consumers pay higher retail prices for marketing order commodities.</td>
</tr>
<tr>
<td>General Accounting Office</td>
<td>Analysis of Certain Aspects of the California-Arizona Navel Orange Marketing Order, CED-81-129</td>
<td>1981</td>
<td>Navel oranges</td>
<td>Evaluates the 1980-81 navel orange surplus situation and concludes that (1) no evidence exists that navel oranges have been destroyed and (2) terminating the marketing order would probably lower prices in the short run, but long-range implications are unknown.</td>
</tr>
<tr>
<td>Gilette, D. G.</td>
<td>An Analysis of Federal Marketing Orders in the Potato Industry, University Microfilms, Int'l.</td>
<td>1967</td>
<td>Potatoes</td>
<td>Study describes the legislative framework and use of federal marketing orders, discusses production and marketing characteristics in the potato industry, and measures the impact of federal marketing orders on the potato industry by comparing marketing- and non-marketing-order potato industry areas.</td>
</tr>
<tr>
<td>Glasson, V. R.</td>
<td>&quot;Comments Concerning Federal Fruit, Vegetable, and Specialty Crop Marketing Orders,&quot; American Farm Bureau Foundation</td>
<td>1981</td>
<td>General</td>
<td>Provides input to USDA's 1981 task force evaluating marketing orders. Lists criteria for consideration in reviewing marketing orders. Concludes that marketing orders have served consumers and producers well as an effective means of providing orderly marketing.</td>
</tr>
<tr>
<td>Hedlund, F. F.</td>
<td>&quot;The Impact of Marketing Agreements Upon the Marketing of Fruits and Vegetables,&quot; Journal of Farm Economics, 32:4</td>
<td>1930</td>
<td>General</td>
<td>Concludes that quality regulations have minimum impact. Quantity regulations have no effect if alternative markets exist. Quantity controls slowed down picking and packing in California citrus and also slowed adoption of aggressive sales programs. The statistics and other information collected under marketing order programs are of major importance.</td>
</tr>
<tr>
<td>Author</td>
<td>Title and publisher</td>
<td>Date</td>
<td>Commodities studied</td>
<td>Synopsis</td>
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<tr>
<td>Heron, J. B., Jr.</td>
<td>&quot;National Council of Farmers Cooperatives, Legal, Tax and Accounting Committee Marketing Order Update&quot;</td>
<td>1983</td>
<td>General</td>
<td>Discusses OMB's role in the marketing order oversight process. Concludes that the marketing order programs work, should be retained, and should be administered only by USDA.</td>
</tr>
<tr>
<td>Hoos, S.</td>
<td>&quot;Economic Implications of California Agricultural Marketing Programs,&quot; Journal of Farm Economics, 38:5</td>
<td>1956</td>
<td>General</td>
<td>Programs were good for countering cyclically depressed demand, especially in perennials, but were not successful in alleviating chronic surplus situations.</td>
</tr>
<tr>
<td>Hoos, S.</td>
<td>&quot;Short- and Long-Run Economic Effects and Implications of Using National Marketing Orders as a Supply Management Tool,&quot; in Rutgers Farm Policy Forum Proceedings, Rutgers University</td>
<td>1962</td>
<td>General</td>
<td>Quality control can stimulate demand by increasing consumer satisfaction and confidence. Outlines general conditions under which marketing orders are likely to be successful.</td>
</tr>
<tr>
<td>Hoos, S., and D. A. Clark, Jr.</td>
<td>&quot;Impact of Marketing Orders and Agreements,&quot; Farm Policy Forum, 10:1</td>
<td>1957</td>
<td>General</td>
<td>Comments on the effects of orders on interregional competition. Volume controls for California asparagus caused the state to lose market share. Order-funded promotion for pears expanded California sales relative to other areas. California lemon order stimulated Florida production.</td>
</tr>
<tr>
<td>Hoos, S.</td>
<td>&quot;Marketing Orders and Agreements,&quot; Farm Policy Forum, 16:1</td>
<td>1963</td>
<td>General</td>
<td>Argues that orders &quot;are not doing the job often attributed to them.&quot; Orders have not solved problems associated with chronic surplus situations. &quot;Thus one should look with caution upon anyone offering marketing orders as a cure-all for any type of marketing problem. At the same time, one should look with suspicion at anyone who condemns all marketing orders.&quot;</td>
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</table>
### Synopsis

**Findings and Analysis**
- **Commodities Studied**
  - Cling peaches
  - Pears
  - Lemons
  - Walnuts
  - Almonds

**Synopsis**
- The study found that long-run price gains for "controlled" commodities did not differ greatly from those accruing to uncontrolled commodities. Order price effects include cutting price troughs relative to price peaks. Costs of orders include high cost of resource misallocation, abridgment of individual freedom, and accelerated firm entry and slowed exit. The study suggests that restricted percentages by gradually reduced or volume controls prohibited from being used for 2 successive years.

