FARM CREDIT ADMINISTRATION
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

COORDINATING THE MARKETING OF FLORIDA CITRUS FRUIT

By

G. H. GOLDSBOROUGH

A study conducted with funds provided
by the Research and Marketing Act.

COOPERATIVE RESEARCH AND SERVICE DIVISION

Miscellaneous Report 143 October 1950

UNITED STATES DEPARTMENT OF AGRICULTURE
FARM CREDIT ADMINISTRATION
WASHINGTON 25, D. C.

I. W. DUGGAN, GOVERNOR

COOPERATIVE RESEARCH AND SERVICE DIVISION

HAROLD HEDGES, CHIEF

JOSEPH G. KNAPP, ASSOCIATE CHIEF

The Cooperative Research and Service Division conducts research studies and service activities relating to problems of management, organization, policies, merchandising, sales, costs, competition, and membership arising in connection with the cooperative marketing of agricultural products and the cooperative purchase of farm supplies and services; publishes the results of such studies; confers and advises with officials of farmers' cooperative associations; and cooperates with educational agencies, cooperative associations, and others in the dissemination of information relating to cooperative principles and practices.

COPIES OF THIS PUBLICATION MAY BE HAD ON REQUEST
WHILE A SUPPLY IS AVAILABLE FROM THE
DIRECTOR OF INFORMATION AND EXTENSION
FARM CREDIT ADMINISTRATION
WASHINGTON 25, D. C.

CONTENTS

SUMMARY

Data and opinions for this study on coordinating the marketing of Florida citrus fruit were assembled from the 80 Florida fresh citrus fruit shippers -- marketing about 75 percent of the fruit for fresh consumption -- and 34 citrus processors -- handling about 95 percent of the fruit processed. Consultations were also held with 8 non-operating Florida citrus industry leaders and 61 representatives of the fresh citrus fruit buying trade. All material was based on the 1948-49 season.

From information collected and appraised during this study, made with funds provided by Research and Marketing Act, it appears that a central association can make its greatest contribution to the Florida citrus industry as a bargaining agency for processed fruit and a market information agency for fresh fruit. There seems little likelihood that fresh fruit shippers and processors would support a central selling program. It is also doubtful whether sufficient benefit can be achieved from a mandatory proration program to warrant the time and energy required to administer and enforce the measure.

In the field of pricing, the bargaining activities of a central association should be confined to fruit for processing. There are too many points where prices negotiated for fruit for fresh consumption can break down. A central organization of the Florida citrus industry should consider working out a common contract to be used by grower-members and processors for handling fruit for processing. This contract should be made prior to the beginning of the harvest season and should contain both price agreements on the part of the processor for certain grades and delivery agreements on the part of the grower. The contract should be made for the duration of the marketing season. It should not be reopened unless both processors and the officers of the association agree that changes in the demand and supply situation merit renegotiation of new prices or that fresh fruit prices are materially out of adjustment with processed fruit prices. Since over 60 percent of the crop was processed in 1949-50, prices for processed products might reasonably be expected to set the pattern for all citrus fruit prices.

During the course of this study 102 persons associated with citrus shipping and processing firms and 8 non-operating industry leaders expressed opinions on the need for establishing an industry marketing organization. Ninety-three percent favored the development of such a central marketing program.

All the individuals desiring the organization of a central marketing program believed that the program should include the distribution of more accurate marketing information. Over 72 percent favored the fixing of minimum prices as a necessary program measure.

Almost 54 percent recommended that a central organization should take over all sales activities. However, the individuals favoring central

selling were not too optimistic that such a high degree of organization could be effected and indicated a desire for some degree of coordination in marketing provided positive results could be achieved.

About 50 percent of the persons recommending a central marketing program suggested the proration of fruit. The majority had in mind week-to-week shipping and auction allotments. Some of these individuals, however, were more concerned with the need for an overall proration of fruit to the fresh and processed outlets than with the need for weekly allotments.

About one-fifth believed that the central organization should develop the machinery for dealing with surpluses. Most thought that control of the storage and marketing of processed citrus products would be the key to a surplus handling program.

The point of view of 58 fresh fruit trade representatives in 5 markets and of 3 national chain store system buyers located in Florida were obtained regarding central coordination of Florida citrus fruit marketing. Fifty-six of the 61 favored a central program.

These individuals believed such a program should include the following measures listed in the order of the number of persons favoring each measure: (1) fresh fruit shipping and auction proration; (2) setting minimum prices; (3) central selling; (4) elimination of sales to itinerant truckers; (5) overall proration of fruit to fresh and processed outlets; (6) elimination of consignment selling; and (7) sale of all fruit in auction markets either through the auction or at private sale.

The fresh fruit trade in the markets indicated that the use of citrus fruit by processors in 1949-50 had substantially reduced the volume of fresh fruit normally handled by the trade. They also stated that wholesale margins on fresh fruit were quite low due to the active bidding up of the price by processors and the intense competition between fresh and processed fruit at the retail level. In general, these individuals were somewhat pessimistic regarding the future of the fresh citrus fruit marketing industry.

The study showed that during 1948-49 cooperatives handled almost 47 percent of all citrus fruit marketed for fresh consumption, by the shippers interviewed. Cash buyers marketed about 29 percent, grower-shippers about 15 percent and commission-handlers about 9 percent.

Three methods of selling were used to market about 94 percent of the fruit sold for fresh use in 1948-49. Almost 39 percent was sold on an f.o.b. basis to wholesalers and jobbers; about 28 percent was sold on f.o.b. basis to chain store systems; and about 27 percent was marketed through terminal auctions. Fruit was also sold on consignment, for cash to itinerant truckers, for cash on track, through joint account deals, and through shipper-owned jobbing houses.

About 54 percent of the shippers reported consistent use of auctions during 1948-49. Forty percent consigned fruit to auctions only when no other outlets were available and 5 percent did not ship any fruit to auctions.

During 1948-49, two-thirds of the f.o.b. sales were made by direct contact between buyer and seller, either at the shipping point or in the markets. The balance were made through a market broker.

Shippers used seven kinds of sales organizations to merchandise their fresh fruit. Slightly more than 44 percent of the shippers reported that they employed a fresh fruit sales manager to handle this activity. The next largest number or 24 percent added the selling function to the overall supervisory activities of the company president or general manager. A central sales cooperative sold the fruit for more than 18 percent. The balance of the fresh fruit was marketed by private sales agencies, canned fruit sales managers, shipper owned wholesale houses, and parent retail chain store systems.

Fifty-three percent of the fruit delivered to processing plants by the shippers included in this study was placed in plants owned by the shippers themselves. About 27 percent was sold for cash and 20 percent placed in a cooperative pool.

Sixty-two percent of the citrus marketed by shippers for processing consisted of off-size and off-grade fruit picked out of lots being graded and packed for fresh shipment. The balance or 38 percent moved to the plants direct from the grove.

Cash buying processors manufactured almost 71 percent of all fruit processed in 1948-49. Cooperatives handled slightly more than 24 percent and grower-processors about 5 percent.

Over 65 percent of the fruit processed was obtained by cash purchase. Almost 23 percent was obtained through cooperative pooling arrangements and 12 percent came from processor-owned groves.

Cash buyers grew about 13 percent of the fruit they processed, and grower-processors slightly more than 62 percent. Cooperatives, as such, grew no fruit.

Processors obtained 56 percent of all fruit direct from groves and 44 percent from fresh fruit packinghouses as eliminations from the grading table.

Almost 60 percent of the citrus made into single strength juice, hot concentrate, sections and salad during 1948-49 was sold through brokers. Branch office salaried personnel making direct contact in the markets sold another 20 percent. Shipping point sales offices marketed about 15 percent of these canned products direct without the assistance of market brokers or branch office salesmen. Five percent was sold to food distributors to be marketed under the distributor's brands.

Branch office market salesmen marketed 53 percent of the frozen concentrated juices. Twenty-three percent was sold to frozen food distributors to be marketed under distributor's brands and 22 percent was sold direct by shipping point salesmen.

The Florida fresh fruit marketing system has apparently been effective in obtaining wide distribution of fresh citrus. However, in general, the timing of shipments of Florida oranges to the terminal auctions has not been as regular from week to week as the timing of shipments of California oranges.

Various research studies show that gross wholesale margins per box have been higher on Florida than on California organes in dollars and cents and as a percent of the retail sales dollar. Gross retail margins, on the other hand, have been higher on California oranges than on Florida oranges on a dollar and cent basis but approximately the same on fruit from each State as a percent of the retail sales dollar.

From 1919-20 to 1948-49, season average returns per box to growers for oranges at the packing house door for all methods of sale, were higher in California than in Florida each year but two.

On the basis of fresh orange equivalent, the relative importance of frozen concentrated orange juice as a percentage of total household orange purchases increased from 5 percent in the first quarter of 1949 to 19 percent in the same quarter of 1950. The proportion of oranges purchased in the form of canned single strength juice dropped from 32 percent to 25 percent during this same period, while fresh orange purchases dropped from 62 percent to 56 percent.

Citrus production trends appear strongly upward over the next 20 years. The production of grapefruit and oranges in the United States might reasonably be expected to increase to as much as 250,000,000 boxes by 1969.

From 1919-20 to 1948-49, citrus prices tended to be inversely correlated with production, that is, prices were low when production was larger than normal, and high when production was short. The degree to which prices fluctuated was apparently influenced by the relative proportion of citrus sold fresh and in processed form. During the 1920's citrus fruits were sold mainly for fresh consumption. Hence, relatively small changes in production were accompanied by relatively large changes in price. Following 1930, as increasing percentages were processed, prices reacted less sharply to changes in production.

There have been several attempts to bring about industry organization prior to the organization of Florida Citrus Mutual in 1949. These were the Florida Citrus Exchange organized in 1909; the Fruitman's Club organized in 1925; and the Florida Growers Clearing House Association organized in 1928. Several types of Federal Marketing Agreements have been in operation during various periods since 1933.

Florida Citrus Mutual, which was organized in 1949, is a non-stock overhead cooperative, owned and controlled by citrus growers. At present, its program covers principally the establishment, when necessary, of week-to-week allotments of fresh fruit shipments, the allotment of fresh fruit shipments to auction areas, and setting minimum f.o.b. prices of fresh fruit and minimum prices for raw fruit for processing. The association set minimum prices twice during the 1949-50 season. Fresh fruit shipping allotments were established several times on a volumtary basis.

Producers of fruits and vegetables in other growing areas in the United States and in Canada are conducting industry programs similar in certain ways to that of Florida Citrus Mutual. They include the Utah State Canning Crops Association, The California Canning Peach Association and the British Columbia Tree Fruits, Ltd.

COORDINATING THE MARKETING OF FLORIDA CITRUS FRUIT

By

George H. Goldsborough
Agricultural Economist

This study was requested by the Florida members of the Citrus Advisory Committee of the Research and Marketing Act because of the need of the Florida citrus industry for information on ways and means to build an industry-wide marketing organization.

During the war years, Florida citrus growers were fortunate in realizing a consistently high rate of return from their crops. Unusual demand -- caused by shortened food production in war-torn producing areas and by the food needs of domestic consumers and the peoples in nations allied with the United States -- created and maintained a favorable sellers' market. Price ceilings set by the Office of Price Administration became the accepted established prices during this period, greatly reducing price fluctuations. These factors created a rarified atmosphere of assured markets.

High profits stimulated large increases in citrus plantings. Due to the time required to bring a grove into production - 5 years at a minimum - these plantings did not begin to make themselves felt productionwise during the war. However, quite an increase in production potential was developed.

The demand conditions which had rendered the citrus industry prosperous for half a decade began to change about a year after the end of the war in 1945. The cessation of Government purchases of citrus for overseas shipment, and the rapidly increasing production of new groves drove prices below production costs during the 1946-47 marketing season.

This situation worsened in 1947-48 and leaders in the industry became convinced of the need for some kind of joint industry effort to help solve the price and marketing problems. A program involving closer coordination between the 400 fresh fruit shippers and 50 processors in selling and merchandising citrus was generally considered to offer the greatest promise in solving these problems.

Out of this chaotic marketing situation and the interest of the various industry factors in jointly working out their difficulties grew a demand

NOTE: M. P. Rasmussen, Professor of Marketing, Cornell University, acted in the capacity of consultant on this project. H. G. Hamilton, Head, Department of Agricultural Economics, University of Florida, and A. W. McKay, In Charge, Fruit and Vegetable Section, Cooperative Research and Service Division, Farm Credit Administration, also contributed suggestions and assistance.

for research that would bring together information helpful in building an effective marketing organization, with particular reference to central selling. As a result, a request for such a research project was transmitted to the Secretary of Agriculture by a research committee in Florida composed of growers, processors, packers, and members of the Florida Agricultural Experiment Station. This request was followed up by the Florida members of the Citrus Advisory Committee established under the Research and Marketing Act and a project was authorized in June 1949. In view of the extensive experience of the staff of the Farm Credit Administration in the field of cooperative marketing, that Agency was assigned primary responsibility for conducting this research.

A few months prior to the authorization of this project, the growers organized a central cooperative designed to exercise certain price and shipping controls. It was named Florida Citrus Mutual. It is headquartered at Lakeland, Fla. This study was conducted during the association's first year of operation. It is important that this fact be kept in mind in evaluating this report. This is especially true with regard to the opinion analysis of shippers and processors and fresh fruit buyers. The opinions of the individuals interviewed were naturally influenced in varying degrees by their observations of the program of Florida Citrus Mutual. The activities of the association are discussed in detail later in this report.

PROCEDURE

This project was planned to develop information and analyses for the use of the Florida citrus industry in evaluating its potentialities both for effective group action and in building an industrywide marketing organization and program.

Two approaches to the shipping point portion of this study were considered. A detailed analysis could have been made of a small representative sample of each segment of the marketing and processing trade, or the industry could have been studied in a less detailed manner, covering handlers representing the majority of the fruit marketed. In view of the fact that organizational problems in the large and varied Florida citrus industry are tied into personal relations as much as the mechanics of marketing, the latter approach was decided upon to broaden the number of contacts.

With this in mind, the shippers and processors to be interviewed were selected. They were chosen on the basis of output only. Handlers were arranged according to volume handled during 1948-49 starting with the operator who marketed the largest volume and working down. A sufficient number of small operators were included to obtain data and viewpoints representative of that group. The fresh fruit shippers included in this study marketed slightly more than 75 percent of all fresh citrus shipped in interstate commerce. The processors included in this study manufactured more than 95 percent of the fruit processed.

The information gathered from handlers fell into two categories. The first covered statistics on the volume handled, and the methods of procuring and marketing fruit by shippers and processors. The second involved opinions on feasibility and means of developing a central sales program for fresh and for processed citrus fruits. Where central selling was not favored, opinions were sought on the measures an industrywide organization should include in a program designed to stabilize and improve fruit prices.

Eight non-operating industry leaders also were interviewed. These leaders included such men as the manager of the Marketing Agreement and the manager of the Florida Citrus Commission. The author discussed with these men the question of industry organization in detail.

The viewpoint of the fresh buying trade was obtained through consultations with buyers for three corporate chains which operated purchasing units in Florida and wholesale buyers of fresh citrus and local and area chain stores handling all types of citrus products in five markets. The markets visited were Boston, Mass.; Atlanta, Ga; Birmingham, Ala; Cincinnati, Ohio; Buffalo, N. Y.; and Syracuse, N. Y.

Each fresh fruit wholesaler and chain store representative was asked whether or not he favored greater coordination of citrus marketing at shipping point. If his answer was negative, his reasons were recorded. If his answer was positive, his recommendations as to the type of organization and the program it should attempt were recorded. In addition, information was gathered regarding shifts in the volume and methods of marketing citrus at the wholesale and retail levels in the fresh, frozen and canned forms.

The produce rating books[1] were used to analyze the moral and financial ratings of Florida fresh fruit shippers.

Data relative to efficiency in timing and distributing shipments of Florida, Texas, and California fresh citrus fruit were obtained from the U.S. Department of Agriculture reports on unloadings in certain markets; from auction offerings and prices; and from the reports of the several State Departments of Agriculture on shipments from each producing area.

Fresh fruit shippers and processors interviewed were sorted according to their principal method for obtaining supplies of fruit during 1948-49, i.e., by pooling, by cash purchase, on a commission handling basis, or from groves owned by the operator being interviewed. Those handlers which obtained at least 51 percent of their fruit through pooling arrangements were called "cooperatives." Handlers purchasing 51 percent were

[1]The 1949 Fruit and Produce Credit Book. Produce Reporter Company Wheaton, Ill.

The Packer Red Book, 1949. Packer Produce Mercantile Agency, Kansas City, Mo.

termed "cash buyers" and operators handling 51 percent or more of their fruit on a commission basis were termed "commission-handlers." "Grower-shippers" or "grower-processors" were handlers producing at least 51 percent of the fruit they marketed. All four types marketed fresh fruit. However, there were no processors operating on a commission basis.

The fresh fruit and the processing operations of the fresh fruit shipper-processors were treated separately and then mingled with the fresh fruit shippers and the processors in accordance with the categories described above. The entire fresh fruit marketing operation of the Florida Citrus Exchange, Tampa, was included with the cooperatives. Both the manager and sales manager of the Exchange were interviewed as well as packing-house managers representing 54 percent of the Exchange's volume. However, since each member deals directly with processors in disposing of fruit for processing, the data on the operations of the members of the Florida Citrus Exchange in marketing fruit for processing includes only those Exchange members interviewed.

It was not always possible to use the "51 percent" system in classifying handlers to reflect the differences in methods of operation. For instance, two shipper-processors, corporate in structure, were included with the "cooperatives." (See table 1). This was done because they are owned and operated by growers on a mutual basis. One cooperative shipping fresh fruit was included among the "commission-handlers" because the majority of the fruit was handled on a commission basis, not pooled. One commission-handler and two grower-shippers which were marketing fresh fruit were included among the "cooperatives" because they delegated their marketing activities to an overhead cooperative. Two shipper-processors who grew 50 percent and purchased 50 percent of the fruit they handled were included among the grower-shippers because they stated that their major interest was in making growing operations profitable.

METHODS OF PROCURING AND MARKETING FRUIT BY FRESH FRUIT SHIPPERS AND PROCESSORS, 1948-49 SEASON

FRESH FRUIT SHIPPERS

Types interviewed. - As outlined under "Procedure," shippers were classified as cash buyers, cooperatives, grower-shippers and commission-handlers. Table 1 shows the number of shippers interviewed which fall in each category.

Cash buyers and cooperatives made up almost 69 percent of the shippers interviewed. Grower-shippers ranked third in number. Only 7 percent of the shippers interviewed were commission-handlers.

Table 1. - *Number and type*[1] *of fresh fruit shippers included in study of Florida citrus industry, 1948-49 season*

TYPE OF SHIPPER	NUMBER	PERCENT
Cash buyer	27	33.8
Cooperative[2]	28	35.0
Grower-shipper[3]	18	22.5
Commission-handler[4]	7	8.7
Total	80	100.0

[1]Fifty-one percent of fruit procured by one method, i.e., cash purchase, from own groves, cooperative pool, or on commission.
[2]Includes two corporations which are mutually owned and operated by growers and two grower-shippers and one commission-handler which sell through the Florida Citrus Exchange. Includes central office of the Florida Citrus Exchange.
[3]Two grower-shippers grow one-half and purchase one-half of the fruit they handle. They are included with the grower-shippers because they stated that their major concern was in making growing operations profitable.
[4]Includes one cooperative which handles most of its fruit on commission.

Volume. - Cooperatives accounted for almost 48 percent of all fruit handled during 1948-49 by shippers interviewed. (See table 2). Cash buyers marketed 30 percent of all fruit, grower-shippers about 15 percent and commission-handlers about 8 percent. The various types of operators held the same relative position percentagewise in the marketing of fruit for fresh consumption, except that grower-shippers and commission-handlers gained about 1 percent each and cooperatives and cash buyers lost about the same amount.

Table 2. - *Volume of fruit handled by 80 Florida citrus shippers, 1948-49 season*

TYPE OF SHIPPER	BOXES OF FRUIT		PERCENT	
	ALL FRUIT	FRUIT FOR FRESH CONSUMPTION	ALL FRUIT	FRUIT FOR FRESH CONSUMPTION
Cash buyer	17,420,001	9,501,494	29.7	28.6
Cooperative	[1]28,094,666	15,483,913	47.9	46.7
Grower-shipper	8,695,152	5,155,286	14.8	15.5
Commission-handler	[2]4,481,205	3,055,733	7.6	9.2
Total	58,691,024	33,196,426	100.0	100.0

[1]Includes volume of fruit for fresh shipment of all Florida Citrus Exchange members but does not include volume disposed of to processors by Exchange members not interviewed.
[2]Does not include fruit handled for disposition to processors by one handler interviewed.

Methods of sale for fresh consumption. - Three methods of selling were used to market 93.5 percent of the citrus handled during 1948-49 by the shippers included in the study. (See table 3). Almost 39 percent was sold on an f.o.b. basis to wholesalers and jobbers; about 28 percent was sold on an f.o.b. basis to chain stores; and about 27 percent was

marketed through terminal auctions. Percentagewise, grower-shippers and commission-handlers made the most extensive use of f.o.b. sales to wholesalers and jobbers. Corporate chain store systems were the major outlet for cash buyers. Cooperatives consigned more than one-third of their volume to terminal auctions and about the same amount went f.o.b. to wholesalers and jobbers.

