

An Appraisal of and Recommendations  
for Increasing the Degree  
of Competition in Florida's Dairy Industry

By  
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## I. INTRODUCTION

### BACKGROUND

In Florida the dairy industry has some distinguishing characteristics. Dairy farms are large--both in terms of size of herds and the number of acres of land owned and operated. The number of farmers selling whole milk has been decreasing while increasing elsewhere. Whole milk prices are among the highest in the United States. While Florida dairy farms are large and milk production has been increasing at a rapid rate, per capita production of whole milk is extremely low.

During the depression years of the nineteen thirties, business practices employed by dealers created chaotic conditions in many of the nation's markets for whole and fluid milk. In 26 states, including Florida, State Milk Commissions or Boards were created for the purpose of regulating and stabilizing the prices of milk at levels that would be fair to producers, dealers and consumers. By 1937, the practice of administering milk prices was accepted, but it was quite obvious that a better method of determining milk prices was needed in many markets. During that year the

United States Congress authorized the Secretary of Agriculture to issue Federal Market Orders designed to facilitate the pricing of milk in markets of an interstate nature.

Since World War II, the public has become more and more dissatisfied with administered milk pricing and especially with administered pricing by state agencies. As a result of this dissatisfaction, the number of state commissions or boards has decreased from 26 to 17. On the other hand, Federal Market Orders are now being used in more than 50 areas. These Federal Market Orders regulate the price of whole milk at the producer level, whereas state milk-pricing agencies frequently regulate the price of milk at both producer and consumer levels.

Nearly every successive legislature, in the states having milk commissions or boards, has found it necessary to take a definite position on milk-pricing policy. Much of the public opinion supporting changes in milk-pricing policy is based on the hypothesis that administering milk prices restricts competition and that restrictions to competition raise the price of milk. On the other hand, the original purpose of administering milk prices was to maintain and stimulate competition by establishing fair and reasonable milk prices.

To a considerable extent, this apparent paradox can be traced to a lack of understanding of the conditions that

facilitate competition, and of knowledge as to the extent to which competitive conditions prevail in milk markets.

#### PURPOSE AND SCOPE

Since the capitalistic system is based on "competition" between producers of goods and services, and the citizens of this country endorse the free enterprise system, it is evident that the American people believe that some form of "competition" is desirable. For this reason, the Florida dairy industry has been studied from the viewpoint of its competitive nature. Underlying the study are two basic assumptions: (1) competition is desirable and necessary for continuance of our free enterprise system and (2) the kind of competition that is most desirable in the dairy industry may be different from the kind of competition that is desirable in other industries.

The objectives of the study are threefold. The first objective is to determine the kind and extent of competition which exists in Florida's dairy industry. The second objective is to evaluate the kind of competition that prevails in terms of its effect upon the production and utilization of milk. The third objective is to suggest several courses of action that might stimulate competition in the industry.

Section I includes background, purpose and scope, and methodology used in the study. Section II describes the

unique characteristics of Florida's dairy industry, characteristics of commercial producers and milk dealers, and methods used in pricing milk in central and south Florida. In Section III, the prevailing price structure in Florida and blend prices received by producers in 1952 are examined. In addition, the marketing problems of milk producers and dealers and their suggestions for solving them are discussed. The theoretical requisites of a competitive, economic environment are outlined in Section IV.

Section V deals with the nature and extent of competition in the nation's regulated markets, and comparisons are made to the theoretical model of competition presented in Section IV. In the Section that follows the type of competition that prevails in the milk markets of central and south Florida is evaluated. The competition that prevails in Florida is then compared with competition that prevails in markets in other states. Section VII outlines several methods of stimulating competition in the milk markets of central and south Florida. Finally, the Summary and Conclusions are presented in Section VIII.

#### METHODOLOGY

REVIEW OF LITERATURE.---There is an abundance of literature on the economic characteristics of various aspects of the dairy industry in many parts of the country. Numerous

studies have been published on the various phases of the dairy industry in such leading milk producing states as Wisconsin, Minnesota, New York, and Pennsylvania. Likewise, detailed and exhaustive economic analyses have been made of the industry in such major milksheds as New York, Philadelphia, and Chicago.

In contrast to the abundance of information available on the industry in other states and major milksheds, the economic literature on Florida's dairy industry is very meager. Only one study<sup>1</sup> of the structure of the industry in Florida has been published. This study, together with three production studies,<sup>2</sup> constitutes all of the economic literature currently available on the Florida dairy industry.

DATA AVAILABLE.--Secondary data were available from three sources. These included United States Census reports, the Florida State Department of Agriculture, and the Florida Milk Commission. Data obtained from these sources were used during the initial planning and carrying out of this study.

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<sup>1</sup>W. K. McPherson and R. F. Luckey, Jr., Some Trends and Characteristics of the Dairy Industry in Florida, Florida Agricultural Experiment Station Bulletin 309, March, 1954.

<sup>2</sup>A. H. Spurlock, D. L. Brooke, and R. E. L. Greene, Cost of Producing Milk in Selected Areas of Florida, Florida Agr. Exp. Sta., Ag. Ec. Series No. 51-4, January, 1951; E. D. Smith, N. K. Roberts, and W. G. O'Regan, Milk Production Cost Trends in the Florida Peninsula, Fla. Agr. Exp. Sta., Agr. Ec. Series No. 55-9, May, 1955; Bruce McKinley, An Economic Study of 249 Dairy Farms in Florida, Florida Agricultural Exp. Sta. Bulletin 246, May, 1932.

United States Census reports were used to determine population figures by county areas in Florida and the volumes of milk sold off farms in the individual counties. Lists of wholesale milk producers and dealers were obtained from the Florida State Department of Agriculture. These lists gave the names of all producers and dealers in the individual counties of the state. The Florida Milk Commission provided information relative to the general size and location of producers and milk dealers. The Commission was also able in most cases to designate the producers who sold to each milk dealer.

SELECTION OF AREA.--The data assembled from the above mentioned sources were then used to identify an area having the following characteristics: (1) this area included a large percentage of the state's population and milk production, (2) markets in this area were closer together spatially than similar markets in north and northwest Florida and the degrees of competition for milk should be greater than in north or west Florida, (3) dairy farms varied greatly in size and it was felt that this variation might be due to market imperfections or to other causes, and (4) the number of milk dealers in the area was considered sufficient for some degree of competition for milk supplies.

The area thus identified will be called central and south Florida. It consists of 26 counties, all of which are

located south of the northern limits of Pasco, Polk, Orange, Seminole, and Brevard Counties.

DESCRIPTION OF THE SAMPLE.--As of March 12, 1952, there were 429 licensed dairies in the 26 counties in central and south Florida covered by this study (Figure 1). Three hundred and eighty-six of these dairies, or nearly 90 per cent, were located in the 15 counties where the Florida Milk Commission established producer Class I prices and consumer retail prices. Only 43 dairies, or less than 10 per cent, were located in 11 counties where producer and consumer prices were not established by a public agency. One hundred and ten milk dealers were also located in the 26 counties comprising the area of this study (Figure 2). Ninety-four, or about 87 per cent, of these dealers were located in the 15 counties where the Milk Control Commission regulated producer Class I prices and consumer retail prices. Only 14 dealers, or about 13 per cent, were located in the 11 counties where producer and consumer prices were not determined by a public agency.

A judgment sample was used in order to obtain the desired 25 per cent sample of milk dealers and producers and at the same time: (1) to include all those producers located in one area who sold their milk to dealers in another area, (2) to include as many producers as possible who had been in business two years or less, and (3) to include dealers and producers of representative sizes in the sample.

FIGURE 1 LOCATION AND NUMBER OF WHOLESALE MILK PRODUCERS, BY COUNTIES, CENTRAL AND SOUTH FLORIDA, 1952\*

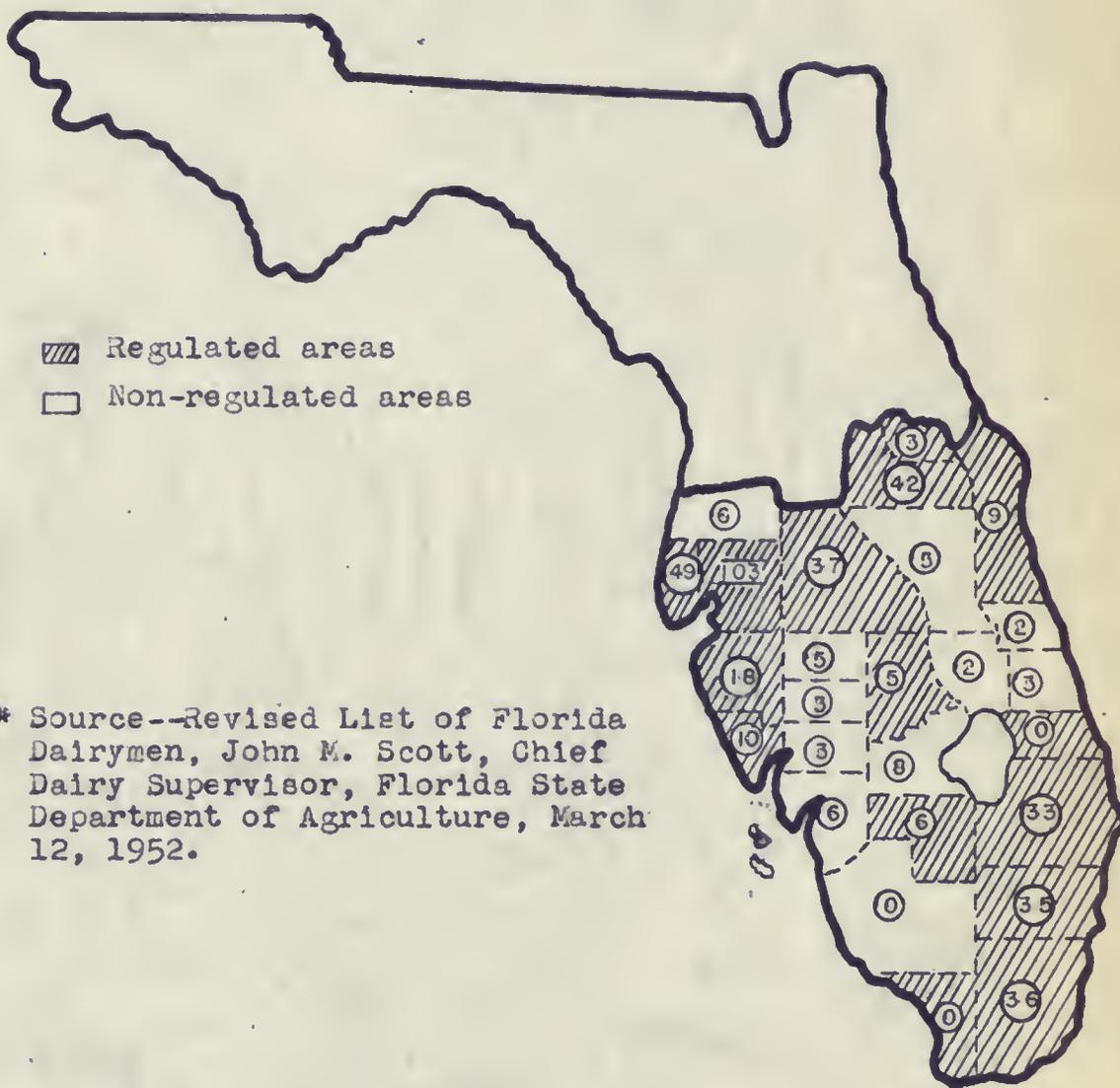
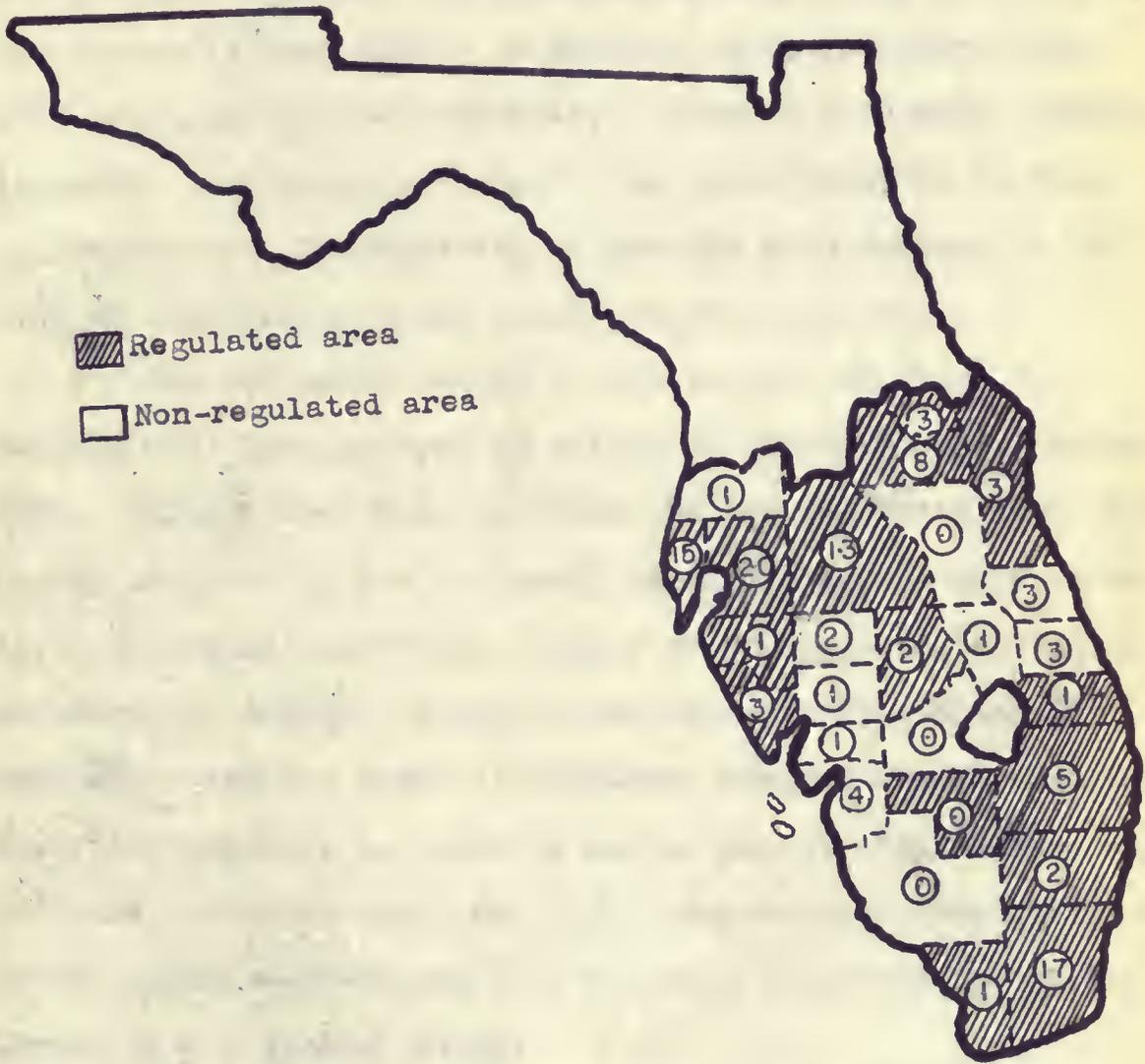


FIGURE 2 LOCATION AND NUMBER OF DISTRIBUTORS AND PRODUCER-DISTRIBUTORS\* BY COUNTIES IN CENTRAL AND SOUTH FLORIDA, 1952.



\* Source—John M. Scott, Chief Dairy Supervisor, Revised List of Milk Pasteurizing Plants, Florida Department of Agriculture, April 8, 1952.

This judgment sample was made by choosing at random from each separate administered price and non-price administered area one large milk dealer, one average-sized dealer, and one small dealer. In areas where this could not be done, due to the limited number of dealers, some deviation from this sampling plan was necessary. Efforts were made, however, to secure dealers in the sample who varied greatly in size of operations. Twenty-seven of the 110 milk dealers in the area of study were chosen (24.5 per cent sample).

The producers who sold milk to each of these 27 dealers were then arrayed by volume of off-farm sales during 1951. Efforts were made to secure in the sample at least one large, one medium, and one small producer selling to each of the selected milk dealers. Nearly every producer located in one area and selling to one of the selected 27 milk dealers located in another area and producers who had been in business two years and less who sold to one of the 27 milk dealers were included in the sample. The 117 wholesale producers<sup>3</sup> included in the sample represented 27.3 per cent of the wholesale producers in the area of study.

After drawing the sample, schedules were prepared. These schedules were pre-tested by interviewing both producers and dealers not in the area of the study. Schedules were then

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<sup>3</sup>The sample selected originally included 119 wholesale milk producers but two producers refused to be interviewed.

revised slightly and interviews were started among the 117 wholesale producers and 27 milk dealers in the sample.<sup>4</sup>

All information was placed on these prepared schedules during personal interviews with owners and/or managers of dairy farms and milk distribution plants. These interviews were conducted during the late spring and early summer of 1953.

TYPES OF DATA OBTAINED.--Information obtained from producers included: (1) general information from producers such as tenure, education, size of operations, etc., which might affect the individual's marketing situation, (2) size of dealer operations as compared to producer's operations which might allow some producers to gain bargaining advantages at certain outlets, (3) contractual arrangements of sales between producers and dealers, (4) availability of marketing outlets, (5) type of milk transportation used and its cost, and (6) information which might indicate the degree of competition for milk.

Information obtained from milk dealers was of a similar nature to that obtained from producers. Most of this information was used as a cross check on the accuracy of producer statements.

METHOD OF ANALYSIS.--A theoretical model of pure competition<sup>5</sup>

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<sup>4</sup>Schedules used are found in Appendix A.

<sup>5</sup>A model of pure competition is used instead of perfect competition since time must elapse between the achieving

was first established. Data obtained from the 117 interviews with wholesale producers, 14 producer-distributors, and 13 distributors were then analyzed in light of this model. The methods that were used in 1952 and the results of these methods in relation to this theoretical model were compared. Comparisons between the present extent of competition in Florida and other areas of the United States were also made. As a result of the above comparisons, suggestions were made in regard to methods of stimulating competition in Florida markets.

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of knowledge on the part of buyers and sellers and the efforts of buyers and sellers in using market knowledge. The model of perfect competition does not recognize this time lapse.

## II. THE MILK INDUSTRY IN CENTRAL AND SOUTH FLORIDA

### UNIQUE CHARACTERISTICS OF FLORIDA'S MILK INDUSTRY<sup>6</sup>

#### GROWTH AND IMPORTANCE OF DAIRYING IN FLORIDA AND OTHER

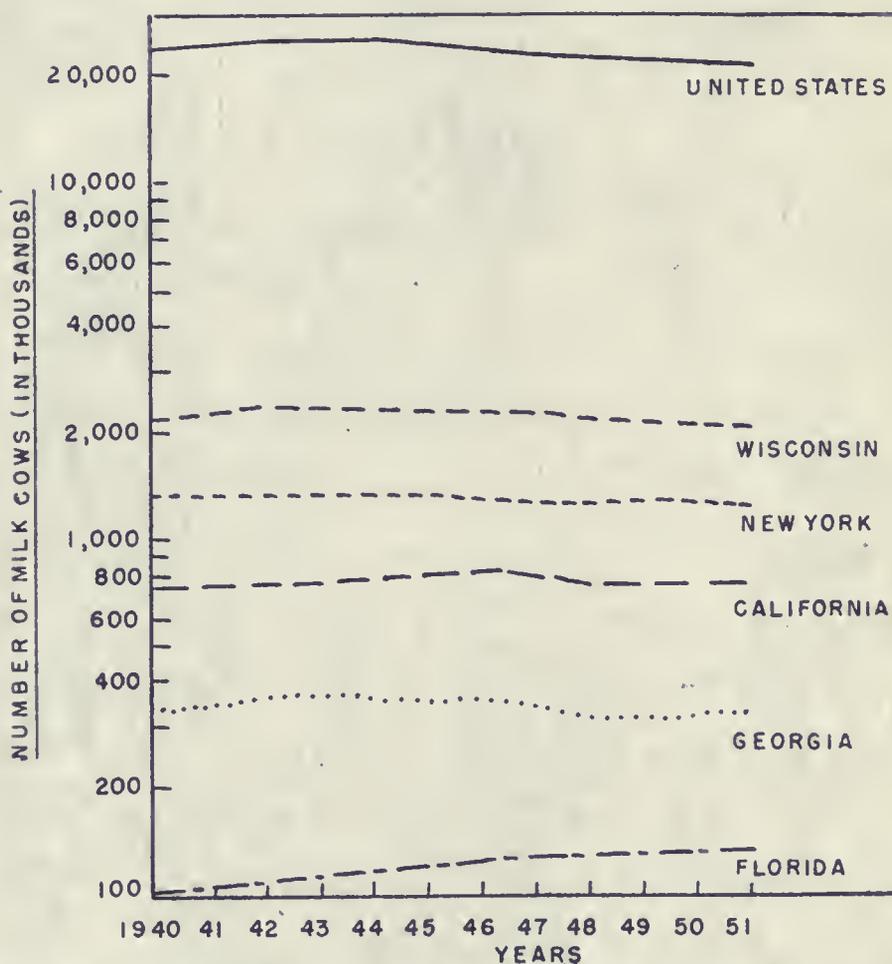
STATES.--From 1940 to 1950, the number of farms in Florida reporting the sale of whole milk declined from 1,891 to 1,695 farms, a decrease of 10.4 per cent. Only about 3 per cent of Florida farmers reported sales of whole milk in 1950. During the same period, the number of farms reporting the sale of whole milk in the United States increased from 953,898 to 1,097,150, an increase of 15.0 per cent. About 20.4 per cent of the farmers in the United States reported sales of whole milk in 1950.