**Synopsis**
- Attempts to separate demand-increasing and supply-decreasing effects of order-imposed minimum quality standards. Estimates a positive relationship between minimum quality and demand in only 4 of 17 order commodities studied. Demand elasticity in the vicinity of "normal" production indicates higher standards could elevate producer returns during large crop years.

**Synopsis**
- Evaluates consumer surplus and producer gross return effects of terminating various provisions in federal orders. Identifies information required to draw conclusions about net welfare gains and losses in the short and long run.

**Synopsis**
- Compares farm price levels and price variability for commodities with and without marketing orders. Ranks orders by potential market power conferred. Finds limited statistical evidence that order commodity prices were higher (absolutely or as a percent of parity) or more stable than matched non-order counterparts. No discernible relationship between potential market power and actual price performance.

**Synopsis**
- Evaluates role of marketing orders in present farm economy and their effect on consumers. Also discusses efforts to evaluate marketing orders by USDA, FTC, GAO, and others, and proposals to improve marketing order administration.
<table>
<thead>
<tr>
<th>Author</th>
<th>Title and publisher</th>
<th>Date</th>
<th>Commodities studied</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Knutson, R. D.</td>
<td>&quot;Restoring Public Confidence in Federal Fruit and Vegetable Marketing Orders,&quot; Cooperative Extension Service, Texas A&amp;M University</td>
<td>1981</td>
<td>General</td>
<td>Evaluates whether USDA marketing order decisions are made in the public interest. Proposes alternatives for improved USDA oversight including periodic review, updating the parity goal, and procedures for obtaining consumer representation on committees.</td>
</tr>
<tr>
<td>Masson, A.</td>
<td>&quot;Statement to the USDA Advisory Committee on Regulatory Programs on Citrus Marketing Orders, Bureau of Economics, Federal Trade Commission&quot;</td>
<td>1976</td>
<td>California-Arizona oranges and lemons</td>
<td>Discusses costs of citrus orders: higher fresh fruit prices, abnormally long season, restricted fresh shipments, resource misallocation, excess profits to growers, eradication of price competition.</td>
</tr>
<tr>
<td>McMenamin, M.</td>
<td>&quot;Tedious Fraud: Reagan's Farm Policy and the Politics of Agricultural Marketing Orders,&quot; Cato Institute</td>
<td>1983</td>
<td>General</td>
<td>Discusses &quot;free market&quot; vs. &quot;regulatory control&quot; controversy and presents views held by some marketing order critics.</td>
</tr>
<tr>
<td>Author</td>
<td>Title and publisher</td>
<td>Date</td>
<td>Commodity studied</td>
<td>Synopsis</td>
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<tr>
<td>38. Merchant, C. S.</td>
<td>&quot;Maine Potato Marketing Agreement and Order,&quot; Journal of Farm Economics, 31:4</td>
<td>1949</td>
<td>Maine potatoes</td>
<td>Concludes desirable features of orders are uniform product/commodity sizes and elimination of small sizes. Undesirable features are &quot;crowding&quot; the tolerances, added inspection costs, limited outlets for eliminated potatoes, and no consumer representation.</td>
</tr>
<tr>
<td>40. Nelson, G. and T. H. Robinson</td>
<td>&quot;Retail and Wholesale Demand and Marketing Order Policy for Fresh Navel Oranges,&quot; American Journal of Agricultural Economics, 60:3</td>
<td>1978</td>
<td>Navel oranges</td>
<td>Estimates monthly demand for navel oranges. Concludes that administrative committee decisions to restrict fresh shipments may have reduced producer returns relative to unrestricted shipping, since demand (at handler level) was estimated to be elastic. Committee response to 1974 Cost of Living Council efforts to increase weekly pro-rates was inconsistent with grower profit maximization objective.</td>
</tr>
<tr>
<td>Author</td>
<td>Title and publisher</td>
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<tr>
<td>42. Ricks, D. J.,</td>
<td>The Tart Cherry Subsector of U.S. Agriculture: A Review of Organization and Performance, University of Wisconsin-Madison</td>
<td>1982</td>
<td>Tart cherries</td>
<td>Discusses (1) overall nature of the tart cherry industry, (2) reasons for supply instability, (3) impact of the federal marketing order program on supplies, and (4) potential for increasing market demand.</td>
</tr>
<tr>
<td>L. G. Ham, and</td>
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<tr>
<td>W. C. Chase-Lansdale</td>
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<tr>
<td>43. Shafer, C. E.</td>
<td>&quot;The Effect of a Marketing Order on Winter Carrot Prices,&quot; American Journal of Agricultural Economics, 50:4</td>
<td>1968</td>
<td>Carrots</td>
<td>Employed a dummy variable in time series analysis to capture effect of marketing order on demand for winter carrots from Texas. Concludes that order reduced the price spread between retail and grower levels but did not affect demand above the grower level.</td>
</tr>
<tr>
<td>44. Smith, E. B.</td>
<td>Evaluation of Federal Marketing Orders for Fruits and Vegetables Using Time Varying Parameters, University Microfilms, Int'l.</td>
<td>1982</td>
<td>Citrus fruit, vegetables, and potatoes</td>
<td>Evaluates the relationship between order activity and demand. A current and historical perspective of marketing order use and evolution is presented. An empirical model linking order activity to demand is developed and estimated.</td>
</tr>
<tr>
<td>45. Smith, R. J.</td>
<td>&quot;The Lemon Prorate in the Long Run,&quot; Journal of Pol. Economy, Dec. 1961</td>
<td>1961</td>
<td>Lemons</td>
<td>Argues that grower returns for lemons (per carton) in the long run have not been increased by use of the lemon marketing order. Order has the effect of subsidizing lemon juice, which is competitive with fresh lemons.</td>
</tr>
<tr>
<td>46. Smith, T. B.</td>
<td>&quot;Comments Concerning Federal Fruit, Vegetable, and Specialty Crop Marketing Orders,&quot; Community Nutrition Institute</td>
<td>1981</td>
<td>General</td>
<td>Provides input to USDA's 1981 task force evaluating marketing orders. Concludes that marketing orders result in consumers paying higher prices and this is ample reason to pursue change. States that previous requests to broaden the task force to include public members were unsuccessful.</td>
</tr>
<tr>
<td>Author</td>
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<tr>
<td>Staaf, J. D.</td>
<td>An Economic Analysis of Florida Avocado and Lime Merchandising. The Economic Associates, Inc.</td>
<td>1983</td>
<td>Avocados, limes</td>
<td>Presents an overview of avocado and lime market conditions and evaluates the economics of information and advertising. For avocados, recommends limited price advertising, generic advertising be cut out, and additional market research be undertaken. For limes, recommends research on competing Mexican imports but no promotion unless Florida limes can be differentiated from Mexican limes.</td>
</tr>
<tr>
<td>Thor, P. K., and E. V. Jesse</td>
<td>Economic Effects of Terminating Federal Marketing Orders for California-Arizona Oranges, Tech. Bulletin 1664, Economic Research Service, U. S. Department of Agriculture</td>
<td>1981</td>
<td>Navel and valencia oranges</td>
<td>Employs weekly simulation model to estimate short- and long-run effects of terminating order. Short-run effects include substantially lower and more volatile grower returns as more fruit is sold fresh. In the long run, fresh prices and shipments are about the same as with the orders in effect, as is price variability. Other long-run effects include reduced season lengths and a major contraction of the processing sector with diminished production for processing.</td>
</tr>
<tr>
<td>Wood, W. M., Jr.</td>
<td>Federal Marketing Orders and Commodity Group Organization, University Microfilms, Int'l.</td>
<td>1965</td>
<td>General</td>
<td>Evaluates the effectiveness of federal orders as a tool for aiding in the development of commodity group cohesiveness and organization. Also evaluates the degree of commodity group leadership in establishing orders and USDA's role in the process.</td>
</tr>
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</table>
**FEDERAL MARKETING ORDERS PROPOSED**