Table 3. - *Methods of sale of fruit sold for fresh consumption by 80 Florida citrus shippers, 1948-49 season*

TYPE OF SHIPPER	PERCENT OF ALL FRESH FRUIT								
	SOLD F.O.B. TO CORPORATE CHAIN STORE SYSTEMS	SOLD F.O.B. TO WHOLESALERS AND JOBBERS	SOLD THROUGH AUCTION	CONSIGNED TO COMISSION HOUSES	SOLD CASH ON TRACK	SOLD TO ITINERANT TRUCKERS	SOLD ON A JOINT ACCOUNT BASIS	SOLD THROUGH SHIPPER OWNED JOBBING HOUSES	TOTAL
Cash buyer----	45.0	35.0	10.9	5.5	-	2.2	.1	1.3	100.0
Cooperative---	23.1	36.8	36.5	1.5	1.3	.8	-	-	100.0
Grower-shipper	11.9	42.8	31.8	6.4	-	1.3	5.8	-	100.0
Commission-handler-----	24.3	53.2	19.6	1.4	-	1.5	-	-	100.0
Average--	27.8	38.8	26.9	3.4	.6	1.3	.9	.3	100.0

Fruit was also sold on consignment to commission houses, for cash on track through joint account deals, to itinerant truckers and through jobbing houses owned by shippers. Cash buyers and grower-shippers were the most consistant users of the consignment method. Cooperatives were the only shippers which sold citrus for cash-on-track. Itinerant truckers constituted a minor outlet for each group. Except for a few cash buyers grower-shippers were the only type of shipper entering into joint account deals with receivers. A few cash buying firms own jobbing houses in certain markets.

These data illustrate one of the major problems involved in administering an f.o.b. price program. Almost one-third of the fruit does not have a price placed on it until it reaches the point of consumption. This includes fruit consigned, sold at auction, sold through shipper-owned jobbing houses and through joint account. This problem might possibly be solved either by discontinuing sales of this type or by close control over the volume shipped under these arrangements.

Regularity of use of terminal auctions. - Shippers were asked to describe the manner in which they made use of terminal auctions. This was done to determine whether they were attempting to maintain an auction demand by regular shipments of good quality fruit or were merely using auctions during periods of inadequate demand from regular private sale customers.

About 54 percent of the shippers reported consistent use of auctions during 1948-49. (See table 4). Forty percent consigned fruit to

auctions only when no other outlets were available and over 6 percent did not ship any fruit to auctions. A larger proportion of cooperatives reported consistent use of auctions than did other types of shippers. Although two-thirds of the grower-shippers who did use auctions employed them consistently, one-sixth did not use them at all. The majority of cash buyers used auctions as emergency outlets. Commission-handlers were about evenly divided with regard to the manner in which they used terminal auctions with four consistent users and three emergency users.

Table 4. - *Regularity of use of terminal auctions by 80 Florida shippers, 1948-49 season*[1]

TYPE OF SHIPPER	NUMBER OF SHIPPERS			
	SELLING THROUGH AUCTIONS		NOT SELLING THROUGH AUCTIONS	TOTAL
	CONSISTENTLY DURING SEASON	DURING PERIODS OF INADEQUATE DEMAND FROM PRIVATE SALE OUTLETS		
Cash buyer----------	10	15	2	27
Cooperative----------	19	9	0	28
Grower-shipper----------	10	5	3	18
Commission-handler---------	4	3	0	7
Total----------	43	32	5	80
Percent----------	53.8	40.0	6.2	100.0

[1]This table is based on statements by shippers on how they utilized terminal auction facilities during 1948-49.

Methods used in maintaining customer contact in f.o.b. selling. - Two-thirds of the f.o.b. sales were made by direct contact between buyer and seller, either at the shipping point or in the markets. (See table 5). One-third were made through a market broker.[2] About one-half of the direct sales were made to wholesalers, chain stores, and other buyers in the market-place. The balance were sold direct to buying brokers[3] and national jobbing and retail chain store buyers located at shipping point.

Only 20 percent of the f.o.b. sales made by cash buyers were negotiated through market brokers, while cooperatives and commission-handlers sold over 40 percent through brokers. Grower-shippers made a little over 32 percent of their f.o.b. sales through brokers.

[2]A market broker is a sales agent located in the market place to bring buyer and seller together in the interest of the seller. He does not take title to the fruit.
[3]As used in this study, a buying broker is a buyer engaged in buying fruit as a speculator and for the account of other purchasers. He takes title to the fruit.

Table 5. - *Methods used by 80 Florida citrus shippers in maintaining customer contact in f.o.b. sales, 1948-49 season*

TYPE OF SHIPPER	BOXES OF FRUIT SOLD			
	THROUGH MARKET BROKERS OR SALARIED OFFICES	DIRECT TO BUYERS AND BUYING AGENTS AT SHIPPING POINTS	DIRECT TO BUYERS IN THE MARKET	TOTAL
Cash buyer	1,525,692	3,181,737	2,896,370	7,603,799
Cooperative	3,716,887	2,856,615	2,685,361	9,258,863
Grower-shipper	911,610	724,894	1,186,418	2,822,922
Commission-handler	977,436	714,330	675,441	2,367,207
Total	7,131,625	7,477,576	7,443,590	22,052,791
	Percent sold			
Cash buyer	20.1	41.8	38.1	100.0
Cooperative	40.1	30.9	29.0	100.0
Grower-shipper	32.3	25.7	42.0	100.0
Commission-handler	41.3	30.2	28.5	100.0
Average	32.3	33.9	33.8	100.0

Individual or organization handling sales. - Table 6 shows the kinds of sales organizations used by shippers to merchandise their fruit. This tabulation does not include the central office of the Florida Citrus Exchange since its sales department is maintained by a group of shippers and is referred to under the heading "Central cooperative sales agency." Forty-four percent of the shippers reported that they employed a fresh fruit sales manager -- a person devoting 75 percent or more of his time to marketing -- to handle this activity. The next largest number of shippers or 24 percent added the selling function to the overall supervisory activities of the company president or general manager. A central sales cooperative sold the fruit for almost 18 percent of the shippers and joined with a private sales agency in marketing the fruit of another 1 percent. Five percent sold through a private sales agent. Three shippers processing as well as marketing fresh fruit assigned the sale of both fresh and processed fruit to the same individual. Two shippers handled all sales through company-owned jobbing houses. One packer affiliated with a corporate chain store system shipped all his fruit on order of that chain system.

A relatively larger proportion of cash buying shippers than other types of shippers used one individual or department to supervise more than one activity. Over 64 percent of this type of shipper merged supervisory activities for fresh fruit sales with processed fruit marketing or with non-marketing managerial duties in contrast with about 28 percent for all types of shipper.

Table 6. - *Individual or organization to whom 79 Florida citrus shippers assigned responsibility for handling sales, 1948-49 season*

TYPE OF SHIPPER	NUMBER OF SHIPPERS ASSIGNING RESPONSIBILITY FOR SALES TO:								
	CENTRAL COOPERATIVE SALES AGENCY	PRIVATE SALES AGENCY	FRESH FRUIT SALES MANAGER[1]	FRESH AND CANNED FRUIT SALES MANAGER	PRESIDENT AND/OR GENERAL MANAGER	OWN WHOLESALE HOUSES	PARENT RETAIL CHAIN	CENTRAL COOPERATIVE SALES AGENCY AND PRIVATE SALES AGENCY	TOTAL
Cash buyer-----	0	0	13	0	12	2	0	0	27
Cooperative----	14	0	10	1	2	0	0	0	27
Grower-shipper-	0	3	8	2	3	0	1	1	18
Commission-handler------	0	1	4	0	2	0	0	0	7
Total-----	14	4	35	3	19	2	1	1	79
Percent---	17.7	5.1	44.3	3.8	24.0	2.5	1.3	1.3	100.0

[1]Does not include central office of Florida Citrus Exchange.

The handlers not maintaining a separate department for fresh fruit marketing were, for the most part, the lower volume operators. (See table 7). Since most of the shippers included in the study handled a relatively large volume of citrus, it is reasonable to assume that a still larger proportion of the houses not studied did not have a department to handle the marketing function only. If they have followed the same pattern as the small volume shippers included in this study, many have delegated this activity to a person responsible for general supervision or to a private or cooperative sales agency.

Table 7. - *Comparison of volume of fruit marketed by 79 Florida citrus shippers with or without a fresh fruit sales department, 1948-49 season*

VOLUME HANDLED (BOXES)	NUMBER OF SHIPPERS			PERCENT OF SHIPPERS		
	MAINTAINING A FRESH FRUIT SALES DEPARTMENT[1]	NOT MAINTAINING A FRESH FRUIT SALES DEPARTMENT	TOTAL	MAINTAINING A FRESH FRUIT SALES DEPARTMENT	NOT MAINTAINING A FRESH FRUIT SALES DEPARTMENT	TOTAL
0-199,999---------	5	15	20	14.3	34.1	25.3
200,000-399,999---	15	19	34	42.9	43.2	43.0
400,000-599,999---	6	6	12	17.1	13.6	15.2
600,000-799,999---	6	4	10	17.1	9.1	12.7
800,000 and over--	3	0	3	8.6	0.0	3.8
Total--------	35	44	79	100.0	100.0	100.0

[1]Does not include the central office of the Florida Citrus Exchange.

From these data, it would appear that there is not as much duplication of sales overhead as is commonly supposed. This does not mean that there isn't room for improvement in coordination of sales effort, but it does raise the question as to whether the actual cost of the shipping point system of marketing fresh Florida citrus is excessive. The cost to grower of not having a more completely coordinated marketing system may, however, be higher than necessary in the form of lower prices and lower net returns.

Methods used in disposing of fruit for processing. - Table 8 shows the extent to which fresh fruit marketing agencies have developed integrated operations. Fifty-three percent of the fruit delivered to processing plants by the 79 Florida citrus shippers was placed in plants owned by the shippers themselves. Fruit sold for cash at current market prices comprised 25 percent of the fruit delivered to processors and fruit sold under preseason price contract about 2 percent. A considerable volume of fruit was placed in cooperative processing pools by shippers not directly affiliated with a cooperative shipper-processor enterprise. These shippers, including grower-shippers, commission-handlers, and other cooperatives pooled their fruit with fruit delivered to the cooperative plants by the fresh fruit shipping divisions of the cooperatives. This accounted for 20 percent of the fruit disposed of for processing.

Table 8. - *Methods of disposing of fruit for processing by 79 Florida fresh citrus fruit shippers, 1948-49 season*

TYPE OF SHIPPER	BOXES OF FRUIT				
	DELIVERED TO OWN PROCESSING PLANT	SOLD FOR CASH AT CURRENT MARKET PRICES	SOLD UNDER PRICE CONTRACT	PLACED IN COOPERATIVE POOL	TOTAL
Cash buyer--------	4,533,608	3,384,899	0	0	7,918,507
Cooperative-------	6,814,103	1,551,651	434,537	3,810,462	12,610,753
Grower-shipper----	2,100,082	1,191,123	28,910	219,751	3,539,866
Commission-handler	0	247,709	0	1,177,763	1,425,472
Total--------	13,447,793	6,375,382	463,447	5,207,976	25,494,598
	Percent				
Cash buyer--------	57.3	42.7	0.0	0.0	100.0
Cooperative-------	54.1	12.3	3.4	30.2	100.0
Grower-shipper----	59.4	33.6	0.8	6.2	100.0
Commission-handler	0.0	17.4	0.0	82.6	100.0
Average------	52.8	25.0	1.8	20.4	100.0

Commission-handlers operated no processing plants and placed 83 percent of their fruit for processing in cooperative plants. On the other hand cash buyers, cooperatives and grower-shippers handled close to 60 percent of their fruit for processing in their own plants. Cash buyers

sold all of the remainder of their fruit for processing for cash at current market prices. Grower-shippers also used this method to dispose of most of the fruit for processing not handled by their own plants while cooperatives used cooperative pools.

Proportion of fruit delivered to processing plants direct from groves and packinghouses as grade-outs by 79 shippers. - Sixty-two percent of the citrus for processing was delivered from the grove to processors via fresh fruit packing plants. (See table (9). This consisted of off-size and off-grade fruit picked out of lots being graded and packed for fresh shipment. The balance or 38 percent moved to the plants direct from the grove.

Table 9. - *Volume of fruit delivered to processing plants direct from groves and packinghouses by 79 Florida citrus shippers, 1948-49 season*

TYPE OF PROCESSOR	BOXES OF FRUIT		
	FROM PACKINGHOUSE[1]	DIRECT FROM GROVE	TOTAL
Cash buyer	5,726,356	2,192,151	7,918,507
Cooperative	6,965,283	5,511,234	12,476,517
Grower-shipper	1,953,642	1,586,224	3,539,866
Commission-handler	1,104,371	321,101	1,425,472
Total	15,749,652	9,610,710	25,360,362
	Percent		
Cash buyer	72.3	27.7	100.0
Cooperative	55.8	44.2	100.0
Grower-shipper	55.2	44.8	100.0
Commission-handler	77.5	22.5	100.0
Average	62.1	37.9	100.0

[1]Off-size and off-grade fruit.

Commission-handlers delivered almost four-fifths of the fruit they sent to processing plants from their grading tables. This was not surprising since this type handler did not operate any processing plants and, for the most part, provided facilities for packing fruit for fresh consumption. However, a few commission-handlers who provided a complete grove caretaking and sales service for growers moved a substantial volume of fruit to processors direct from the grove.

Cooperatives, grower-shippers, and cash buyers with large investments in processing plants as well as fresh fruit packinghouses are interested in total net return from the entire operation. One would expect these types of operators to deliver a relatively large proportion of their fruit for processing direct from the grove. Table 9 bears this out for cooperatives and grower-shippers but not for cash buyers. Cooperatives and

grower-shippers both delivered more than 44 percent of their fruit for processing from the grove while cash buyers averaged less than 28 percent. This situation was due, in part, to the fact that the operations of the two largest cash buyers were not typical of the average of the other 25 and gave unusual weight to the "packinghouse grade-outs" average.

PROCESSORS

Types interviewed. - Practically all processors who packed any substantial amount of citrus products were visited. Their production represented over 95 percent of all fruit processed during the 1948-49 season. Processors were classified as cash buyers, cooperatives and grower-processors in accordance with the procedure previously outlined.

In numbers, cash buyers far outranked all other types of processors. (See table 10). They made up almost 62 percent of all processors. Cooperatives with about 24 percent were next in importance followed by grower-processors with about 15 percent.

Table 10. - *Number and type of processors included in study of Florida citrus industry, 1948-49 season*[1]

TYPE OF PROCESSOR	NUMBER	PERCENT
Cash buyer	21	61.8
Cooperatives[2]	8	23.5
Grower-processors[3]	5	14.7
Total	34	100.0

[1]Fifty-one percent of fruit procured by one method, i.e., cash purchase, from own groves, or from cooperative pool.
[2]Two of these are corporate in structure but are owned and operated by growers on a mutual basis.
[3]Two of these grow one-half and purchase one-half of the fruit they handle. They are included with the grower-processors rather than the cash buyers because they stated that their major concern was in making growing operations profitable.

Volume handled. - Cash buyers were even more dominant volumewise than in numbers in the citrus processing industry during the 1948-49 season. (See table 11). This group handled almost 71 percent of all fruit processed. Cooperatives handled about 25 percent and grower-processors about 5 percent.

Cash buyers and cooperatives were the only types of processors manufacturing frozen concentrate. Cash buyers handled 74 percent and cooperatives 26 percent of all fruit made into frozen concentrate. The ranking of the three groups on other canned citrus products was in about the same proportion as the ranking for all products.

Table 11. - *Volume of citrus fruit handled by 34 Florida citrus processors, 1948-49 season*

TYPE OF PROCESSOR	BOXES OF FRUIT PROCESSED		
	FOR CANNING[1]	FOR PROCESSING AS FROZEN CONCENTRATE	ALL FRUIT
Cash buyer	25,128,838	6,483,272	31,612,110
Cooperative	8,728,056	2,253,728	10,981,784
Grower-processor	2,100,082	0	2,100,082
Total	35,956,976	8,737,000	44,693,976
	Percent		
Cash buyer	69.9	74.2	70.7
Cooperative	24.3	25.8	24.5
Grower-processor	5.8	0	4.8
Total	100.0	100.0	100.0

[1]Includes hot concentrate, single strength juice, sections and salad.

Relative size. - During the 1948-49 season cash buyers handled the largest average volume of the various types of processors with over one and one-half million boxes per processor. (See table 12). Cooperatives were close behind with an average size of slightly over one and one-third million boxes. The average volume handled by grower-processors amounted to 420,000 boxes.

Table 12. - *Average number of boxes handled by 34 Florida citrus processors, 1948-49 season*

TYPE OF PROCESSOR	NUMBER OF PROCESSORS	TOTAL BOXES PROCESSED	AVERAGE BOXES PROCESSED
Cash buyer	21	31,612,110	1,505,338
Cooperative	8	10,981,784	1,372,723
Grower-processor	5	2,100,082	420,016
Total	34	44,693,976	1,314,529

Methods used in obtaining fruit. - Twelve percent of the fruit processed came from processor-owned groves during the 1948-49 season. (See table 13). Cash buyers grew about 13 percent of the fruit they processed and purchased the balance. Grower-processors grew slightly more than 62 percent and bought almost 38 percent. Cooperatives, as such, grew no fruit, obtaining 93 percent by pooling arrangements and 7 percent by cash purchase.

Table 13. - *Methods used by 34 processors in obtaining citrus fruit, 1948-49 season*

TYPE OF PROCESSOR	BOXES PROCESSED			
	GROWN BY PROCESSOR	OBTAINED BY CASH PURCHASE	OBTAINED BY POOLING ARRANGEMENT	TOTAL
Cash buyer	4,058,830	27,553,280	0	31,612,110
Cooperative	0	794,654	10,187,130	10,981,784
Grower-processor	1,305,041	795,041	0	2,100,082
Total	5,363,871	29,142,975	10,187,130	44,693,976
	Percent			
Cash buyer	12.8	87.2	0.0	100.0
Cooperative	0.0	7.2	92.8	100.0
Grower-processor	62.1	37.9	0.0	100.0
Average	12.0	65.2	22.8	100.0

Proportion of fruit received from packinghouses and direct from groves. - Processors obtained 56 percent of all fruit direct from groves and 44 percent from fresh fruit packinghouses as eliminations from the grading table during the 1948-49 season. (See table 14).

Table 14. - *Volume of fruit received by processors from packinghouses and direct from groves, 1948-49 season*

TYPE OF PROCESSOR	VOLUME (BOXES)[1]		
	FROM PACKINGHOUSE[2]	DIRECT FROM GROVE	TOTAL
Cash buyer	13,267,914	18,344,196	31,612,110
Cooperative	5,526,443	5,455,341	10,981,784
Grower-processor	934,768	1,165,314	2,100,082
Total	19,729,125	24,964,851	44,693,976
	Percent		
Cash buyer	42.0	58.0	100.0
Cooperative	50.3	49.7	100.0
Grower-processor	44.5	55.5	100.0
Average	44.1	55.9	100.0

[1]Includes fruit for both concentrating and canning. Most processors stated that a greater proportion of fruit for concentrating was obtained direct from groves than fruit for canning.
[2]Off-size and off-grade fruit.

This illustrates the prime importance of processors as outlets for Florida citrus fruit. No longer is the processing industry considered an outlet for fruit salvaged from the fresh fruit packinghouse only. Returns have apparently been sufficiently high at the processing plant during recent years to attract more than one-half the fruit direct from the groves.

Operators of frozen concentrate plants indicated that it was often impossible for them to use packinghouse "grade-outs" because minimum internal grade requirements for concentrating purposes were generally higher than for fresh fruit. Therefore, it is reasonable to expect operators of frozen concentrate plants to compete with the fresh market for top quality fruit. This has been the case during the 1949-50 season.

Purchasing methods. - Over 86 percent of the fruit purchased by proc-errors was bought for cash at current market prices. (See table 15). Only 14 percent was bought under "preseason" price contracts.

Table 15. - *Purchasing methods used by 34 Florida citrus processors, 1948-49 season*

TYPE OF PROCESSOR	BOXES PROCESSED		
	PURCHASED UNDER PRICE CONTRACT	PURCHASED FOR CASH AT CURRENT MARKET PRICES	TOTAL
Cash buyer	4,025,889	23,527,391	27,553,280
Cooperative	0	794,654	794,654
Grower-processor	0	795,041	795,041
Total	4,025,889	25,117,086	29,142,975
	Percent		
Cash buyer	14.6	85.4	100.0
Cooperative	0.0	100.0	100.0
Grower-processor	0.0	100.0	100.0
Average	13.8	86.2	100.0

The "preseason" price contracts did not cover the full growing season but were executed far enough in advance of actual picking to be considered futures contracts by the processors concerned. These contracts were usually made from 2 to 4 weeks in advance. "Cash at current market prices" refers to purchases where the price was placed on the fruit at the market not more than one week in advance of delivery.

Apparently cash buyers were the only type of operator willing to risk a futures market and agree on prices well in advance of delivery. Almost 15 percent of the fruit they purchased was obtained in this manner. Their willingness to take this risk probably stemmed from their dependence

on purchasing to obtain fruit. Cooperatives which obtain most of their fruit through pools and grower-processors that grow more than 62 percent of their needs are usually in a position to obtain adequate supplies of fruit without being obliged to enter into price agreements in advance.

Marketing agents used in distributing canned citrus products. - Each type of processor sold the major portion of the products canned (single strength juice, sections, salad, hot concentrate and marmalade) through brokers. (See table 16). Almost 60 percent was marketed through this kind of agent. Branch office personnel making direct contact in the markets with wholesale grocers and corporate chain store systems marketed another 20 percent. Shipping point sales offices sold about 15 percent of the canned fruit products direct without the help of market brokers or salaried salesmen. These sales were made to buyers visiting the processor's home offices or by direct telephone, teletype, wire or mail contact.

Table 16. - *Marketing agents used by 34 Florida citrus processors in distributing canned citrus products,*[1] *1948-49 season*

TYPE OF PROCESSOR	BOXES OF FRUIT SOLD				
	THROUGH BROKERS	THROUGH BRANCH OFFICES	THROUGH FOOD DISTRIBUTORS UNDER DISTRIBUTORS' BRANDS	DIRECT	TOTAL
Cash buyer----	14,244,287	7,320,000	0	3,564,551	25,128,838
Cooperative---	5,642,117	0	1,746,000	1,339,939	8,728,056
Grower-processor---	1,481,694	0	0	618,388	2,100,082
Total----	21,368,098	7,320,000	1,746,000	5,522,878	35,956,976
	Percent sold				
Cash buyer----	56.7	29.1	0.0	14.2	100.0
Cooperative---	64.6	0.0	20.0	15.4	100.0
Grower-processor---	70.6	0.0	0.0	29.4	100.0
Average--	59.4	20.4	4.8	15.4	100.0

[1]Hot concentrate, single strength juice, sections and salad.