In 1951, Florida farmers were milking 137,000 cows--an increase of 35.6 per cent over the number of cows milked in 1940 (Figure 3). This increase in the number of cows milked, coupled with the fact that the number of farms producing milk has decreased, indicates that the average size of dairies has increased since 1940.

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<sup>6</sup>Much of this material was abstracted from Some Trends and Characteristics of the Dairy Industry in Florida, W. K. McPherson and R. F. Luckey, Jr., Florida Agricultural Experiment Station Bulletin 539, March, 1954, pp. 6, 7.

FIGURE 3 AVERAGE NUMBER OF MILK COWS ON FARMS  
BY YEARS IN THE UNITED STATES AND  
SELECTED STATES, 1940-51\*



\*Source--United States Department of Agriculture,  
Bureau of Agricultural Economics, Farm Production  
Disposition, and Income From Milk, Washington,  
D. C., 1940-51.

While Florida farmers were increasing the number of cows milked, Georgia, California, New York, and Wisconsin farmers held their number of milk cows about the same. In the United States the number of milk cows on farms actually decreased.

Florida farmers produced only 0.50 per cent of all the milk produced in the nation during 1952, whereas 1.84 per cent of the total population of the nation lived within the state. Milk production per capita in Florida was lower than in any of the other states, except Massachusetts and Rhode Island (Table 1).

Milk production per cow reached a high of 4,400 pounds in 1950 and 1951, but was still approximately 800 pounds less than the national average. To a considerable extent, the relatively low production of milk per cow in Florida is due to (1) a tendency of producers to use the breeds of cows that produce milk with a high butterfat content, (2) quality of the cows, and (3) insufficient amounts of good pastures and roughage.

Cash receipts from marketing of all milk and cream in Florida (at the farm) increased from \$10,632,000 in 1940 to \$38,466,000 in 1951,<sup>7</sup> or 262 per cent. About 30 per cent

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<sup>7</sup>United States Department of Agriculture, Bureau of Agricultural Economics, Washington, D. C., Farm Production, Disposition and Income From Milk, 1940-49 and 1950-51, April, 1952.

of this increase in income was due to increased production and 70 per cent to the increase in price (Figure 4).

TABLE 1

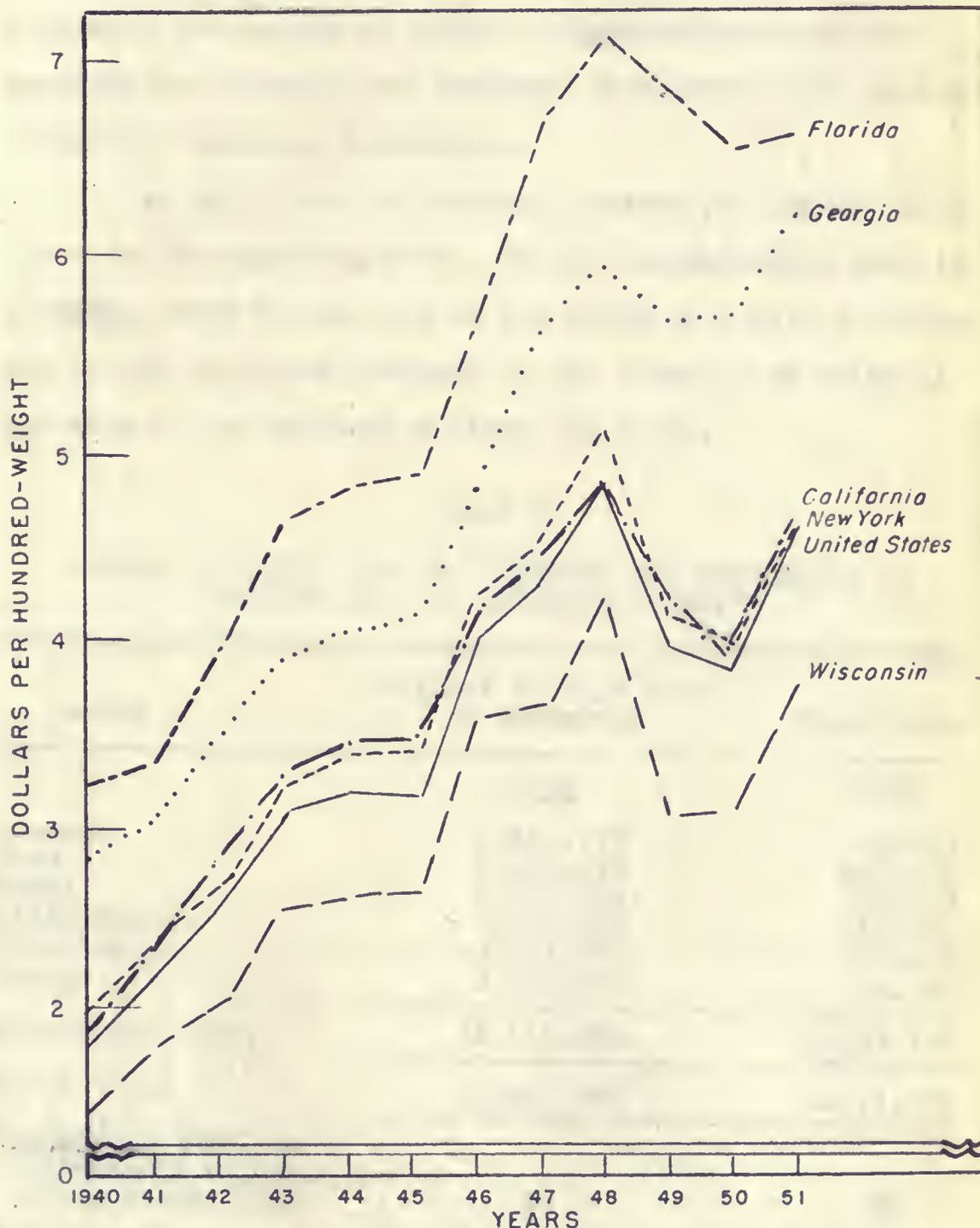
MILK PRODUCTION PER CAPITA BY STATES, 1952<sup>a</sup>

State	Pounds	State	Pounds
Wisconsin	4,340	Mississippi	639
Vermont	4,116	Colorado	604
North Dakota	2,872	New York	590
Minnesota	2,678	Delaware	586
Iowa	2,146	Illinois	549
South Dakota	1,953	Virginia	543
Idaho	1,893	Pennsylvania	538
Nebraska	1,534	California	530
Kansas	1,174	Maryland	518
Missouri	985	Nevada	489
Utah	913	Georgia	428
Indiana	879	West Virginia	404
Montana	846	North Carolina	386
Michigan	812	Texas	386
Kentucky	798	Alabama	335
Oklahoma	772	Connecticut	331
Oregon	749	Arizona	322
Wyoming	721	New Mexico	290
Tennessee	710	Louisiana	273
Maine	697	South Carolina	270
Washington	679	New Jersey	222
Ohio	654	Florida	196
Arkansas	648	Rhode Island	165
New Hampshire	641	Massachusetts	163

<sup>a</sup>United States Department of Agriculture, Bureau of Agricultural Economics, Farm Production, Disposition and Income from Milk, 1951-1952, Washington, April, 1953.

LOCATION OF PRODUCTION AND CONSUMPTION AREAS.--Distributors in the larger milksheds, such as New York and Chicago, purchase milk from producers located as far as 200 or 300 miles

FIGURE 4 PRICE OF MILK SOLD TO PLANTS AND DEALERS AT WHOLESALE IN THE UNITED STATES AND SELECTED STATES, 1940-51.\*



\*Source—United States Department of Agriculture, Bureau of Agricultural Economics, Farm Production, Disposition, and Income from Milk, Washington, D. C., 1940-51.

from the market. In these cases, either farmers located near the market find it is more profitable to produce other commodities, or the cost of production at the more distant points is low enough to offset transportation costs and provides an incentive for dairymen to maintain and, in some instances, increase production.

In still other milksheds, dairies are located very close to the consuming area. This is particularly true in Florida, where 66 per cent of the whole milk sold by dairymen in the state was produced in six counties in which 51 per cent of the population lives (Table 2).

TABLE 2

GALLONS OF MILK SOLD BY PRODUCERS AND POPULATION IN  
FLORIDA AND SIX SELECTED COUNTIES

County	Gallons of Milk Sold by Producers		Population
	1949		1950
Broward	9,165,777		83,933
Dade	8,539,132		495,084
Duval	6,330,246		304,029
Hillsborough	5,728,802		249,894
Pinellas	3,201,282		159,249
Orange	3,149,042		114,950
Six-county total	36,114,281		1,407,139
State total	54,448,108		2,771,305
Six-county total as percentage of state total	66		51

A further illustration of the nearness of production to consumption areas is shown by comparing Figure 5 showing the location of the larger cities in central and south Florida, and Figure 1 showing the number of producers per county.

FORM IN WHICH MILK IS SOLD AT THE FARM.--Essentially all of the milk sold by Florida dairymen leaves the farm as whole or fluid milk. No cream is sold to dealers, less than 0.7 per cent of the milk sold is in the form of farm-churned butter, and the volume of cream sold by farmers at retail is low.

Florida dairymen sell a smaller proportion of all milk to dealers than other farmers throughout the nation (Table 3). This means that Florida dairymen distribute a larger proportion of their milk at retail than dairymen in the country as a whole. Consequently, the number of producer-distributors in Florida is relatively high. Here it is significant to note that the proportion of the total amount of milk sold by farmers at retail is declining, in both Florida and the nation as a whole.

USE THAT DEALERS MAKE OF WHOLE MILK.--The proportion of whole milk sold from farms that reaches consumers as fluid milk is much larger in Florida than in the nation. For example, in the Dade-Broward-Monroe milkshed in 1951, approximately 86 per cent of all milk sold from farms was distributed as fluid milk and 12 per cent for use in the manufacture of ice cream

FIGURE 5 LOCATION OF THE LARGER CITIES IN  
CENTRAL AND SOUTH FLORIDA, 1952



TABLE 3

PERCENTAGE OF MILK SOLD OR UTILIZED FOR PREPARATION OF DAIRY PRODUCTS SOLD FROM FARMS IN THE UNITED STATES AND FLORIDA, 1940-1951<sup>a</sup>

Year	For Farm-Churned Butter Sold (Per Cent of Total)		For Retail Sales of Milk and Cream by Farmers (Per Cent of Total)		For Deliveries to Plants and Dealers			
	U.S.	Fla.	U.S.	Fla.	U.S.	Fla.	U.S.	Fla.
1940	1.6	2.7	7.0	28.8	37.6	2.3	53.8	66.2
1941	1.4	2.4	6.4	26.5	36.4	2.1	55.8	69.0
1942	1.3	1.6	6.0	25.7	32.0	1.9	60.7	70.8
1943	1.1	1.4	6.0	23.1	31.0	1.2	61.9	74.3
1944	1.1	1.4	5.9	22.0	27.0	.5	66.0	76.1
1945	1.1	1.3	5.6	20.5	24.0	.3	69.3	77.9
1946	1.1	1.5	5.5	20.3	21.9	.3	71.5	77.9
1947	1.0	1.4	5.0	19.0	21.5	...	72.5	79.6
1948	.9	1.1	4.9	17.9	20.9	...	73.3	81.0
1949	.8	1.0	4.3	15.7	20.3	...	74.6	83.3
1950	.7	1.0	4.0	14.7	20.4	...	74.9	84.3
1951	.7	.7	3.9	14.4	19.3	...	76.1	84.9

<sup>a</sup>Calculated from data presented in Farm Production, Disposition, and Income from Milk, 1940-49: Revised Estimates, USDA, BAE, April, 1952; and Ibid. 1950-51, April, 1952.

and milk drinks.<sup>8</sup> This, and quantitative estimates on the use of milk in other sheds suggest that at least 80 per cent of all milk produced in Florida is sold by distributors as fluid milk. In contrast, only 48.5 per cent of all milk produced on farms in the nation was consumed as fluid milk and cream in 1950. Since the latter figure includes cream and fluid milk consumed on farms, it is reasonable to assume that less than 45 per cent of all milk sold from farms is sold to non-farm consumers as fluid milk.<sup>9</sup>

PRICES OF WHOLE AND FLUID MILK.---Prices of whole milk<sup>10</sup> for fluid Class I purposes in Florida are among the highest in the nation and have been for many years. In addition, a higher proportion of the whole milk sold off farms is used as Class I than in almost any other market. This results in even larger differences in producer blend prices than is evident from the fluid milk prices.

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<sup>8</sup>Data supplied by Dade County Health Bureau, Miami, Florida.

<sup>9</sup>United States Department of Agriculture, Bureau of Agricultural Economics, Dairy Situation, February, 1951, p. 12.

<sup>10</sup>For example, in April, 1953, only two markets in the United States had a higher price for 4.0 per cent butter-fat content milk than either Jacksonville or Miami, Florida. Over 80 markets had lower prices. United States Department of Agriculture, Bureau of Agricultural Economics, Washington, D. C., Fluid Milk and Cream Report, April 16, 1953, pp. 2-5.

Consumer prices for milk both delivered to homes and purchased from stores, are also higher in Florida than in almost any other market in the United States.<sup>11</sup>

#### CHARACTERISTICS OF COMMERCIAL DAIRIES

TYPES OF DAIRIES.--The 131 commercial dairies included in this study were divided into two types on the basis of the kind of business in which they engaged. One type was composed of 117 wholesale milk producers while the other type was composed of 14 producer-distributors.<sup>12</sup> Wholesale dairies<sup>13</sup> specialized in the production of whole milk and sold their product to milk dealers for processing and distribution. Producer-distributors operated two enterprises simultaneously, that is, they produced whole milk and then processed and distributed it.

ORGANIZATION OF COMMERCIAL DAIRIES.--Commercial dairies were operated by three general types of business organization: individual proprietorships, partnerships, and corporations.

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<sup>11</sup>Ibid., pp. 2-5.

<sup>12</sup>There is no widely accepted definition of a producer-distributor. Some research personnel consider an operator to be a producer-distributor only if he produces all the milk he retails, while others define him as one who produces 50 or 75 per cent of the milk he processes and distributes. Producer-distributor as used in this study denotes an operator who produces any part of the milk he processes and distributes.

<sup>13</sup>Wholesale dairies and wholesale milk producers are used as synonymous terms in this manuscript.

Nearly three-fourths of all commercial dairies studied were operated by individual proprietors (Table 4). About one-sixth were operated under partnership arrangements, and less than one-tenth were operated as corporations.

TABLE 4

ORGANIZATION OF COMMERCIAL DAIRIES IN CENTRAL AND SOUTH FLORIDA, 1953

Type of Business Organization	Wholesale Dairies		Producer Distributor Dairies		All Commercial Dairies	
	(No.)	(Per Cent)	(No.)	(Per Cent)	(No.)	(Per Cent)
Individual proprietorship	89	76.1	8	57.1	97	74.0
Partnership	20	17.1	2	14.3	22	16.8
Corporation	8	6.8	4	28.6	12	9.2
Totals	117	100.0	14	100.0	131	100.0

Only 6.8 per cent of the wholesale dairies were operated by corporations, while 28.6 per cent of the producer-distributor dairies used this form of business organization. As in other industries, the corporate form of business organization not only facilitates the acquisition of capital and the distribution of risk, but also extends the life of the firm. This may be an effective form of organization for producer-distributor dairies that employ large amounts of capital and/or operate several enterprises.

CHARACTERISTICS OF SELECTED PRODUCTION FACTORS

LAND OWNERSHIP.--Over three-fifths of the 131 commercial dairies were operating only land owned by the firm (Table 5). More than one-fourth of the farms utilized both owned and rented land, while only about one-tenth of the farms were operated entirely on rented land. Producer-distributors did not use rented land to the extent that wholesale producers did. None of the producer-distributors were operating on rented land exclusively, whereas 14.5 per cent of the wholesale producers utilized rented land exclusively for their dairy enterprises.

TABLE 5

LAND TENURE ARRANGEMENTS OF 131 COMMERCIAL DAIRIES  
IN CENTRAL AND SOUTH FLORIDA BY TYPE OF  
ORGANIZATION, 1952

Type of Land Tenure	Wholesale Dairies		Producer-Distributor Dairies		All Commercial Dairies	
	(No.)	(Per Cent)	(No.)	(Per Cent)	(No.)	(Per Cent)
Complete ownership	69	59.0	11	78.6	80	61.1
Both owned and rented land	31	26.5	3	21.4	34	25.9
Land entirely rented	17	14.5	..	....	17	13.0
Totals and averages	117	100.0	14	100.0	131	100.0

Only three of the 117 wholesale dairies rented any land out to other people. This acreage was quite small but the use that was being made of the land is typical of the way in which a substantial amount of Florida land has been improved.<sup>14</sup> The native or raw land was being cleared of trees, brush, and palmettos and planted to watermelons and gladioli. After one to three years it will be seeded with improved pasture grasses and used for the dairy herd. None of the producer-distributors rented any land to others.

Eleven of the 17 wholesale dairies that rented all of the land used for producing milk were operating under conventional rental arrangements<sup>15</sup> for the use of land and buildings. Five of these producers rented or leased land, barns and livestock (Table 6). This system is quite similar to share cropping arrangements found in other segments of the agriculture industry. One dairyman rented only the land he used and owned the barn he had built on the land, and his cows.

#### LAND USE PATTERN

Degree of Diversification.--As a rule the 117 wholesale milk-producing dairy farms included in this study were highly specialized, one product (milk) producing units.

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<sup>14</sup>Less than one-half acre per farm based on all 117 wholesale dairies.

<sup>15</sup>Rent paid monthly.

TABLE 6

RENTAL ARRANGEMENTS OF 17 COMMERCIAL DAIRY FARMERS WHO  
RENTED ALL OF THEIR LAND, CENTRAL AND  
SOUTH FLORIDA, 1953

Type of Rental	Type of Firm		
	Single Proprietor- ship	Partner- ship	Corporation
	(Number)	(Number)	(Number)
Rented land only	1	..	..
Rented land and barns	8	2	1
Rented land, barns, livestock	4	1	..
Totals	13	3	1

Only 16 producers received any non-dairy farm income during 1952. These 16 farmers averaged only 17.4 per cent of their farm income from sources other than producing milk and only two of them received more than 25 per cent of their farm income from these sources. One other farmer had a combination enterprise of beef and dairy during 1952, but had received no income from his newly established beef herd. The only farm enterprise combinations found were: (1) dairy and citrus on four farms, (2) dairy and beef on eleven farms, and (3) dairy, citrus, and beef on two farms (Table 7).

TABLE 7

FARM ENTERPRISES OTHER THAN DAIRY OF 17 WHOLESALE MILK  
PRODUCERS, CENTRAL AND SOUTH FLORIDA, 1952

Type of Non-Dairy Farm Enterprise	Number of Producers	Average Acres Utilized
Citrus	4	12.8
Beef	11	350.1
Citrus and Beef	2	
(a) Citrus		8.0
(b) Beef		17.0

The 14 producer-distributor dairies studied were producing and selling whole milk. Only two of these 14 firms received any non-dairy farm income during 1952. One of these dairies received 40 per cent of its farm income from a beef herd which utilized 600 acres, or 50 per cent of its land during 1952. The second dairy received 10 per cent of its farm income from 10 acres of citrus during 1952.

Acreage Utilized.--The average wholesale dairy in the group studied consisted of 232 acres owned by the firm and 76 acres of rented land, or a total of 308 acres. A great deal of variation was found in acreage operated. The range in acres was from four to over 1,000 acres. While the average was 308 acres per farm, the most typical size of dairy was between 50 and 99 acres (Table 8). This

difference was due largely to the number of large farms of over 500 acres.

TABLE 8

VARIABILITY IN ACREAGE USED FOR DAIRYING BY SIZE GROUPS,  
117 WHOLESALE MILK PRODUCERS AND 14 PRODUCER-  
DISTRIBUTORS IN CENTRAL AND SOUTH  
FLORIDA, 1952

Size of Farms (Acres)	Number of Farms	
	Wholesale Milk Producer	Producer- Distributor
Less than 50	14	..
50 - 99	19	..
100 - 149	10	1
150 - 199	17	..
200 - 249	9	2
250 - 299	11	2
300 - 349	6	..
350 - 399	4	..
400 - 449	6	..
450 - 499	3	2
500 - 549	8	..
550 - 599	2	1
600 and over	8	6
<b>Total</b>	<b>117</b>	<b>14</b>

The average producer-distributor dairy farm was composed of 728 acres owned and 32 acres rented, or a total of 760 acres. Although there was not as much variability in size of dairy operations as among wholesale milk producers, there was still considerable variation. The smallest producer-distributor operation was 131 acres while the largest was over 2,000 acres.