**JANUARY 1978 - FEBRUARY 1985**

**AMS, FRUIT AND VEGETABLE DIVISION**

<table>
<thead>
<tr>
<th>Date of proposal</th>
<th>Area and commodity</th>
<th>Main provisions</th>
<th>Promulgation action</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/78</td>
<td>Texas - High Plains potatoes</td>
<td>Research and promotion</td>
<td>None</td>
<td>Insufficient industry interest shown.</td>
</tr>
<tr>
<td>10/78</td>
<td>Texas - South melons</td>
<td>Grade, container</td>
<td>Referendum favorable; order issued April 1979</td>
<td></td>
</tr>
<tr>
<td>11/78</td>
<td>Florida bell peppers</td>
<td>Containers</td>
<td>None</td>
<td>Insufficient industry interest shown.</td>
</tr>
<tr>
<td>4/79</td>
<td>Nevada potatoes</td>
<td>Grade and size</td>
<td>No action since 1979</td>
<td>Producers to wait and see if production expands enough to support pro-gram.</td>
</tr>
<tr>
<td>10/79</td>
<td>Florida leather leaf fern and plumosa</td>
<td>Research and promotion</td>
<td>None</td>
<td>Insufficient industry interest shown.</td>
</tr>
<tr>
<td>3/82</td>
<td>National order - mushrooms</td>
<td>Research and promotion, including paid advertising</td>
<td>Failed to gain industry support</td>
<td>Several major producers refused to support. Separate legisla- tion required.</td>
</tr>
<tr>
<td>3/82</td>
<td>National European (hothouse) cucumbers</td>
<td>Grade and size, pending containers, research and development</td>
<td></td>
<td>Some industry support evident; need to develop grade standards.</td>
</tr>
</tbody>
</table>
### Vegetable branch (continued)