Five percent was sold to food distributors to be marketed under the distributor's brands. These were actually direct sales but they were considered separately here because food distributors generally are large operators with a special kind of operation. Food distributors, as used herein, are processors that buy from other processors and resell the purchased units under their own brands to wholesalers and retailers.

Cash buyers were the only type of handler employing salaried market salesmen in branch offices to merchandise their products. They marketed 29 percent in this manner. Cooperatives sold 20 percent of their canned citrus products to food distributors but cash buyers and grower-processors did not use this channel. Percentagewise grower-processors were the largest users of brokers as marketing agents. Grower-processors also led the other types of processors in direct selling.

This study did not attempt to ascertain the proportion of canned products moving under buyers' label. The impression gained was that many corporate chain store systems, as well as the food distributors discussed above, were obtaining fruit labeled in this manner. To the degree that this is true, the question may well be raised as to how effectively the commodities can be merchandised with a multiplicity of brands and split advertising.

Marketing agents used in distributing frozen concentrated citrus juices. Three types of marketing agencies marketed frozen concentrated citrus juices during the 1948-49 season for Florida processors. (See table 17). These were salaried market salesmen, frozen food distributors, and shipping point salesmen. Processors marketed 55 percent through salaried market salesmen. Another 23 percent was sold to frozen food distributors to be marketed under the distributors' brands. Shipping point salesmen sold the remaining 22 percent direct to frozen food wholesalers, corporate chain store systems, supermarkets, and institutions.

Cooperatives sold 81 percent of their frozen concentrated juice to frozen food distributors and 19 percent direct. Cash buyers sold

Table 17. - *Marketing agents used by Florida citrus processors in distributing frozen concentrated citrus juices, 1948-49 season*

TYPE OF PROCESSOR	BOXES OF FRUIT SOLD			
	THROUGH BRANCH OFFICES	TO FROZEN FOOD DISTRIBUTORS FOR MARKETING UNDER DISTRIBUTORS' BRANDS	DIRECT	TOTAL
Cash buyer	4,800,000	232,378	1,450,894	6,483,272
Cooperative	0	1,820,091	433,637	2,253,728
Grower-processor	0	0	0	0
Total	4,800,000	2,052,469	1,884,531	8,737,000
	Percent sold			
Cash buyer	74.0	3.6	22.4	100.0
Cooperative	0.0	80.8	19.2	100.0
Grower-processor	0.0	0.0	0.0	0.0
Average	54.9	23.5	21.6	100.0

74 percent of their frozen concentrated juice through salaried market salesmen in branch offices, 4 percent to frozen food distributors and 22 percent direct. Grower-processors did not manufacture frozen concentrated juice.

Frozen food distributors are processors in their own right who buy from other processors to augment their supplies. They are considered marketing agencies since they control the branding, distribution and merchandising of the frozen concentrated products they buy as well as the products they manufacture.

The merchandising program for frozen concentrate appeared to be serving the grower much more effectively than the program for canned citrus. Most of the fruit was being sold under a few well-known brands. Dealer servicemen and radio, newspaper, magazine and poster advertising were being extensively used to make the public aware of the characteristics of the product.

APPRAISAL OF EFFECTIVENESS AND EFFICIENCY OF FLORIDA FRESH FRUIT MARKETING SYSTEM

MARKETS REACHED

No data are available to show conclusively whether or not Florida obtains the widest possible distribution of its citrus fruit. However, there are a few facts which shed some light on the matter.

From 1939-40 to 1948-49 the total production of citrus fruits in Florida more than doubled and was successfully marketed. Although much of this increase was marketed in processed form as an economy product, fresh fruit marketings also increased.

During the latter part of the 1948-49 season disastrous freezes in California and Texas materially shortened citrus supplies in those States. As a result Florida fresh citrus fruit flowed west into markets where it cannot normally compete. Through May 26, 1949, the territory north of the Ohio River and west of the Mississippi River received 10,798 carloads via rail compared to 30,927 carloads which were shipped to the 11 northeastern States. These shipments to western markets were more than one-third as much as those going to eastern markets. In the 1947-48 season through June 2, 1948, the same western States had received only 7,950 rail carloads compared to 32,754 carloads which went to eastern markets.

In comparing actual unloads of rail receipts, Dallas, Tex. reported 21 carloads of Florida oranges, 10 of grapefruit and 2 of "mixed" citrus unloaded in March 1949, compared to only 1 carload of Florida oranges in March 1948. Denver, Colo. reported no rail unloads of Florida citrus fruit in March 1948, but in 1949 this city used 23 carloads of oranges, 20 of grapefruit and 6 of "mixed" cars. Portland, Ore. unloads from Florida in March 1948, consisted of only one carload of grapefruit, while in March 1949, 18 carloads each of Florida oranges and grapefruit were

unloaded. Minneapolis, Minn. unloads for March 1949, amounted to 21 carloads of Florida oranges, 46 of grapefruit and 10 of "mixed" citrus in contrast to one carload of Florida oranges in 1948.

Truck distribution was also relatively heavy to the western States following the cold damage in California and Texas. For the period beginning March 20, and ending May 21, 1949, 6,325 carload equivalents of oranges and 1,982 carload equivalents of grapefruit were shipped from Florida via motor trucks. Twenty-seven percent of the oranges went to eastern States, 40 percent to western States and 33 percent to southern States. Of grapefruit, 22 percent went to eastern States, 44 percent to western States and 34 percent to southern States.

The above figures on the distribution of fresh Florida fruit subsequent to the California and Texas freezes are included to show that Florida fruit moved without delay into new markets when the opportunity afforded. Table 18 illustrates the same point. It shows grapefruit unloads in

Table 18. - *Cars of grapefruit unloaded at 20 selected markets, October 1946 and February 1947*

CITY	OCTOBER 1946[1]		FEBRUARY 1947[1]	
	FLORIDA CARS UNLOADED	ALL OTHER CARS UNLOADED	FLORIDA CARS UNLOADED	ALL OTHER CARS UNLOADED
	Populations of over 1,000,000			
New York	472	12	552	88
Chicago	140	39	2	271
Philadelphia	169	-	57	33
Boston	103	3	67	60
Detroit	61	8	8	119
Pittsburg	59	3	11	108
St. Louis	31	16	-	111
Cleveland	45	9	-	122
Baltimore	59	-	66	17
Washington	38	-	26	19
Total	1,177	90	789	948
	500,001 to 1,000,000			
Buffalo	38	-	2	63
Minneapolis	36	5	-	99
Cincinnati	68	5	3	103
Milwaukee	28	1	-	78
Kansas City	22	11	-	91
Seattle	25	6	-	44
New Orleans	10	1	-	10
Hartford	18	-	5	2
Atlanta	21	-	27	2
Louisville	17	1	1	32
Total	283	30	38	524

[1]Marketing Florida Citrus Summaries, 1946-47 Season, U. S. Department of Agriculture.

20 important markets during October 1946 and February 1947 in the 1946-47 season. In October, Florida was shipping most of the grapefruit being marketed in the United States, and was naturally getting the majority of the business. In February, other States, principally Texas, were well into their regular shipping season and Florida was unable to compete with them in the midwestern markets. However, western competition did not become serious in the eastern seaboard cities.

COMPARISON OF THE FLORIDA AND CALIFORNIA FRESH CITRUS MARKETING SYSTEMS

The fact that Florida apparently obtains wide distribution of its fresh citrus fruit does not prove its marketing system is operating at maximum effectiveness. The fruit would probably get adequate distribution even if there were no shipping point salesmen. As long as wholesalers and retailers could handle Florida citrus fruit at a profit they would devise means for getting it into consumption.

Probably the most important measure of the effectiveness of a shipping point marketing system is the extent to which it improves growers and shippers net income. Cooperative and private sales agencies were organized to bring this about by increasing the bargaining strength of growers in determining sales price, decreasing the cost of marketing, smoothing out price fluctuations by better timing of shipments and the elimination of market gluts, ironing out grading problems, and increasing fruit consumption through merchandising techniques.

Although Florida has an abundance of sales agencies for citrus, these agencies are considered by many persons to be none too successful in serving their own interests and those of the grower. This attitude is based on the belief that these agencies are so highly competitive that they frequently resort to uneconomic price cutting tactics and cannot effectively employ the measures essential to a good marketing program.

Persons who are critical of this alleged damaging competition and lack of coordination, often point in contrast to the coordinated sales program of the California citrus industry. The California Fruit Growers Exchange, Los Angeles, has successfully marketed 75 percent of California's citrus crop for many years. During the last 17 years the Exchange's fruit and that of other California shippers has been shipped under a Federal Marketing Agreement with week-to-week volume allotments to each shipper.

Those who favor the Florida shipping point citrus marketing system hold that lack of central organization or marketing controls has permitted the system to operate with more elasticity, less overhead interference and cost, and, through the intensity of competition, more merchandising drive. They insist that these factors have combined to make possible an ever expanding production. These individuals also point out that Florida fresh citrus fruit has been marketed successfully without volume proration under a Federal Marketing Agreement but that California citrus shippers have used such a program.

Following are some data which permit certain comparisons and analysis of the Florida and California systems:

Marketing costs, margins, prices realized and net returns to growers. - On November 11, 1943, the Federal Trade Commission submitted a report on distribution methods and costs of important food procusts,[4] to the Congress of the United States. This report included a tabulation of the costs per box of distributing California and Florida oranges from the grove through corporate chain store systems and through the wholesale trade and the net proceeds to growers during the 1935 and 1936 marketing season.

Table 19 shows the data presented for New York, Baltimore and Chicago in the Federal Trade Commission report without change except for two items. The items "picking, grading, packing, inspection and loading" cost and "proceeds to growers" were adjusted to make them comparable. In the case of the former, picking and hauling costs had been excluded from the California figures but had been included in the Florida data. Thus "proceeds to growers" represented on tree returns for Florida and packinghouse door returns for California. The California figures for these items were made comparable with those for Florida by adding the California picking and hauling costs to the "picking, packing, inspection and loading" cost figure and the picking and hauling cost from growers' proceeds. The California picking and hauling cost figure was taken from the 1936 Annual Report of the California Fruit Growers Exchange.

Table 19 shows three of the items that can be influenced by a marketing system. These are wholesale margins; costs of picking, grading, packing, inspection, and loading; and net returns to growers. Net returns to growers are of course, governed to a substantial degree by the other items.

Wholesale margins on fruit bought by corporate chain store systems from wholesalers were lower in each market in the case of California fruit than on Florida fruit. The average margin taken by wholesalers for all the fruit they sold was also lower in each market for California fruit. Percentagewise, wholesale margins for Florida fruit were almost double those for California citrus.

Net proceeds to growers were higher for all California fruit through both corporate chain store systems and the wholesale trade in each market with two exceptions. In Baltimore, California navel oranges returned less to the grower than did Florida oranges. However, returns from California Valencia oranges in Baltimore exceeded those of all Florida oranges.

Costs for picking, grading, packing, inspecting and loading standard packed boxes were lower in California than in Florida. This is probably due to the fact that the Florida orange box weighs 13 pounds more than

[4]Report of the Federal Trade Commission on Distribution Methods and Costs. Part I-Important Food Products. Submitted to the Congress November 11, 1943. pp 147, 149, 151.

the California box. Therefore, these services could be expected to cost more in Florida. It may be that the central coordination program of the California Fruit Growers Exchange makes possible the purchase of wax, power, machinery, paper and containers at a discount, the more efficient use of labor by shifting between packinghouses and loading stations, and the establishment of grading standards requiring little supervisory expense.

The costs of operating the shipping point sales organization (termed merchant shipper or broker for shipper in table 19) averaged somewhat higher in California than in Florida. This included advertising and merchandising costs and, in the case of California, the maintenance of the salaried market salesmen of the California Fruit Growers Exchange. It is not possible to tell from the report whether or not the brokerage paid to market brokers is included in the Florida figures. The Florida data apparently include the profit or loss of the cash buying packer since the shipping point marketing cost ranges from a loss for sales through corporate chain store systems in Chicago to a gain of 12 cents a box for sales through corporate chain store systems in Baltimore. The consistancy of this cost for California fruit is to be expected since marketing charges of a cooperative sales agency do not vary with the market but are set at such a level as to keep the agency functioning. On the other hand, a cash buyer assumes the responsibility for the fruit at the grove and may make a wide margin or lose money according to market changes.

Since all the corporate chain store purchases shown on table 19 were made from wholesalers and none direct from shippers, no appraisal can be made as to the effectiveness of the Florida and California marketing systems in reducing retail margins. The retail margin was greater in dollars and cents on California fruit than on Florida fruit in all three cities. Percentagewise, however, the retail margin was slightly less on California fruit in Chicago and New York and slightly more in Baltimore.

A Farm Credit Administration Miscellaneous Report[5] issued May 1950 presents some additional comparisons of wholesale margins on California and Florida and Texas oranges. Table 20 shows the average gross margins taken on citrus fruit during the period December 1946 - March 1947 by wholesalers, service wholesalers and jobbers in New York, Chicago, Cleveland, Kansas City, and Indianapolis. In this study it was possible to separate Florida and Texas data from California figures but not Florida data from Texas data. Therefore, the cost and margin figures on citrus from Florida and Texas were combined for comparison with those on citrus from California. Texas and Florida have essentially the same type of marketing system. Both are highly competitive. Neither State has a volume proration program.

[1]Samuels, J. K. and Goldsborough, G. H. Wholesale Distribution of Citrus Fruits in Five Terminal Markets, Dec. 1946 - March 1947. U. S. Department of Agriculture, Farm Credit Administration, Miscellaneous Report 139. May 1950. p. 10.

Table 19. - *Portions of the consumer's cost paid to chain stores and of the wholesale receiver's proceeds for California Navel and Valencia oranges and Florida oranges that were absorbed by preparation, transportation, marketing costs, and margins during various periods in 1935 and 1936*

SOLD TO CHAIN STORES	CHICAGO						NEW YORK						BALTIMORE					
	DOLLARS PER BOX			PERCENT			DOLLARS PER BOX			PERCENT			DOLLARS PER BOX			PERCENT		
	CALIF. NAVELS	CALIF. VALEN-CIAS	FLORIDA ALL	CALIF. NAVELS	CALIF. VALEN-CIAS	FLORIDA ALL	CALIF. NAVELS	CALIF. VALEN-CIAS	FLORIDA ALL	CALIF. NAVELS	CALIF. VALEN-CIAS	FLORIDA ALL	CALIF. NAVELS	CALIF. VALEN-CIAS	FLORIDA ALL	CALIF. NAVELS	CALIF. VALEN-CIAS	FLORIDA ALL
Cost to consumer	4.97	5.56	4.30	100.00	100.00	100.00	4.93	5.88	4.19	100.00	100.00	100.00	4.85	6.53	4.06	100.00	100.00	100.00
Distributor's margins:																		
Retail	1.55	1.64	1.51	31.10	29.50	35.17	1.47	1.54	1.35	29.78	26.19	32.16	1.77	2.28	1.26	36.43	34.86	31.06
Wholesale	.05	.06	.07	1.04	1.09	1.70	.05	.07	.09	1.01	1.28	2.28	.05	.05	.12	1.03	.77	2.88
Intermediate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Merchant shipper or broker for grower	.09	.09	(1)	1.71	1.65	[2].14	.08	.09	.06	1.62	1.49	1.54	.08	.08	.12	1.65	1.23	2.99
Total margins	1.69	1.79	1.58	33.85	32.24	36.73	1.60	1.70	1.50	32.41	28.96	35.98	1.90	2.41	1.50	39.11	36.86	36.93
Freight and other transit costs	1.13	1.20	.83	22.83	21.51	19.27	1.16	1.24	.58	23.60	21.08	13.77	1.17	1.25	.54	24.12	19.12	13.27
Picking, grading, packing, inspection and loading costs	.64	.61	.80	12.95	11.00	18.70	.68	.64	.84	13.77	10.84	19.98	.68	.62	.70	14.09	8.56	17.23
Miscellaneous costs	-	(1)	(1)	-	(1)	.04	-	(1)	(1)	-	.01	(1)	-	-	(1)	-	-	.01
Proceeds to grower	1.51	1.96	1.09	30.37	35.25	25.26	1.49	2.30	1.27	30.22	39.11	30.27	1.10	2.25	1.32	22.68	35.46	32.56
Number of shipments	70	48	30	70	48	30	11	49	186	11	49	186	3	8	24	3	8	24
Number of boxes (std)	32,324	22,200	13,130	32,324	22,200	13,130	5,079	22,638	82,892	5,079	22,638	82,892	1,386	3,696	11,185	1,386	3,696	11,185

SOLD TO OR THROUGH WHOLESALE RECEIVERS	CHICAGO						NEW YORK						BALTIMORE					
	DOLLARS PER BOX			PERCENT			DOLLARS PER BOX			PERCENT			DOLLARS PER BOX			PERCENT		
	CALIF. NAVELS	CALIF. VALEN-CIAS	FLORIDA ALL	CALIF. NAVELS	CALIF. VALEN-CIAS	FLORIDA ALL	CALIF. NAVELS	CALIF. VALEN-CIAS	FLORIDA ALL	CALIF. NAVELS	CALIF. VALEN-CIAS	FLORIDA ALL	CALIF. NAVELS	CALIF. VALEN-CIAS	FLORIDA ALL	CALIF. NAVELS	CALIF. VALEN-CIAS	FLORIDA ALL
Wholesale receivers proceeds	3.27	3.81	3.10	100.00	100.00	100.00	3.20	3.98	3.02	100.00	100.00	100.00	3.06	3.71	2.80	100.00	100.00	100.00
Distributors' margins:																		
Wholesale	.04	.05	.11	1.40	1.37	3.42	.05	.06	.07	1.41	1.46	2.27	.04	.05	.08	1.39	1.27	2.96
Intermediate	-	-	-	-	-	-	-	-	(1)	-	-	(1)	-	-	-	-	-	-
Merchant shipper or broker for grower	.11	.11	.05	3.23	2.84	1.47	.11	.11	.08	3.51	2.82	2.64	.11	.11	.11	3.44	2.98	3.79
Total margins	.15	.16	.16	4.63	4.21	4.89	.16	.17	.15	4.92	4.28	4.91	.15	.16	.19	4.83	4.25	6.75
Freight and other transit costs	1.16	1.22	.88	35.58	31.96	28.27	1.07	1.19	.56	33.42	29.97	18.75	1.18	1.26	.57	38.67	34.10	20.34
Picking, grading, packing, inspection, and loading costs	.67	.64	.81	20.32	16.85	26.21	.66	.66	.83	20.78	16.35	27.52	.65	.63	.71	21.20	16.91	25.29
Miscellaneous costs	(1)	-	(1)	.02	-	.14	.01	(1)	.02	.25	.15	.45	(1)	-	(1)	.01	-	(1)
Proceeds to grower	1.29	1.79	1.25	39.45	46.98	40.49	1.30	1.96	1.46	40.63	49.25	48.37	1.08	1.66	1.33	35.29	44.74	47.62
Number of shipments	417	404	153	417	404	153	666	1,543	819	666	1,543	819	47	159	66	47	159	66
Number of boxes (std)	221,363	186,438	63,795	211,363	186,438	63,795	311,026	713,600	357,007	311,026	713,600	357,007	21,637	73,375	28,768	21,637	73,375	28,768
Period covered 1935	Nov.-Dec.	Oct.-Nov.	Oct.-Nov.	Nov.-Dec.	Oct.-Nov.	Oct.-Nov.	Nov.-Dec.	Oct.-Nov.	Oct.-Nov.	Nov.-Dec.	Oct.-Nov.	Oct.-Nov.	Dec.-June	Oct.-Nov.	Oct.-June	Dec.-June	Oct.-Nov.	Oct.-June
1936																		

[1]Less than 0.006.
[2]Denotes loss.

Source: *Report of the Federal Trade Commission on Distribution Methods and Costs. Part I, Important Food Products, P 147, 149, 151. Submitted to the Congress November 11, 1943; Annual report of the California Fruit Growers Exchange, 1936.*

Table 20. - *Citrus fruit margins for wholesalers, service wholesalers, and jobbers in five terminal markets, December 1946 to March 1947*[1]

TYPE OF HANDLER	CALIFORNIA ORANGES		FLORIDA AND TEXAS ORANGES	
	MARGIN PER BOX	PERCENT OF SALES PRICE	MARGIN PER BOX	PERCENT OF SALES PRICE
Wholesaler	$0.39	7	$0.47	12
Service Wholesaler	.50	9	.64	14
Jobber	.33	6	.75	19
Weighted average	.41	7	.51	13

[1]New York, Chicago, Cleveland, Kansas City and Indianapolis.

The margin comparisons shown in table 20 were made for three types of handlers, namely, wholesalers, service wholesalers, and jobbers. The activities of these handlers were defined as follows:

> "Wholesalers" - Firms that buy in carload lots, less than carload lots, and at auction and which sell principally to other wholesale buyers such as jobbers.
>
> "Service Wholesalers" - Firms that buy in carlots, less than carload lots, from wholesalers and at auction. They handle a complete line of produce and sell and deliver principally to retailers.
>
> "Jobbers" - Firms that buy at auction and from wholesalers, other jobbers or truckers and which sell principally to retailers.

Gross margins averaged 10 cents a box less for California oranges than for Florida and Texas oranges. Jobbers took the highest margin on Florida and Texas oranges and service wholesalers the highest margin on California fruit. Wholesale margins on Florida and Texas fruit were almost double those on California fruit when shown as a percent of sales price.

This difference in margins could have been due to the fact that high priced and more carefully selected and standardized California fruit was competing with lower priced Florida and Texas oranges. Florida and Texas fruit could have offered a greater opportunity for speculative profit since this fruit was marketed by a large number of shippers competing with each other and offering fruit in a wide range of more or less similar grades and sizes at varied prices.

Data included in a stucy by Lillieholm[6] and the 1948 Annual Report of the California Fruit Growers Exchange makes possible another comparison between gross margins on Florida and California fruit. These gross margins are presented as percent of the retail sales dollar in table 21.