Pasture.--The land area, utilized by the 117 wholesale milk producers, was devoted mainly to the production of forage to be utilized in milk production. Only 11 per cent of the land area was used for non-dairy enterprises, such as beef and citrus production, during 1952. Eighty-three per cent of the land was devoted to the dairy enterprises, while six per cent was waste and/or unused land (Table 9).

Of the land used for the dairy enterprises on these 117 wholesale dairies, 47.7 per cent was in improved pastures, supplemental pastures and feed crops. Only very limited amounts of this acreage was in supplemental pasture or were used for raising feed crops for the dairy enterprise. Seventeen producers had 100 per cent unimproved pastures, 23 had 100 per cent improved pastures, and 77 had both unimproved and improved pastures.

Of the land used by producer-distributors in their milk production enterprises, 27.3 per cent was unimproved pasture, while 72.7 per cent was in improved pasture and feed

crops. None of the 14 producer-distributors grew any supplemental pastures and only two producer-distributors devoted any land area to growing feed crops (Table 10).

TABLE 9

LAND UTILIZATION OF 117 WHOLESALE MILK PRODUCERS IN CENTRAL AND SOUTH FLORIDA, 1952

Types of Land Use	Per Cent of Sub-total	Per Cent of Total
Land Used in Dairy Enterprise		
Unimproved Pasture <sup>a</sup>	52.3	
Improved Pasture <sup>b</sup>	45.8	
Supplemental Pasture <sup>c</sup>	.7	
Feed Crops <sup>d</sup>	<u>1.2</u>	<u>83.0</u>
Land Used in Non-Dairy Enterprises		
Beef	98.3	
Citrus	<u>1.7</u>	<u>11.0</u>
Waste and/or Unused Land		6.0
Total		<u>100.0</u>

<sup>a</sup>Native grasses, woods, palmettos.

<sup>b</sup>Cleared of brush and woods, fertilized and planted to pasture grasses.

<sup>c</sup>Rye, oats, millet for winter graze.

<sup>d</sup>Hay, silage, corn for green feed.

TABLE 10

## LAND UTILIZATION OF 14 PRODUCER-DISTRIBUTORS IN CENTRAL AND SOUTH FLORIDA, 1952

Types of Land Use	Per Cent of Sub-total	Per Cent of Total
<b>Land Used in Dairy Enterprise</b>		
Unimproved Pasture <sup>a</sup>	27.3	
Improved Pasture <sup>b</sup>	71.1	
Supplemental Pasture	....	
Feed Crops <sup>c</sup>	<u>1.6</u>	<u>75.2</u>
<b>Land Used in Non-Dairy Enterprises</b>		
Beef	99.1	
Citrus	<u>.9</u>	<u>10.0</u>
Waste and/or Unused Land		<u>14.8</u>
<b>Total</b>		<b>100.0</b>

<sup>a</sup>Native grasses, woods, palmettos.

<sup>b</sup>Cleared of woods and brush, fertilized and planted to pasture grasses.

<sup>c</sup>Hay and grass silage.

Feed Crops.--Only eight of the 117 wholesale milk producers and two producer-distributors raised any feed for dairy animals in addition to pasture during 1952 (Table 11). On these 10 farms, total farm production of the various

feed crops grown was estimated to be:

1600 tons of hay  
 1000 tons of grass silage  
 70 tons of green fodder  
 1000 tons of green chopped feed

TABLE 11

FEED CROPS GROWN, OTHER THAN PASTURE, BY 117 WHOLESAL E MILK PRODUCERS AND 14 PRODUCER-DISTRIBUTORS IN CENTRAL AND SOUTH FLORIDA, 1952

Feed Crops	Number of Producers
None (pasture only)	121
Hay	6
Hay and Grass Ensilage	1
Ensilage	1
Corn	1
Green Chopped Grasses for Barn Feeding	1
Total	131

Based upon the amount of feed grown in other states for the dairy enterprise, the amount of feed grown in Florida was extremely low. No grain was grown at all, while production of hay, silage, and other roughage totaled only slightly more than one-tenth ton per milk cow.<sup>16</sup>

<sup>16</sup>W. L. Barr, Organizing Dairy Farms for Efficient

Differences in Land Use of Wholesale Milk Producers

and Producer-Distributors.--There was little difference between producer-distributors and wholesale milk producers in the proportion of land used for supplementary pasture, or for raising feed crops (Tables 9 and 10). There was, however, a great deal of difference in the proportion of improved pastures raised. Only about 46 per cent of the land devoted to dairying by wholesale producers was in improved pastures, while over 71 per cent of the land area of producer-distributor farms was used for that purpose.

NUMBER OF DAIRY ANIMALS.--The number of milk cows on the 117 wholesale milk dairies studied varied from 6 to 850 and averaged 154 cows. The number of herd replacements being raised per wholesale milk dairy varied from none to over 300 animals and averaged 41 animals. Of all herd replacements 54 per cent were one year of age or older.

The number of milk cows on the 14 producer-distributor farms varied from 54 to over 800 animals and averaged 390. The number of herd replacements being raised varied from 10 to 800 animals and averaged 159 animals. Of these 55 per cent were one year of age or older, while 45 per cent were less than one year of age.

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Production, The Pennsylvania State University Bulletin 478, April, 1946, p. 26. According to a study made during 1941-42 in Pennsylvania over 35 per cent of the dairy farmers involved raised 75 per cent or more of their grain, 2.0 tons of silage, .8 ton of other roughage and 1.9 tons of hay per milk cow.

Differences in Size of Operations of Wholesale Milk Producers and Producer-Distributors.--The average producer-distributor farm was 147 per cent larger than the average wholesale milk producer farm, as measured by acreage. The average number of milk animals on producer-distributor farms was 150 per cent greater than on the average wholesale milk producer farm. The number of herd replacements being raised on producer-distributor farms averaged 39 per 100 milk cows. This was nearly 50 per cent higher than the ratio of 27 replacements per 100 milk cows being raised on wholesale milk producers' farms.

#### SPECIALIZED SERVICES USED

Commercial Hauling.--Of the 117 wholesale milk producers interviewed, 82 hauled their own milk to processing plants (or dealers).<sup>17</sup> Sixteen producers used hauling facilities furnished by their dealers, thirteen producers paid their neighbors to haul the milk, five producers hired their own commercial haulers, and one producer had an arrangement with a milk-producing neighbor to alternate the hauling chore (Table 12).

None of the milk produced by producer-distributor dairies studied was sold to other milk dealers. Seven of these dairies operated bottling plants on the dairy farms,

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Five of these 82 producers sold to and hauled their milk to more than one dealer outlet.

TABLE 12

METHODS OF HAULING USED BY 117 WHOLESALE MILK PRODUCERS IN  
CENTRAL AND SOUTH FLORIDA, 1952

Type of Hauler	Number of Producers	Per Cent of Producers
Self hauled	82	70.1
Dealer hauler	16	13.7
Neighbor hauled	13	11.1
Commercial hauler	5	4.3
Combination hauling (Alternating hauling)	1	.8
Total	117	100.0

thus minimizing the cost of transporting milk to processing plants. The remaining seven hauled their own milk from their dairy farms to their bottling plants. The average distance of these hauls was 12.5 miles. With but two exceptions, these seven producer-distributors were the largest of the 14 producer-distributors with an average of 166 cows per farm. Producer-distributors having one location for production of milk and a different location for processing of milk averaged over 600 milk cows per farm.

Dairy Herd Improvement Association Services.---Only eight of the 117 wholesale milk producers were members of "Dairy Herd Improvement Associations" while none of the

14 producer-distributors were members.<sup>18</sup> The eight D.H.I.A. members averaged 3.6 years younger than the 109 non-D.H.I.A. members. In addition, the eight D.H.I.A. members had an average of 1.6 years more schooling than non-D.H.I.A. members (Table 13).

TABLE 13

COMPARISON OF OPERATOR AND FARM CHARACTERISTICS OF EIGHT D.H.I.A. MEMBERS IN CENTRAL AND SOUTH FLORIDA WITH 109 WHOLESALE MILK PRODUCERS WHO WERE NON-D.H.I.A. MEMBERS, 1953

Characteristics	Eight D.H.I.A. Members (Average)	109 Non-D.H.I.A. Members (Average)
Owner's age	43.0	46.6 <sup>a</sup>
Years of schooling	10.9	9.3 <sup>a</sup>
Acres used for dairying	203.0	260.0
Per cent of land in improved pasture	51.7	47.6
Number of cows	70.0	160.0
Number of heifers	42.0	41.0
Cow-heifer ratio	.60	.26
Pasture per cow (acres)	2.9	1.6
Per cent using artificial insemination	75.0	18.0

<sup>a</sup>Includes only 75 single proprietorships.

<sup>18</sup>C. W. Reaves, "Dairy Herd Improvement Association Report," May 11, 1954 (mimeographed), Florida Agricultural Extension Service, Gainesville, Florida. According to

The D.H.I.A. members had smaller farms than non-members, as measured by acres of land used for the dairy enterprise and by total number of milk cows per farm. The land used for dairying by D.H.I.A. members consisted, however, of 51.7 per cent improved pasture as compared to only 47.6 per cent for non-members. In addition, D.H.I.A. members had 2.9 acres of pasture per milk cow as compared to 1.6 acres of pasture for non-members.

The number of heifers found on D.H.I.A. members' farms per 100 milk cows was 60 as compared to 26 for non-members, a difference of over 130 per cent. Three-fourths of the D.H.I.A. members used artificial insemination on all or part of their herds, as compared to less than one-fifth of non-members.

Evidently D.H.I.A. members, while having fewer acres per farm and smaller dairy herds than non-D.H.I.A. members, were producing more of their herds' feed needs through greater reliance on not only improved pasture but on unimproved pasture. D.H.I.A. members were also raising more of their herd replacements than non-members, and in an effort

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this information, about 4.3 per cent of Florida's dairy cows were under D.H.I.A. supervision during the second quarter of 1952. Only 8 or 6.8 per cent of the 117 dairymen in this study were members of D.H.I.A.; these 8 producers owned 3.1 per cent of the milk cows owned by the 117 dairymen. According to the 32nd Biennial Report of the Department of Agriculture, State of Florida, there were 172,000 dairy cows in Florida as of June 30, 1952. During the second quarter of 1952 there were 7,369 cows under D.H.I.A. supervision.

to improve their herds' productive capacities, were more interested in artificial insemination than were non-members.

Artificial Insemination.--Twenty-eight producers of the 117 producers interviewed used artificial insemination for all or part of their herds. Twenty-three of these 28 producers used artificial insemination exclusively. Five used artificial insemination only on part of their herds. Producers using artificial insemination exclusively averaged 116 cows per farm. These herds were smaller than herds where artificial insemination was not used; there the average herd size was 154 cows. The five producers using artificial insemination on part of their herds averaged 260 cows per farm.

No relationship was found between producers' use of artificial insemination and the number of replacements raised. The 23 dairies using artificial insemination exclusively had a heifer-cow ratio of .38 compared to an average of .26 for all 117 producers. The five producers who used artificial insemination on part of their herds had a heifer-cow ratio of .43. This suggests that since a greater proportion of the smaller dairymen used artificial insemination than did larger dairymen and dairies owned by individual proprietors were smaller than those owned under partnership and corporation arrangements, the use of artificial insemination was also found to be related to type of ownership (Table 14).

TABLE 14

ORGANIZATION OF DAIRY FARM OWNERSHIP AND USE MADE OF ARTIFICIAL INSEMINATION ON  
117 WHOLESALE MILK PRODUCING FARMS IN CENTRAL AND SOUTH FLORIDA, 1953

Type of Ownership	Artificial Insemination Used On						
	100 Per Cent of Herd		Part of Herd		None of Herd		Total
	(No.)	(Per Cent)	(No.)	(Per Cent)	(No.)	(Per Cent)	
Individual proprietor	20	22.5	3	3.4	66	74.1	89
Partnership	2	10.0	1	5.0	17	85.0	20
Corporation	1	12.5	1	12.5	6	75.0	8
Totals and Averages	23	19.6	5	4.3	89	76.1	117

## CHARACTERISTICS OF MILK DEALERS

TYPES AND SIZES OF DISTRIBUTION OPERATIONS.--Of the 27 milk dealers interviewed, 13 were distributors and 14 were producer-distributors.<sup>19</sup> The average volume of fluid milk sold by the 13 distributors during 1952 was 865,462 gallons. The range in sales volume was from 85,000 to more than 2,000,000 gallons of fluid milk sales. The average volume of fluid milk sold by the 14 producer-distributors<sup>20</sup> was 537,000 gallons during 1952. The range in sales volume was from 43,200 to nearly 1,800,000 gallons of fluid milk (Table 15). None of these producer-distributors produced enough milk on their own dairy farms to satisfy completely their Class I fluid milk distribution needs. Individually, these 14 producer-distributors produced from 10 to 80 per cent of their Class I distribution needs.

The 13 distributors, all organized as corporations, had been distributing milk from their present locations for periods of 2 to 31 years. The average distributor had been

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<sup>19</sup>The term "milk dealer" indicates both distributor and producer-distributor. The term "distributor" denotes that the firm is engaged only in processing and distribution of fluid milk and other dairy products. The term "producer-distributor" denotes a firm, that in addition to processing fluid milk and other dairy products, produces part of its own milk requirements for distribution.

<sup>20</sup>Two of these producer-distributors were located in non-Class I or retail price control areas. These two producer-distributors averaged only 149,500 gallons of fluid milk sales during 1952. The other 12 producer-distributors averaged 601,000 gallons of Class I sales.

retailing milk for 15.5 years. The 14 producer-distributors --8 operating under single owners, 2 under partnership arrangements and 4 as corporations--had been in the distribution business from 5 to 30 years. The average producer-distributor had been retailing milk for 21.6 years.

TABLE 15

SIZE OF DISTRIBUTORS AND PRODUCER-DISTRIBUTORS IN CENTRAL AND SOUTH FLORIDA AS MEASURED BY FLUID MILK SALES, 1952

Gallons Sold (000)	Number of Distributors	Number of Producer-Distributors
Less than 250	3	4
250 - 499	2	4
500 - 999	2	4
1,000 - 1,499	4	1
1,500 and over	2	1

LOCATION OF MILK DEALERS.--Twenty-three of the 27 milk dealers were located in one of the centers of population in central and south Florida. These 23 milk dealers were located in the Miami Standard Metropolitan Area, the Orlando Standard Metropolitan Area and the Tampa-St. Petersburg Standard Metropolitan Area, as well as in the cities of West Palm Beach, Lakeland, Sarasota, and Ft. Myers.<sup>21</sup> The other

<sup>21</sup>Criteria used for Standard Metropolitan Areas, cities and towns are those given in the 1950 United States Census of Population, United States Department of Commerce,

four milk dealers were located in cities of less than 5,000 population in Brevard, Hardee, and Highlands counties (Figures 3 and 5). Since milk production in Florida is, in general, concentrated around the larger cities, these 27 dealers were also located close to milk supplies as well as to consumption areas.

#### METHODS OF PRICING MILK IN CENTRAL AND SOUTH FLORIDA

There were two methods used in arriving at consumer and retail prices in central and south Florida. The first method was by administered prices or prices established by the Florida Milk Commission. This method of pricing was used in 15 of the 26 central and south Florida counties.

The second method was non-administered pricing. This method was used in 11 of the 26 central and south Florida counties.

METHODS OF PRICING MILK IN ADMINISTERED AREAS.--In 1933 the Florida legislature established the Florida Milk Commission. The Commission was directed to carry out the objectives and policies which the legislature deemed necessary to correct conditions in the Florida dairy industry.

OBJECTIVES AND POLICIES.--The objectives of milk pricing in Florida by administrative action have been confused with policies. According to state law, the policy of administered

pricing is

. . . to protect the public health, safety, and welfare. It is declared that the production and distribution of milk, cream and other milk products in the State of Florida is an industry upon which, to a large degree, the prosperity and health of the people of the State of Florida depend, and that the present economic emergency is, in part, a result of the disparity between the prices of milk, cream and milk products, and other commodities, which disparity had diminished the power of milk producers to purchase industrial products, and has broken down the orderly production and marketing of milk, cream and other milk products, and has seriously impaired the agricultural assets supporting the credit structure of the State of Florida and political subdivisions thereof; that unhealthful, unfair, unjust, destructive, demoralizing and uneconomic trade practices have grown up and have been carried on in the production, sale and distribution of milk, cream and milk products in this state which impair the dairy industry in this state and imperil the constant supply of pure and wholesome milk to the inhabitants thereof, and constitute a menace to the health and welfare of the inhabitants of this state . . . .<sup>22</sup>

The law further states that,

In order to correct abuses arising from the destructive and unfair manipulation of prices, which are found to spring from a selfish disregard of the public interest in the manner of carrying on the dairy industry, which is an organized industry, it is found necessary to resort to the legislative remedy of regulating prices to save both producers and consumers from such manipulation of prices in the industry; because such practices amount to evils which menace the health, safety and welfare of the people at large, this chapter is passed.<sup>23</sup>

In simpler language, the objectives of administered pricing in Florida are: (1) to increase incomes of dairymen, (2) to promote orderly production and marketing of milk,

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<sup>22</sup>Florida Statutes (1953), c. 501. <sup>23</sup>Ibid.

cream and other milk products, and (3) to remove unhealthful, unfair, unjust, destructive, demoralizing and uneconomic trade practices that are a menace to the welfare of the people in the state.

The policies under which the Florida Milk Commission must work to obtain these objectives are termed "powers of Milk Commission" in the statutes. These policies direct the Commission<sup>24</sup> to establish minimum prices that must be paid to the producer by milk dealers for milk and minimum prices to purchasers of home delivered milk, as well as minimum prices that wholesale outlets must pay for milk. The Commission also has the power to establish maximum producer, retail, consumer, and wholesale milk prices. These minimum and maximum prices are to be based on the different classes or grades of milk.

It is the expressed policy of the Florida Milk Statutes that the Commission shall supervise and regulate the entire milk industry of the State of Florida, including the production, transportation, manufacture, storage, distribution, delivery, and sale of milk, cream, and milk products. This expressed policy has been limited, however, by a provision that such supervision and regulation shall be done only at the request of producers. Only after being

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<sup>24</sup>On October 1, 1955, the Milk Commission discontinued minimum pricing for a period of one year.

invited to supervise and regulate a marketing area upon petition of a group of representative producers, can the Commission, after due consideration, establish administered prices. This has been interpreted to mean upon the petition of a majority of whole milk producers, producing at least 51 per cent of the milk distributed in the market. Hence, the program of the Commission has been dependent upon producer acceptance of administered prices.

TECHNIQUES USED.--Some of the techniques used by the Florida Milk Commission as aids to regulation are: (1) delineation of market areas, (2) milk classification, (3) butterfat differentials, (4) prices, and (5) other devices for adjusting supply and demand.

Market Areas.--The Commission has the power to "reasonably classify and establish definite market areas, and provide different rules, regulations and charges therefor."<sup>25</sup>

While charged with the objective of promoting orderly production and marketing of milk, cream and other milk problems and with the policy of supervising and regulating the milk industry in Florida, the Florida Milk Commission has apparently been hampered by a conflicting policy. The Commission is restricted from reasonably classifying and establishing economic marketing areas by a provision

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<sup>25</sup>Florida Statutes (1953), c. 501.04 (9).

stating "that the Commission shall not supervise or regulate any natural marketing area except upon petition of a group of representative producers who petition the Commission to invoke the provisions of this chapter as herein provided."<sup>26</sup>

The Commission is further limited in establishing or maintaining natural economic milk-marketing areas by another provision stating, "the Commission shall withdraw the exercise of its powers from any market established under the provisions of this chapter upon written application by a majority in number of the producers and producer-distributors; providing, however, that such producers and producer-distributors shall produce not less than fifty-one percent of the volume of milk distributed in said market."<sup>27</sup>

The Commission does not have the specific power to establish economic marketing areas. As a result, the regulated areas, as presently defined, are small areas which bear little or no relation to milk supply and demand areas. In most areas of Florida, wholesale milk producers are organized by counties. Hence, petitions by groups of representative producers in natural marketing areas have generally been on a county basis. This has resulted in the grouping of most marketing areas initially as single county milk-marketing areas. As producers in other counties adjacent to a county under milk control regulations desire to have

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<sup>26</sup>Ibid.    <sup>27</sup>Ibid., c. 501.20.

regulation extended to them, they have sometimes asked that they be joined in a common marketing area with the adjacent county already regulated. This has resulted in marketing areas containing more than one county. When the producers in the petitioning area did not want to be made a part of another milk-marketing area, the Commission has had to issue orders establishing them as a separate area or leave them as a non-regulated area. This has not resulted in complete integration of producers into areas from which the major markets draw their milk supplies nor has it resulted in establishing marketing areas on the basis of competitive distribution areas.

Even after establishment of two or more separate adjacent county marketing areas, the Commission has been in a poor position to require consolidation of areas. The producers, if they opposed such consolidation, could withdraw completely from milk control regulation at the request of a majority of the wholesale milk producers producing more than 51 per cent of the milk in the area. This undoubtedly has led to the maintenance of separate small marketing areas which should actually be part of larger established marketing areas. The Commission, on October 6, 1950, for example, tried to consolidate three small marketing areas<sup>28</sup> in central

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<sup>28</sup>Information obtained from "Official Orders of the Florida Milk Commission" and conversation with members of the Commission.