<table>
<thead>
<tr>
<th>Date of proposal</th>
<th>Area and commodity</th>
<th>Main provisions</th>
<th>Promulgation action</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/82</td>
<td>Washington-Oregon asparagus</td>
<td>Grade, size, containers, markings, research and promotion</td>
<td>Producer meeting held; no positive action</td>
<td>Insufficient producer support.</td>
</tr>
<tr>
<td>11/82</td>
<td>East Central Georgia onions</td>
<td>Grade, size, containers, markings, research, and promotion</td>
<td>Industry withdrew support</td>
<td>State legislature failed to designate area for &quot;Vidalia&quot; onions.</td>
</tr>
<tr>
<td>12/83</td>
<td>California tomatoes</td>
<td>Grade, size, maturity, containers, and markings</td>
<td>Pending</td>
<td></td>
</tr>
<tr>
<td>1/84</td>
<td>Several states roses</td>
<td>Research and promotion</td>
<td>Pending</td>
<td>Need to amend enabling legislation.</td>
</tr>
<tr>
<td>1/84</td>
<td>Virginia broccoli</td>
<td>Grade, size, maturity, containers, and markings</td>
<td>Pending</td>
<td></td>
</tr>
<tr>
<td>3/84</td>
<td>Florida bell peppers</td>
<td>Grade, size, maturity, and containers</td>
<td>Pending</td>
<td></td>
</tr>
<tr>
<td>4/84</td>
<td>Texas vegetables¹</td>
<td>Research and promotion</td>
<td>Pending</td>
<td></td>
</tr>
</tbody>
</table>

¹Proposal is for a marketing agreement only. Research and promotion program will only be binding on growers and handlers who voluntarily enter into the agreement with the Secretary of Agriculture.
<table>
<thead>
<tr>
<th>Date of proposal</th>
<th>Area and commodity</th>
<th>Promotion provisions</th>
<th>Promulgation action</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/78</td>
<td>California ruby seedless grapes</td>
<td>Grade, size, containers</td>
<td>Failed in referendum conducted Aug. 1979</td>
<td>Insufficient grower support for issuance.</td>
</tr>
<tr>
<td>3/83</td>
<td>California kiwi</td>
<td>Grade, size, maturity, and containers</td>
<td>Referendum favorable. Order issued Oct. 1984</td>
<td></td>
</tr>
<tr>
<td>10/84</td>
<td>San Joaquin Valley California avocados</td>
<td>grade, size, maturity, containers, and production research</td>
<td>Pending</td>
<td></td>
</tr>
</tbody>
</table>

**Specialty crops branch**

<table>
<thead>
<tr>
<th>Date of proposal</th>
<th>Area and commodity</th>
<th>Promotion provisions</th>
<th>Promulgation action</th>
<th>Reason</th>
</tr>
</thead>
</table>

Source: Agricultural Marketing Service, USDA.
Guidelines For Fruit, Vegetable, & Specialty Crop Marketing Orders

U.S. DEPARTMENT OF AGRICULTURE
JANUARY 25, 1982
GUIDELINES FOR
FRUIT, VEGETABLE, & SPECIALTY CROP MARKETING ORDERS

The Agricultural Marketing Agreement Act of 1937 (Act) authorizes the Secretary of Agriculture to administer marketing order programs for fruits, vegetables, and specialty crops. In response to the President's Task Force on Regulatory Relief, the Secretary of Agriculture initiated an economic review of Federal marketing orders in May 1981. This review was undertaken to determine how well the programs are meeting the Administration's goals of:

--Reducing Federal government regulation;
--Maximizing producer returns through open and competitive marketing;
--Achieving more efficient allocation of resources;
--Supporting the concept of self-help programs.

The Department's economic review evaluated the impact of the numerous programs permitted through the marketing order system. After extensive analysis, the report concluded that orders have the potential to effectively stabilize supplies and prices but some may impose inefficiency on the production and marketing system.

Recognizing the inherent instability in producing and marketing agricultural commodities in general, and these crops in particular, the Secretary intends to operate marketing order programs in a manner to reduce extreme fluctuations in supplies and prices. Reducing risks to
both buyers and sellers provides producers and consumers a degree of protection against extreme losses arising from economic and natural causes.