[6]Lillieholm, Wm. C. Grove to Retail Margins for Florida Valencia Oranges Marketed in Fresh Form in Selected Cities, 1940 to 1948. Bureau of Agricultural Economics, U. S. Department of Agriculture. September 1950.

The data show that California growers received 26 percent of the retail sales dollar compared to 17 percent for Florida growers. All of this advantage in favor of the California grower was apparently due to the lower gross margins taken by wholesalers and retailers on California fruit. Freight and packing and selling consume a somewhat larger percent of the retail sales dollar for California than for Florida citrus. Picking and assembling were 6 percent of the sales dollar in each State.

Table 21. - *Grove to retail margins for Florida Valencia oranges and all California oranges during the 1947-48 season*

MARGINS	PERCENT OF RETAIL SALES DOLLAR	
	FLORIDA VALENCIA ORANGES[1]	CALIFORNIA VALENCIA AND NAVEL ORANGES[2]
Combined wholesale and retail	46	32
Auction	2	(3)
Freight	14	19
Packing and selling	15	17
Picking and assembling	6	6
Growers net on-tree return	17	26
Total	100	100

[1]Source: W. C. Lillieholm, "Grove to Retail Margins for Florida Valencia Oranges Marketed in Fresh Form in Selected Cities, 1940 to 1948." Bureau of Agricultural Economics, U. S. Department of Agriculture. September 1950.
[2]Data taken from the 1948 Annual Report of the California Fruit Growers Exchange. This report covers all oranges sold from October 1947 to November 1948.
[3]Included in wholesale and retail margin.

A study by Rasmussen, Quitsland and Cake[7] includes data on average gross retail margins on Florida and California oranges in New York City during August and November 1939 and March 1940. On a dollar and cent basis, gross retail margins on California fruit were about one and two-thirds times the margins on Florida fruit each month. As a percent of the retail sales dollar, gross retail margins were slightly higher on California fruit than Florida fruit during August and March and slightly lower during November.

To summarize, it appears that retail margins made up about the same percent of the retail sales dollar for both Florida and California fresh oranges, but that gross wholesale margins on California fruit were usually lower as a percent of the retail sales dollar.

The control program of the California Fruit Growers Exchange may have been responsible for part of the difference in wholesale margins. However, the lower wholesale margins on California citrus might have been due as much to the relatively high price of the California fruit as to

[7]Rasmussen, M. P., Quitslund, F. A., and Cake, E. W. Retail Outlets for Fruit in New York City. U. S. Department of Agriculture, Farm Credit Administration Bul. 52. June 1941. p. 32.

the Exchange's bargaining power which volume control may make possible. Wholesalers generally find it easier to take wide margins on lower priced items.

Timing of shipments. - Table 22 compares the average weekly percentage change in auction shipments and prices of Florida and California oranges in New York and Chicago and in all auction markets during 1946-47 and 1947-48. California varied less than Florida in week-to-week shipments to the Chicago auction and to all auctions. However, there was about the same variation in week-to-week shipments from each State to New York. California auction prices change less than Florida prices from week to week during both seasons in New York and Chicago and all auctions.

The relatively greater stability of California shipments may have been caused by the volume proration program or the central sales program of the California Fruit Growers Exchange, or both. One would expect shipment regularity to be the major influence on price stability. It is noted, however, that Florida and California had about the same variance in shipments to New York but California had less price variance each year. Perhaps the volume control of the California Fruit Growers Exchange enabled that organization to influence the relative price stability of California fruit in New York.

Prices received. - Figure 1 shows season average prices to growers at the packinghouse door for California and Florida oranges during the 29-year period 1919-20 to 1948-49. California oranges brought higher prices than Florida fruit each year but two. This difference has been more than 75 cents a box for 9 of the 29 years and more than 50 cents a box for 14 of the 29 years.

To assign principal responsibility for this price differential to any one factor would not be sound in the absence of statistical proof. Many persons believe the external appearance of California fruit is more appealing and will, therefore, usually bring a higher price. Others are of the opinion that California packers and shippers do a more effective grading and packing job. Some individuals hold that the difference in the marketing system between California and Florida has effected the price differential.

BUSINESS REPUTATION AND CREDIT RATING OF FLORIDA FRESH CITRUS FRUIT SHIPPING FIRMS

Data developed from the produce rating books and the Annual Report of the Citrus and Vegetable Inspection Division of the Florida Department of Agriculture leave no question of the excellence of the Florida fresh fruit marketing system with regard to willingness and ability of the shippers to discharge financial obligations. Of the fruit shipped during 1948-49, 21 percent was handled by shippers with the top business reputation and credit rating. (See table 23). Seventy-four percent was marketed by shippers with the next highest rating. Only a little over 4 percent had a low rating.

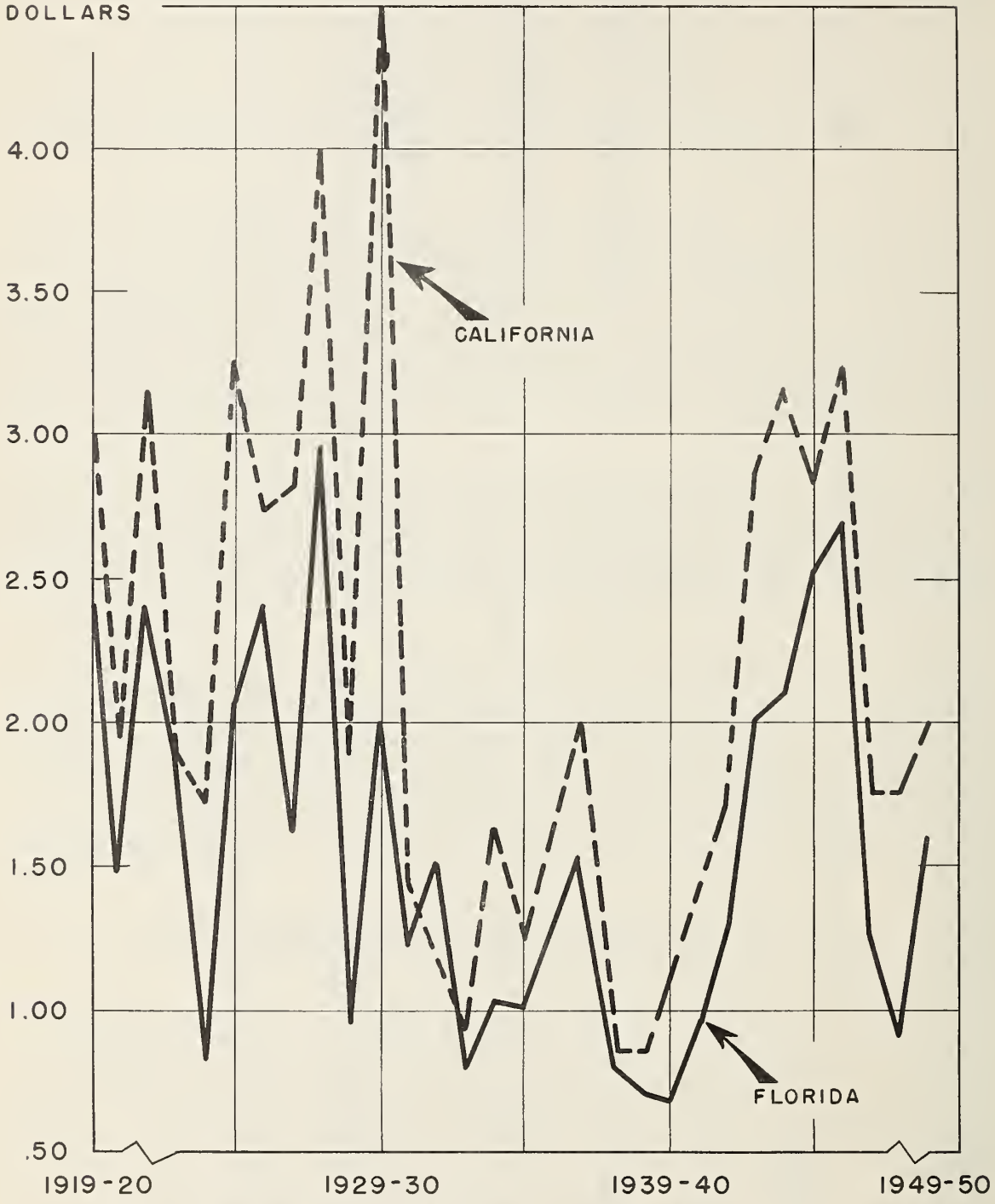
Table 22. - *Average weekly percentage change in auction prices and auction shipments of California and Florida oranges for the 1946-47 and 1947-48 seasons*[1]

LOCATION OF AUCTIONS	AVERAGE WEEKLY PERCENTAGE CHANGE IN PRICES				AVERAGE WEEKLY PERCENTAGE CHANGE IN SHIPMENTS				PERIOD COVERED	
	1946-47		1947-48		1946-47		1947-48		1946-47	1947-48
	FLORIDA	CALIFORNIA	FLORIDA	CALIFORNIA	FLORIDA	CALIFORNIA	FLORIDA	CALIFORNIA		
New York, N. Y.--	13.2	11.5	10.3	7.4	32.0	34.3	20.0	18.6	October 18, 1946-July 18, 1947	November 7, 1947-July 30, 1948
Chicago, Ill.---	14.0	10.0	9.3	7.8	39.8	25.6	38.7	16.7	November 1, 1946-July 4, 1947	October 31, 1947-July 2, 1948
Total all auction cities	12.2	9.3	8.3	5.8	30.2	24.0	17.0	14.2	October 25, 1946-July 11, 1947	October 31, 1947-July 23, 1948

[1]Computed from Marketing Florida Citrus Summaries, 1946-47 and 1947-48, U. S. Department of Agriculture..

FIGURE I

GROWER'S AVERAGE RETURNS PER BOX FOR ORANGES IN CALIFORNIA AND FLORIDA●



●EQUIVALENT PACKING HOUSE DOOR RETURNS FOR ALL METHODS OF SALE
SOURCE: CROP REPORTING BOARD, B.A.E., U.S.D.A. 030442-1

Table 23. - *Volume of fruit handled by firms with designated business reputation and credit rating, 1948-49 season*[1]

BUSINESS REPUTATION AND CREDIT RATING	BOXES HANDLED	PERCENT OF TOTAL	CUMULATIVE PERCENT
XXXX (excellent)	8,955,138	21	21
XXX (good)	31,836,180	74	95
XX (fair)	1,795,047	4	99
X (doubtful)	56,658	(2)	99
Not given	657,356	1	100
Total	43,300,379	100	

[1]Data from the 1950 Produce Blue Book and the 1948-49 Annual Report of the Citrus and Vegetable Inspection Division of the Florida Department of Agriculture.

[2]Less than .5 percent.

RECOMMENDATIONS BY INDUSTRY REPRESENTATIVES REGARDING COORDINATED MARKETING

Each person interviewed in this study was asked to express an opinion on whether or not some type of central organization would be helpful economically to the persons growing and marketing Florida citrus. If the answer was in the affirmative the person was asked to outline the basic type of organization that appeared to offer the most promise and that, at the same time, would successfully fit into the current marketing system. Suggestions were then obtained regarding the type and scope of activities in which such an organization should engage.

This phase of the study included 102 representatives of the fresh fruit shipping and processing firms in Florida. Seventy of these represented organizations shipping fresh fruit only. Twenty-one represented handlers who only processed and 13 represented organizations marketing both fresh and processed fruit. The persons whose views are set forth in this section were associated with the firms which provided the statistical information analyzed in preceding sections.

Suggestions were also obtained from eight persons directly allied with the Florida citrus industry but who do not operate shipping or processing firms. Among others, these included the chairman and manager of the Florida Citrus Commission, the manager of the Florida Citrus Marketing Agreement and the general manager of the United Growers and Shippers Association.

The task of classifying the vast number of opinions and suggestions proved difficult, particularly where suggestions included certain shades of meaning which would tend to set them outside of any broad category. However, in order to make the analysis and report of this data wieldy and of practical value, several broad classifications were set up arbitrarily. Then to cover the principal variations in meaning, subclassifications were used.

OPINIONS ON NEED

One hundred and two persons, or almost 93 percent of those interviewed, were of the opinion that greater coordination of marketing activities was needed and that it could only be accomplished through central organization. (See table 24).

Table 24. - *Opinions of persons interviewed regarding the need for a coordinated marketing program for the Florida citrus industry, 1949*

TYPE OF OPERATOR[1]	NUMBER OF PERSONS		
	FAVORING A COORDINATED MARKETING PROGRAM	OPPOSING A COORDINATED MARKETING PROGRAM	TOTAL
Cash buyer	35	7	42
Cooperative	30	1	31
Grower	21	0	21
Commission-handler	8	0	8
Total	94	8	102
Non-operating industry leader	8	0	8
Total	102	8	110
	Percent		
Cash buyer	83.3	16.7	100.0
Cooperative	96.8	3.2	100.0
Grower	100.0	0.0	100.0
Commission-handler	100.0	0.0	100.0
Average	92.2	7.8	100.0
Non-operating industry leader	100.0	0.0	100.0
Average	92.7	7.3	100.0

[1]Includes fresh fruit shippers, fresh fruit shipper-processors and processors.

Eight persons were fearful that free enterprise might be smothered under any kind of coordinated program. They felt that the intense competition between handlers that has always existed in the industry had been responsible for its dynamic and expanding character. They point to the willingness of individuals to risk investments in canning and freezing facilities and the importance of these investments to the economy of the State. They consider the periodic low-priced surpluses of fruit to be one of the industry's most effective merchandising instruments. These low prices have caused new consumers to try citrus and become regular users. Controls fixing prices at a high level might curtail use of citrus and halt the growth of the Florida citrus industry.

These eight individuals were strongly opposed to prorating fresh shipments. They stated that this type of control, when based on "past performance" would tend to freeze the industry. Newcomers would have no opportunity and the most aggressive established handlers would not be allowed to expand. Proration programs based on "current control" would force all handlers to enter into preseason handling contracts. Cash buyers would have to adjust their business methods to operate under "current control." This was believed to be unfair to cash buyers.

Overall proration of fruit by major channels, i.e., fresh, canned and concentrated, was also considered impracticable. It was felt that this procedure would not leave the proper latitude for consumers to inform the industry by purchase habits which product or products they desired.

Some of the comments by this group indicated that they had difficulty visualizing the difference between an industry-operated program and a Government sponsored and administered program. Apparently the volume and price controls being employed by the Federal Government in supporting crop prices have been distasteful to these individuals. Therefore, they could see no reason why marketing controls enforced by an industry organization should be any more acceptable.

RECOMMENDATIONS ON TYPE OF CENTRAL ORGANIZATION NEEDED

Two kinds of industry organization were suggested by the persons favoring central control. Ninety-eight percent preferred to have a grower-owned cooperative administer a broad marketing program. (See table 25). About one-fifth of the 100 persons favoring a cooperative believed that the association would need the police power obtainable under a Federal

Table 25. - *Types of organization recommended by persons favoring a central marketing program for the Florida citrus industry, 1949*

TYPE OF OPERATOR	NUMBER RECOMMENDING AN OVERHEAD COOPERATIVE			NUMBER RECOMMENDING SEVERAL PROCESSING CORPORATIONS	TOTAL
	WITHOUT FEDERAL MARKETING AGREEMENT	WITH FEDERAL MARKETING AGREEMENT	TOTAL		
Cash buyer----------	31	3	34	1	35
Cooperative----------	22	8	30	0	30
Grower-shipper-------	16	5	21	0	21
Commission-handler---	6	1	7	1	8
Total----------	75	17	92	2	94
Industry leader------	6	2	8	0	8
Total----------	81	19	100	2	102
Percent---------	79.4	18.6	98.0	2.0	100.0

Marketing Agreement to operate effectively. Two percent of those desiring further coordination in the marketing system felt that the needs of the industry would be most effectively served if the various processors were merged into about six highly competitive corporations of approximately the same size. While this would not result in overall central control, the suggestion shows that these persons believed some consolidation was needed for greater efficiency and effectiveness in packing and marketing.

RECOMMENDATIONS ON NATURE AND SCOPE OF MARKETING PROGRAM OF A CENTRAL COOPERATIVE

In appraising the recommended marketing programs outlined in this section certain qualifications should be kept in mind.

The majority or about 54 percent of the persons favoring a program administered by a grower-owned and controlled cooperative believed that the cooperative should assume the sales functions of agencies shipping fresh fruit or agencies processing fruit or both agencies either through a central or regional office. (See table 26). A few of these persons suggested the encouragement of more grower ownership in processing facilities.

Most of those stating that an overhead association should actually market fruit made the statement with reservations. It was felt that while central selling offered the greatest possibilities for improving the marketing system the industry may not yet be ready for such a program. These individuals indicated a willingness to participate in any worthwhile program looking toward the time when an atmosphere favorable to central selling might gradually be created.

Approximately 46 percent of these individuals strongly opposed a central selling organization now or in the foreseeable future. They point to the time and effort each firm has given to building market connections and brand reputation and the resultant reluctance of these organizations to turn sales activities over to an untried agency. They describe the differences that exist between the various growing areas in varieties and grades produced. Most of them feel that the total merchandising effort would be reduced if competition in marketing were removed or materially lessened. These persons favor a more moderate program which would not interfere with the existing system but merely eliminate uneconomic pricing practices and uncoordinated shipping programs.

Considered together, therefore, the groups favoring and opposing central selling are not far apart on the type of overall marketing program needed by the Florida citrus industry. Those favoring central selling are hopeful but not nearly as rigid in their stand as those opposing such a program. Almost every person favoring this type of program recommended certain measures in lieu of central control of sales. Many thought that central selling alone would need to be supplemented by other measures such as proration programs.

Table 26. - *Recommendations by representatives of the Florida citrus industry regarding activities in which a central marketing organization should engage, 1949*[1]

TYPE OF OPERATOR[2]	NUMBER OF PERSONS RECOMMENDING:																						
	TOTAL NO. OF PERSONS FAVORING A COORDINATED MARKETING PROGRAM	THE STRENGTHINING OF GROWERS BARGAINING POWER IN PRICE SETTING							CENTRAL CONTROL OF SALES								PRORATION OF FRUIT						
		SET MINIMUM ON TREE PRICES	SET MINIMUM f.o.b. PRICES FOR FRESH FRUIT	SET MINIMUM DELIVERED IN PRICE OF FRUIT FOR PROCESSING	SET MINIMUM PRICES ON PROCESSED PRODUCTS	TOTAL NO. OF RECOMMENDATIONS	NO. OF PERSONS FAVORING STRENGTHENED BARGAINING POWER	PERCENT FAVORING STRENGTHENED BARGAINING POWER	ONE OVERHEAD AGENCY TO			REGIONAL OVERHEAD AGENCY TO		TOTAL NO. OF RECOMMENDATIONS	NO. OF PERSONS FAVORING CENTRAL SELLING	PERCENT FAVORING CENTRAL SELLING	OVERALL PRORATION FOR FRUIT SHIPMENT AND FOR MANUFACTURE INTO PROCESSED FORM			FRESH FRUIT AUCTION AND SHIPPING PRORATION			PERCENT FAVORING PRORATION
									MARKET FRESH AND PROCESSED FRUIT	MARKET FRESH FRUIT ONLY	MARKET PROCESSED FRUIT ONLY	MARKET FRESH ONLY	MARKET PROCESSED ONLY				UNDER FEDERAL MARKETING AGREEMENTS	INDUSTRY OPERATED	NO. OF PERSONS FAVORING OVERALL PRORATION	UNDER FEDERAL MARKETING AGREEMENTS	INDUSTRY OPERATED	NO. OF PERSONS FAVORING PRORATION	
Cash buyer----------	35	1	15	19	3	38	28	80.0	1	4	1	3	-	9	9	25.7	3	2	5	3	12	15	42.9
Cooperative----------	30	1	15	17	3	36	21	70.0	9	6	-	7	2	24	22	73.3	4	-	4	8	12	20	66.7
Grower----------	21	-	13	16	1	30	17	81.0	2	3	-	5	-	10	10	47.6	4	2	6	5	6	11	52.4
Commission-handler---	8	-	4	4	-	8	5	62.5	-	2	1	3	-	6	6	75.0	-	-	-	1	2	3	37.5
Total----------	94	2	47	56	7	112	71	75.5	12	15	2	18	2	49	47	50.0	11	4	15	17	32	49	52.1
Non-operating industry leader-----	8	1	2	2	-	5	3	37.5	2	2	-	4	2	10	8	100.0	2	-	2	2	1	3	37.5
Grand total-----	102	3	49	58	7	117	74	72.5	14	17	2	22	4	59	55	53.9	13	4	17	19	33	52	51.0

TYPE OF OPERATOR[2]	NUMBER OF PERSONS RECOMMENDING:														
	A SURPLUS DISPOSAL PROGRAM							THE ENCOURAGEMENT OF MORE WIDESPREAD GROWER OWNERSHIP OF PROCESSING PLANTS				THE ELIMINATION OF CONSIGNMENTS OF FRESH FRUIT		ALL SALES IN AUCTION SUPPLIED AREAS TO MOVE THROUGH AUCTION	
	OVERALL PRORATION OF FRUIT FOR FRESH SHIPMENT AND FOR MANUFACTURE INTO VARIOUS FORMS IN CASE OF SURPLUS	FURNISH MORE ADEQUATE STORAGE AND FINANCING FACILITIES FOR PROCESSOR TO STORE FRUIT	OBTAIN NEEDED FUNDS THROUGH TAX ON FRUIT MARKETED	DISPOSE OF SURPLUSES (GENERAL--NO MEASURE SPECIFIED)	TOTAL NO. OF RECOMMENDATIONS	NO. OF PERSONS FAVORING SURPLUS DISPOSAL PROGRAM	PERCENT FAVORING SURPLUS DISPOSAL PROGRAM	THROUGH A CENTRAL ORGANIZATION	THROUGH LOCAL COOPERATIVES (NOT INDEPENDENT EXCEPT FOR MARKETING)	NO. OF PERSONS FAVORING MORE GROWER OWNERSHIP OF PROCESSING PLANTS	PERCENT FAVORING MORE GROWER OWNERSHIP OF PROCESSING PLANTS	NO. OF PERSONS FAVORING	PERCENT FAVORING	NO. OF PERSONS FAVORING	PERCENT FAVORING
Cash buyer----------	3	4	1	-	8	6	17.1	-	-	-	0	1	2.8	-	0
Cooperative----------	-	4	1	-	5	4	13.3	6	2	8	26.7	3	10.0	-	0
Grower----------	-	2	2	-	4	4	19.0	-	-	-	0	-	0	1	4.8
Commission-handler---	-	5	1	1	7	5	62.5	-	1	1	12.5	-	0	-	0
Total----------	3	15	5	1	24	19	20.2	6	3	9	9.6	4	4.2	1	1.1
Non-operating industry leader----	-	1		-	1	1	12.5	1	-	1	12.5	-	0	-	0
Grand total-----	3	16	5	1	25	20	19.6	7	3	10	9.8	4	3.9	1	1.0

[1]Includes definite recommendations only. "I don't know," "maybe this--maybe that," etc., not recorded. Information obtained during fall of 1949 and winter of 1950.
[2]Includes fresh fruit shippers, fresh fruit shipper-processors and processors.