Florida, but was unable to do so because of producer opposition. On September 1, 1948, after 15 years of regulation, at the request of producers, the Lakeland area was split off from the rest of Polk County. During April, 1949, the area within 10 miles of Lakeland was classified as a separate milk-marketing area. In 1941 after 8 years of regulation, one county milk marketing area withdrew from Commission regulation. During 1950 this county was reinstated as a separate marketing area.<sup>29</sup> This high degree of fragmentation has resulted from policies stated in the legislation regulating the Commission.

As of January 1, 1953, 15 of the 26 counties in central and south Florida were operating under the Commission's regulations. These 15 price-administered counties were divided into 11 different milk-marketing areas. Two counties, Hillsborough and Polk, had four separate marketing areas, that is, Tampa, Plant City, Lakeland, and Polk County Marketing Areas. Seven areas included only one county each. Five marketing areas included two counties each. Three marketing areas were composed of three counties each.

Between January 1, 1953, and June 1, 1954, the Commission issued orders consolidating the Highlands County Marketing Area (five wholesale milk producers and two

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<sup>29</sup>Information obtained from "Official Orders of the Florida Milk Commission."

producer-distributors in 1952) with the Hardee County Milk Marketing Area (five wholesale milk producers and two producer-distributors in 1952). Osceola County was added to the Orange-Seminole Counties Milk Marketing Area. The Brevard County Milk Marketing Area was included as part of the Volusia-Flagler Counties Milk Marketing Area. Other areas in central and south Florida have remained unchanged.

Milk Classifications.--The Commission is empowered not only to establish minimum prices to producers, and minimum and maximum prices of milk and other fluid dairy products to consumers, but "may fix by official order the prices to be paid by milk dealers to producers and others for milk and its various grades and uses,"<sup>30</sup> as well as fixing prices applicable to various grades of milk sold by milk dealers to consumers, if the majority of the producers producing fifty-one per cent or more of the milk in a certain area have requested regulation by the Commission. The Commission has, in some areas, separated whole milk into three classes. These classes have been commonly denoted as Class I,<sup>31</sup>

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<sup>30</sup>Florida Statutes (1953), c. 501.13 (4).

<sup>31</sup>All fluid milk processed and sold includes Grade A raw or pasteurized, homogenized, with or without vitamins added, chocolate milk, certified milk and premium milk.

Class II,<sup>32</sup> and Class III.<sup>33</sup> Class I milk is the highest price classification used for producer payment. Class II milk is the second highest price classification. Class III is the lowest price classification used in pricing producer milk. Similar classifications are used in other markets in the United States.

Butterfat Differentials.--In all regulated milk markets in the United States, whole milk with varying butterfat content has been priced accordingly. Milk of high butterfat content has been recognized as having more economic value than milk of low butterfat content. The Commission has realized this economic difference in whole milk and has provided an established butterfat differential.

Pricing Techniques

Producer Level.--The Commission under its powers has established varying prices in the different milk marketing areas to be paid producers by milk dealers for all Class I milk. During the first few years of administering prices, the Commission often established minimum Class II

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<sup>32</sup>Class II milk is defined by Commission orders as milk from which cream is separated and the cream and milk (skimmed) utilized for the manufacture of such by-products as buttermilk, skim, chocolate drink, ice cream mix, etc.

<sup>33</sup>Class III milk is milk from which the cream is separated and utilized while the skim milk is dumped or given to the producer. Official Order No. 20-Q, the Florida Milk Commission, October 14, 1953.

and III prices to be paid producers. During 1952, Class II and III prices were established by administered pricing only in the Dade-Broward-Monroe (Miami) Milk Marketing Area. In the other 10 regulated marketing areas of central and south Florida, producer Class II and III prices were not established by the Commission.

**Consumer Level.**--The Commission has established minimum wholesale and retail prices to be paid by consumers in all of its regulated areas, but it has never made use of its power to also establish maximum retail and wholesale prices. Prices paid by wholesale accounts were two cents less per quart of milk than the home delivered price. The store resale price is, however, the same as the home delivered price. Minimum retail and wholesale prices are established for such products as: raw and chocolate milk, buttermilk, Grade A pasteurized, Certified and Premium milk and Homogenized milk with or without Vitamin D. Skim milk and fluid cream prices are also established by the Commission in each of the regulated areas.

**Results of Pricing Techniques Used.**--As a result of establishing only Class I producer milk prices in nearly all of the regulated areas of central and south Florida, and only fluid milk and cream at consumer levels, blend milk prices to producers are not regulated and neither are marketing margins.

In only the one marketing area of Dade-Broward-Monroe are producer blend prices effectively regulated. The Class II and III prices paid producers in the areas where these prices are not regulated by the Commission have at times been only one-half or less of the regulated class price where Class II and III prices were regulated.

Dealer marketing margins on fluid milk and cream have never been regulated in any area except the Dade-Broward-Monroe Area. Since only milk to be used as fluid (Class I) has been regulated in these other areas and milk to be used as fluid cream has been unregulated, dealer marketing margins have been unregulated.

Adjusting Supply to Demand.--In any one price-administered milk marketing area of the United States there are two periods toward which programs for adjusting supply to demand are aimed. The first period is usually considered a short run period wherein an attempt is made to adjust supply to demand over a one-year period or on a seasonal basis. The second period is for a longer run period of time than one year.

Short-Run Adjustments.--The Florida Milk Commission, prior to 1954, left the problem of adjusting supply to demand in the short run largely to the producers and milk dealers. In only one or two areas in central and south Florida had the Commission established a method adjustment by use of a

base-quota or base-surplus plan.<sup>34</sup> In the other areas of central and south Florida where prices were established by administrative action, use of a base-quota or base-surplus plan was not a part of the Commission's regulation. The common practice in these areas, however, was for milk dealers to use a form of the base-quota or base-surplus plan with their producers. During 1954 the Commission made the use of a base-surplus plan mandatory in each price regulated area in central and south Florida.

Long-Run Adjustments--The Florida Milk Commission has relied on public hearings in adjusting supply to demand over the long run period. Adjusting prices of the various class uses established by the Commission has been the sole means of making this adjustment. These public hearings have generally, if not always, been held at the request of interested producers. At these hearings, producers, dealers and consumers are invited to testify. Producer cost of

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<sup>34</sup>Base-surplus or base-quota plans vary considerably. In general, producers selling milk to a dealer under a base plan are assigned a daily or monthly volume base in accordance with the relationship between their total shipments during a designated base period and the dealers' Class I sales during the period. The base period used is generally the time of lowest production in relation to fluid milk sales. These bases are then used during the remainder of the year to determine the Class I utilization of the producer's milk. For example, in Florida a producer may supply 5 per cent of all the milk received by a dealer during the base period (January-February in some markets). Throughout the rest of the year the producer may be paid 5 per cent of the dealer's fluid milk sales during each pay period. Milk production higher than the base is considered "surplus."

production records, usually based on the previous year's operations, are generally presented at such public hearings. These records are witnessed by a notary public and sworn to be correct by the presenting producers appearing before the Commission. Only those producers who care to do so present such testimony at these public hearings.

The law specifically states that,

. . . the Commission shall take into consideration all conditions affecting the milk industry including the amount necessary to yield a reasonable return to the producer and to the milk dealer. In determining what is a reasonable return to the producer, the Commission shall take into consideration the necessary cost incurred in that particular locality in maintaining dairy animals in a healthy condition, paying wages and supplying working conditions to employees sufficient for their subsistence at levels generally obtaining and for the safeguarding of their health in defraying the ordinary fixed charges and operating expense incidental to the ownership, control and management of a herd of average numerical size, including a reasonable amount representing annual rent of land equipment necessarily utilized therein and in addition to afford such producers a reasonable return in excess of their cost of production. In determining the reasonable return to the milk dealer, the Commission shall take into consideration reasonable average operating expense in processing, storage, transportation and delivery charges and all necessary reasonable expenses connected therewith.<sup>35</sup>

Based upon testimony of producers, the Commission established the various producer Class I prices in the individual marketing areas. Class I prices are always established in every area. At the producer level a uniform

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<sup>35</sup>Florida Dairy Statutes (as amended, 1953),  
c. 501.

butterfat differential has been established by the Commission in the regulated areas of central and south Florida. This differential amounts to 5.8 cents per hundredweight for each one-tenth of one per cent variation from the established class prices which are based on 4.0 per cent butterfat content milk.

Class II producer prices as of January 1, 1953, were established by the Commission in only one of the eleven administered milk marketing areas in central and south Florida. Class II prices in this marketing area (Dade-Broward-Monroe) were established through use of a formula which was based on the competitive price of butter in Chicago on the butter market, plus an allowance for the overrun in making butter, plus an allowance for transportation charges from Chicago to Florida, plus the price of the solids-not-fat of 4.0 per cent butterfat milk, plus transportation charges, times a yield factor for determining the amount of solid-not-fat on a dry basis which can be made from a hundredweight of 4.0 per cent butterfat milk, plus a butterfat differential of 5.8 cents per hundredweight.

Producer Class III prices as of January 1, 1953, were established in only the Dade-Broward-Monroe Milk Marketing Area. Class III prices were established by use of the formula given above without any allowance for the non-fat solids.

Minimum retail and wholesale prices for dealers are also established at public hearings. Only rarely do dealers present testimony based on statistical data or cost accounts to show what marketing spread is needed to allow them a reasonable profit. Testimony usually given consists of generalized statements under oath that the marketing spreads elsewhere are larger, or that labor costs, package container costs or equipment costs have changed.<sup>36</sup>

The Commission after due consideration to determine the marketing spread needed, establishes the retail and wholesale prices of dealer sales. It has been the custom in the past to price wholesale fluid milk sales at two cents per quart less than retail sales. The store handling margin is generally two cents per quart. Milk delivered to homes and milk bought from stores by consumers thus have identical prices.

#### COMPLIANCE WITH REGULATIONS

Producer Class I, II, and III Prices.--The Commission's established Class Prices to be paid producers were followed without exception by the 27 milk dealers included in the study.<sup>37</sup> In several instances, more than the minimum prices was paid producers for Class I.

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<sup>36</sup>This was true at two hearings the author attended. Data furnished by other people indicated that this was true at other hearings also.

<sup>37</sup>No data was found to the contrary.

Butterfat Differentials.--Butterfat differentials of one-tenth cent per one-tenth per cent of butterfat per gallon or 5.8 cents per hundredweight of milk per each one-tenth per cent butterfat above or below a 4.0 per cent content level are established and are mandatory in each of the 11 milk marketing areas of central and south Florida. Little attention has been paid to this provision by milk dealers. Of the 112 wholesale milk producers<sup>38</sup> located in administered areas, 40 producers (35.7 per cent) were not being paid for their milk on the basis of butterfat content. These 40 producers were located in 9 of the 11 marketing areas. In some instances, these producers received 100 per cent Class I prices for their milk in lieu of butterfat payments; in other instances the established butterfat differential was subtracted for milk of less than 4.0 per cent butterfat, but was not added when the milk was above 4.0 per cent. In many cases, these producers were paid one or two cents per gallon more than the established Class I 4.0 per cent butterfat content price,<sup>39</sup> while in numerous other

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<sup>38</sup>Four other producers interviewed were located in non-administered areas; none of these four were paid on the basis of butterfat content. One other producer interviewed in an administered area sold all his milk retail to customers coming to his farm.

<sup>39</sup>One dealer, who paid one cent a gallon above the established class price in lieu of paying a butterfat differential, reported that in the near future he would be forced to pay on the basis of butterfat content because the

cases, no provision was made in lieu of payment on the basis of butterfat content. In one rather unique case, a producer did not receive any butterfat differential because of "free" transportation of his milk from the farm to the dealer's plant. This producer, in the event that his butterfat content dropped below 4.0 per cent, had an agreement to pay transportation charges.

It is probable that dealers purchasing milk from producers on any basis other than butterfat content would not be doing so if it were not more profitable.<sup>40</sup> These wide variations and deviations, in paying for milk of less than or more than 4.0 per cent butterfat content, would appear to make adequate supervision of the industry much harder than if these deviations did not exist. Hence the effectiveness of the Commission in fulfilling its objectives has been decreased.

Of the 27 milk dealers interviewed, only 14 paid for milk on the basis of butterfat differentials. Eleven of the dealers who did not pay butterfat differentials were located in milk control areas where butterfat differentials were provided and were mandatory of payment. These 11 dealers sold

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butterfat content of his producers' milk had dropped over a period of years, to the point where instead of making money by not paying for butterfat, he was losing money on each gallon purchased.

<sup>40</sup>One dealer indicated that the reason he was not paying for butterfat content was because it was more profitable to buy milk on a flat price basis.

approximately 23 per cent of the total fluid milk sold by the 25 dealers interviewed who were located in milk control areas during 1952.

Characteristics of Distributors Not Paying Established Butterfat Differentials.--Only nine of the 13 milk distributors interviewed paid for milk on the basis of butterfat content. The four distributors who did not pay for milk on the basis of butterfat content were located in four of the established marketing areas. In each of these four areas butterfat differentials were regulated by the Commission. These four distributors not complying with pricing regulations were characterized by three factors:

1. Three of the four distributors were among the smallest five distributors interviewed. Only one of the four was among the largest five distributors in sales volume during 1952. These four distributors, while representing 31 per cent of the 13 distributors interviewed, handled only 17.4 per cent of total fluid milk sales during 1952.
2. The four distributors who did not pay butterfat differentials paid for milk from producers on the basis of 100 per cent Class I prices. Two of these four distributors worked closely with their producers in an effort to equate the volume of whole milk produced with the sales volume of fluid milk sold. As a result of this collaboration, the distributors were able to sell all of the whole milk they received as fluid milk and hence pay the producers Class I prices for their entire output.

The other two distributors did not work closely with their producers to achieve a close relationship between production and sales, and at times refused to take all of their

producers' milk production at any price. In other words, they did not buy the milk if they could not use it in the production of fluid milk.

3. Two of these four distributors did not use any base-quotas with their producers. All other distributors used some variation of the base-quota plan.

#### Characteristics of Producer-Distributors Not Paying

Established Butterfat Differentials.--Nine of the 14 producer-distributors interviewed said they did not pay for milk on the basis of butterfat content. Seven of the nine that did not pay for milk on this basis were located in marketing areas in which the use of butterfat differentials were mandatory; two were located in uncontrolled market areas.

These seven producer-distributors not complying with the Commission regulations were characterized by three factors:

1. The seven producer-distributors who did not purchase milk from producers on a butterfat basis were relatively small; their sales of fluid milk averaged only one-third of the sales of the other five producer-distributors during 1952.
2. Four of the seven producer-distributors who did not pay butterfat differentials paid 100 per cent Class I prices to their producers during 1952. Only one producer-distributor of the five who paid butterfat differentials purchased producer milk on the basis of 100 per cent Class I.
3. Five of the seven producer-distributors who did not pay butterfat differentials used some variation of the base-quota plan during 1952. Of the five producer-distributors who paid butterfat differentials, only one used the base-quota plan during 1952.

The two producer-distributors in non-control areas were characterized by having relatively small Class I sales volumes during 1952, paying for producer milk on the basis of 100 per cent Class I use, payment on a flat price per gallon basis without regard to butterfat content, and non-use of any base-quota plan during 1952.

#### Consumer Class I Prices

**Retail Prices.**--None of the 27 milk dealers interviewed gave any indication that the Commission's consumer retail prices were not followed.

**Wholesale Prices.**--The Commission establishes wholesale prices for milk sold by dealers to stores, restaurants, hotels and other larger accounts. Information obtained from the 27 milk dealers indicated that discounting practices<sup>41</sup> on wholesale accounts were rampant.

Ten dealers out of 15 who answered the question "What are your marketing problems?" listed discount practices as a major problem. These 10 milk dealers were located in 5 of the 11 separately administered milk marketing areas of central and south Florida. Discounts ranged from 2 and 3 per cent in some areas to over 15 per cent in at least one area.

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<sup>41</sup>These discounting practices enable the wholesale accounts to have a wider spread on their sales, since little or none of these discounts are passed on to the final consumer in the form of lower prices.

Further evidence of wholesale discounting was found in the Miami market. Reliable sources reported that dealers had been meeting once weekly, in the same building where the Commission office is located, in a futile attempt to control discounting practices.<sup>42</sup> At last reports, these meetings had not resulted in eliminating illegal discount practices.

METHODS OF PRICING MILK IN NON-ADMINISTERED AREAS.--Of the 26 central and south Florida counties included in this study, 11 counties were not subject to the Commission's price regulations during 1953. Because of the nearness of these areas to administered areas, there appeared to be some influence upon prices found in the non-administered areas. In effect, producers in unregulated areas could, by suggesting to their dealers that they were interested in having administered pricing, achieve prices which were closely related to administered prices in nearby regulated markets.

MILK CLASSIFICATION.--Milk classification in these non-administered areas might well be said to be non-existent. Milk was regarded as milk and not thought of as Class I, II, III or any other type of classification. Milk was bought by milk dealers at a flat price per gallon and sold to consumers as fluid milk at a price the dealer or dealers felt was necessary to maintain operations. In most cases milk produced

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<sup>42</sup>An invitation to attend one of these meetings was declined by the writer.

in excess of the dealers' Class I needs was rejected by the milk dealer.

ADJUSTING SUPPLY TO DEMAND--In the non-administered areas of central and south Florida, there were no organized methods used in adjusting production to consumption. Dealers worked closely with their producers in order to give them some idea of when consumption of fluid milk was highest and lowest. Producers attempted to adjust their breeding programs so that production closely followed consumption. In some cases, dealers refused to take all the milk produced by each of their producers during several months of each year at Class I prices. The surplus milk above Class I needs was turned back to the producers to dispose of as they saw fit.

QUALITY OR BUTTERFAT DIFFERENTIALS.--In non-administered pricing areas, butterfat differentials were neither established nor paid. By common agreement between the dealers and their producers, the butterfat content of wholesale milk was to be 4.0 per cent or greater.

PRICE POLICIES.--Prices to producers were based on a flat price per gallon. These prices appeared to follow the established Class I price for 4.0 per cent butterfat content whole milk in nearby administered pricing areas. Both retail and wholesale prices of Class I milk in non-administered areas also appeared to follow the established retail and wholesale prices in nearby price administered areas.

III. PRICE STRUCTURE PREVAILING IN  
CENTRAL AND SOUTH FLORIDA

CONSUMER PRICES

GEOGRAPHIC PRICE STRUCTURE.--As of January 1, 1953, the milk prices per quart for milk delivered to homes, or for milk purchased from stores, varied from 24 to 26 cents in central and south Florida. Consumer prices were highest in the Dade-Broward-Monroe (Miami) Area and lowest in the Manatee-Sarasota Area.

FLUCTUATIONS OF CONSUMER MILK PRICES.--Consumer milk prices in central and south Florida have been relatively inflexible. During the three years of 1950, 1951, and 1952, no price changes were made by the Commission in four of the eleven marketing areas. These four areas were Highlands, Polk, Lakeland, and Brevard. Only one consumer price change was made in the Tampa, Manatee-Sarasota, Plant City, and Pinellas Areas. Only two changes were made in the Orange-Seminole, Martin-Palm Beach-Hendry, and Dade-Broward-Monroe Areas.

Consumer price fluctuations in the two large markets of Tampa and Miami can be considered as fairly representative of price changes made in the central and south Florida areas.

The Tampa marketing area experienced one price change upward during October, 1950, and no changes in 1951 and 1952. The Miami (Dade-Broward-Monroe) Area experienced one price change downward in June, 1950, and one price change upward in September, 1951. No changes were made during 1952 (Figure 6).