In keeping with the Administration's objectives and those of the Act, the Secretary will require some adjustments in programs that restrict entry, limit supply, or perpetuate over-supply of commodities. The extent of Federal involvement will be consistent with the efficient use of the nation's resources in the interest of producers and the general public.

The following general guidelines will be applied to all Federal marketing orders covering fruits, vegetables, and specialty crops. These guidelines will be applied to each marketing order on a case-by-case basis, after full discussion with the industries involved.

VOLUME CONTROL PROGRAMS

Producer Allotment Programs

The Department's recent economic review pointed out that producer allotment programs have the potential for limiting supply, causing underinvestment by industry, and reducing open competition by restricting entry of new producers.

While the allotment system is contrary to the general policy of this Administration, it does have a statutory basis. To balance policy goals with statutory requirements, the Secretary will carry out these programs in a manner that will eliminate barriers to entry. Where changes in existing programs are necessary, the Secretary will work with the affected industries toward gradual adjustments.
The Secretary recognizes that market allocation programs can be beneficial to producers when used properly. The programs must allow individual incentive and product innovation, they should not be used to inhibit long-run market expansion or to encourage or continue chronic over-production. The Secretary intends to evaluate annually the economic situation in each industry where market allocations are proposed to ensure that regulations are designed with these objectives in mind.

The Secretary will evaluate committee recommendations as to their possible long-term effects on price differentials between markets and the percentages of production going to the different markets. This is to ensure that market adjustment and public interest concerns receive appropriate attention.

The industry must monitor the effects of continual use of annual regulations, so that regular supply and demand signals from the market are not distorted. The committees must submit, and the Secretary will consider, market allocation recommendations separately from all other features available under the program, including prorates.

**Prorates**

Prorates are measures which regulate the short-term flow of a commodity to market. Specifically, the term "prorate" refers to the establishment of a maximum quantity a handler may ship during a limited time period. Recommendations for prorates that have an allocative effect will be considered separately.

This Administration believes that prorates can be a valuable tool for effective marketing serving the interests of both producers and consumers through market stabilization and extension of the season.
This type of program may be used to prevent temporary market gluts and correspondingly depressed prices by smoothing out product flow. It contributes to more efficient use of handling and distribution facilities. However, maximum effectiveness would require "perfect" market information and administration. All too often one or both of these are unattainable. Consequently, prorates should be used guardedly so as to avoid stifling individual incentive or overly restricting market supplies.

With a view toward preserving individual incentives, the Secretary is asking each industry using the prorate feature to assess its own unique problems and needs and recommend ways to best use prorate provisions consistent with these guidelines. Among the approaches that affected committees should consider:

1. Use of prorate only during a limited part of the season, i.e., a limited number of weeks;

2. Expansion of the specific time frame included in each prorate, i.e., two, three, or four week prorates instead of only weekly;

3. A combination of a partial season prorate and expanded time frame.

The Secretary believes that changes in the present system would permit greater intraseasonal flexibilities for individual handlers while at the same time protecting the viability of the program.

Reserve Pools

Reserve pools can be used to control the extreme fluctuations in supplies and prices that often plague agriculture. However, the reserve program should not result in stockpiling of certain commodities with little or no market outlet. Therefore, when an industry
committee recommends a reserve, it must clearly state the intended
disposition of the reserve. This should include several alternatives
including a "most likely" projection and should be revised by the
committee to reflect changing supply or market conditions.

Shipping Holidays

Shipping holidays are intended to reduce market supply fluctua-
tions by requiring commodity handlers to refrain from shipping a
certain commodity for a short period of time. Although many marketers
believe that shipping holidays aid market stability and prevent market
deterioration, strong evidence to support or refute this concept has
not been presented. The undetermined value of these measures raises
the question of the need for government involvement. Future recommend-
dations will therefore be carefully considered by the Department.

QUALITY PROVISIONS

Quality provisions are the most frequently used feature of
marketing orders and are usually in the form of minimum grade and/or
size regulations. This provides consumers with a high quality product,
thus serving the long-term interests of producers, since a good quality
image can lead to long-term market expansion. However, with crops
which reflect the uncertainties of weather, quality requirements need
to be flexible enough to maximize the marketing of all fruits and
vegetables suitable for consumption in fresh form.

Industry should be cautioned that use of quality regulations
primarily as a form of supply control is contrary to Administration
policy. Therefore, the Department will continue to evaluate the use
of this feature with particular emphasis on the following three areas: (1) Whether quality controls have varied significantly from season to season or within seasons, (2) Whether the percentage of product meeting minimum quality standards has been declining, or (3) Whether the standards have been tightened over the years.