Under certain broad measures recorded in table 26, both the number of recommendations and number of persons favoring those measures have been shown where these figures differ. In some cases there was an opportunity for duplication to enter into the tabulations. For instance, under "central selling" an individual might favor two sales organizations -- one for processed fruit and one for fresh fruit. Percentages were calculated for number of persons only.

Improved market information service. - Everyone favoring coordinated marketing believed that more accurate and better distributed market information was needed. They stated that one of the main reasons for unsound price cutting practices and periodic glutting of individual markets was that many shippers, especially small ones, did not have access to current and accurate shipment destination and price data. Lack of knowledge tends to make uninformed shippers jumpy and vulnerable to rumor and panic. All persons expressed a willingness to cooperate in the free interchange of such information.

Strengthen growers' bargaining power in price setting. - Except for the establishment of a market information service, fixing minimum prices was mentioned most frequently as a desirable program measure. Over 72 percent favored providing a growers' association with the power of negotiating minimum prices with shippers or processors or both. Setting of minimum prices on fruit for processing was recommended 58 times and of minimum f.o.b. prices on fresh fruit 49 times. Thirty-three individuals desired the setting of both f.o.b. prices and raw fruit prices. This accounts for the difference in number between recommendations and persons. Seven favored setting prices for finished processed products and three persons believed that all price negotiations should be on an "on tree" basis.

Those favoring price setting on finished processed goods believed that certain types of operators have an advantage where prices on processed fruit are set at the "raw fruit level." They stated that grower-processors and cooperative-processors who pay cash for only a small part of their fruit might base retail sales prices on an overall raw fruit price below the established minimums. If this practice was followed, buyers who pay cash for all their fruit could not compete except during periods in which raw fruit prices were at or below growers' cost of production.

Setting minimum prices on processed goods did not seem feasible to the majority of the persons interviewed because of the likelihood of its illegality under the anti-trust laws. One cash buyer recommended that the anti-trust problem could be met by setting the minimum with a two-way split, i.e., minimum raw fruit price plus average cost of processing. This buyer suggested that the sum of these amounts could vary as much as 10 cents from the average for firms able to show better than average manufacturing efficiencies.

The discussions on minimum pricing revealed that a relatively large proportion of the operators believed that no difficulty should be encountered

in holding minimum prices at or above growing costs at all times if all handlers observed prices set by a central association. It was pointed out that due to definite climatic limitations the production of citrus will probably not exceed the distribution potential apparently being created by the frozen concentrate industry. Furthermore, it was held that excessively low prices were usually caused by unsound competition or panic and that enforcement of minimum prices would eliminate such factors.

Almost 20 percent of the persons interviewed, however, did not believe the likelihood of surpluses had ceased to exist since the industry had been subject to surplus conditions from time to time in the past. These individuals were of the opinion that minimum price programs would not be successful unless a central organization has the machinery to dispose of surpluses.

Central selling. - Almost 54 percent of the persons interviewed recommended a consolidated sales program. Most of the individuals recommending this approach were enthusiastic about its promise for solving the problem of uncoordinated marketing. However, there was no marked optimism regarding the possibility of effecting such a high degree of organization in the Florida citrus industry. None of these persons said that central selling was the only program with which they would cooperate. All expressed a desire to see a program for more coordination developed even if it accomplished only a small degree of the coordination they consider necessary for maximum results. Consequently, their point of view was not greatly different from the balance of the individuals interviewed who were willing to go along with a few broad controls but unwilling to consider relinquishing control of sales. In addition, many of the advocates of central selling believe that a lesser degree of coordination is probably an essential part of the foundation and evolution for a sounder approach.

Two general methods of administering a central sales program were suggested. One group recommended channeling all sales through a single overhead agency. A slightly smaller number recommended organizing three or four regional marketing agencies. Each agency would serve one of the fairly well defined growing areas, i.e., the Indian River section, Polk County, Pinellas County, and the northern interior. In general, it was envisioned that the regional organizations would be competitive on selling and advertising but would jointly maintain an overhead cooperative to furnish market information and to administer minimum prices and shipping controls when necessary.

Approximately one-half the persons favoring one sales agency recommended that the agency handle both fresh and processed fruit. The other 50 percent did not believe a central program was needed for marketing processed products but for fresh fruit only. They reasoned that processors can supply the market evenly over a 12-month period because their product is storable. It was recognized, however, that processors who were under pressure financially could not always follow such a schedule and might be forced to market their products over a short period. One

individual suggested establishing a central fresh fruit agency and a processed sales agency for canners not associated with a large canner or food distributor operating plants in several States.

Seven of the persons suggesting one agency for both fresh and processed goods recommended that the central organization should actually own and operate a substantial portion of the processing plants. Three more felt that more extensive grower interest in processing facilities would be desirable but that this interest should remain decentralized in local associations, with the locals using the sales service of a central.

Twenty persons suggested regional agencies for marketing fresh fruit only and 3 recommended regional agencies for fresh fruit and regional agencies for processed fruit. One suggested a regional agency for processed fruit only.

In the main, those suggesting controlled selling through one cooperative were influenced in their thinking by the long history of successful marketing of the California Fruit Growers Exchange. Those suggesting several sales agencies were also influenced by the operations of the same organization, but in a somewhat different way. Their opinion had been molded both by admiration for the effectiveness of the marketing program in day-to-day operations and apparent disappointment in what they characterize as lack of dynamic foresight in the policies of the Exchange. A most frequently mentioned example of this lack of foresight was the manner in which the California citrus industry permitted Florida and Texas to take over an ever increasing proportion of the citrus processing industries in the United States. Since the California Fruit Growers Exchange normally markets 74 percent of the oranges and 90 percent of the lemons, the responsibility for the decision to remain a fresh fruit industry was placed on that organization. They pointed out that strong competition among handlers in Florida and Texas caused the investment of considerable risk capital in processing facilities. These observations seem to have convinced the group suggesting regional agencies that a cooperative should feel strong competitive pressures in its own growing area as well as from other producing areas and from other commodities. Such pressures, they held, would tend to keep each agency constantly on the lookout for new outlets for an expanding industry.

Prorating. - About 50 percent of the persons interviewed suggested the allocation or proration of fruit supplies. (See table 26).

An overall proration of fruit to the fresh fruit shippers, to the canners and to the frozen concentrators was recommended by 17 persons. The overall proration program, as recommended by the persons interviewed, would involve preseason determinations and allocations of the volume to be marketed in each form to bring the greatest "on tree" returns. A number of individuals recommending this measure felt that an overall proration program would also be valuable in assuring growers of two or more major competitive outlets. To them, an allocation of this kind would preclude the possibility of fresh shippers, canners or concentrators handling a large enough proportion of the citrus crop to provide them with a

disproportionate bargaining power in pricing fruit to the grower. Such preseason determinations and allocations would be subject to change during the marketing season if warranted by changes in the demand and supply situation.

This reasoning, where developed by fresh fruit shippers, may have stemmed from a fear of being swallowed up by the fast-growing processing industry. Growers generally appeared apprehensive of the growing concentration of the processing industry in relatively few hands.

Fifty-two persons recommended a weekly volume proration of fresh fruit shipments. All stated that such a proration would be of limited value unless it included an auction proration program and unless shippers were required to adhere rigidly to the proration regulations.

It is noted that many of the persons recommending a proration program favored administration of the program under a marketing agreement. They believe that a cooperative will not be able to enforce such proration without the assistance of the Government.

Surplus disposal. - The largest number of recommendations for handling surpluses dealt with the finished processed product. The construction of additional storage facilities for holding surplus processed fruit was mentioned 16 times. In each case it was suggested that the construction of such facilities should be accompanied by a financing program for processors participating in a storage program. These processors would have to be assured a return for their product equal to the average return to processors whose participation might not be needed. All processors with unsold fruit or actively processing fruit would be required to participate during periods of surplus.

Ten of the individuals suggesting the above described surplus handling program believed that the necessary financing should be handled through Florida lending institutions. They felt that a central cooperative should administer the program and have the power to declare such a program in effect and to require the cooperation of the industry. They recommended that the central cooperative should have control of the timing and volume of fruit sales by processors involved during surplus periods.

Six persons recommending this program believed it should be handled in essentially the same manner but administered and financed by the Government.

Three cash buyers suggested that a surplus program should also employ an overall industry proration scheme determining the timing and volume of fruits shipped fresh, processed into single strength juice, sections and salad, and processed into frozen concentrated juice. They indicated that such a proration program would only be practicable where a season-long surplus appeared likely.

It was suggested by 5 persons that a surplus marketing fund should be built up by the agency administering the program. The fund would be accumulated by levying a tax on growers for each box of fruit produced during periods when net returns to growers exceeded a fixed sum. The money so collected would be credited to the account of the grower. When the fund became large enough for the needs of the program, the tax would be suspended.

It was indicated that this industry fund would be used to liquidate loans for construction of storage facilities and to compensate processors if they sustained losses in marketing fruit they were directed to store. Processors would also be financed from this fund during periods in which they have fruit in storage.

Eliminating consignments of fresh fruit. - Four persons recommending setting minimum prices and establishing shipping and auction proration programs for fresh fruit suggested that these measures would be more effective if shippers were not allowed to consign fruit to commission merchants. It was held that receivers of fruit on consignment can place this fruit on sale in direct competition with fruit for which other buyers have paid minimum f.o.b. prices. If a sufficient amount were consigned to break the market in the terminals, the minimum f.o.b. price would then lose the support of f.o.b. buyers.

FRESH FRUIT BUYER RECOMMENDATIONS REGARDING COORDINATED MARKETING

OPINIONS ON NEED

Fifty-eight representatives of the fresh fruit trade were interviewed in five markets to ascertain their attitude toward more complete organization of the Florida citrus industry. The markets visited were Boston, Mass.; Atlanta, Ga.; Birmingham, Ala.; Cincinnati, Ohio; and Buffalo, N. Y. The persons interviewed included brokers, carlot receivers, jobbers, and representatives of local chain store systems and fruit auction companies. In addition buyers representing three national chain store systems in Florida were interviewed.

Except for small jobbers, the handlers were aware of the efforts being made in Florida to coordinate fruit marketing through Florida Citrus Mutual. Fifty-six out of 61 favored a central marketing program. Representatives of city chain store systems took a neutral position pointing out that their only interest was in keeping their stores supplied. They stated that a change in the type of marketing organization would not affect their operations as long as supplies were made available at prices which did not unduly restrict distribution.

Three receivers and one jobber in Boston and one receiver in Cincinnati believed that a coordinating organization at shipping point would deprive the marketing system of the competitive spirit essential to aggressive merchandising. These five were much opposed to setting minimum prices on fresh fruit. They felt it undesirable to attempt to set minimum prices at shipping point for the great variety of grades and sizes

shipped out of Florida. Proration programs were considered a means of starving the market in the interest of excessively high prices for the growers. They favored volume distribution at the lowest possible price commensurate with production cost.

Each person favoring or not objecting to industry organization for marketing purposes was asked to recommend the measures such an organization should employ to be most effective. (See table 27). It was pointed out that the purpose of the program, as broadly conceived, would be to improve marketing of the fruit both as to time and place and to help stabilize prices and increase net incomes from the grower to the retailer.

MEASURES RECOMMENDED

Prorating

Fresh fruit shipping and auction proration. - More buyers mentioned the establishment of shipping and auction prorations than any other measure. Slightly over one-third recommended week-to-week control of shipments. All indicated that a shipping allotment should include a proration program to auctions. Four trade representatives were of the opinion that a proration program would be quite effective and much simpler to administer if it were restricted to the major terminal markets. They pointed out that prices established in these markets usually set the pattern for the rest of the country.

Overall proration. - Four Boston carlot receivers suggested establishing an overall three-way proration of fruit at the beginning of each season, i.e., a predetermined amount to be sold for fresh consumption, for processing into canned products and for processing into frozen concentrated juice. These receivers stressed the necessity for growers to maintain strongly competitive processed and fresh marketing systems. Four other receivers also mentioned the desirability of maintaining this competitive relationship but did not suggest a specific method for accomplishing that objective. It is probable that these opinions stemmed partly from the interest of the buyers in fresh fruit marketing.

Minimum Pricing. - Fifteen handlers favored establishing minimum prices on fresh fruit when unwarranted declines were occurring or appeared imminent. They indicated that this stabilization would reduce the risk of severe losses. Setting minimum prices on raw fruit for processing was suggested as a desirable measure five times. One carlot receiver indicated that he felt the negotiation of raw fruit prices by growers through a bargaining arrangement might be the most important function of an industry organization. Several handlers mentioned that when Florida fruit is moving under a minimum price, the trade devotes much less time and money in searching for bargains and in appraising price levels and trends.

Eight buyers were much opposed to setting minimum prices on fresh fruit. They indicated that the great number of varieties, grades and brands moving from Florida; the practice of consigning fruit and shipping fruit

Table 27. - *Recommendations regarding marketing controls by fresh fruit buyers in 5 terminal markets and for national chain store systems, 1950*

MARKETS	TOTAL NUMBER	NUMBER OF BUYERS RECOMMENDING:																	
		SHIPPING AND AUCTION PRORATION						OVERALL PRORATION OF FRUIT FOR FRESH CONSUMPTION AND PROCESSED USE	MINIMUM PRICES					CENTRAL CONTROL OF SALES				SALE OF ALL FRUIT EITHER AT AUCTION OR PRIVATE SALE IN EACH MARKET	ELIMINATION OF CONSIGNMENTS	ELIMINATION OF FRUIT SALES TO ITINERANT TRUCKERS	MAINTENANCE OF FRESH FRUIT VOLUME AT A HIGH LEVEL
		AUCTION	SHIPPING	AUCTION AND SHIPPING TO MAJOR TERMINALS	TOTAL NO. OF RECOMMENDATIONS	TOTAL NO. OF PERSONS FAVORING SHIPPING AND AUCTION PRORATION	PERCENT FAVORING SHIPPING AND AUCTION PRORATION		FRESH FRUIT	FRUIT FOR PROCESSING	TOTAL NO. OF RECOMMENDATIONS	TOTAL NO. OF PERSONS FAVORING MINIMUM PRICES	PERCENT FAVORING MINIMUM PRICES	ONE AGENCY	REGIONAL AGENCIES	TOTAL NO. OF PERSONS FAVORING CENTRAL CONTROL OF SALES	PERCENT FAVORING CENTRAL CONTROL OF SALES				
Boston, Massachusetts	15	4	4	4	12	9	60.0	2	1	2	3	2	13.3	4	1	5	33.4	1	-	-	6
Buffalo, New York	9	4	4	-	8	4	44.4	-	5	-	5	5	55.6	-	-	-	0.0	-	-	-	-
Atlanta, Georgia and Birmingham, Alabama	19	4	4	-	8	4	21.1	3	3	2	3	3	15.8	2	-	2	10.5	-	1	5	2
Cincinnati, Ohio	10	2	2	-	4	2	20.0	-	1	1	1	1	10.0	2	-	2	20.0	-	-	-	-
National chains	3	-	-	-	-	-	0.0	-	3	3	3	3	100.0	-	2	2	66.7	-	2	-	-
Total	56	14	14	4	32	19	33.9	5	13	8	15	14	25.0	8	3	11	19.6	1	3	5	8

unsold without definite destination; and the lack of an auction proration program made minimum pricing at shipping point unworkable. They stated that if prices were going to be set they should be set at the point of consumption by controlling the movement of fruit to the major terminals.

Central Selling. - Eleven persons suggested that central selling would be the most desirable and effective method of marketing Florida citrus. To a certain extent their thinking had been influenced by the marketing program of the California Fruit Growers Exchange. They pointed out that the Exchange, through volume control is able to stabilize prices somewhat. (Few buyers knew that California has a volume proration program in addition to a central sales agency.) They believed that this stability affords buyers a more consistent profit margin. Several times it was mentioned that California shippers protected handlers located in private sale markets near auction terminals by using auction prices to determine private sale prices. This precludes the possibility of redistributors buying fruit at auction at a price low enough to enable them to reship and undersell buyers in nearby small markets. It was pointed out that the great variety of prices placed on Florida fruit created a sense of risk on the part of buyers that caused them to spend much time and money in assuring themselves of the lowest competitive purchase price and the highest speculative margin.

These buyers did not believe that a central organization should attempt to place minimum prices on fruit at shipping point. They felt the pattern should be set at auction at the point of consumption in order to be in line with the actual demand for the various grades and sizes.

The men favoring central selling indicated, however, that a tightly controlled proration program without arbitrary pricing at shipping point might do almost as effective a job of stabilizing fruit movement as central selling. However, such a program would not afford as great an opportunity to establish a broad merchandising campaign. The statements regarding the control possibilities of a tight proration program were qualified by the suggestion that the proration program should be set up to provide receivers with a regular supply, be it large or small. It was pointed out that wide supply fluctuations make it difficult to plan the course of a business enterprise.

Buyers for three national chain store systems in Florida felt that three or four regional sales agencies would be preferable to one central agency. They discussed the practical difficulties of obtaining the cooperation of all shippers in marketing fruit through one agency. Differences in varieties, personalties and historical pattern were pointed out. In addition, these buyers doubted that a single sales agency would have enough competitive pressure to maintain an aggressive program.

National chain store buyers emphasized that any coordinated marketing program which includes minimum f.o.b. price setting must have the power

to exert control over "rollers"[8], consignments to commission houses, joint account shipments, and auction consignments. Delivered and auction prices should be in line with f.o.b. prices.

A receiver in an eastern terminal suggested that better results might be achieved if shippers did not sell both at auction and private sale in auction markets. He indicated that if the auction is to be used as a barometer, all fruit and all buyers should be brought together there. Where the auction is weakened by outside sales, the prices realized may be misleading and harmful if used as guides for f.o.b. prices. Therefore this receiver concluded that complete abandonment of the auction is preferable to partial use.

Buyers for two national chain store systems and one southern receiver suggested the elimination of consignment selling on the grounds that the shipping of fruit unsold was likely to destroy minimum f.o.b. price programs.

Five southern receivers expressed the opinion that small itinerant truckers have presented harmful competition to those established handlers who had attempted to go along with the minimum price program of Florida Citrus Mutual. Itinerant truckers were alleged to have purchased loads below current minimum prices from handlers not cooperating with the program and to have distributed them through the southern markets at prices with which cooperating handlers could not compete. The five receivers felt that this practice can only be eliminated by bringing all shippers into the program.

[8]Fruit shipped unpurchased without definite destination.

TRADE COMMENTS ON TRENDS IN THE FRESH CITRUS FRUIT MARKETING INDUSTRY

EFFECT OF DEVELOPMENT OF FROZEN CITRUS CONCENTRATE

Most of the trade representatives generally agreed that the demand for oranges by processors of frozen concentrated juice had reduced the volume of fruit moving through fresh channels by 25 to 35 percent over previous years. They indicated that this competition was especially strong during January, February and March 1950. According to the trade, margins were low on fresh fruit this year due to the active bidding-up of the price by processors and fresh fruit buyers and the intense competition between fresh and processed fruit at the retail level. April seemed to have been a bit more satisfactory than January, February and March from both a volume and margin standpoint. This was due to the fact that f.o.b. prices were about $1 less and a number of processors were temporarily out of the market.

FUTURE OF FRESH FRUIT MARKETING INDUSTRY

The state of the wholesale trade can best be described as one of "hopeful" pessimism regarding the future of the fresh citrus fruit marketing industry. The trade was fearful that the 1949-50 marketing season might be indicative of what they can expect in the future. They were hopeful, however, that the partial reversal of this trend which occurred in April might mean that fears of a permanent and disastrous reduction in fresh fruit shipments were not too well founded.

Some of the terminal market citrus handlers indicated that they were attempting to replace lost citrus volume with apples, pears and other fruits. Some were handling more vegetables. However, the majority stated that there were no fresh commodities that would take the place of citrus fruit volumewise. The marketing of other high volume commodities such as potatoes did not seem to offer promise because these fields are already crowded.