During the same three-year period, markets operating under administered pricing in other states with Milk Commissions experienced considerably more flexibility in consumer prices. For example, Pittsburgh had five adjustments upward and two downward, Atlanta had three adjustments upward and one downward, and Los Angeles had five adjustments upward and one downward (Figure 6). Administered prices at the consumer levels in the Tampa and Miami markets appear to be even more inflexible when compared with prices in Federal Order Markets where consumer prices are not determined by regulation. Chicago experienced 20 adjustments, 13 upward and 7 downward; Boston had 16 adjustments, 9 upward and 7 downward, while New York City had 23 adjustments, 11 upward and 12 downward (Figure 7).<sup>43</sup>

#### PRODUCER PRICES

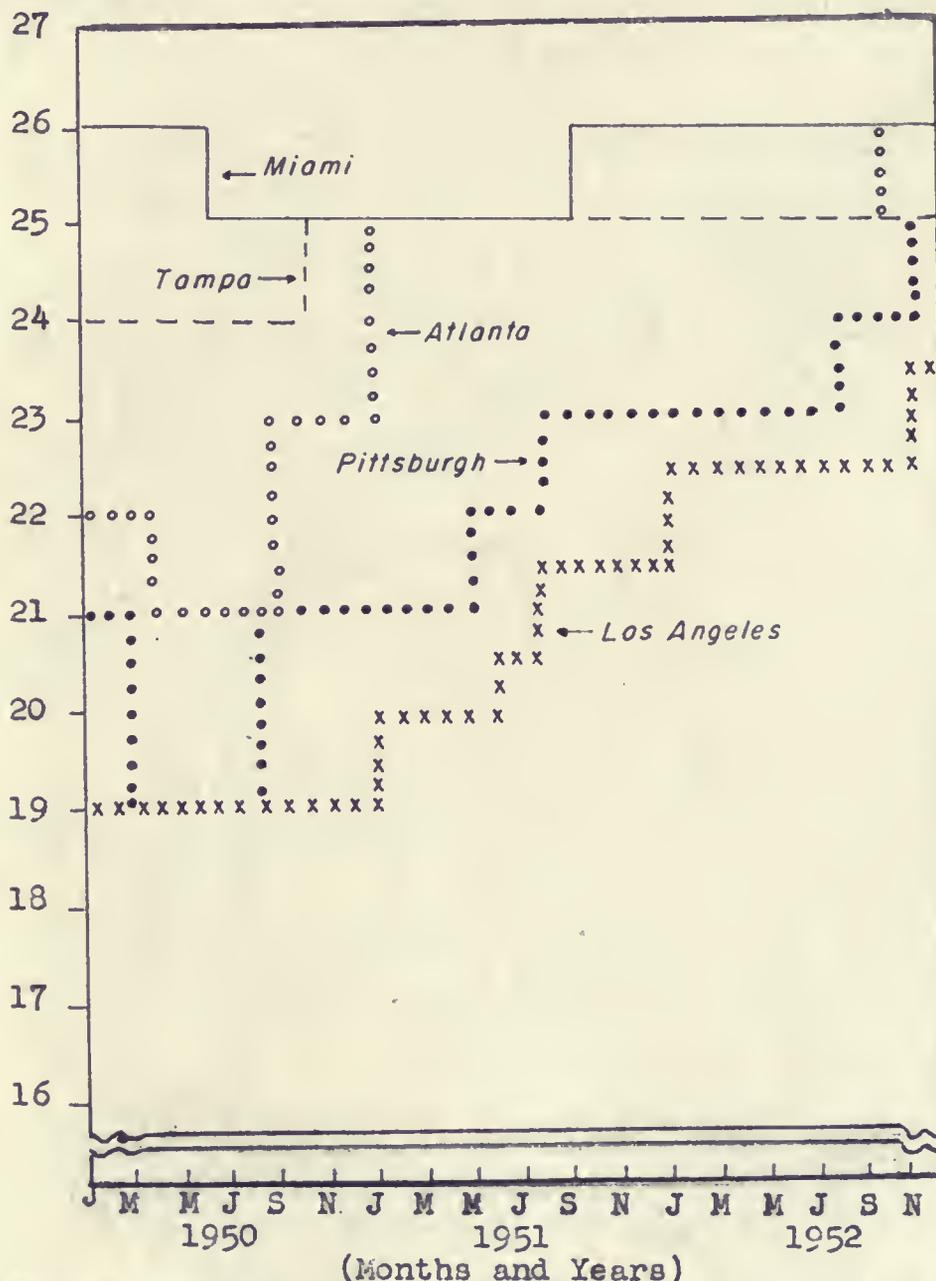
GEOGRAPHIC CLASS I PRICE STRUCTURE.--As of January 1, 1953, producer Class I prices varied from a low of 51 cents per

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<sup>43</sup>United States Department of Agriculture, Bureau of Agricultural Economics, Washington, D. C., Fluid Milk and Cream Report, 1950-1952.

FIGURE 6 RETAIL PRICES PER QUART OF MILK IN SELECTED CITIES OF THE UNITED STATES, 1950-52\*

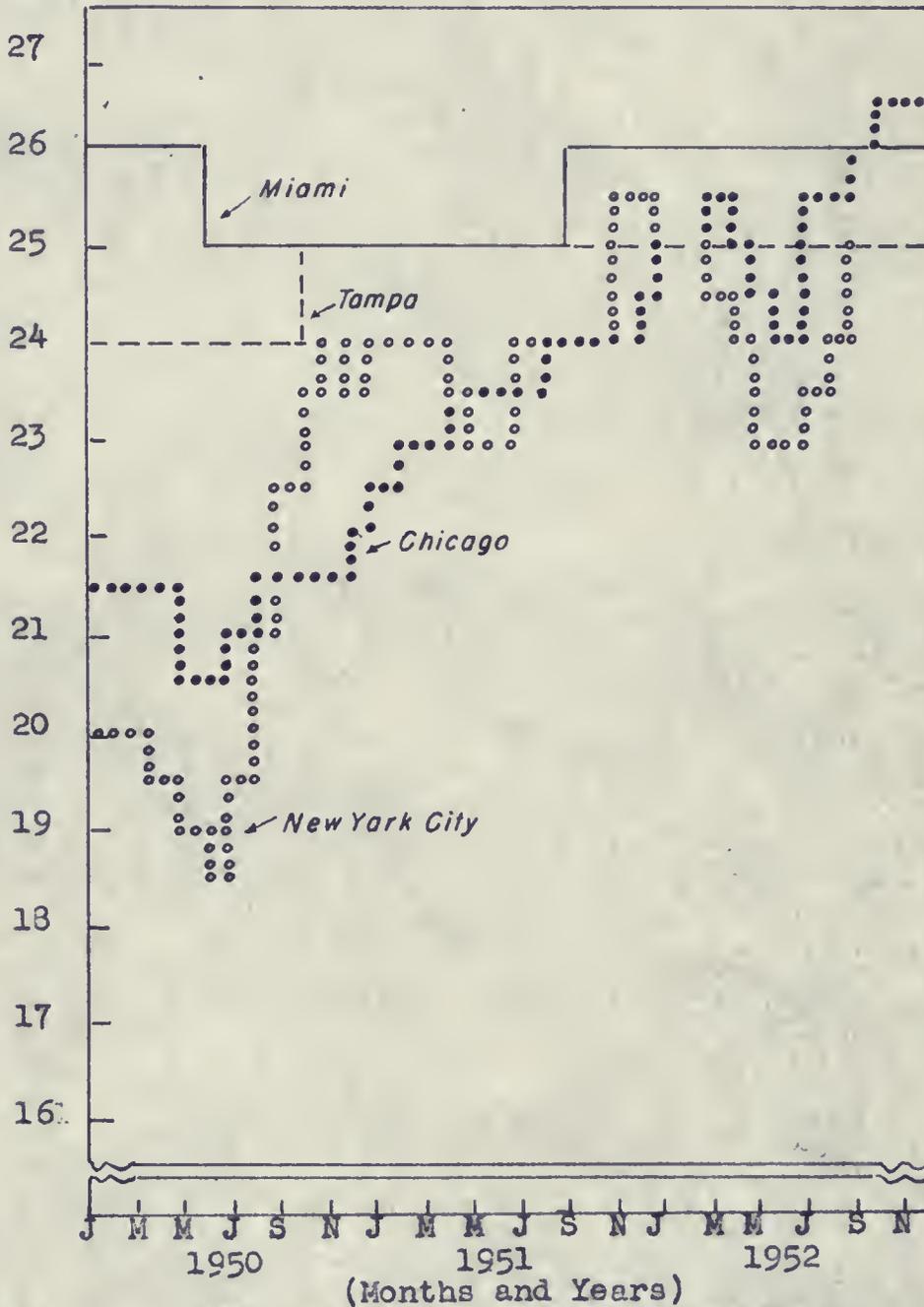
Price per quart.  
(cents)



\*Source—United States Department of Agriculture, Bureau of Agricultural Economics, Fluid Milk and Cream Reports, Washington, D. C. and Official Orders of the Florida Milk Commission, 1950-52.

FIGURE 7 RETAIL PRICES PER QUART OF MILK IN TAMPA AND MIAMI, FLORIDA\* AND IN THE FEDERAL ORDER MARKETS\*\* OF CHICAGO AND NEW YORK CITY, 1950-52.

Price per quart  
(Cents)



\*Source—Official Order of the Florida Milk Commission, 1950-52.

\*\*Source—United States Department of Agriculture, Bureau of Agricultural Economics, Fluid Milk and Cream Reports, Washington, D. C., 1950-52.

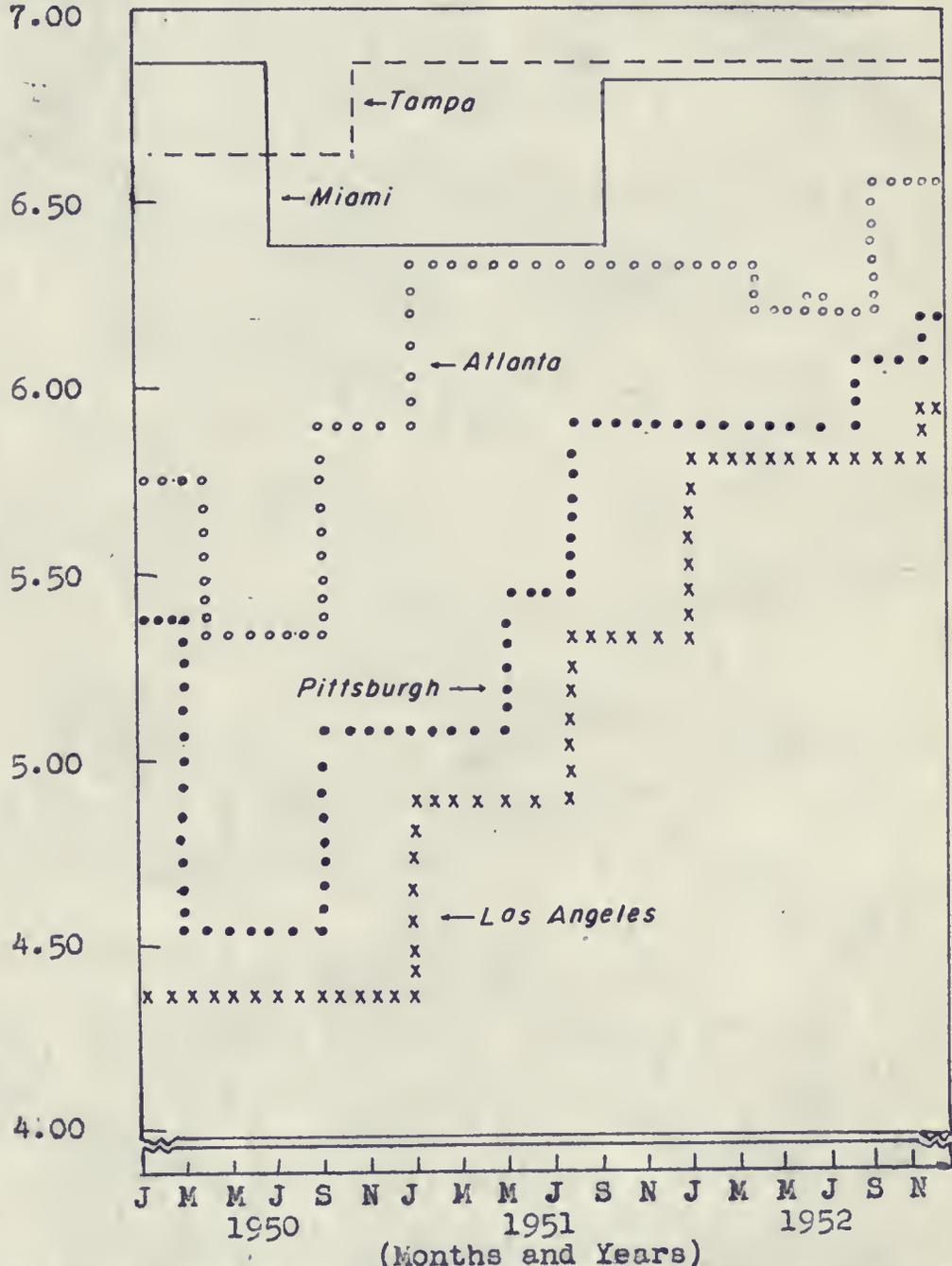
gallon of 4.0 per cent butterfat content milk, to a high of 61 cents per gallon in the administered areas of central and south Florida.

The lowest producer price of 51 cents per gallon was found in Highlands, while the highest price of 61 cents was found in the Lakeland, Polk, and Dade-Broward-Monroe Areas. The Orange-Seminole Area had a price of 57 cents per gallon. A 60-cent price was found in the Martin-Palm Beach-Hendry Area. All others had a price of 59 cents per gallon.

FLUCTUATIONS OF PRODUCER CLASS I PRICES.--The producer Class I prices in central and south Florida have been very inflexible. During the three years 1950, 1951 and 1952, no changes were made by the Commission in Class I producer prices in the Highlands, Polk, Plant City, and Manatee-Sarasota Areas. During the same period, milk prices were changed only once in the Lakeland, Pinellas, Tampa, and Brevard Areas, and twice in Orange-Seminole, Dade-Broward-Monroe, and Martin-Palm Beach-Hendry.

In other state price-regulated markets in the United States, producer prices have been much more flexible. Pittsburgh Area prices changed seven times, five upward and two downward. Atlanta prices changed eight times, five upward and three downward. In Los Angeles there have been five changes, four upward and one downward (Figure 8).

FIGURE 8 PRODUCER PRICES PER HUNDREDWEIGHT OF MILK IN THE STATE REGULATED MARKETS OF TAMPA, MIAMI, PITTSBURGH, ATLANTA AND LOS ANGELES, 1950-52.  
 Price per Cwt. (do.)  
 7.00



\*Source--United States Department of Agriculture, Bureau of Agricultural Economics, Fluid Milk and Cream Reports, Washington, D. C., and Official Orders of the Florida Milk Commission, 1950-52.

In comparison with producer prices under Federal Market Orders, producer prices have been even more inflexible. The Class I producer prices in Chicago were adjusted 25 times, 11 upward and 14 downward. In Boston there were 23 adjustments, 13 upward and 10 downward. In New York City there were 33 adjustments, 15 upward and 18 downward (Figure 9).

CLASS II AND III MILK.--The Commission regulated Class II and III milk prices in only the one area of Dade-Broward-Monroe (Miami). In the other 10 Class I price-regulated areas, non-administered pricing is relied upon to determine non-Class I prices. Since the Class II and III prices in Miami are tied to Chicago butter prices,<sup>44</sup> these Class prices change monthly. In the markets where Class II and III prices are not established by the Commission, the unregulated prices tend to be considerably less than the regulated prices in the Miami Area.

#### BLEND PRICES

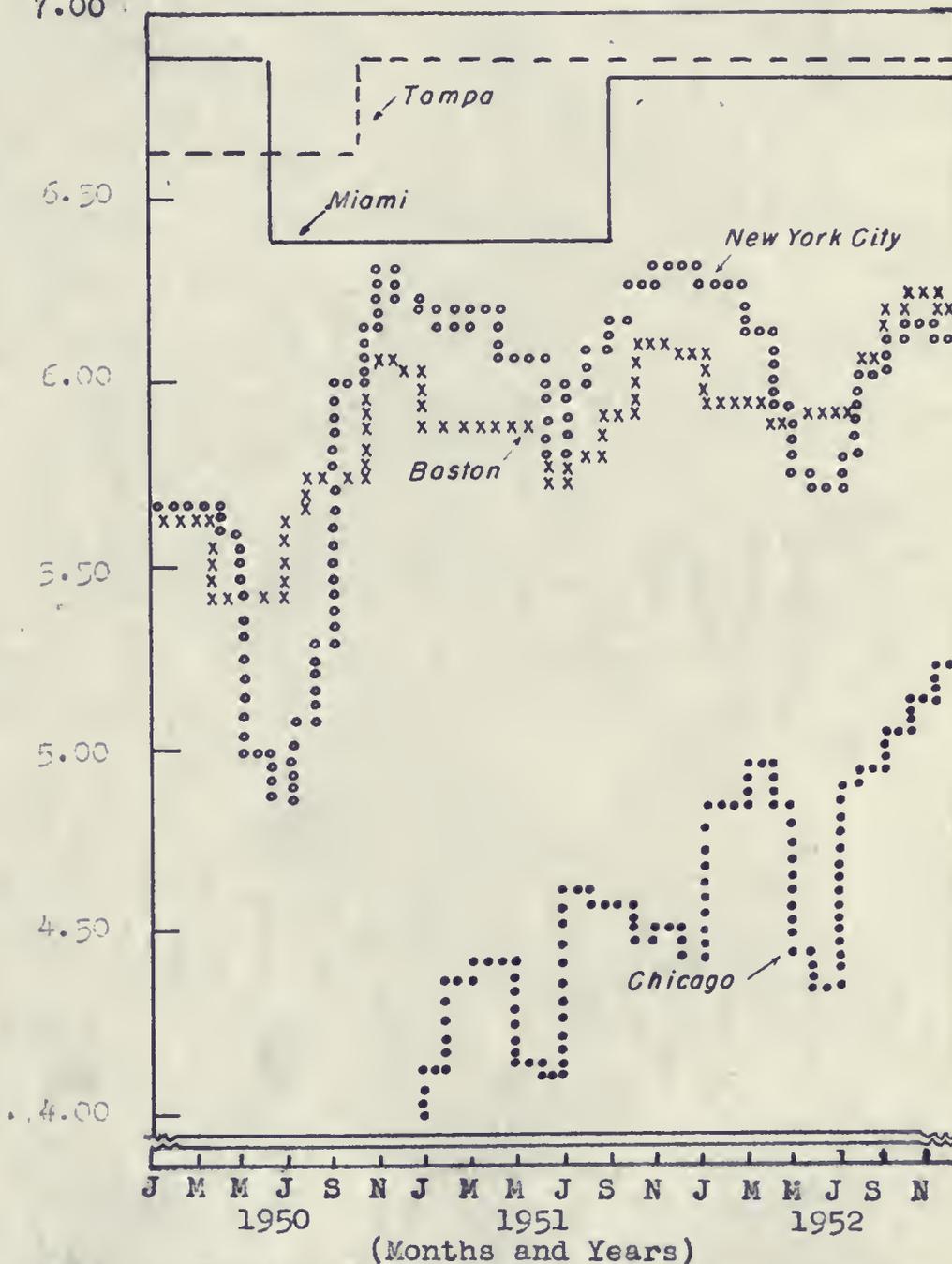
DIFFERENCES BETWEEN PRICES PAID TO PRODUCERS SELLING TO THE SAME OUTLET.--In central and south Florida, although the Class I price is established by the Commission in the various

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<sup>44</sup>Chicago butter prices are generally used by all State and Federal pricing agencies since Chicago is the nation's main commodity market for butter. National prices vary from Chicago prices generally by transportation costs only.

FIGURE 9 PRODUCER PRICES PER HUNDREDWEIGHT OF MILK IN TAMPA AND MIAMI, FLORIDA AND THE FEDERAL ORDER MARKETS OF CHICAGO AND NEW YORK CITY, 1950-52.\*

Price per  
Cwt.  
(do.)  
7.00



\*Source--United States Department of Agriculture, Bureau of Agricultural Economics, Fluid Milk and Cream Reports, Washington, D. C., and Official Orders of the Florida Milk Commission, 1950-52.

markets, no provision has been made in regard to equalization of the proportions of each producer's milk to be used in the various classes.<sup>45</sup> The one exception was the Dade-Broward-Monroe (Miami) Area where the Commission has established base-quota periods and made the use of base-quotas mandatory. Establishment of individual bases must be related to each producer's sales to his dealer during the base period in this area.

As a result of the lack of specific Commission provisions in regard to equalization of the proportions of each producer's milk to be used in the various classes, many, if not most of the producers in established price areas in central and south Florida, are not a part of any pooling device. In effect, many producers are not even selling milk by the simplest and most widely used milk pool known, that is, individual-handler pool. Producers selling to the same outlet do not receive uniform average blend prices for their milk. Each producer's blend price is a result of the producer's bargaining power with his milk outlet. Deviations from individual-handler pools were shown by data obtained from dealers and producers. The following deviations have

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<sup>45</sup> During 1954 base-quota periods were established in all central and south Florida marketing areas. The base-quotas based on the established period may have eliminated producer blend price differences when producers sell to the same outlet, except for differences due to the use of the base-quotas.

been given as examples:

Dealer A

- Producer 1 - Gave a base arbitrarily and received 100 per cent Class I prices during 1952.
- Producer 2 - Received 100 per cent Class I prices during 1952. Producer leased barn and land from dealer.
- Producer 3 - Received 100 per cent Class I prices during 1952. Producer owed dealer money for a production loan.
- Other Producers - Received varying amounts of Class II during 1952.

Dealer B

- Producer 1 - Received 100 per cent Class I prices during 1952 as per written contract. Other producers did not have written contracts.
- Producer 2 - Dealer has not allowed this producer to change base-quota in five years although other producers reset base figures yearly.
- Producer 3 - Base-quota raised 50 per cent after producer told dealer that making barn improvements would be impossible unless a greater proportion of milk brought Class I prices

Dealer C

- Producer 1 - Received 97 per cent Class I prices during 1952 as per written contract. Other producers did not have a written contract.
- Other Producers - Received large proportions of Class II prices and producers had not been able to change base-quotas in several years.

#### Dealer D

Producer 1 - Received 100 per cent Class I prices during 1952 after complaining to dealer D about the amount of milk paid at Class II prices during 1951.

Producer 2 - Dealer D promised to pay for a larger proportion of milk at the Class I price after producer threatened to sell to another dealer.

Producers 3, 4, and 5 - These producers received large amounts of Class II during 1952.