Grade and size regulations keep low quality produce from the market. Some argue that this lower quality produce would be attractive to some consumers. In view of this, industries should consider changes that would allow the marketing of the off-grade/size commodity within the local production area as well as consider the establishment of a minimum quantity exemption from the quality standard. If the industry believes that this type of approach could not or should not be followed, it should present convincing evidence to the Department. A number of existing orders already have provisions of this type.

Charitable contributions are exempted from regulation in most orders. This Administration strongly endorses the concept of charitable contributions and encourages expanded use of these provisions.

**IMPORT REQUIREMENTS UNDER SECTION 608e**

Section 608e of the Agricultural Marketing Agreement Act imposes the same quality requirements on an imported commodity as are imposed on a domestic commodity. It does not seek to limit imports but rather to ensure that low quality imports do not undermine the purpose of the Act, threatening the domestic market for U.S. crops.
U.S. policies on foreign trade must take into consideration requirements of a number of international agreements to which the United States is party. Accordingly, the Department will review any proposed marketing order legislation or regulation to ensure that its provisions and impact are compatible with the intent of Section 608e and with these international agreements.

In conducting this review, the Agricultural Marketing Service will examine all available information and will maintain close contact with other government agencies as well as industry sources. Consequently, industries are cautioned to carefully examine future recommendations to make sure that they are consistent with the spirit and intent of the law and U.S. international obligations.

RESEARCH AND PROMOTION

Fruit and vegetable marketing orders authorize the collection of funds for use in production and marketing research and for advertising and promotion. The Administration supports production and marketing research because it can help producers respond rapidly to acute problems that reduce yields. Research can also provide new techniques to increase yields and reduce production and marketing costs in the future. Advertising and promotion can contribute to economic efficiency by helping consumers make better informed decisions.

Bloc-Voting

When referenda are conducted either on a proposed order or amendment of an existing order, the law allows a cooperative to vote for its membership. This is referred to as bloc-voting. Although this
is provided for under the statute, the Secretary strongly encourages cooperatives to refrain from bloc-voting. It is believed that individual voting will better represent the interests of the industry and will more clearly demonstrate the desires of the entire industry, both to the Department and the general public.

**ADMINISTRATIVE PROCEDURES**

**Responsibility of Committees and USDA**

The Act places upon the Secretary of Agriculture the full authority to assure the proper operation of marketing orders. Marketing order committees have a responsibility to make the most informed recommendations possible in striving for this objective. Therefore, it is imperative that all market order administrative committees provide the Secretary, through the Agricultural Marketing Service, comprehensive data that provide a sound analytical basis for their recommendations. Failure of the administrative committee to provide this information in a complete and timely manner could result in delays of the seasonal implementation of provisions of a particular marketing order. At the same time, the Secretary continues to accept his responsibility for timely action.

**COMMITTEE TENURE**

The economic review suggested establishing a limit on tenure to improve representation and allow for different and more contemporary ideas. In view of this, the Secretary will require that all committee
membership be limited in tenure. The Department will work with each committee to develop an appropriate time frame. The Secretary also encourages all committee members to take a very active role in all phases of marketing order administration.

**PERIODIC REFERENDA**

Some marketing orders provide for periodic referenda but most do not. The Secretary believes these referenda are in the public interest. They provide the industry with a means to regularly reassess the value of marketing orders and keep the Department informed of the wishes of the majority of the industry. Therefore, the Secretary is requiring that periodic referenda be conducted for each order. USDA will work with each committee in development of a time frame appropriate for each order.
CONCLUSION

The role of the Department of Agriculture is to develop and implement agricultural policies that are in the public interest. Marketing orders that are wisely constructed, appropriately utilized, and effectively administered are part of such a policy. However, as with any other program, there are possibilities for misuse. These preceding guidelines are established to assure that abuse does not occur and to provide a means of better understanding of the boundaries, both to the industry and the general public.
Dear Mr.

As you know, supply control marketing orders recently underwent an intensive Executive Branch review including an airing of the subject in the White House and before the full Cabinet. I would not suggest that the outcome was reached without some initial disagreement. However, I am taking this opportunity to tell you that this review resulted in a reaffirmation of Administration support for the marketing order concept, for the policy guidelines issued last year for these programs, and the Secretary of Agriculture to administer the programs.

A year of experience operating within the policy guidelines issued in 1982 has demonstrated their value as a basis for industry-government understanding. We believe that this is an appropriate time to expand on this experience and identify more specific plans for applying these guidelines to season-long volume control programs. Our objective is to reduce constraints where possible under these programs in order to rely more fully on free market forces. To further define the marketing order guidelines the following would apply:

With regard to producer allotment programs, we intend to phase out entry barriers over the next five years. This will provide the affected industries with a reasonable amount of time to adjust their marketing practices.