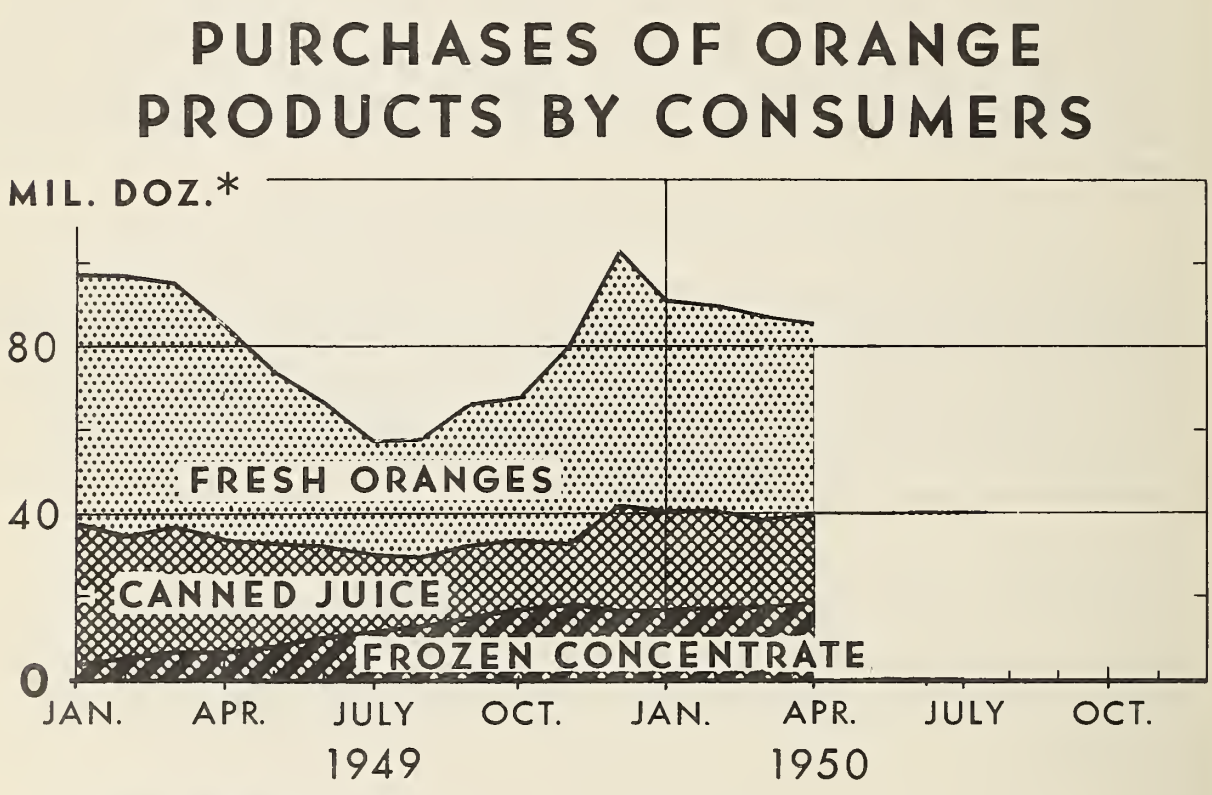
One carlot receiver in a northeastern auction market and one in a midwestern auction market felt that the decrease in the volume of fresh citrus moving through the wholesalers in the major terminals was due to an increase in direct distribution from shipper to small city jobbers, chain store systems, and supermarkets, as well as to the encroachment of frozen concentrate. They expected this trend to continue.

Several buyers in the northeastern markets thought that the produce industry would not be profitable again until considerable consolidation of firms handling fresh produce occurs. They stated that processing was cutting into the fresh volume of strawberries, peas, beans and other commodities as well as citrus and that this change has been especially marked during the past 5 years.

RECENT CHANGES IN CONSUMPTION OF ORANGES

On the basis of fresh orange equivalent, the relative importance of frozen concentrated orange juice as a percentage of total household consumer orange purchases increased from 5 percent in the first quarter of 1949 to 19 percent in the same quarter of 1950. (See figure 2). The proportion of oranges purchased in the form of canned single strength orange juice dropped from 32 percent to 25 percent during this same period, while fresh orange purchases dropped from 62 percent to 56 percent.

FIGURE 2



*FRESH ORANGE EQUIVALENT

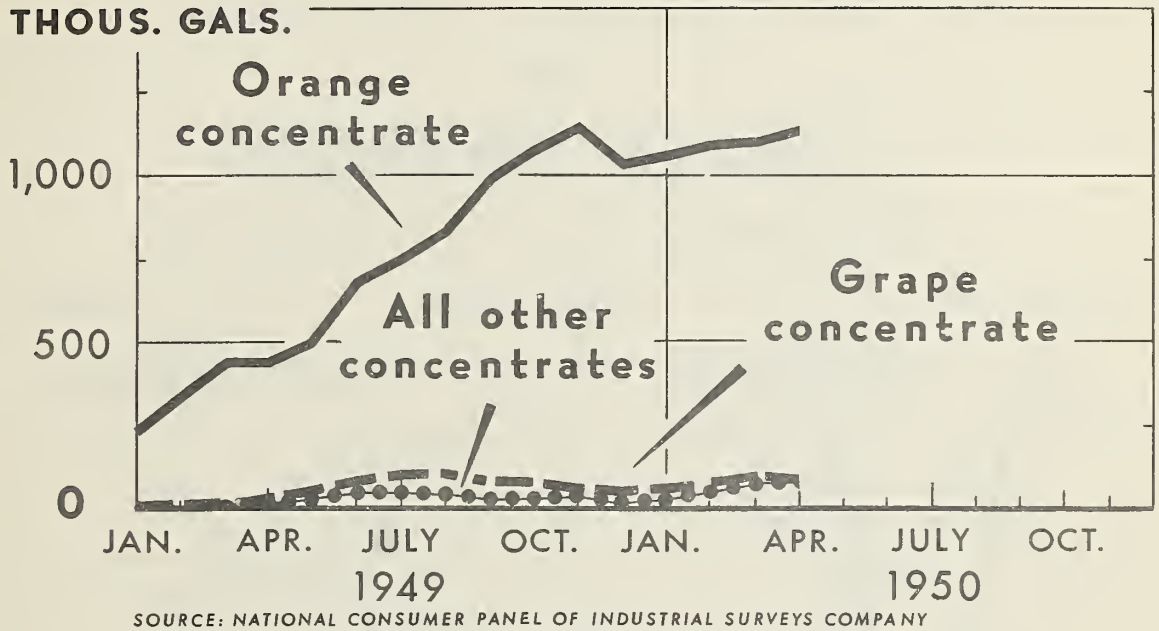
SOURCE: NATIONAL CONSUMER PANEL OF INDUSTRIAL SURVEYS COMPANY

Frozen orange concentrate sales accounted for about 90 percent of all sales of frozen concentrated fruit juices, including grape concentrate, during the 6-month period ending April 1950. (See figure 3).

Since January 1949, the trend in household consumer purchases of canned orange juice, grapefruit juice, and blended orange-grapefruit juice has been downward. (See figure 4). On the other hand, tomato and prune juice purchases in the early months of 1950 were at about the same level as a year ago. Pineapple juice purchases are reported considerably higher.

FIGURE 3

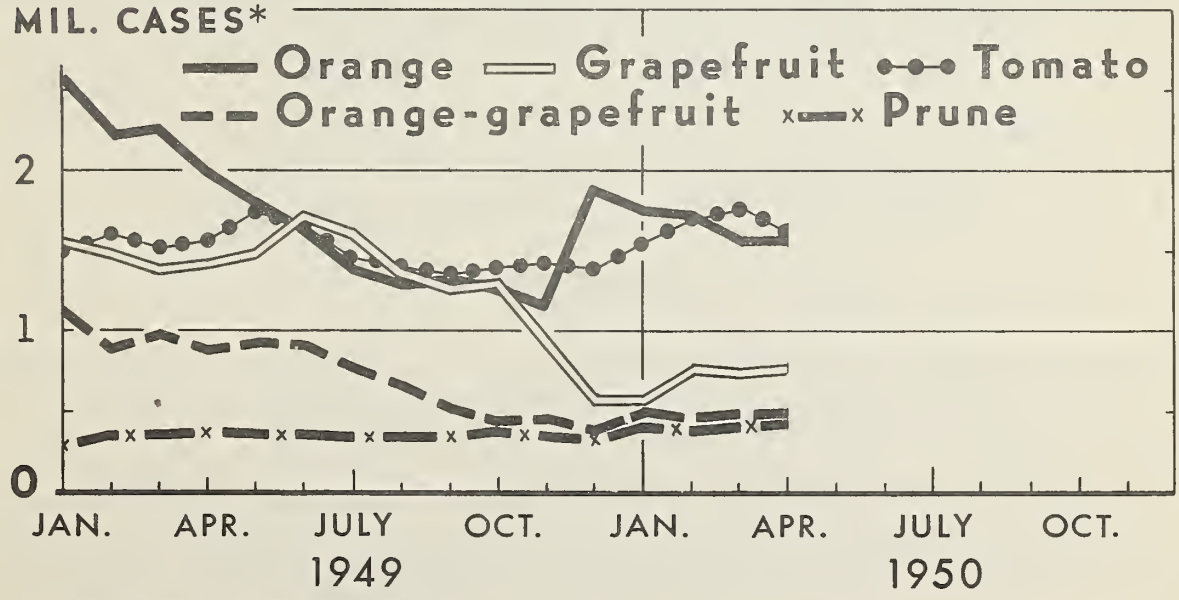
CONSUMER PURCHASES OF FROZEN FRUIT JUICES



SOURCE: NATIONAL CONSUMER PANEL OF INDUSTRIAL SURVEYS COMPANY

FIGURE 4

CONSUMER PURCHASES OF SELECTED CANNED JUICES

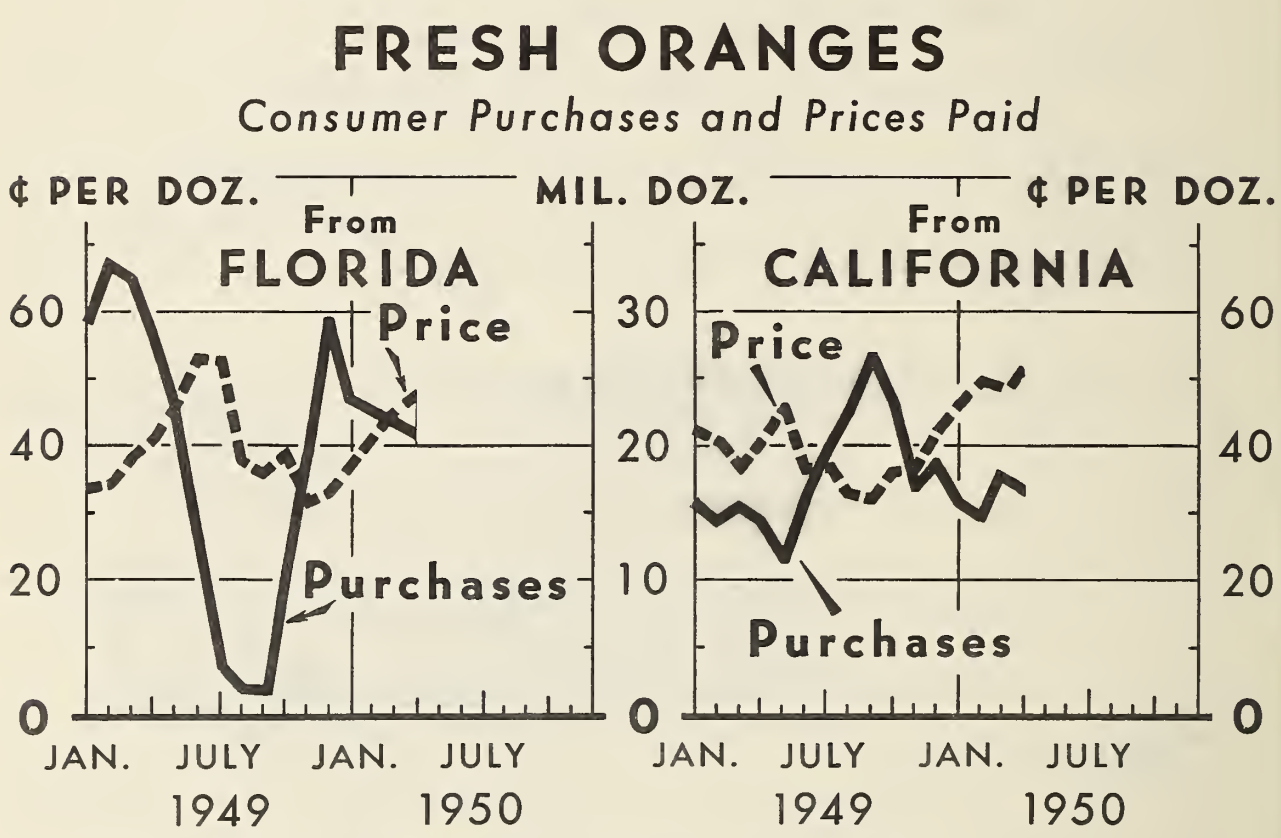


*EQUIVALENT CASES OF 24 #2'S

SOURCE: NATIONAL CONSUMER PANEL OF INDUSTRIAL SURVEYS COMPANY

Consumer purchases of oranges in the fresh form and prices paid for them over the past 15 months are shown on figure 5. Consumer purchases of Florida oranges in the first three months of 1950 were considerably below those for the same months in 1949. Purchases of California oranges were about as high in early 1950 as in early 1949. During this period prices of oranges increased 6 cents a dozen for Florida fruit and 10 cents a dozen for California fruit

FIGURE 5



SOURCE: NATIONAL CONSUMER PANEL OF INDUSTRIAL SURVEYS COMPANY

OUTLOOK FOR PRODUCTION AND PRICES OF CITRUS FRUIT

PRODUCTION

Production 1919-20 to 1948-49. - Production of all citrus fruits in Florida and California increased at about the same rate from 1919-20 through 1935-36 with California leading by about 10 million boxes. (See table 28 and figure 6). From 1936-37 to 1948-49 Florida's rate of increase exceeded that of California. Total production in Florida comprised over 50 percent of the United States total in 1947-48 and 1948-49. Production in Texas increased at a rapid rate until 1938-39 and then more slowly to 1944-45 when it leveled off at about 28,000,000 boxes. Severe freezes

Table 28. - *All citrus - Acreage and production*[1]

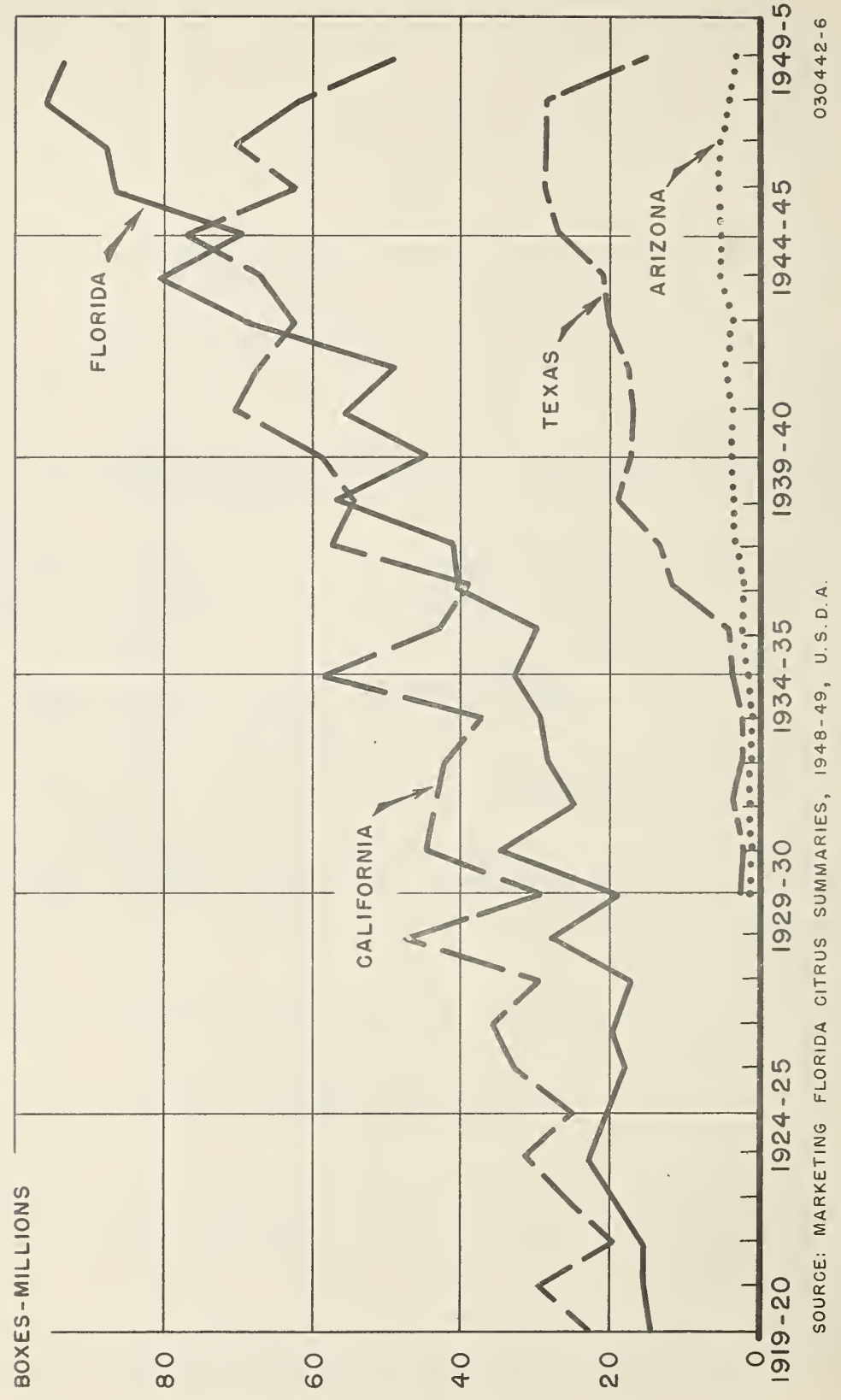
CROP SEASON	FLORIDA		CALIFORNIA		TEXAS		ARIZONA		OTHER		UNITED STATES	
	ACREAGE	PRODUCTION	ACREAGE	PRODUCTION	ACREAGE	PRODUCTION	ACREAGE	PRODUCTION	ACREAGE	PRODUCTION	ACREAGE	PRODUCTION
1919-20	84.1	13,928	194.0	21,527	.3	12	.7	109	3.0	88	282.1	35,664
1920-21	94.8	15,226	199.0	29,807	.6	10	.9	94	5.8	149	301.1	45,286
1921-22	107.2	15,133	206.9	18,758	1.3	13	.9	115	6.3	162	322.6	34,181
1922-23	119.5	18,735	210.9	25,460	1.8	45	1.0	141	12.9	295	346.1	44,676
1923-24	135.9	22,240	214.5	30,948	2.6	71	1.2	181	14.6	355	368.8	53,795
1924-25	160.6	20,236	218.1	24,194	3.4	318	1.4	165	3.5	77	387.0	44,990
1925-26	163.1	17,830	220.9	32,117	4.2	212	1.5	236	3.8	257	393.5	50,652
1926-27	184.2	19,612	227.8	35,785	5.3	402	1.7	195	4.3	267	423.3	56,261
1927-28	193.3	17,000	230.6	28,876	6.9	609	1.9	230	5.0	360	437.7	47,075
1928-29	200.8	27,806	235.3	47,751	10.4	878	2.4	310	5.2	335	454.1	77,080
1929-30	208.2	18,108	240.7	28,304	16.2	1,811	3.2	502	5.1	436	473.4	49,161
1930-31	220.2	35,008	244.0	44,419	22.7	1,450	3.8	539	4.9	292	495.6	81,708
1931-32	246.5	24,200	249.6	43,785	31.8	3,120	4.6	595	5.2	379	537.7	72,079
1932-33	265.4	28,010	253.2	42,319	47.7	1,765	5.8	761	5.5	478	577.6	73,333
1933-34	279.7	28,812	251.2	37,506	65.8	1,630	7.6	955	6.1	250	610.4	69,153
1934-35	291.8	32,815	260.8	57,961	78.8	3,390	11.3	1,410	6.6	521	649.3	96,097
1935-36	305.4	29,512	266.3	42,863	85.8	3,557	16.3	2,040	7.1	247	680.9	78,219
1936-37	314.1	40,245	273.2	38,946	92.0	11,630	19.3	1,620	7.3	391	705.9	92,832
1937-38	322.5	40,870	283.5	57,161	94.1	13,280	20.8	3,100	7.5	381	728.4	114,792
1938-39	329.0	56,695	292.1	54,450	96.0	18,485	21.0	3,130	7.9	566	746.0	133,326
1939-40	332.5	43,995	297.6	58,400	97.3	16,760	21.1	3,495	8.3	362	756.8	123,012
1940-41	342.8	55,980	300.6	69,997	98.8	16,300	20.7	3,178	8.0	254	770.9	145,709
1941-42	354.7	48,650	302.9	67,056	100.5	17,350	20.6	4,040	4.8	198	783.5	137,294
1942-43	364.4	68,875	305.5	62,280	102.3	20,060	20.6	3,330	4.6	340	797.4	154,885
1943-44	369.6	80,990	310.9	66,311	104.0	21,260	20.2	5,180	4.5	240	809.2	173,981
1944-45	374.8	69,350	315.1	76,880	105.4	26,700	20.1	4,900	4.5	360	819.9	178,190
1945-46	383.7	86,200	319.6	61,810	108.9	28,800	20.0	5,310	4.5	330	836.7	182,450
1946-47	389.2	87,570	321.4	70,450	112.9	28,300	20.0	5,300	4.5	410	848.0	192,030
1947-48	401.8	95,570	318.6	61,130	116.0	28,400	20.0	3,780	4.5	300	860.9	189,180
1948-49[2]	413.5	93,100	317.1	48,980	122.5	14,700	18.6	2,590	4.5	300	876.2	159,670

[1]Thousands of bearing acres, and thousands of boxes.
[2]Preliminary.

Source: *Marketing Florids Citrus Summaries, 1948-49, U. S. Department of Agriculture.*

FIGURE 6

CITRUS PRODUCTION BY STATES



SOURCE: MARKETING FLORIDA CITRUS SUMMARIES, 1948-49, U.S.D.A.

during the 1948-49 season reduced the output of California and Texas citrus substantially. Production of citrus fruits in the United States dropped 30,000,000 boxes or almost 16 percent from 1947-48 to 1948-49.

Estimated future production. - Future citrus production is somewhat easier to predict than the production of other tree fruits because of the relatively long life and regularity of development of citrus trees. A production forecast covering the period from 1944-45 to 1969-70 was prepared under the leadership of Hugh L. Cook, Bureau of Agricultural Economics, U. S. Department of Agriculture and issued in 1946[1].