#### Dealer E

Producer 1 - Received 100 per cent Class I during 1952, although no base-quota had been assigned.

Other Producers - Varying proportions of their milk were bought as Class II, in accordance with base-quotas.

Producer discrimination in buying policies of dealers can make a great deal of difference in prices received by producers selling to the same dealer.<sup>46</sup> Using a theoretical model, an illustration of this will be helpful in emphasizing these differences.

Assuming that there are two producers of equal size insofar as herds and farm facilities are concerned, and that the production per cow is equal, with identical butterfat tests and identical seasonality of production, the dealer pricing policies can greatly affect returns to producers. If both producers sell 200,000 gallons of milk to their dealer

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<sup>46</sup> See Appendix B.

during a single year, and one received 100 per cent Class I (61 cents), while the other received enough non-Class I to force his yearly average blend price down to 54 cents per gallon, there would be a difference of seven cents per gallon. Based on 200,000 gallons this price difference amounts to \$14,000 annually. This difference could not exist except under conditions of producer discrimination which results in immobility of producers.

DIFFERENCES BETWEEN PRODUCERS SELLING TO DIFFERENT DEALERS

IN THE SAME MARKET.--Wide differences exist in annual blend prices received by producers selling in the same market.

These prices differ because of differences in (1) contractual arrangements with dealers, (2) seasonal production patterns of producers, (3) Class I sales patterns of the various dealers, and (4) butterfat content of the milk. Illustrations of differences in average annual prices paid to producers due to these four factors are presented below.

Differences in average producer blend prices due only to contractual arrangements was 2.75 cents per gallon of whole milk for two producers selling to the same dealer in a central Florida area. One producer received 100 per cent Class I prices for his milk while another producer received only 85.7 per cent Class I during the last four months of 1952. Using a hypothetical volume of 5,000 gallons

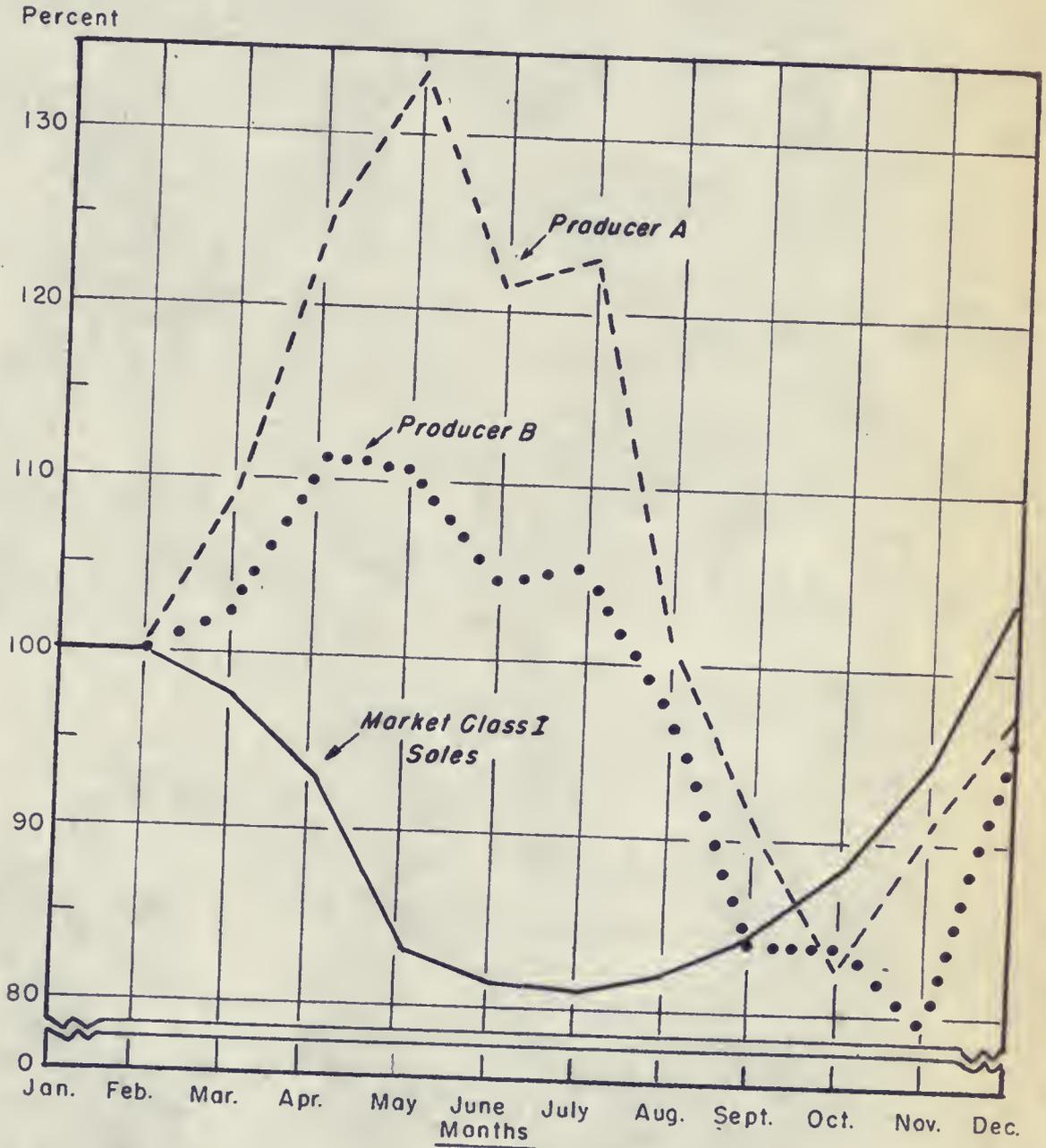
monthly this difference would amount to \$137.50 monthly, or \$1,650 yearly.

Differences in producer prices due to different seasonal production patterns by dairy farmers in relation to Class I milk sales by dealers is shown by the following example: Two producers (producer A and producer B) in the Miami market varied 42.5 per cent and 33.0 per cent respectively from Class I fluid milk sales in the markets (differences between high and low production figures, Figure 10). Assuming that both producers had received 100 per cent Class I prices during the base-setting months of January and February and during the months when their production fell below their allotted bases during the fall, one producer received some Class II payment from March through August and one from March through September. Because of the better adjustment of producer B to Class I sales he would have received an average annual blend price of 59.73 cents per gallon in 1952 while Producer A would have received 54.87 cents per gallon. This difference was 4.86 cents per gallon.<sup>47</sup> The total annual return to producer A was \$69,963.20 for 127,500 gallons of

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<sup>47</sup> Assuming the Class I price of 61.0 cents per gallon and the average Class II price of 47.8 cents per gallon during 1952 as established by the Florida Milk Commission for 4.0 per cent butterfat content milk was paid producers.

FIGURE 10. COMPARISON OF SEASONAL PRODUCTION PATTERNS OF TWO PRODUCERS IN THE MIAMI AREA WITH CLASS I MILK SALES OF DEALERS, USING A JANUARY-FEBRUARY BASE, FLORIDA, 1952.



milk and \$70,305.60 for 117,700 gallons of milk for producer B.

An example of differences in producer prices due to Class I milk sales patterns of various dealers is shown in the following hypothetical example. Several assumptions need to be made:

1. The Class I price in the market is 61 cents per gallon.
2. Each producer sells to his dealer 5,000 gallons of 4.0 per cent butterfat content whole milk each month.
3. Dealer A buying from producer A can use all of the milk purchased from producer A as fluid Class I milk for six months and 90 per cent as Class I for the remaining six months.
4. Dealer B buying from producer B can utilize all his purchases as Class I milk for six months but only 80 per cent as Class I for the remaining six months.
5. A Class I price of 61 cents per gallon and a Class II price of 47.8 cents per gallon.
6. All milk not utilized as Class I was purchased at Class II prices.

Using these assumptions producer A selling to dealer A would have received an annual blend price of 60.34 cents per gallon while producer B selling to dealer B would have received 59.68 cents per gallon. This difference due solely to Class I milk sales patterns of the dealers would be .66 cents per gallon. The yearly difference would be \$396.

Differences in returns to producers due to butterfat variation are readily apparent. For example, if two producers

sell 60,000 gallons of 5.0 per cent butterfat content milk yearly to their dealers and one producer receives the established Class I price and butterfat differential, while the other producer received only the 4.0 per cent butterfat Class I price, the difference is five cents per gallon.<sup>48</sup> The annual difference would be \$3,000.

DIFFERENCES BETWEEN PRODUCERS SELLING TO DEALERS LOCATED IN

DIFFERENT MARKETS.---There have been wide differences in annual blend prices received by the producers located in the various regulated markets of central and south Florida.

These differences in annual blend prices have been generally conditioned by one or more of six factors:

1. Differences in established Class I prices in the regulated areas. For example, in the past, differences in Class I prices to producers in different marketing areas have accounted for large differences in prices paid to producers located and selling milk in different marketing areas. They may be justified to the extent that such prices accurately reflect different competitive costs of production. However, in many central Florida marketing areas, first one, then another of the areas has had the lowest or highest producer Class I prices. No one area has consistently been high or low in price. The very inconsistency of these producer Class I prices points out the extreme difficulty the Commission has in pricing Class I milk from cost of production reports submitted by producers at price hearings. If these cost of production figures are inadequate, should they be used as the main criteria in establishing producer prices?

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<sup>48</sup> Assuming the Class I price of 61.0 cents per gallon and the average Class II price of 47.8 cents per gallon during 1952 as established by the Florida Milk Commission for 4.0 per cent butterfat content milk was paid producers.

2. Differences in non-Class I prices paid to producers in the 10 regulated areas where non-Class I prices are not fixed by the Commission. Very real differences were found in the prices paid for non-Class I milk in the various areas. With competition for non-Class I milk these price differences would be slight or non-existent.
3. Differences in the utilization patterns of dealers in the various markets. The ability of some producers to bargain with their dealer in regard to the utilization to be made of their milk, while other producers are part of an individual-handler pool, aggravates market price differences.
4. Use or non-use of individual-handler pools by dealers. In some markets individual-handler pools were used by all or nearly all dealers. In other markets some dealers had producers who were not part of their individual-handler pool. In effect, the exclusion of some producers from the pool nullified the purposes and objectives of the pool. The producers excluded from the pool received discriminatory treatment and evidently received unjust proportions of either Class I prices or non-Class I prices. These deviations caused considerable variations in average prices paid to producers located in various markets.
5. Compliance with the Florida Milk Commission's established butterfat differentials. In some markets payments based on butterfat content of milk were largely ignored. This caused wide differences in producer prices. For example, if two producers were selling 4.6 per cent butterfat content milk, the producer being paid on the basis of butterfat might receive the Class I price of 60 cents per gallon plus three cents for butterfat. The second producer would receive only 60 cents per gallon.
6. Adjustment of supply to fluid milk demands. Variations caused by these adjustments are generally due to the responses of individual producers. Some dealers gave their producers little guidance in meeting expected seasonal Class I needs.

## MARKET PROBLEMS IDENTIFIED BY THE INDUSTRY

WHOLESALE PRODUCERS.--Evidence that considerable variations in producer prices prevailed in central and south Florida was shown by replies of 56 wholesale milk producers to the question, "What are your marketing problems?"

Nineteen of 56 producers said that payment based on utilization made of their milk was their major market problem while 18 of 56 producers said that payment based upon correct butterfat content was their major problem (Table 16). If these producers were right in suggesting that they were not being paid for correct butterfat contents and/or utilization of their milk, it must necessarily follow that producer prices differed considerably without logical reasons and competition was hindered or restricted seriously.

Eight of the 56 wholesale milk producers said they were too small to bargain effectively with their milk dealers. This marketing problem suggests the possibility of highly imperfect market conditions, with resulting price variations between producers based entirely on bargaining power.

Eight more producers said they had little security in the market place, due to lack of effective competition of milk dealers for whole milk produced by dairy farmers. If competition is lacking, the opportunity for discrimination between producers is present because producers have

TABLE 16

## MARKETING PROBLEMS OF 56 WHOLESALE MILK PRODUCERS IN CENTRAL AND SOUTH FLORIDA, 1952

Item	Specified Marketing Problems	No. of Replies
1.	Producer is not paid for correct utilization made of his milk	19
2.	Producer is not paid for correct butterfat content	18
3.	Producers are too small to bargain effectively with milk dealers	8 <sup>a</sup>
4.	Producers have little security in the market place because of lack of effective competition and alternative outlets	8 <sup>a</sup>
5.	Distributors are slow in paying or owe producer money for past deliveries	6 <sup>a</sup>
6.	Unfavorable publicity when price is changed	6
7.	Producer receives too much surplus <sup>b</sup>	6
8.	Hauling time is excessive due to poor unloading facilities at plant	5
9.	Milk Control Commission needs changed or is too lax	5
10.	Too much milk coming in from out-of-state	3
11.	Distributor pays too low a price for surplus	2
12.	Wholesale price war in this area <sup>c</sup>	2
13.	Area is a closed market; producers' relatives can't start dairying	1
14.	Class I price is too low	1
15.	Butterfat differential is too low	1
16.	Miscellaneous <sup>d</sup>	2
Total Marketing Problems		91 <sup>e</sup>

<sup>a</sup>Includes 2 producers in non-price administered areas.

<sup>b</sup>Several producers thought that their dealers were unwilling to sell whole milk to other dealers because of the possibility of the competing distributors being able to expand sales.

<sup>c</sup>One producer said he was forced to rebate 2¢ a gal. to his milk dealer in order to help finance the wholesale price war.

<sup>d</sup>One producer said his milk dealer paid him Class II for plant loss and route spoilage; one producer said that

little opportunity to shift their sales outlets from one dealer to another.

Six producers said their dealer owed them money and/or was slow in paying. Several of these producers were owed thousands of dollars by their dealers. In some cases, producer payments were as much as a year in arrears.

At least 64 of the 91 marketing problems given by 56 producers dealt with marketing conditions (Table 16, items 1, 2, 3, 4, 5, 12, 13, and 16). These problems showed clearly the prevailing competitive conditions which were to be found in the industry.

PRODUCER-DISTRIBUTORS.--Five producer-distributors said their major market problem was the wholesale price war<sup>49</sup> carried on in their area (Table 17). These five producer-distributors were located in three different control areas. One producer-distributor said his major marketing problem was securing payment for the correct butterfat content of his bulk sales to other dealers.

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bases were established in secret and this resulted in uneven distribution of surplus.

<sup>9</sup>Ninety-one marketing problems suggested by 56 whole-sale milk producers.

<sup>49</sup>Discounting on wholesale sales to large accounts by milk dealers in violation of prices fixed by the Florida Milk Commission.

TABLE 17

MARKETING PROBLEMS OF SEVEN PRODUCER-DISTRIBUTORS IN CENTRAL  
AND SOUTH FLORIDA, 1953

Marketing Problem	No. of Respondents
Discounting on Wholesale Sales <sup>a</sup>	5
On bulk sales to other distributors do not get paid on correct butterfat tests	1
Cannot get enough milk <sup>b</sup>	1
Total	7

<sup>a</sup>These five producer-distributors were located in three of the eleven milk marketing control areas of central and south Florida.

<sup>b</sup>This producer-distributor paid a larger proportion of surplus (non-Class I) to his producers during 1952 than any of the other 13 producer-distributors interviewed.

DISTRIBUTORS.--Of the 13 milk distributors interviewed, five distributors located in four different marketing areas said that discounting on wholesale accounts was their major marketing problem (Table 18).

INDUSTRY SUGGESTIONS FOR IMPROVING  
THE MARKET FOR MILK

WHOLESALE PRODUCERS.--Of the 109 suggestions made by 71 wholesale milk producers to correct marketing problems, 36 dealt with butterfat tests, utilization payments and milk weights. These 36 producers were evenly divided upon the method of assuring payments based on correct butterfat contents,

TABLE 18

MARKETING PROBLEMS OF EIGHT MILK DISTRIBUTORS<sup>a</sup> IN CENTRAL  
AND SOUTH FLORIDA, 1953

Problem	No. of Respondents
Discounting on wholesale sales	5
Producer Complaints <sup>b</sup>	1
Couldn't get enough milk <sup>c</sup>	1
Too much milk being produced	1
Fluctuations in seasonal demand	1
Price too low on 1/2 pints	1

<sup>a</sup>All eight distributors were located in Milk Control Areas.

<sup>b</sup>Producers complained when they weren't getting 100 per cent Class I and heard that someone was.

<sup>c</sup>This distributor had an agreement with his present producers not to take on new producers.

utilization and weights. Eighteen producers felt that farmer cooperatives should be used to correct these problems, while 18 other producers felt that the Florida Milk Commission should be the instrument to correct these marketing difficulties (Item 1, Table 19). Other marketing suggestions made, which apparently are the result of price structure problems, are Items 4, 5 (in part), 6, 8, and 12 (in part), Table 19. These producers' suggestions dealt largely with methods of making milk marketing more competitive. Only three producers

TABLE 19

## SUGGESTIONS FOR IMPROVING DAIRY MARKETING MADE BY 71 WHOLE-SALE MILK PRODUCERS IN CENTRAL AND SOUTH FLORIDA, 1953

Item	Suggestion	No. of Respondents	
1	Correct butterfat tests, overseeing utilization payments and weights could be made by:		
	(1) Farmer Cooperatives	18	
	(2) Milk Control Commission	<u>18</u>	36
2	Milk Control Commission should prevent price wars	6	
	Skimming of milk by distributors	2	
	Discounting practices of distributors	3	
	Set surplus milk prices	2	
	Stop reconstitution of milk by distributors	1	
	Shift surplus milk from area to area	<u>1</u>	15
3	Farmers should organize cooperatives to:		
	Handle surplus milk	6	
	Combat bad publicity	3	
	Bargain for producers	1	
	Represent farmers at Legislature	<u>1</u>	11
4	Milk Control Commission should enforce present laws		9
5	Keep Milk Control Commission		8
6	Bonding Law should be passed to assure payment to producers		7
7	Commercial milk haulers should be encouraged		5
8	Establish market-wide pools <sup>a</sup>		4
9	Butterfat differential should be increased		3
10	Out-of-state and/or out-of-market milk should be kept out as long as there is surplus Florida milk		3

TABLE 19--Continued

Item	Suggestion	No. of Respondents
11	Duplication of inspection services should be removed	2
12	Formula pricing should be adopted	2
13	Miscellaneous <sup>b</sup>	4
Total		109 <sup>c</sup>

<sup>a</sup> <sup>a</sup>To be equitable to all, and to stop unfavorable publicity.

<sup>b</sup>Class II milk should be priced as Class I; quality standards should be kept high; surplus should be turned back to producer to be disposed of; dealers should have to give discontinuation notices to producers.

<sup>c</sup>109 suggestions were made by 71 wholesale milk producers.

suggested that marketing improvements could be made by limiting competition from out-of-state milk (Item 10, Table 19). Evidently most producers were more concerned with intra-state than with inter-state marketing problems.

PRODUCER-DISTRIBUTORS.--Only one suggestion was made by producer-distributors which dealt with problems arising out of the present price structure. This producer-distributor suggested that vigorous enforcement of milk weights and butterfat tests should be made (Table 20).

TABLE 20

MARKETING SUGGESTIONS BY FIVE PRODUCER-DISTRIBUTORS IN CENTRAL AND SOUTH FLORIDA, 1953

Marketing Suggestion	No. of Respondents
Keep the Milk Control Commission <sup>a</sup>	2
Get the Government out of business	1
Vigorous enforcement of milk weights and butterfat tests	1
Encourage more dairy farms to assure adequate supplies	1
<b>Total</b>	<b>5</b>

<sup>a</sup>In order to prevent the big dealers from squeezing the smaller producer-distributors out of business.

DISTRIBUTORS.--Only three distributors offered marketing suggestions which dealt with marketing problems created by the existing price structure.

Two distributors said that cooperation was needed to eliminate wholesale discount practices, while one distributor thought that the Florida Milk Commission should be allowed to price Class I milk in every area of the state, regardless of producer sentiments (Table 21).

TABLE 21

SUGGESTIONS BY FIVE MILK DISTRIBUTORS IN CENTRAL AND SOUTH  
FLORIDA FOR IMPROVING THE MARKETING SITUATION, 1953

Suggestion	No. of Respondents
Cooperation among distributors to eliminate wholesale discounts	2
Milk Control should cover all pricing of Class I milk	1
Florida should continue to be a Class I market	1
Quality standards should be kept high	1
Condensaries should be encouraged in west Florida	1
Total	6 <sup>a</sup>

<sup>a</sup>Six suggestions were given by five milk dealers.

#### IV. THEORETICAL MODELS OF COMPETITION

In the preceding sections, the central and south Florida dairy industry has been described in terms of the characteristics of the firms that comprise it, the methods that are used to establish prices and the resulting price structure, and the problems producers and dealers consider important. Whether the industry is serving society effectively depends entirely upon what kind of a dairy industry society wants. Generally speaking, the American people believe that a competitive economy is desirable. In order to determine whether the dairy industry as organized and operated in central and south Florida is desirable to the American people, it will be evaluated by the use of a theoretical model of a competitive economic system.

Economists have identified several types of competition in the American economy. The two extreme types are pure competition and bilateral monopoly. Within these extremes, economists recognize several degrees of competition but have not--as yet--defined models for them that are as detailed and precise as the theoretical concept of pure competition. The theoretical concept of pure competition,

together with the degrees of competition that exist in markets that are less than perfect, provides standards by which competition in the milk industry can be identified and evaluated.