For market allocation and reserve pool programs, we intend to require that primary markets have available a quantity equal to 110 percent of recent years' sales in those outlets before approving secondary market allocation or pooling. This will assure plentiful supplies for consumers and for market expansion but will retain the mechanism for dealing with burdensome supply situations.

We also intend to provide for greater flexibility under prorate programs. However the principal prorate programs are in formal rulemaking under the Administrative Procedure Act and I cannot make specific judgements about changes until hearing records have been analyzed.

I believe that constructive changes such as these will make the marketing order concept even stronger. I intend to continue to use my statutory authority to administer these programs for the benefit of the American farmers and the public in general.

Sincerely,

John Block
Mr. J. Dexter Peach  
Director, Resources, Community,  
and Economic Development Division  
U.S. General Accounting Office  
Washington, D.C. 20548

Dear Mr. Peach:

This is in response to your April 11, 1985, request that we review and comment on the draft report entitled, The Role of Marketing Orders in Establishing and Maintaining Orderly Marketing. Our comments, which follow, respond primarily to the general thrust of the report and the recommendations presented therein. In addition, we have attached a short listing of those errors that we believe are significant enough to merit your consideration and correction.

1. Summary of the Report

Initially the report describes the depression era crisis in the agricultural economy of the nation, which led to a multitude of Congressionally legislated programs to help stabilize agricultural markets and improve grower returns. The report then concentrates on a review of 11 commodities affected by nine different marketing order programs. The orders selected for review represent a cross section of marketing order authorities currently used to influence the supply of, or demand for, all commodities subject to orders. Based on observations of these nine orders, the report addresses: (1) the controversies surrounding the programs and the effect of each type of marketing order authority on the commodity supply; (2) the emerging trends in the use of marketing orders; and (3) the administration of the programs.

The report notes that marketing order programs have been the subject of controversy ever since their inception. Recognizing that critics have constantly argued that consumers' interests would be better served in a totally free market environment, the report observes that for 10 of the 11 commodities examined, competitive market forces appear sufficient to limit any price increases.

The report concludes that while marketing orders can affect the quantity and quality of supplies, only the lemon prorate resulted in significant unused tonnage. Furthermore, the report found that little basis exists to conclude that handlers' quality standards have been used to restrict salable supplies. Noting that quality controls have not tended to change when crop sizes varied from year to year, the report asserts that the use of such tools can encourage farmers to improve their product and help assure consumers that the affected commodities meet basic minimum standards.
Further, the report specifically notes the absence of any evidence suggesting that the quality control features of marketing orders were being used to hold salable commodities off the market. Examination of the use of reserve pools for almonds and tart cherries pointed to the development of new outlets for these items, while the report notes that the producer allotment programs for spearmint and hops tend to restrict the entry of new producers into the marketplace.

The report finds that Congressional emphasis has shifted in recent years away from production controls to a marketing oriented focus, emphasizing increases in long-term demand over short-term supply controls. It notes that market research and product development are desirable features of orders that will not only offer better quality products but products which reflect consumer demand.

The report concludes by suggesting several specific areas for USDA improvement in the area of marketing order administration, namely, that USDA:

1. Actively participate in industry education meetings, rather than reserving participation to invited appearances only;
2. Update and expand the current marketing order operations manual;
3. Develop criteria for measuring marketing order performance; and
4. Make wider use of decision papers to clarify the benefits and shortcomings of existing marketing order programs or to justify changes.

II. Response

The report presents a positive assessment endorsing the use of marketing orders by growers and handlers to solve today's marketing problems. It contends that USDA has played an increasingly limited role in informing the industry and the public of the pros and cons of marketing orders. Further, it asserts that better USDA evaluation of marketing order effectiveness and increased communication of accurate program information could abate much of the controversy surrounding marketing orders.

Transcending the Administration's position on marketing orders per se, is the strongly held belief that all Americans would benefit most by a significantly reduced level of government interference in their businesses and lives. This belief is the foundation of the Administration's position on farm programs generally, as well as in other areas of government regulation.
With this backdrop, we want to clearly reiterate that the Administration supports the concept of marketing orders so long as the programs are consistent with statutory requirements and with USDA guidelines. Marketing orders were studied extensively by USDA during 1981 and 1982 and aired in the Cabinet Council in 1983. This in-depth evaluation demonstrated that some order provisions may impose inefficiencies on the production and marketing system and that adjustments in such orders would be necessary to provide greater flexibility needed to reduce constraints under the programs in order to rely more fully on free market forces. Of the various different types of orders, research and promotion programs are viewed as the most beneficial for producers, handlers, and consumers alike, and volume control orders, the least beneficial.