The production estimates were based on (1) age distribution of trees standing in 1944, (2) average yields by age of trees, (3) average length of productive life of groves, and (4) assumed rates of plantings of new groves. The information on age distribution and yield by ages was considered fairly accurate by the group which made the predictions. However, little was known concerning average length of productive life of trees because only a small percentage of the trees in the United States are old enough to indicate the average productive life span. Future plantings could only be assumed.

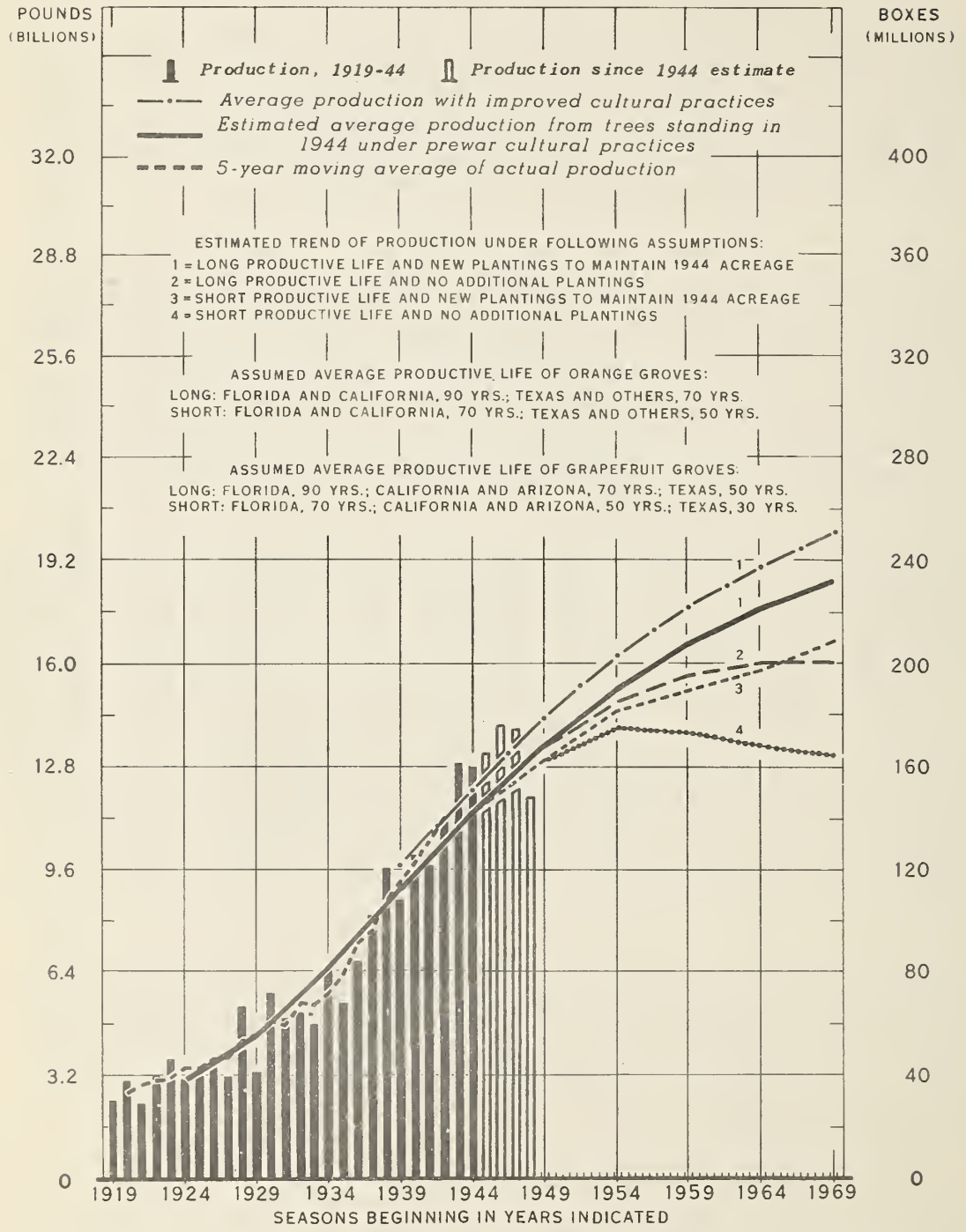
Forecasts of future production with four basic assumptions were presented. These assumptions were: (1) long productive life (Florida and California, 90 years, Texas and others 70 years) with annual plantings equal to a complete replacement of the acreage in 1944 within the assumed productive life span of groves in each; (2) long productive life with no new trees planted; (3) short productive life (Florida and California 70 years, Texas and others 50 years) with replacement plantings as in (1) above; and (4) short productive life with no new trees planted. In view of the fact that many of the groves were still far short of retirement age in 1944, it was pointed out that an average annual planting equal to a full replacement of groves would actually mean a steady and material increase in total acreage until the larger blocks of acreage begin to reach retirement age and go out of production.

In the light of planting rates and production trends since 1944, these estimates cannot be considered excessive. Therefore, the estimates of future production made in 1944 for the coming 25 years are included in this study. They are shown for all grapefruit and oranges in figure 7 For purposes of comparison, actual production from the 1944-45 to the 1948-49 season is also shown.

[1]Readjustments in Processing and Marketing Citrus Fruits. Prepared at the suggestion of the Working Group on Conversion of Marketing Facilities and Methods. Interbureau Committee on Post War Programs. Bureau of Agricultural Economics, U. S. Department of Agriculture. July 1946.

FIGURE 7

TOTAL PRODUCTION OF ORANGES AND GRAPEFRUIT COMBINED, IN THE UNITED STATES, BY SEASONS, 1919-48 AND ESTIMATED TRENDS TO 1969 BASED ON 1919-44 PRODUCTION



SOURCE: ESTIMATED TRENDS FROM "READJUSTMENTS IN PROCESSING AND MARKETING CITRUS FRUITS," B.A.E., U.S.D.A., JULY 1946. PRODUCTION FIGURES B.A.E., U.S.D.A.

The maximum orange and grapefruit production estimate with long life and replacement plantings under improved cultural conditions was placed at about 250,000,000 boxes in the United States by 1969. Next highest production estimate of about 231,000,000 boxes was based on the same length of life and replacement schedule but with prewar cultural practices. The lowest estimate of about 164,000,000 boxes was based on short productive life with no replacement plantings.

The estimated trends in production, 1944-45 to 1969-70, must of course be appraised in light of changed conditions since 1944. Frost damage to Texas groves and the downward acreage trend in California which began in the 1946-47 season (see table 28) may upset predictions made in 1944-45 for those States. California has also been troubled by the production of a high proportion of small sized fruit. As a result, per acre yields have decreased. The demand for fruit by processors in Florida may stimulate plantings in that State beyond the point envisioned in 1944-45 by the estimators. Therefore, production changes in California and Texas may be counterbalanced to a degree by changes in Florida.

PRICES

Period 1919-20 to 1948-49. - Prices for citrus fruit have fluctuated rather widely in recent years. (See figure 8). During the 1920's, while production was relatively small and fairly steady, prices were at relatively high levels. They declined sharply from the high point reached in the 1920's with recessions in business activity and higher levels of production. Following some recovery in the middle 1930's citrus prices declined still further in the late 1930's under the influence of sharply rising production.

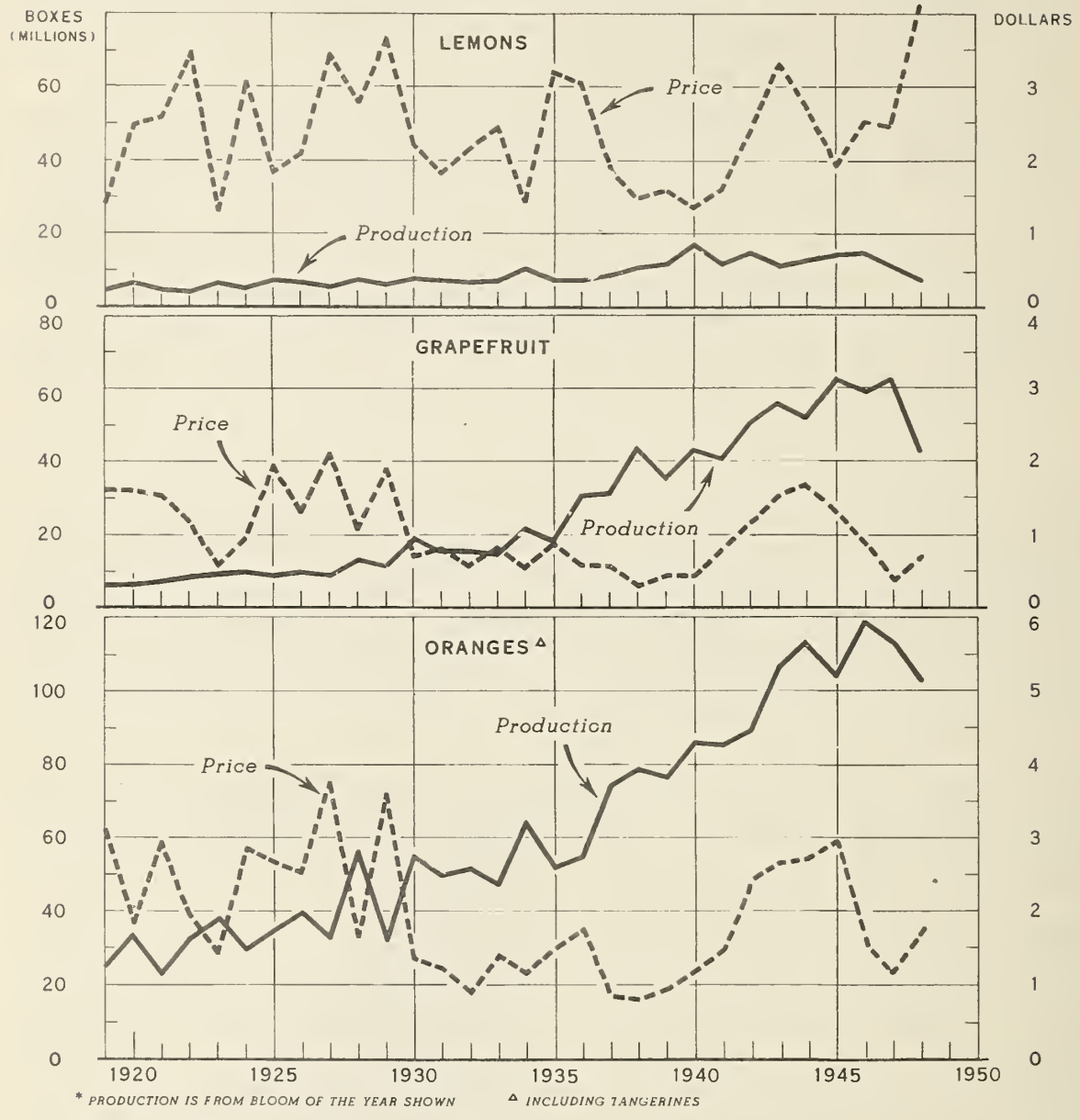
In the early 1940's the stimulus of strong wartime demand was more than enough to compensate for the increase in production and prices rose to the highest levels attained since the late 1920's for oranges and grapefruit and the middle 1930's in the case of lemons.

Immediately after the war, prices declined sharply with the Government's withdrawal from the market. Prices remained at these relatively low levels until a disastrous freeze in Texas and California reduced available citrus supplies causing prices to rise sharply in early 1949. For most of 1949-50, growers have enjoyed prices higher even than those realized during World War II. Freezes in Texas and California, a hurricane in Florida and the development of the frozen concentrate industry have all influenced prices received by growers during this past season.

Factors affecting prices. - From 1919-29 to 1948-49 prices for citrus fruits tended to be inversely correlated with production during the period -- that is, prices were low when production was larger than normal and high when production was short. (See figure 8)

FIGURE 8

CITRUS FRUITS: PRODUCTION AND SEASON AVERAGE RETURNS PER BOX TO GROWERS AT THE PACKING-HOUSE DOOR. 1919-48 SEASONS*



* PRODUCTION IS FROM BLOOM OF THE YEAR SHOWN △ INCLUDING TANGERINES

SOURCE: B.A.E., U.S.D.A.

Conversely, prices for citrus fruits tend to be directly correlated with general business conditions and disposable income in the hands of consumers. Citrus prices remained high all during World War II even with sharply rising production. (See figure 8). Strong consumer buying power accounted, to a large degree, for this situation.

Price fluctuations are apparently influenced by the relative proportion of citrus sold fresh and in processed form. During the 1920's citrus fruits were sold mainly for fresh consumption. Hence, relatively small changes in production tended to be accompanied by relatively large changes in price. Following 1930, as increasing percentages were processed, prices reacted less sharply to changes in production. These relationships are especially apparent in the case of grapefruit which was manufactured earlier and in greater proportion than oranges. Except for the precipitious drop in prices from 1945-46 to 1946-47, these relationships held during the postwar period.

Future prices. - No attempt will be made here to predict future price trends for citrus fruits. It does seem appropriate, however, to review a few facts.

The United States has enjoyed 10 years of unprecedented business activity. Consumer purchasing power has been at an all time peak. These conditions may exist at the same or higher levels for another decade. However, barring another war or a long and intensive period of preparedness for war, previous economic history would lead one to expect a fairly serious interruption before another 10 years have passed.

Regardless of recent low temperature damage in Texas and California and hurricane damage in Florida, prospects for citrus production are believed to be strongly upward over the next 2 or 3 decades. New citrus products such as frozen concentrated orange juice have a real opportunity to expand citrus consumption. Better merchandising can also help. However, per capita consumption of any commodity does have a limit. Further, there seems little question that many other non-citrus fruit or vegetable juice concentrates will be on the market shortly in large volume.

It would seem wise for any organization attempting to influence price or administer other marketing controls to emphasize these basic facts to its members. Growers should be made to understand the limitations of a coordinating organization. They should recognize that a cooperative cannot alter the broad demand and supply structure but that it can improve average net prices by helping dispel panic among buyers and sellers, regulating and smoothing out supplies moving into consumption, bolstering the bargaining power of growers, and aggressively merchandising the product.

If growers understand the functions of a central cooperative, they will be much less likely to blame the association for economic depressions and price declines. In addition, with such understanding, they will be more likely to agree to the necessary sacrifices when the situation demands tight controls.

EFFORTS TO FORM INDUSTRY ORGANIZATIONS PRIOR TO FLORIDA CITRUS MUTUAL

It is generally agreed by members of the citrus industry that except for major supply changes, the severe fluctuations in the price levels of Florida citrus in the past have resulted from uncontrolled shipping, uneconomic price cutting, inadequate marketing information, and the lack of coordinated merchandising effort. Florida growers, shippers, and processors have long felt the need for organizing under a unified marketing program designed to eliminate these defects in the marketing system. However, the inability of the various segments of the industry to agree on the specific measures which should be employed has always been one of the major obstacles in bringing about an all inclusive marketing program.

FLORIDA CITRUS EXCHANGE

The first attempt to organize the industry was in 1909 with the granting of a charter to the Florida Citrus Exchange. Prior to that year, growers had no outlets for citrus fruit other than through speculators and commission houses. Prices had been poor for several years. Growers attributed the unsatisfactory price conditions to lack of grower control over marketing. They decided to find means to correct this situation.

Several representatives were sent to California to study first-hand the organizational structure and the marketing program of the California Fruit Growers Exchange. When these growers returned to Florida, they reported favorably on the effectiveness of cooperative enterprise in solving the marketing problems of the California citrus grower. A mass meeting was held in Tampa to discuss the possibilities of organizing an overhead cooperative marketing association for Florida citrus fruits. Growers voted overwhelmingly to organize such an association. Shortly afterward the Florida Citrus Exchange was incorporated under a special Act of the Legislature.

The Exchange was organized as a federation along the lines of the California Fruit Growers Exchange with sub-exchanges and local associations operating under the control of a central office. The organizers of the Exchange hoped that the association would become the marketing agency for a large enough proportion of Florida citrus to enable it to exercise broad control over distribution and pricing. These hopes were never fully realized. In the 1909-10 season the association handled about 25 percent of the Florida citrus crop. This proportion fluctuated within a fairly narrow range reaching a peak of about 38 percent in the 1931-32 season. At present, about 20 percent of the citrus fruit for fresh consumption moves through the Florida Citrus Exchange.

THE FRUITMAN'S CLUB

The Florida Citrus Exchange has been a success in marketing Florida citrus and a leader as that industry has doubled and redoubled in size. However, since it has never had the support of the majority of the growers and shippers, the industry has attempted several times to effect unified

control under other types of agencies. These organizations were never set up to actually market fruit, but to coordinate the activities of the various marketing agencies.

The first of these was the Fruitman's Club formed in 1925. It was composed of about 60 shippers who handled the fruit for a large percentage of the growers of the State. The club never became very active and in 1928 helped organize another agency, a cooperative named the Florida Citrus Growers Clearing House Association, to accomplish the coordination which the shippers felt was needed.

THE FLORIDA CITRUS GROWERS CLEARING HOUSE ASSOCIATION

In June 1928, the Florida Citrus Growers Clearing House Association, incorporated under the cooperative statute of Florida and conforming to the Capper-Volstead Act, was organized. This cooperative was set up to coordinate and control the marketing activities of the more than 100 fresh fruit shippers. The organizers of the Clearing House designed it to achieve the necessary coordination and control without entering into actual marketing or making any essential change in the marketing system. The main functions of the Clearing House were to widen and improve the distribution of Florida citrus and to stabilize prices in line with demand and supply by the elimination of conditions leading to uneconomic price cutting. The program included standarization of grade and pack, aggressive advertising, a fresh fruit shipping proration program to private sale markets, a proration of fruit to auctions, and an improved market information service. Membership in the Clearing House included growers who agreed to market through or sell to shippers who were members of the organization and shippers who agreed to be bound by the regulations of the association in picking, packing and marketing activities.

The Clearing House operated from June 1928 to November 1933. Its control of shipments from the State reached a peak of approximately 77 percent of the total in 1929-30.

The organization ceased to exist because too much was expected of it. The proration programs proved relatively ineffective in bolstering prices because non-member shippers moved more than their normal share during periods when restrictions were being imposed on members. Members became discouraged by the loss of volume to other shippers and they overshipped. In addition, the Clearing House unfortunately commenced operations at the beginning of a 5-year decline in citrus prices and prices generally. Many of the members who withdrew their support of the association probably did so because they believed that it should have been more effective in preventing or retarding the downward push on prices.

FEDERAL MARKETING AGREEMENTS

When the Clearing House failed to solve the price and distribution problems of Florida citrus fruit, the industry turned to the Federal Government for advice and assistance. A marketing agreement was drawn up in

1933 regulating the grades and sizes that could be shipped in interstate commerce and voted on by the growers. Growers approved the agreement by the necessary majority. It became law and required all shippers to abide by the regulations set forth under the agreement. This marketing agreement remained in effect during the 1933-34 season and until December 1934 of the following season. During that month a freeze shortened the crop materially. The agreement was no longer considered necessary and was canceled. In May 1936 an agreement regulating the weekly volume of shipments as well as grade and size was approved and put into operation. This was discontinued in March 1937 because the volume control feature was found to be unworkable. In February 1939 a second marketing agreement regulating the grades and sizes to be shipped fresh was approved by the growers and continues to remain in force.

Several of the persons interviewed were close to the industry during the period it struggled with a volume proration program under a Federal Marketing Agreement. It was the feeling of most of these people that the proration scheme did not work because many growers and shippers refused to make firm handling contracts and many shippers circumvented the volume restrictions. There were enough of these defections to render volume regulations ineffective.

FLORIDA CITRUS MUTUAL

REASONS FOR DEMAND BY GROWERS AND HANDLERS FOR ORGANIZATION

Citrus production in the United States increased from 35,644,000 boxes in 1919-20 to about 189,180,000 boxes in 1947-48. Over the same period citrus production in Florida increased from about 13,928,000 boxes or about 39 percent of the United States total to 95,570,000 boxes or more than 51 percent of the United States total. This represents an increase of approximately 686 percent in about a quarter of a century.

It would appear from these production figures that, on the average, citrus growing has been profitable. However, the industry's history has been characterized by cycles of "feast and famine." In addition, prices have frequently fluctuated widely from day to day and week to week during the marketing seasons. As previously indicated several attempts have been made in the past to smooth out these cycles and fluctuations somewhat by coordinating the activities of the agencies marketing the rapidly increasing production of citrus. However, conditions apparently never became quite chaotic enough to force individual growers and handlers to submit their operations to a real control program. These attempts failed to achieve their aims and were abandoned.

During World War II, growers enjoyed relatively high prices. With the end of hostilities, however, Government purchases tapered off and the citrus industry was faced with marketing the production from an expanded acreage through normal trade channels. By the 1946-47 season the industry was at the bottom of its economic cycle. The season average on-tree price per box for oranges for all uses was down to 95 cents from the

previous season's average of $2.37. Grapefruit dropped from $1.27 to 63 cents on the tree. During the 1947-48 season oranges averaged 63 cents and grapefruit 26 cents a box on the tree. Prices remained near or below average cost of production during the 1948-49 season until a severe freeze in California and Texas during January 1949 reduced the available citrus supplies in the United States.

The Florida citrus industry and local business and financial institutions dependent on the industry became alarmed when the 1947-48 season began with even less promise than the 1946-47 season. Mutual distress brought growers, shippers and canners together and these groups evidenced a strong desire for the development of a marketing program which might improve the situation.

The Florida Citrus Commission appointed a committee to study the matter. This committee arrived at the conclusion that an industry organization with marketing controls was needed.

Ideas and assistance in working up a plan of organization were freely provided by the Florida Banker's Association and other interested agencies. The initial plan for organization was a cooperative formed under the Florida Agricultural Cooperative Act. The voting members were the packers, shippers, and processors (handlers) of citrus fruit. Growers were tied in by contracts with the handlers. Later it was decided to place control in the hands of the growers and the corporate structure was changed to make the growers direct members. The handlers are tied in by contracts and have no vote unless they are also grower-members. This change was made because it was believed that growers would more actively support an organization in which they had membership and the kinds of controls needed could not be exercised except by a grower-owned and controlled cooperative. It was decided that the association must have 75 percent of the State's citrus production under contract before it would be formally organized. This sign-up was accomplished in February 1949, and the association was incorporated on March 25, 1949. It was named Florida Citrus Mutual.