In the following pages, the theoretical models of pure competition are stated and actual situations prevailing in the United States dairy industry are compared with them. The model of pure competition has been used as a standard for comparison rather than the model of perfect competition. This was due largely because the model of perfect competition assumes that time does not enter into decision making, et cetera, while the model of pure competition allows time for adjustments.

#### PURE COMPETITION

The requisites<sup>50</sup> of pure competition are:

1. Homogeneity--the product must have enough "homogeneity" so that the buyer--or seller--is influenced in his choice of a seller--or buyer--only by consideration of prices.
2. Market knowledge--there must be good communications and facilities so that buyers and sellers will have knowledge of transaction prices and of the prices at which other buyers and sellers are willing to buy or to sell.

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<sup>50</sup>The first two and the last conditions are given by K. E. Boulding, Economic Analysis, Revised Edition, 1948, pp. 49-50. The third and fourth conditions are taken from R. H. Blodgett, Principles of Economics, 3rd Edition, 1951, pp. 50-51.

3. Interference with supply and demand--prices of the economic good must be determined by the joint action of the forces of supply and demand, without government regulations or controls interfering with these forces.
4. Independence of buyers and sellers--there must be independence of buyers and sellers. This means that there must be no agreements, combinations or conspiracies among buyers or sellers for purposes of restricting purchases or production in order to lower or raise prices. Independence of buyers and sellers also means that no barriers to the entry of either producers or dealers can be erected by agreements or conspiracies.
5. Buyers and sellers--there must be enough buyers and sellers so that the practices of any single buyer and/or seller cannot influence prices perceptibly. This also means that there must be no discrimination between buyers and/or sellers. Sellers must be willing and able to sell to any buyer, and buyers must be willing and able to buy from any sellers.

It is doubtful if any industry in the United States fits the theoretical framework of pure competition as outlined above. The stock exchanges and commodity exchanges, which deal in agricultural products, come closest to fulfilling the model of pure competition. Even in agriculture, however, governmental controls, and local conditions, cause departures from pure competition and violate one or more of the theoretical requisites for pure competition.

#### IMPERFECT COMPETITION

Any form of economic competition that does not meet the requisites of pure competition is called imperfect. In general, the number of buyers and sellers has been used as a

rough measure of the degree of imperfection in any market situation. Using numbers of buyers and numbers of sellers as criteria, nine forms of competition can be recognized, eight of which are imperfect (Table 22).

The American people have accepted the use of various types of imperfect competition in many industries. This acceptance has been due to efficiency of production which could only have been attained under some form of imperfect competition. However, when society does accept some form of imperfect competition, it (1) endeavors to make the situations as competitive as possible in light of desired goals, and (2) creates commissions, boards, or agencies such as the Interstate Commerce Commission, to protect the public interest. In other words, society uses regulations to create and maintain the kind and type of competition it considers desirable.

The American people generally consider it desirable to encourage the establishment of a market situation with as many buyers and sellers as is consistent with efficient production. In other words, at a given level of efficiency, an oligopoly is more desirable than a monopoly and perfect competition more desirable. In practice, the number of situations that can be accurately described as bilateral monopoly are as scarce as those that meet the requisites of either perfect or pure competition.

TABLE 22

THE NINE MARKET SITUATIONS POSSIBLE, ACCORDING TO THE NUMBER EACH OF BUYERS AND SELLERS ASSUMING ABSENCE OF SELLERS' OR BUYERS' PREFERENCES<sup>a</sup>

Buying Side	Selling Side		
	Many Sellers	Few Sellers	One Seller
Many Buyers	1. Pure Competition	2. Oligopoly (duopoly)	3. Monopoly
Few Buyers	4. Oligopsony (duopsony)	5. Bilateral Oligopoly	6. Monop- listic Oligopsony
One Buyer	7. Monopsony	8. Monopsonlistic Oligopoly	9. Bilateral Monopoly

<sup>a</sup> Adapted from W. H. Nicholls, Imperfect Competition Within Agricultural Industries, The Iowa State College Press, Ames, Iowa, p. 14.

In the following sections (Sections V and VI) the theoretical model of pure competition and the eight identifiable types of imperfect competition will be used to evaluate the competition that exists in the milk market in the United States in general and in central and south Florida in particular.

V. NATURE AND EXTENT OF COMPETITION IN THE  
NATION'S REGULATED MARKETS FOR MILK

THE PRICING PROBLEM

Whole milk is relatively bulky and low in value when compared with other commodities. Until recent times, whole milk for fluid use has been thought to be too perishable to be shipped long distances. Experiences with milk during World War II have shown that this is not true, but many people still believe that it is too perishable to be shipped long distances. The production and marketing of whole milk for fluid use is closely supervised by state and municipal health authorities. At the present time, the production and distribution of fluid milk and cream are primarily local enterprises, largely due to legal barriers.<sup>51</sup>

Since both production and distribution of fluid milk and cream, and particularly fluid milk, are primarily of a local nature, there has been no central market place to

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<sup>51</sup> See Appendix C, "Practice and Theory of Market Exclusion in the Milk Markets of the United States." As used here "fluid" denotes whole milk to be used for fluid purposes.

"discover true prices." This is largely a result of the small number of buyers and sellers in a small local market.

Most of the large local milk markets in the United States are characterized by having relatively small number of dealers and hundreds or even thousands of producers. One or two large dealers usually buy most of the locally produced whole milk and have most of the fluid milk sales in the individual markets.<sup>52</sup>

Usually, the larger dealers in large local markets are affiliated with one of the companies which operate on a national scope. In 1937 and 1938, for example, one national concern had 61 per cent of fluid milk sales in Baltimore, 55.5 per cent in Washington, D. C., 30 per cent in Louisville, Kentucky, nearly 29 per cent in Hartford, Connecticut, 24 per cent in Philadelphia, nearly 24 per cent in New York City, and nearly 23 per cent of the fluid milk sales in both Youngstown, Ohio, and Milwaukee, Wisconsin.<sup>53</sup>

In areas where affiliates of national concerns do not operate, one large independent company frequently buys and

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<sup>52</sup>In 1950 there were only 42 handlers of milk (dealers) in the Kansas City Marketing Area, while there were 2,746 producers. A few large dealers sold 85 per cent of the milk in the market. C. C. Erwin, Supply and Utilization of Milk in the St. Louis and Kansas City Fluid Markets, Missouri Agricultural Experiment Station, Research Bulletin 506, August, 1952, pp. 14 and 17.

<sup>53</sup>Temporary National Economic Committee, Mimeographed Report, Release No. 14, Monograph 32, Washington, D. C., October, 1939.

distributes most of the fluid milk in the market. Under these conditions, the balance of bargaining power rests largely with dealers rather than with producers or consumers. In an attempt to gain a bargaining position which would be on equal terms with that of dealers, many large dairy producer-bargaining cooperatives were begun prior to and during the decade of the twenties. Throughout the 1920's, prices of fluid milk and other dairy products in many large markets of the United States were established by negotiations of milk dealers and producer-bargaining cooperatives. Such things as seasonal incentives, different milk classes, butterfat differentials, store differentials, and pooling practices came into common usage during this period.<sup>54</sup>

In 1931 and 1932 the stabilized marketing conditions achieved prior to this time broke down under the stress of economic conditions. In an attempt to improve their income situations, many producers selling milk to dealers through their cooperatives, began to retail milk at almost any price that would improve on the negotiated wholesale farm prices. Still other producers, who had been cooperative members, sold to milk dealers who had never bought milk through the

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<sup>54</sup>John J. Dillon, Seven Decades of Milk, Orange Judd Publishing Company, New York, 1941, p. 178; and Leland Spencer and S. Kent Christensen, Milk Control Programs of the Northeastern States, Northeast Regional Publication No. 21, Cornell University, Agricultural Experiment Station Bulletin 908, November, 1954, p. 36.

cooperatives, or who had stopped buying from the cooperative in an effort to improve their positions. In the main, these dealers utilized more of their milk receipts in the higher priced use classifications. These dealers were willing and able to pay slightly more than the average blend prices paid by the dealers who still bought milk through the cooperatives. This resulted in still lower blend prices to producers selling milk through cooperatives, since more and more of the cooperative milk was being used in the lower priced use classifications. This, of course, resulted in still further lowering prices to non-cooperative producers.<sup>55</sup>

The dealers, who bought milk independently of the cooperatives, had a distinct price advantage over dealers who bought cooperative milk. In many cases, these dealers began to expand their sales volumes to the detriment of dealers who still purchased milk through cooperatives. It was in this period of chaotic marketing conditions and milk strikes that pricing by state and federal authorities first began to take place.

#### DEVELOPMENT OF GOVERNMENTAL PRICING AGENCIES

In the early 1930's price-cutting among competing dealers was common. In some markets, price wars were in progress. Since much of the reduction in retail and wholesale

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<sup>55</sup>Spencer and Christensen, op. cit., pp. 10-11.

prices was passed back to producers who were in poor financial straits ways were sought to eliminate price-cutting. The obvious solution to eliminating price-cutting was the fixing of minimum resale prices.<sup>56</sup>

In an effort to correct the chaotic milk marketing conditions of the early thirties, many states passed laws establishing Milk Marketing Control Agencies or Commissions in 1933 and 1934.<sup>57</sup> These agencies were usually empowered to establish producer prices for different milk classes and resale prices to consumers. Regulations passed by these agencies attempted to correct these conditions, raise producer prices, eliminate unfair and unjust trade practices, and assure a healthful supply of milk for consumers. Federal Milk Market Orders or licenses were first issued in 1933. These orders attempted to correct the same chaotic conditions as did the state groups. During 1937, Federal Marketing Orders<sup>58</sup> were revised so that only producer prices, rather than both producer and consumer prices, were established. Since that time, additional Federal Marketing Orders have been established. On January 1, 1956, 16 states had

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<sup>56</sup>Ibid., p. 8.

<sup>57</sup>Ibid., pp. 30-33.

<sup>58</sup>Under the Agricultural Marketing Agreement Act of 1937 as amended.

state milk commissions or agencies while more than 49<sup>59</sup> markets operated under Federal Marketing Orders.

Some State Commissions and Federal Market Orders have attempted to maintain or re-establish the competitive nature to the market, while others have tended to restrict competition. In general, the conditions prevailing in the 1930's before price regulation, appear to have resulted in destructive competition.<sup>60</sup>

#### REQUISITES OF PURE COMPETITION

HOMOGENEITY OF PRODUCT.--The first requisite of pure competition, homogeneity of the product, is met in nearly all markets of the United States, except for special grades of milk. All milk produced and sold by producers is regarded as the same product by dealers in the individual markets. Market value of the milk varies if there are differences in butterfat content and transportation costs.

Fluid milk is generally regarded as a homogeneous product within the individual markets, but not in different markets. This is due to the various milk standards erected by the individual markets and other legal barriers which tend to make fluid milk markets individual milk areas.

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<sup>59</sup>United States Department of Agriculture, The Yearbook of Agriculture, 1954, Government Printing Office, Washington, D.C., p. 362.

<sup>60</sup>Spencer and Christensen, op. cit., pp. 8-12.

MARKET KNOWLEDGE.--The second requirement of pure competition is knowledge on the part of both buyers and sellers of transaction prices and of the prices at which other buyers and sellers are willing to buy or to sell. This condition is met in most large milk markets of the United States. Most of the 49<sup>61</sup> Federal Milk Markets have monthly releases of price and statistical information which aid buyers and sellers in those markets to obtain knowledge concerning marketing conditions. As of January 1, 1953, 11 of the 15 states other than Florida, operating under Milk Control Commissions, Boards, or Agencies, periodically prepared and released price and other statistical information dealing with individual markets. Through this media, buyers and sellers in the individual markets gain market knowledge. In addition, in those markets where large producer cooperatives operate, most of these cooperatives compile and release market information periodically to their members and to the dealers with whom they do business. Market information from these sources is also supplemented by information from studies carried on by various state universities and governmental agencies.

Pooling of milk in the various markets also aids in increasing market knowledge among milk producers and dealers through providing for uniform blend prices. When uniform

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<sup>61</sup>United States Department of Agriculture, The Yearbook of Agriculture, 1954, op. cit., p. 362.

blend prices exist in a given market it is easier for producers to evaluate their markets. Market blend prices are available for publication only when milk is pooled.

INTERFERENCE WITH SUPPLY AND DEMAND.--The third requirement of pure competition is that prices must be determined by the joint action of the forces of supply and demand, without governmental interference or collusive action of buyers and sellers. This condition is not met in very many fluid milk markets of any size in the United States. It is probable that governmental regulations in many markets increase competition at producer and dealer levels. For example, regulation can aid in (1) increasing or maintaining the number of buyers and sellers through policy, (2) delineating when a product must be regarded as homogeneous, (3) increasing market knowledge, (4) eliminating discrimination, and (5) maintaining the independence of buyers and sellers.

Adjusting supply and demand by regulation in the dairy industry has been difficult for several reasons. Producers recognize that production costs per gallon are less during the spring and early summer months when cows derive a large proportion of their diet from rapidly growing pasture grasses. In addition, the palatable nature of the pastures at this time of year acts as a stimulation upon production. Last, but not least, dairy cattle in their native state tend to freshen in the spring. Since this is the

easiest way of having cows freshen from a management viewpoint, many producers are willing to have their cattle freshen during the spring. Where this is widely practiced, production varies considerably during the different seasons of the year.

Consumption, however, is relatively stable, or at least is not as seasonal as milk production in most markets. In an effort to induce a closer relationship between production and consumption, several different methods of seasonal production incentives to producers have been used in many different markets of the United States.

In administered milk marketing areas of the United States, there are two periods toward which programs for adjusting supply to demand are aimed. The first period is usually considered a short-run period, wherein an attempt is made to adjust supply to demand on a seasonal basis. To adjust supply to demand is dependent not only on one Class use price but on all Class use prices. For example, if a producer blend price of six dollars per hundredweight is desired and necessary to equate supply and demand, a Class I price of seven dollars will not work unless other class prices are regulated. If the Class I price is established at seven dollars per hundredweight, and only Class I milk is produced, the equating price of six dollars cannot be reached. If the Class I price is seven dollars, and the unregulated Class II

price varies from four to seven dollars from area to area, the equating market price is difficult to attain. If, however, the Class I price is seven dollars and the regulated Class II price is five, it is obvious that the equating price of six will be reached when 50 per cent of the milk sold to dealers is sold as Class I and 50 per cent as Class II.

Among the different plans used to adjust production to consumption have been: (1) Seasonal Class Prices, (2) Base-surplus, Base-quotas, or Base-rating Plans, and (3) Fall Premium Plans. These plans have been used for adjusting supply to demand in both the short-run and long-run periods.

SEASONAL CLASS PRICES.--Most regulated markets of the United States use seasonal production incentives based on seasonal class prices.<sup>62</sup> Under a seasonal class price plan, the various class prices vary widely seasonally in accordance with state and federal pricing regulations on producer-handler contracts governing the market. Class I price variations, however, cause most of the variations in blend prices. This is due to two reasons: (1) Class I uses constitute the major portion of total milk used in many markets, and (2) prices of other milk classes vary seasonally within narrow

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<sup>62</sup>N. T. Pritchard, Fall Premium Milk Pricing Plans, Farm Credit Administration, United States Department of Agriculture, Circular C-147, September, 1952, p. 15.

limits because they are based on prices of manufactured dairy products.

Under seasonal class price incentives, major emphasis has been placed on affecting production by changing Class I prices. A rather common practice has been to decrease consumer milk prices by some multiple of one-half cent per quart, which has been accounted for by lowering producer prices by some multiple of 22 cents per hundredweight. The producer Class I price has been generally lowered by 22, 44, or even 66 cents per hundredweight during the spring and summer, and raised by 22, 44, or 66 cents during the months when stimulated production was desired. These changes in Class I prices, when combined with seasonal changes in other class prices, and in proportions of milk used in the different classes, may cause blend prices to vary greatly during the year.

The varying blend prices resulting from the use of seasonal class price plans have been intended to encourage more production during the months when demand has been greatest relative to supply. In most markets this period is from September through February.

Some producers who have been spring-summer producers may be encouraged by the use of a seasonal class price plan to shift production to the fall-winter period when supply is short relative to demand. It is possible that some producers

may quit dairying rather than convert from spring-summer to fall-winter production with its greater labor requirements. In this way competition at the producer level may be reduced as a result of a decreased number of producers. On the other hand, the industry itself may become more efficient if supply is better adjusted to demand.

At the dealer level competition may also be affected by the use of a seasonal class price plan. This is particularly true in areas where considerable surplus milk (above Class I fluid needs) exists and where cheese, ice cream, and condensed, evaporated products are manufactured. Seasonal class price plans could, conceivably, cause a shift in seasonal production which would decrease surplus supplies for manufactured use during the spring and summer. The resulting inefficiency caused by the loss of processing volume during the spring and summer when these manufacturing plants normally operate could decrease the number of total buyers in a market. This analysis would also be true for both base plans and fall-premium plans.

BASE-SURPLUS, BASE-QUOTA, OR BASE-RATING PLANS.--Under base-surplus, base-quota, or base-rating plans, each milk producer receives two blend prices during each delivery period. These are known as base (Class I) and surplus prices (other classes).

Each producer usually receives the base price (Class I) for all milk delivered to his outlet, up to his base quantity.

Surplus (other classes) prices are paid for milk deliveries in excess of the base. The base in any delivery period is usually equal to the number of days in the pay period, multiplied by average daily milk deliveries during the previous base-forming period. Another method of calculating the base, is to pay each producer the base price (Class I) during each pay period for a given volume of milk which is a proportion of total dealer Class I milk sales during the pay period. This proportion was the one established during the base period. The base period usually consists of several fall and winter months. In the two south Florida marketing areas where base periods were established by the Commission, the base period used was January and February. This period was generally the time of relatively scarce production in relation to consumption.

Seasonal price incentives, to producers under base plans, are created by two factors. The seasonal production pattern of each producer affects his base and quantities of milk sold at base and surplus prices during each delivery period. As a result the producers' gross returns are affected. Base and surplus prices vary seasonally as a result of changes, if any, in use-class prices. The producer's blend price is affected by these changes as well as by the proportions of milk being used in the different classes.

The use of base-surplus, base-quota, or base-rating plans have sometimes been criticized on the basis that they restrict production.<sup>63</sup> There has been a tendency in some markets where base plans are used for individual producer bases to become fixed and to be regarded as private property. Potentially new producers, who may be more efficient, may be effectively barred from the market unless they can secure a base. Bases may be available only by purchase or after a waiting period when the new producer's milk may be paid for at surplus prices. These surplus prices may be so low and the waiting period so long that new producers are discouraged from entering the dairy industry. Thus, competition would be limited through limiting the number of producers.

FALL PREMIUM PLAN.--The Fall-Premium Plan, sometimes known as the Louisville Plan, or the "put-and-take" plan, is the newest development in providing seasonal price incentives. Essentially, the plan provides a guaranteed fall or winter premium through building up a reserve fund. This is done by applying a given take-off rate to all milk received by dealers during a designated period in the spring and/or summer. The dealer pays into the fund his producer's pro-rata share for the reserve fund. In the designated months when milk production is to be stimulated, the pay-back fund is allocated and paid back

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<sup>63</sup>Ibid., pp. 17-20.

pro-rata to producers in accordance with milk deliveries in each of the pay-back months.

Price incentives can be identical under either seasonal class price plans, base-surplus plans or fall premium plans. One of the advantages of the fall premium plans over the seasonal class price plans is that retail prices are stable. The value of seasonal retail price changes, because of inelastic demand<sup>64</sup> for fluid milk, is doubtful in affecting seasonality of consumption. The disadvantages of having disruptions in the market, by having seasonal retail price changes, appear to be great.<sup>65</sup> Pritchard, in comparing fall premium plans to base-surplus plans, states:

. . . that while both plans may be equally effective in adjusting production to consumption, fall premium plans are more flexible in price adjustments. Fall premium plans are also easier to understand and administer than base-surplus plans. Fall premium plans cannot be criticized on the basis of restricting production as base-surplus plans have been at times.<sup>66</sup>

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<sup>64</sup>G. S. Shepherd, Agricultural Price Analysis, The Iowa State College Press, 3rd Edition, 1950, p. 69; John Cassels, "Fluid Milk Programs of the AAA," Vol. 43, Journal of Political Economy, 1935, p. 416; E. W. Gaumnitz and O. M. Reed, U. S. Dept. of Agriculture, DM-2, Some Problems in Establishing Milk Prices, p. 44.

<sup>65</sup>Pritchard, op. cit., pp. 17-20.

<sup>66</sup>Ibid., pp. 24-26. For further information concerning seasonal incentive plans see: (1) N. T. Pritchard, Fall Premium Milk Pricing Plans, Circular C-147, September, 1952, Farm Credit Administration, U.S.D.A.; J. B. Roberts, The Louisville Fall-Premium Plan for Seasonal Milk Pricing, Kentucky Ag. Exp. Sta. Bul. 510, 1947; (3) W. C. Weldon and L. F. Herrmann, Base Allotments on Quota Plans Used by Farmers' Cooperative Milk Association, Misc. Report 23,

The effects of fall premium plans upon competition at the producer level would probably be slight. This would be particularly true if the present practice, which allows new producers to enter the market without a substantially lower blend price than existing producers, were used in markets adopting this plan.