The Administration believes that the USDA's role is to develop and implement agricultural policies that are in the public interest. It is not our objective, however, to encourage the development of additional government programs.

The report concludes with two specific recommendations for the consideration of the Secretary of Agriculture, as follows:

1. To require that AMS develop and apply criteria for measuring the performance of individual marketing orders so that interested parties can judge the merits and shortcomings of orders; and

2. To require that AMS update and keep current the operations manual for marketing orders.

The first recommendation raises a matter that has long been viewed by the Department as a critical but elusive area of concern. Repeatedly, since the onset of marketing orders under the Agricultural Marketing Agreement Act of 1937, the Department has studied marketing orders, or cooperated with others undertaking similar studies, with the objective of measuring the effectiveness of these programs.

In a 1981 USDA study entitled, "Effectiveness of Federal Marketing Orders for Fruits and Vegetables," by Jesse and Johnson, the authors found that efforts to make quantitative measurements of the effects of Federal orders on grower-level prices were inconclusive. The difficulty encountered in measuring the effectiveness of orders in this 1981 study is typical of the experience of others undertaking similar studies in the past. Appendix III of the report lists some 51 marketing order studies. Overall, these studies have been more descriptive of orders than they have been conclusive in measuring order effectiveness. In addition, many of the evaluations undertaken have concentrated on specific issues and thus shed little light on the matter of order effectiveness generally.
Mr. J. Dexter Peach

The recommendation, however, is meritorious in its end objectives. Thus, AMS will continue to work with its sister agencies as well as academicians and others in an effort to develop appropriate criteria and to make meaningful measurements of marketing order effectiveness.

We agree with the second recommendation. The marketing order manual can be a useful guide to the labyrinth of legal and policy requirements and procedures that must be dealt with in connection with marketing order administration. The manual has long been in need of revision and updating as recommended and it is the Department's intention to do so in a practical and expeditious manner.

Sincerely,

KAREN DARLING
Acting Assistant Secretary
Marketing and Inspection Services

Enclosure
CORRECTIONS TO THE MANUSCRIPT

P. 11 top partial paragraph. There are 47 federal marketing orders and one marketing agreement currently in effect.

p. 2 2nd full paragraph. Most of the state marketing orders were developed as promotion programs.

p. 3 3rd full paragraph. first objective of the Act is incorrectly stated. The Act does not guarantee or assure parity prices. Instead, the objective is to establish and maintain orderly marketing conditions in interstate commerce as well as establish grower prices which approach parity. The Act states that parity should be approached at as rapid a rate as the Secretary deems to be in the public interest and feasible in view of current demand requirements.

p. 5 3rd paragraph. Add to the parenthesis: "three fourths in the case of California citrus."

5th item under the procedures substitute: "The public is given time to submit written proposed findings and conclusions."

P. 6 2nd paragraph. The Secretary of Agriculture approves (not determines).

p. 11 2nd paragraph. It should be noted that the spearmint order does provide for limited entry of new producers.

p. 14 end of top partial paragraph. It should be pointed out that the Hop Committee does not market hops, it controls the volume of marketing.

p. 14 last half of last paragraph should be restated as follows: "Prior to each crop year, the marketing order committees adopt a marketing policy and a projected shipping schedule that reflects anticipated supply and demand factors. Each week during the season, the committees may recommend a maximum quantity of fruit which may be shipped by handlers, usually for the following week."

p. 20 last paragraph. First sentence should be restated as follows to describe what happened: "Although the Federal Government declined to use the marketing order to establish a reserve, subsequently USDA helped the industry ........."

p. 25 1st paragraph. It is true that in one or two recent years as much as 65 percent of the lemon crop was withheld from the domestic fresh market, but substantial quantities were also exported fresh or were processed domestically.
p. 30  Title heading for Figure 5 should probably be: "Production Withheld From The Fresh Market, 1971-1981."

p. 30  Footnote "c" should read: "Tart cherry quality standards apply only to commodities placed in reserve. Almond quality standards apply to almonds received by handlers from producers as well as almonds placed in reserve."

p. 40  top paragraph, 2nd sentence should read: "After the Congress authorized in 1937 the use of quality controls, CTFA's three committees - peaches, plums, and pears - turned away from dealing with surpluses through quantity controls in favor of expanding demand."

p. 54  line 5 - "Notice of referendum" should read, "Notice of hearing."

p. 64  Appendix I, M.O. 984 applies to California walnuts only. Oregon and Washington were deleted in 1976.

[GAO Note: These comments were considered and changes made to the text where appropriate. Page numbers in USDA's comments were changed to reflect those in the final report.]