PRESENT STRUCTURE

Florida Citrus Mutual is a non-stock cooperative owned and controlled by growers producing citrus fruit. Its charter and bylaws empower the association to engage in a wide range of activities. It can sell and merchandise fruit; encourage better production methods; endeavor to secure more equitable freight rates; conduct research in the production, harvesting, packing, and marketing of fruit; help secure appropriate State and Federal legislation; secure production and marketing data from members on the citrus industry; distribute production, marketing and credit information to its members; and cooperate with Federal and State agencies in securing more effective enforcement of laws affecting the industry.

Control of Mutual is vested in a board of directors composed of 21 men. Grower-members in each of the seven Florida Citrus Commission districts elect 3 directors from their own number to represent them. The bylaws

provide for an advisory committee to be elected and controlled by the board of directors. This committee must be composed of from 7 to 13 persons, each of whom must be a grower-member with experience in marketing, shipping or canning of citrus fruits. Each member has one vote.

The association enters into a marketing contract with each member. These contracts forbid grower-members to sell to or through handlers not affiliated with the cooperative.

As pointed out previously, packers, shippers, and processors (handlers) may become affiliated with Florida Citrus Mutual by signing a handler's contract. This contract obligates the cooperative to assist the handler in obtaining supplies of citrus fruit and the handler to cooperate with certain stated measures designed to improve the marketing and price of fruit. The clauses in the handler's contracts covering coordinated marketing give the Florida Citrus Mutual the right to establish overall week-to-week allotments of fresh fruit shipments, the allotment of fresh fruit shipments to auction areas in accordance with the historic position of shippers in such markets, minimum f.o.b. prices of fresh fruit and minimum prices for raw fruit for processing.

The management is composed of a general manager and department heads to handle fresh fruit marketing, processed fruit marketing, grower relations, accounting and statistics. A staff of fieldmen is maintained to assist the various departments to administer the program. In addition the association has fresh fruit representatives in several key markets. These men assemble market information and secure the cooperation of the buying trade in developing and maintaining the orderly marketing of fresh fruit.

ACTIVITIES DURING 1949-50

The 1949-50 marketing season was the first season in which Florida Citrus Mutual undertook to help stabilize prices and help create a more orderly marketing pattern for the Florida citrus industry. On July 25, 1949, the four major objectives of the cooperative were listed in a bulletin to members. These were the setting of minimum f.o.b. prices for fresh fruit and for raw fruit for processing and the establishment of week-to-week fresh fruit shipping and auction allotments. Growers were informed that measures to achieve these objectives would not be employed except when the board of directors deemed that the marketing and price situations warranted action.

The association's first test came on November 10, 1949. At that time prices for oranges were declining rapidly. The board of directors decided the decline was due to lack of confidence in the stability of citrus prices on the part of buyers and sellers rather than a true reflection of demand and supply. Accordingly, minimum prices were set on fresh fruit and fruit for processing. These prices held. A few weeks later active bidding for fruit by shippers and processors caused prices to gradually increase to a relatively high level and to remain stable until early April.

Prices began to decline rapidly again at the beginning of the marketing season for the Valencia variety. The board did not feel that such a precipitous decline was warranted and set minimum prices successfully a second time.

Fresh fruit shipping allotments were established on oranges a number of times during the season. No attempt was made to make this proration scheme mandatory and many shippers marketed more than their allotment. Fortunately, however, overshipments by individual shippers did not damage the market seriously. Total shipments never became very excessive and owing to cold damage to Texas and California citrus these states did not present their usual competition on the fresh market.

To date, no auction allotment plan has been put into operation. The development of a workable allotment has proved the most difficult part of the overall program. It not only requires the close cooperation of all the auction shippers but of the auction buyers and auction companies as well.

An improved system of gathering and exchanging market information has been made possible through organization. All fresh fruit shippers and all processors affiliated with Florida Citrus Mutual are providing the association with information from which a daily report is developed. This report shows the number of carloads of fresh fruit sold f.o.b. and the prices realized; the number of carloads shipped on consignment; the number of carloads moving to auction; the number of "rollers"; the number of boxes delivered to processors and the prices paid for this fruit.

Florida Citrus Mutual is also engaged in development work on crop insurance and the utilization of citrus wastes, and in efforts to secure more equitable freight rates.

GROWER-PROCESSOR RELATIONS

FLORIDA

Growers lose control of the majority of the fruit sold for processing at the grove or the processor's receiving platform. Cooperative processors and grower-processors handled only 29 percent of the fruit processed in 1948-49. Cash buyers manufactured about 71 percent of the processed fruit. About 38 percent of the fruit handled by grower-processors and 7 percent handled by cooperatives involved a cash transaction with other growers. A large percentage of the fruit processed by cooperatives and grower-processors is actually marketed by cash buyers and sold under their private brands.

In view of the fact that growers control only a small proportion of the manufacture and sale of processed fruit and that 60 percent of the fruit is sold in processed form, grower-processor relations should be a major field of interest of an overhead cooperative in the Florida citrus industry. Until the 1949-50 season, these relationships were confined

primarily to thousands of individual deals between buyer and seller. Little consideration was given to the overall demand and supply situation in these negotiations. In times of surplus or apparent surplus the bargaining weapons tended to be in the hands of the buyer. In times of shortage or apparent shortage the situation was usually reversed. When conditions were uncertain the processor, with his superior sources of information and relatively small numbers, tended to have the advantage.

Such a situation made it almost impossible for any segment of the industry to do much planning. When prices were falling or appeared weak, canners spent a great deal of effort assuring themselves that their purchase price did not exceed more than the market average. This led to heavy downward pressures on prices. When prices were rising or fruit shortages were apparent buyers were likely to bid prices too high. This sometimes resulted in processors getting caught in a price decline with high priced inventories or pushing retail prices so high that the movement of fruit was retarded all along the line.

One of the objectives of Florida Citrus Mutual is to improve grower-processor relations and relations between processors. The first step in this direction was to enter into a contract with each processor. This contract was made for the 1949-50 season. It obligated the association to furnish processors with a "constant and dependable supply of fruit of the quality and varieties required" by the processor. In return for this service the processors agreed to abide by minimum raw fruit purchase prices established by the association.

The board of directors of Florida Citrus Mutual sets minimum prices with the advice and counsel of its Advisory Committee and of processors. Grower and processor, therefore, no longer depend on individual negotiation alone to determine price, but join in a minimum pricing program in the light of current demand and supply conditions.

While this approach to pricing was reasonably successful during 1949-50, the results attained in one season should not be overrated. The Florida citrus grower through this program may be trying to "have his cake and eat it too." As long as prices are rising the grower keeps hand off the the price system and takes advantage of the increase. When prices begin to drop, he attempts to hold all or most of the increase by setting floor prices. In the long run this is likely to restrict retail distribution, retard the movement of fruit, and cause artificial price depressing surpluses. A central association which attempts to set minimum prices is engaged in a precarious activity unless it has full control of marketings and can dispose of surpluses. These powers are especially necessary during periods when established prices are higher than justified by the demand and supply situation.

It would appear that price negotiations would serve the industry better if they covered all citrus processed rather than just the citrus processed during periods for which minimum prices are set. For instance, if a central cooperative obtained for its members season-long grower-processor

contracts containing price agreements for each grade of fruit and based these prices on a thorough analysis of the demand and supply situation, a much more stable condition might result. These prices would naturally be subject to change if the association and the processors agreed that significant adjustments have occurred in either demand or supply.

The price of fruit for fresh consumption will normally tend to hold a definite relationship with the prices established for fruit for processing. However, if the fresh fruit prices got seriously out of adjustment, the association could also consider this sufficient cause to reopen grower-processor contracts.

Such price agreements would enable processors to do a more effective job of planning financing, merchandising, and retail price programs. Growers might reasonably feel more assurance that their income would be protected. The central association would not have to risk its prestige and grower loyalty by setting minimum prices.

Grower-processor relations should not be restricted to price agreements alone. Perhaps there are improvements to be made in picking schedules and arrangements and unloading schedules. Perhaps by-products of value for cattle feeding can be made available to grower-members at advantageous prices. All phases of grower-processor relations should be explored by a central association.

IN OTHER FRUIT AND VEGETABLE GROWING AREAS

Producers of fruits and vegetables in other areas in the United States and Canada are conducting industry programs similar in certain ways to that of Florida Citrus Mutual.

Utah.- For more than 16 years the Utah State Canning Crops Association with headquarters at Logan, Utah, has been negotiating contract terms with canners of fruits and vegetables in the interests of growers. It is an overhead cooperative which coordinates the bargaining activities of 10 local associations.

The terms of the contracts are worked out annually by the association officers and processors. The contracts are made between growers and canners but are not valid unless approved by the cooperative and signed by its president. Identical grower-canner contracts are used by each of the 15 processors operating in Utah for each commodity canned.

The grades for each commodity and the prices to be paid for each grade are clearly defined in the contract. Contracts are delivered to the growers for signing by field employees of the processors. Each grower lists on the contract the acreage he will plant and estimated production of the crop concerned. Provisions for delivery of the commodity by the grower to the processors' plant are also included.

Growers can now obtain the by-products of the pea vining operation for ensilage at cost as a result of the association's activities. Canners provide growers with seed at low cost. Better tomato field box service has been provided by canners at the association's request.

The association does not attempt to interfere with the processors' marketing program -- that is, whether or not they put up a fancy pack, a standard pack, or a substandard pack or whether they can solid pack tomatoes, tomato juice or puree.

All the canners in Utah are cash buyers. There are no cooperative canners or grower-canners. Therefore, the task of working out a common contract for each canner is not as complicated as it is in the case of Florida citrus.

The association represents the growers in obtaining appropriate legislation. It also works with the Utah State Agricultural College in the initiation and conduct of fruit and vegetable crop research.

California.- The California Canning Peach Association was organized in 1936 to bargain with canners of cling peaches in the interest of grower-members. Its bargaining activities primarily cover price determination. The association has under contract about 40 percent of the total production of cling peaches in California.

The association's peaches are sold to canners under the terms of a contract drawn between the association and the canners. Each grower selects the processor to whom he wishes his fruit to be sold. In the event the processor is in a weak financial condition or is unwilling to bargain with the association, the fruit is offered to other processors.

Canners pay growers direct. Growers receive 90 percent of the value of the deliveries and the association 10 percent. The association uses the money withheld from growers to reimburse growers whose fruit has not been sold or who cannot collect for the fruit they delivered. When these obligations are liquidated, growers receive their prorata share of the money withheld.

The association operates within the structure of marketing orders approved by growers and canners and issued by the California Department of Agriculture.

The 1950 order provided for the establishment of minimum grades and sizes of fruit for processing, assessments for continued advertising and sales promotion, the elimination of a part of the potential harvest through preseason thinning, an investigation of the possibilities of developing a tree removal operation to bring future crops down to economic size, and assessments for a stabilization fund.

A preliminary evaluation was made of the supply and demand picture in May, followed by successive appraisals of the situation prior to harvest.

Such factors as the carryover of the 1949 pack; the urban income of the United States; and the prices and supplies of competitive fruits were included in these studies. Prices paid growers for their 1950 crops followed closely the prices paid by processors for the pool of peaches marketed by the California Canning Peach Association.

Other United States producting areas. - Growers in several other producing areas are bargaining with canners to provide themselves with a collective voice in price determination and other factors in grower-processor relations. However, none have been operating for a sufficiently long period to warrant discussion in detail in this report.

Canada. - Canadian producers have engaged in various broad marketing and bargaining programs under Government sponsorship since the Produce Marketing Act was passed in British Columbia in 1927. The general objectives and methods have been similar to those of a voluntary central association but the instruments employed are enforced by the Government.

Free market pricing is supplemented by Government sponsored boards of grower representatives under a provincial marketing commissioner. For some products the desire for higher farm incomes from "orderly marketing" within the marketing season has been the motive. For other products, the farm groups have sought higher prices through compulsory bargaining and arbitration. Farmer representatives negotiate with representatives of the relatively few processors or distributors who were presumed to have monopolistic powers of bargaining and who were allegedly taking abnormal profits.

Through boards set up under the laws of the Province with powers of compulsory arbitration, farm producers have sought to bargain collectively with the distributors or processors. At the request of a group of growers who wish to market their products through a marketing scheme, a poll is conducted by the Provincial Department of Agriculture. If the poll shows a majority of at least two-thirds of the growers in favor of the marketing scheme, the scheme is proclaimed and all producers of the product concerned are required to comply with its terms. The chairman of the schemes has been the marketing commissioner who heads a board of farmers representing the major producing areas. This board bargains with the representatives of the processors or distributors of the product, and in the case of a dispute can refer it to a Governmental arbitration board which makes a decision binding to both parties. Minimum prices may be set, and regulations governing the marketing channels, and the grades and amounts to be marketed are laid down.

The tree fruits produced for processing in Ontario which are covered by bargaining schemes are peaches, pears, cherries and plums.

In British Columbia, apples and other tree fruits are marketed through B.C. Tree Fruits, Ltd. This scheme concerns itself more with fresh fruit marketing than processed fruit marketing. B.C. Tree Fruits is not a price fixing organization but a compulsory central selling agency.

It is grower-owned and designated by the Government to sell all the fruit formerly sold by the cooperatives and independent shippers. The company operates at cost. All fruit is pooled by variety, grade and size. Growers are free to deal and contract with shippers of their own choice. A volume proration scheme of fresh fruit shipments is used when necessary.

B.C. Tree Fruits does not negotiate the terms of grower-processor contracts with processors but merely sells them the raw product. However, the organization recognizes the value of the processing industry as an outlet and allocates processors their share of the total supplies of fruit in years of scarcity as well as in years of heavy production.

RECOMMENDATIONS AND CONCLUSIONS

In the opinion of the writer, a central association for Florida citrus can make its greatest contribution as a bargaining agency for processed fruit and a market information agency for fresh fruit.

Growers do not need a great deal of protection for their interests in fresh fruit marketing. They control a large proportion of the fresh fruit industry through cooperatives and as grower-shippers. In addition, the percentage and volume of fruit shipped fresh has been decreasing the past few years.

On the other hand, almost three-fourths of the fruit used by the rapidly growing processing industry has been handled by cash buyers who controlled the movement of the fruit from the grove to the wholesale or retail level. Many of the cooperative processors do nothing more than manufacture. They delegate the actual marketing and merchandising of their processed products to national distributors. Therefore, the point at which the grower releases title to fruit for processing would seem to be the point at which a central association of growers should direct most of its efforts.

The central association does not necessarily have to restrict these bargaining activities to price negotiations. It can also seek other improvements in grower-processor relations such as changes in picking and loading schedules and obtaining lower prices on by-products.

CENTRAL SELLING

It does not appear that a central organization for Florida citrus should attempt to develop a central sales program. There seems little likelihood that fresh fruit shippers and processors would support such a program. Further, as more and more of the citrus products produced in Florida are merchandised by processors, there will be less and less need for a central sales program.

There are 3 basic reasons for this conclusion. First, the crop in total will probably be less perishable and will be marketable over a longer period, thereby lessening the need for rapid decisions to move seasonal surpluses. Second, the number of firms processing fruit is much fewer

than the number packing fruit for fresh shipment and their average size of business is greater. This should eliminate some of the unsound pricing policies caused by lack of knowledge of market conditions and lack of a well developed marketing program. Third, a large proportion of the fruit now processed is being marketed by large firms capable of providing the industry with an adequate sales and merchandising program.

If the processing industry continues to grow in relative importance the least efficient handlers of fresh fruit will probably be forced to cease operations. This in itself will do much to eliminate weaknesses in the fresh fruit marketing system.

MARKET INFORMATION

The establishment of an accurate and complete market information service for fresh fruit shippers would probably contribute more to the elimination of price cutting and market gluts of fresh fruit than any other one measure. The market information service should also be of value to processors in buying and selling operations.

PRORATION

It may be desirable to establish a mandatory shipping and auction proration program during periods of apparent overshipment if it is possible to secure 100 percent cooperation from all shippers and if prorations are not so stringent that fruit becomes overly abundant to processors. Experience has shown that 100 percent cooperation in prorating fresh fruit shipments in the United States cannot be obtained except through the aid of a Federal Marketing Agreement. Therefore, if mandatory control is desired, such an agreement will be needed.

However, it is doubtful whether sufficient benefit can be achieved from a mandatory proration program to warrant the time and energy required to administer and enforce the measure. The present Marketing Agreement providing regulations for establishing the grades and sizes of fresh fruit that may be shipped appears adequate for the needs of the industry. In view of the fact that 60 percent of the crop is now moving in processed form, a proration program for fresh fruit leaving the State might actually result in an unwarranted reduction in the price of fruit for processing and accordingly a lower average net price to growers.

Therefore, it is recommended that shipping proration programs, when established, be on a voluntary basis. As a part of these proration programs, shippers should be kept informed as fully as possible regarding market conditions, the number of carloads that should leave the State in fresh form, and their prorata share of this number. Compliance or noncompliance with the proration program should be left to the individual decision of each shipper.

PRICING

It is recommended that price negotiations be confined to fruit for processing because there are too many places where prices negotiated for fruit for fresh consumption can break down. Numerous grades, brands, and varieties are being shipped daily. Without central sales control, an overhead cooperative cannot determine and direct the number of carloads to go to each market. It would, therefore, be powerless to set price patterns by alloting key markets the number of cars required to reflect the desired prices. Shippers can make various deals with buyers which can destroy overall price schedules. For instance, they can agree to refund money to buyers on the premise that the fruit arrived at the buyer's warehouse in poor condition. Itinerant truckers can pick up loads at the shipper's door at reduced prices.

However, price negotiations on fruit for processing do not present nearly as many problems. It would not be difficult to devise clear cut grade standards on which prices could be based. There is no opportunity for fruit to change condition materially between the grove and the processing plant. There are only a relatively small number of persons buying fruit for processing and all of these buyers are located in the growing area within easy driving distance of a central meeting place. Processors can afford to merchandise their commodity evenly over long periods and are not subject to serious pressures to dispose of their commodity due to the seasonal and perishable nature of the crop.

Therefore, it is recommended that a central organization of the Florida citrus industry work out a common contract to be used by grower-members and processors for the disposition of fruit for processing. This contract should be made prior to the beginning of the harvest season and should contain price agreements on the part of the processor for certain grades and delivery agreements on the part of the grower. The contract should be made for the duration of the marketing season. It should not be reopened unless both processors and the officers of the association agree that changes in the demand and supply situation merit negotiation of new prices or that fresh fruit prices are materially out of adjustment with processed fruit prices.

It is doubtful that fresh fruit prices will get out of adjustment with processed fruit prices if the price agreements are made in the light of demand and supply conditions. Since the majority of the crop is processed, prices for the processed product might reasonably be expected to set the pattern.

Minimum pricing is not recommended unless the central organization has the machinery to control all marketings and to dispose of surpluses. However, if a central organization which does not have this machinery wants to set minimum prices, such prices should always be set low enough to assure consumption of the entire crop.

MEMBERSHIP RELATIONS

It is recommended that all segments of the industry, particularly grower-members of the central association, be kept fully informed of the limitations of an industry organization and the extent of cooperation and individual sacrifices required to make such an organization perform a satisfactory service. These factors are not now fully understood and this lack of understanding can be the weakest pillar in an organization's foundation. Member loyalty is directly proportionate to member understanding.

BIBLIOGRAPHY

Farrell, M. W.
1949. Experience with Provincial Marketing Schemes in Canada. Journal of Farm Economics 31 (4): 610-626.

Rasmussen, M. P., Quitslund, F. A., and Cake, E. A.
1941. Retail Outlets for Fruit in New York City. Farm Credit Administration Bul. 52. p. 32.

Samuels, J. K. and Goldsborough, G. H.
1950. Wholesale Distribution of Citrus Fruits in Five Terminal Markets December 1946 - March 1947. Farm Credit Administration Miscellaneous Report 139. p. 10.

Shuler, P. E. and Townsend, J. C., Jr.
1949. Florida Citrus Fruit - Annual Summary 1949. Florida Crop and Livestock Reporting Service 2(1): 4-5.

Bureau of Agricultural Economics, U. S. Department of Agriculture
1946. Readjustments in Processing and Marketing Citrus Fruits. Prepared at the Suggestion of the Working Group on Conversion of Marketing Facilities and Methods, Interbureau Committee on Post War Programs. pp. 3-33.

Felix, O. M.
1940. Historical Data of the Florida Citrus Industry and the Florida Citrus Exchange. pp. 8 and 9.

Bureau of Agricultural Economics, U. S. Department of Agriculture
Citrus Fruits, Production, Farm Disposition, Value and Utilization of Sales, Crop Seasons 1909-10 to 1948-49.

Prugh, A. E. and Hoyt, M. F.
Marketing California - Arizona Citrus, Summaries of the 1947-48 and 1948-49 Seasons. Federal-State Market News Service.

Wilson, H. F.
Marketing Florida Citrus, Summaries of 1946-47, 1947-48, and 1948-49 Seasons. Federal-State Market News Service.

1936. Annual Report of the General Manager of the California Fruit Growers Exchange, Los Angeles, Calif.

1948. Annual Report of the General Manager of the California Fruit Growers Exchange, Los Angeles, Calif.

Bureau of Agricultural Economics and Production and Marketing Administration, U. S. Department of Agriculture
1950. Regional Distribution and Type of Stores Where Consumers Buy Selected Fresh Fruits, Canned and Frozen Juices and Dried Fruits, January to March 1950 with Comparisons.

Lillieholm, Wm. C.
1950. Grove to Retail Margins for Florida Valencia Oranges Marketed in Fresh Form in Selected Cities, 1940 to 1948. Bureau of Agricultural Economics, U. S. Department of Agriculture.

1943. Report of the Federal Trade Commission on Distribution Methods and Costs. Part I, Important Food Products. Submitted to the Congress November 11, 1943. pp. 147, 149, and 151.