#### RETAIL AND WHOLESALE PRICES OF MILK

Factors Considered.--In price-fixing at the producer level and at the consumer level (which determines dealer spreads), the main emphasis in the past has been on producer cost of production and dealer distribution costs.

Under the conditions that existed when the original milk control programs were initiated, it was logical to give considerable weight to cost of production in setting prices. Price was not intended to equate supply and demand, but to increase producer incomes. As price-fixing developed into a continuing program, the need increased for giving more consideration to factors other than production costs and dairy farm incomes. Cost of production relates only to the supply side of the market, and is only one of the many factors affecting the supply of milk. The lack of adequate data

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Farm Credit Administration, U.S.D.A., 1940; (4) G. G. Quackenbush and H. A. Homme, Seasonal Price Incentives of the Base and Excess Plan in the Detroit Milk Market, Michigan Ag. Exp. Sta. Tech. Bul. 228, 1952; and (5) Appendix C of this dissertation.

on the demand side of the market has been a major weakness of milk order hearings at which prices are determined.<sup>67</sup>

Distribution costs probably are given more emphasis in determining resale prices and dealer's margins than production costs receive in setting the prices dealers pay for milk. The difficulties involved in obtaining accurate and representative data on distribution costs as a basis for pricing milk are even greater than in determining producers' cost of production.<sup>68</sup>

The primary consideration in fixing producer prices in many state regulated markets is the level of prices in adjacent areas, especially the prices established under Federal Orders.<sup>69</sup>

Factors Necessary.--The factors necessary for pricing of milk are those that relate not only to the supply side of the market, but also to the demand side. Most of the literature on these necessary factors has been developed by research pertaining to the Federal Market Orders. These factors may well be needed in considering what prices should be established by state authorities.

Store Differentials.--"Careful studies of the costs involved in retail delivery and store distribution of milk have shown that under favorable conditions, milk can be

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<sup>67</sup>Spencer and Christensen, op. cit., pp. 30-33.

<sup>68</sup>Ibid., p. 90.    <sup>69</sup>Ibid., p. 122.

distributed through stores in large cities at a saving of 2 cents to 4 cents a quart as compared with home delivery."<sup>70</sup>

State Milk Control Commissions, including Florida's, have shown reluctance in accepting the fact that the costs of distributing and selling milk through wholesale outlets, such as stores, are less than those of home delivery. Of 14 states with Milk Control Commissions where retail prices were established by the Commissioner during June, 1954, only five states had established differentials. Of 37 large markets in these 14 states where retail prices were determined by control agencies, only 14 markets had established differentials. The average differential found in these 37 markets was only .5 cent per quart. In the 14 markets where differentials were established, the average differential was only 1.1 cent per quart (Table 23, Part a).

The reluctance of State Milk Commissions to establish differential pricing on the basis of cost is clearly shown by the fact that only 36 per cent of the states with legally established prices provided any amount of differential. In 43 markets where retail prices were not determined by regulatory bodies during June, 1954, differentials were found in nearly 77 per cent of the markets.

Even where State Control Commissions have recognized the lower costs found in distributing milk in wholesale lots,

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<sup>70</sup>Ibid., p. 97.

the established differentials have been less than in markets where competition has forced differentials into effect.

During June, 1954, the established differentials in the 14 markets with state control of prices had differentials averaging 1.1 cent per quart. In the 33 markets where competition has brought about differentials, the average differential was 1.6 cents per quart, a difference of one-half cent per quart (Table 23, Part b).

TABLE 23

NET DIFFERENCES BETWEEN HOME-DELIVERED AND LOWEST REPORTED STORE PRICES FOR 80 MARKETS BY SPECIFIC GROUPS, JUNE, 1954<sup>a</sup>

Markets	June, 1954		
	Home Delivered Price	Lowest Reported Store Price	Net Difference
	(Cents per Qt.)	(Cents per Qt.)	(Cents per Qt.)
a. State Controlled Markets <sup>b</sup>			
Jacksonville, Fla.	27.0	27.0	0
Miami, Fla.	26.0	26.0	0
Birmingham, Ala.	24.0	24.0	0
Mobile, Ala.	24.0	24.0	0
Fresno, Calif.	20.5	19.5	1.0
Los Angeles, Calif.	21.5	20.0	1.5
Sacramento, Calif.	20.5	19.5	1.0

TABLE 23--Continued

Markets	June, 1954		
	Home Delivered Price	Lowest Reported Store Price	Net Difference
	(Cents per Qt.)	(Cents per Qt.)	(Cents per Qt.)
San Diego, Calif.	21.5	20.5	1.0
San Francisco, Calif.	21.5	20.5	1.0
Santa Barbara, Calif.	22.0	21.0	1.0
Columbus, Ga.	25.0	25.0	0
Savannah, Ga.	27.0	27.0	0
Augusta, Me.	21.5	21.5	0
Lewiston, Mont.	21.0	21.0	0
Concord, N. H.	21.0	21.0	0
Portsmouth, N. H.	21.0	21.0	0
Atlantic City, N. J.	24.5	23.5	1.0
Camden-Trenton, N. J.	22.5	21.5	1.0
Newark, N. J.	23.5	22.0	1.5
Asheville, N. C.	25.0	25.0	0
Charlotte, N. C.	25.0	25.0	0
Durham, N. C.	25.0	25.0	0
Winston-Salem, N. C.	25.0	25.0	0
Portland, Ore.	21.5	21.5	0

TABLE 23--Continued

Markets	June, 1954		
	Home Delivered Price	Lowest Reported Store Price	Net Difference
	(Cents per Qt.)	(Cents per Qt.)	(Cents per Qt.)
Salem, Ore.	22.0	22.0	0
Harrisburg, Pa.	22.0	22.0	0
Johnstown, Pa.	22.0	22.0	0
Philadelphia, Pa.	22.0	21.0	1.0
Pittsburgh, Pa.	24.0	23.0	1.0
Reading, Pa.	23.0	23.0	0
Newport, R. I.	24.0	23.0	1.0
Providence, R. I.	23.0	22.0	1.0
Bellows Falls, Vt.	19.0	19.0	0
Burlington, Vt.	19.0	19.0	0
Alexandria- Arlington, Va.	24.0	22.0	2.0
Norfolk-Portsmouth, Va.	24.5	24.5	0
Richmond, Va.	24.0	23.0	0
37 MARKET AVERAGE	23.0	22.5	.5

TABLE 23--Continued

Markets	June, 1954		
	Home Delivered Price	Lowest Reported Store Price	Net Difference
	(Cents per Qt.)	(Cents per Qt.)	(Cents per Qt.)
b. Markets Under State and Federal Regulation, Resale Prices Not Established <sup>c</sup>			
Fort Smith, Ark.	21.0	21.0	0
Hartford, Conn.	24.0	22.5	1.5
New Haven, Conn.	24.5	24.5	0
Chicago, Ill.	24.0	19.0	5.0
Rock Island, Ill.	21.0	20.5	0.5
Ft. Wayne, Ind.	18.0	22.5	4.5
Gary, Ind.	22.5	20.0	2.5
South Bend, Ind.	20.0	19.0	1.0
Sioux City, Iowa	20.0	19.0	1.0
Topeka, Kan.	21.0	21.0	0
Wichita, Kan.	21.0	20.0	1.0
New Orleans, La.	26.5	26.0	0.5
Boston, Mass.	22.0	20.5	1.5
Fall River, Mass.	22.0	21.0	1.0
Springfield- Worcester, Mass.	21.5	20.0	1.5
Detroit, Mich.	21.0	19.0	2.0

TABLE 23--Continued

Markets	June, 1954		
	Home Delivered Price	Lowest Reported Store Price	Net Difference
	(Cents per Qt.)	(Cents per Qt.)	(Cents per Qt.)
Duluth, Minn.	22.0	20.5	1.5
Minneapolis, Minn.	20.0	15.0	5.0
St. Paul, Minn.	18.0	15.0	3.0
Kansas City, Mo.	18.0	15.0	3.0
St. Louis, Mo.	19.0	18.0	1.0
Springfield, Mo.	19.0	18.0	1.0
Lincoln, Neb.	21.0	21.0	0
Omaha, Neb.	20.0	19.0	1.0
Buffalo, N. Y.	25.5	23.5	2.0
New York, N. Y.	24.0	20.0	4.0
Rochester, N. Y.	25.0	24.0	1.0
Canton, Ohio	18.0	17.0	1.0
Cincinnati, Ohio	21.0	20.0	1.0
Cleveland, Ohio	19.0	18.0	1.0
Dayton, Ohio	21.0	21.0	0
Columbus, Ohio	20.0	19.0	1.0
Toledo, Ohio	19.0	19.0	0
Oklahoma City, Okla.	23.0	22.0	1.0
Tulsa, Okla.	24.0	23.0	1.0

TABLE 23--Continued

Markets	June, 1954		
	Home Delivered Price	Lowest Reported Store Price	Net Difference
	(Cents per Qt.)	(Cents per Qt.)	(Cents per Qt.)
Sioux Falls, S. D.	20.0	19.0	1.0
Knoxville, Tenn.	23.0	23.0	0
Memphis, Tenn.	21.0	20.0	1.0
Nashville, Tenn.	21.0	20.0	1.0
Everett, Wash.	21.0	19.5	1.5
Seattle, Wash.	20.5	19.0	1.5
Huntington, W. Va.	21.0	21.0	0
Milwaukee, Wis.	19.0	17.5	1.5
43 MARKET AVERAGE	21.2	20.0	1.2

<sup>a</sup>Fluid Milk and Cream Report, U. S. Dept. of Agriculture, Bureau of Agricultural Economics, June 1954. All prices quoted in this table are for single quart glass containers.

<sup>b</sup>Retail price set by regulation both on home delivered and milk purchased by consumers from stores.

<sup>c</sup>Retail prices not determined by regulation.

Only the recognition of the lower costs of distributing milk in larger units and the establishment of proper differentials will eliminate illegal wholesale discount practices in regulated markets. State milk control agencies which fix minimum resale prices have delayed the development of lower retail prices of stores as compared with home delivered milk.<sup>71</sup>

INDEPENDENCE OF BUYERS AND SELLERS.--The fourth requirement for perfect competition is independence of buyers and sellers. In very few markets is there any attempt at producer-handler agreements or combinations and conspiracies which might serve to restrict purchases or production. In fact, any attempt to do so, would be difficult to achieve because of the large number of buyers and sellers, homogeneity of the product, market knowledge and lack of opportunity for discrimination in most markets. While in rare cases such agreements might result in some restriction of purchases and producers, the end results of such agreements would be slight. Independence of buyers and sellers also means that no agreements can be made between producers and dealers which restrict freedom of entry into the industry.

NUMBER OF BUYERS AND SELLERS.--The last requisite of perfect competition is that there must be enough buyers and sellers

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<sup>71</sup>Temporary National Economic Committee, op. cit., pp. 119, 159; and Spencer and Christensen, op. cit., p. 101.

so that the practices of any single buyer and/or seller cannot influence price.

In most of the larger fluid dairy markets of the United States, the number of competing milk dealers in the individual markets has dwindled considerably, since the days of unpasteurized milk and low capital investments necessary to operate as a milk dealer. With the rapid expansion in milk pasteurizing and higher capital investment needs, the use of machinery in plants, and the economies present in division of labor and labor specialization, most markets on an individual basis have evolved into markets of relatively few milk dealers. In markets where there are more than a "handful" (six to twelve) of dealers, usually the three or four larger ones handle most of total fluid milk sales.

Without enlarging the markets as presently defined or without increasing the marketing spread sufficiently to encourage new dealers, there is little that can be done to stop this trend. Even enlarging administered markets might not increase competition among dealers, since the spatial effect might tend to assure different dealers separate local production and distribution areas. Widening the market spread might not stimulate new dealers, but might only serve to increase the oligopolistic powers of existing dealers. Recognition of these facts has led state and federal pricing agencies to do little about stimulating competition by encouraging entry of new milk dealers into the various markets.

No attempt has been made to increase the number of dealers in the various markets by governmental action. The Federal Anti-trust Act has not been applied in the field of milk distribution for two possible reasons: (1) there is probably no single market in the United States where one milk dealer has a monopoly on distribution, and (2) large milk dealers are thought to be more efficient than small dealers. If the large dealers were limited as to size, higher marketing margins might be the outcome.

In most milk marketing areas of any size outside Florida, there are found hundreds and even thousands of wholesale milk producers in the individual marketing areas.<sup>72</sup> As a rule, these producers are relatively small, having between 10 and 30 milk cows, whereas Florida producers average about 150 milk cows per farm.<sup>73</sup> Because of the great number

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<sup>72</sup> Handbook of Dairy Statistics, North Central Regional Fluid Milk Marketing Project, NCM-1, Illinois Agricultural Experiment Station, pp. 6-22.

During 1950 the average number of Grade A milk producers in the Chicago market area was 21,506; in the Cleveland area the number was 7,339; in Detroit the number was 10,860; 2,746 in the Kansas City market; 2,136 in the Louisville, Kentucky market; 2,823 in the New Orleans market and 4,299 in the St. Louis market.

<sup>73</sup> Ibid., p. 48.

During 1951, average daily deliveries of whole milk per producer in the Canton, Ohio, milkshed was 557 pounds; in Chicago, 446 pounds; in Cleveland, 265 pounds; in Kansas City, 297 pounds; in Louisville, Kentucky, 317 pounds. During 1952, average daily deliveries of whole milk for 65 producers in the Miami area was 5,568 pounds.

of producers in these markets, sales of each producer have little effect on the market supplies or on market prices. Expanding of the market to include all producers who sell to dealers in the market, and the need for the larger markets to draw milk from hundreds of miles, in some cases have resulted in overlapping of the various milksheds. This overlapping increases competition for milk by increasing the number of buyers and sellers.

Under Federal Marketing Orders and most State Milk Control Agencies, discrimination between producers is almost non-existent. Not only do the regulatory agencies try to keep down discrimination by their regulatory and enforcement powers, but many of the larger markets operate on market-wide pooling arrangements. These market-wide pooling arrangements, by standardizing prices to all buyers and sellers, eliminate the possibility of personal or other types of discrimination.

Most large fluid milk markets in the United States operate on one of three types of pools. These types of pools are: (1) the market-wide pool, (2) the producer-cooperative pool, and (3) the individual-handler pool. In a market-wide pool each producer is paid the market-wide blend price for a certain grade and quality of milk, regardless of the dealer to whom he sells his milk. In a producer-cooperative pool each member of the cooperative is paid a blend price for a certain grade and quality of milk regardless of the dealer to

whom he sells his milk. A typical producer-cooperative usually represents from 30 to 90 per cent of all producers in a market area.<sup>74</sup> With these types of pools, there is little or no opportunity for one dealer or one producer to effect prices by individual action. In an individual-handler pool, only those producers selling to the same milk dealer (handler) receive the same blend price for a certain grade and quality of milk. Average blend prices vary from dealer to dealer, depending on the utilization of milk processed by the individual dealers. Even in markets operated on an individual-handler pooling basis, the size of the producers is such that any action on the part of a producer has little effect on other producers. While the actions of the individual handler might affect the prices paid to his producers, competition for milk is such that the producers can generally sell elsewhere with little or no loss in revenues on their part.

The conclusion which can be reached is that the last requisite of pure competition is not met by most dairy markets in the United States. However, there is a close approximation to competitive conditions, in that the actions of an individual dealer or producer have little effect on the other dealers or producers.

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<sup>74</sup>Spencer and Christensen, op. cit., p. 48.

The fluid milk markets in the United States must be regarded as separate markets due to spatial separation and regulations which bar effective competition from other markets. In markets where there are thousands of milk producers (sellers), and only a few milk dealers (buyers), these individual markets can be regarded as operating under oligopsony conditions. In other markets, conditions of bilateral oligopoly or monopsonolistic oligopoly prevail, depending on the number of buyers and sellers.

Although the nature and extent of competition varies widely from market to market and from area to area there are three conclusions which can be drawn from analyzing the various regulated milk markets of the United States: (1) regulation can be directed toward encouraging regulated competition, (2) the type of competition found in the fluid milk industry of the United States does not fit the requisites of a theoretical model of pure competition, since the presence of a large number of buyers is absent and some type of governmental regulation is present, (3) the model of pure competition is substantially met, since the effect of having only a few dealers in regulated markets has been largely nullified by other factors. Many producers are present, homogeneity of product is present, market knowledge is widespread, there is little or no discrimination, and independence of buyers and sellers is maintained. The only requisite of pure competition which is

not largely met is the absence of governmental controls upon supply and demand forces. Without these controls, however, it is possible that the first four requisites of pure competition might not be met to the degree which they now are.

VI. NATURE AND EXTENT OF COMPETITION IN  
CENTRAL AND SOUTH FLORIDA

THE PRICING PROBLEM

The wholesale milk pricing problem in Florida is similar to the pricing problem encountered in the rest of the United States. However, the pricing problem in Florida is largely confined to fluid milk since no appreciable quantities of manufactured milk products are produced in the state. In Florida, as elsewhere, there is not a central market place to "discover true prices" for fluid dairy products.

Prior to 1933 a free market prevailed. During the early 1930's this free market was thought to be unsatisfactory for several reasons: (1) the development of large milk dealers and the decline in the number of total milk dealers, and (2) the weak bargaining power of producers evidently led to unstable market conditions.

DEVELOPMENT OF THE FLORIDA MILK COMMISSION

In Florida, as in other states, efforts were made to correct conditions in the dairy industry during the early 1930's. The original Florida Milk Commission was established

in 1933. Since that time, minor changes have been made in the statutes which may have changed the nature of the Commission somewhat, but in essence the Commission was established with the same objectives in view as the objectives of Commissions established elsewhere. These purposes, or objectives, were to raise producer prices, correct chaotic marketing conditions, eliminate unfair and unjust trade practices, and assure a healthful supply of milk for consumers. In short, the Florida Commission was established in order to eliminate destructive competition while retaining effectively regulated competition.

Since one of the principal objectives in establishing a Milk Commission was to administer price and other policies as well as to prevent destructive competition, it is appropriate to evaluate the extent to which this objective has been met. The first step in this evaluation is to examine the conditions which exist in the Florida dairy industry in the light of the theoretical model of pure competition. The five requisites of pure competition used in evaluating the nature and extent of competition in the nation's milk markets in the preceding section are again used as a standard for comparison.

#### REQUISITES OF PURE COMPETITION

HOMOGENEITY OF PRODUCT.--Whole milk for fluid use is generally regarded as a similar product or commodity by all buyers

and the buyer or seller is influenced in his choice of buyer or seller only by considerations of price. Any difference in the physical product, such as butterfat content, is recognized by means of butterfat differentials.

In any one single milk marketing area where producers operate, (1) under the same sanitary regulations, (2) where milk produced is of equal quality, (3) where no producer produces a special grade of milk such as Golden Guernsey, et cetera, and (4) where butterfat differentials are uniform and mandatory in each area as they are in central and south Florida, the requirement of "homogeneity" of product should be easy to meet. However, in central and south Florida whole milk is not regarded as a "homogeneous" product by all dealers. Milk sold by producers to some dealers is regarded as a product which is worth the established Class I 4.0 per cent butterfat content producer price, regardless of butterfat content--as long as the butterfat content averages more than 4.0 per cent-- while the same milk, if it could be sold and was sold to another dealer, might well be worth two or three cents per gallon more because of the butterfat content. Consequently, the lack of homogeneity of product has been due primarily to lack of compliance with the Commission's regulations, which deal with differences in the physical product.

In the 11 milk marketing control areas of central and south Florida, at least one milk dealer interviewed in each of nine separate areas did not pay for milk on the basis

of butterfat content. In addition, neither of the two dealers in non-control areas paid producers for milk on the basis of butterfat content.

Of the 25 dealers interviewed who were located in milk marketing control areas, 11 dealers or 44 per cent did not pay established mandatory butterfat differentials (Table 24). These 11 dealers represented 23.1 per cent of total fluid milk sales of all 25 distributors interviewed who were located in price administered areas.

TABLE 24

RELATIONSHIP BETWEEN SIZE OF MILK DEALERS AND PAYMENT FOR MILK ON A BUTTERFAT DIFFERENTIAL BASIS, CENTRAL AND SOUTH FLORIDA, 1952

Fluid Milk Sold in 1952	Dealers Paying Butterfat Differentials	Dealers Not Paying Butterfat Differentials	Total Dealers
(Thousands of gallons)	(Number)	(Number)	(Number)
1,500 and over	3	0	3
1,000 - 1,499	4	1	5
500 - 999	4	2	6
250 - 499	2	4	6
Less than 250	1	4 <sup>a</sup>	7
<b>Totals</b>	<b>14</b>	<b>11</b>	<b>25</b>

<sup>a</sup>Does not include two dealers located in non-control areas where butterfat differentials are not established.

As measured by producer confidence, the potential effectiveness of the Commission in assuring payments to producers based on utilization had not been reached.<sup>75</sup> This may have been due to (1) the wide deviations in the base periods used by dealers, (2) some dealers not using any base period, (3) contracts between dealers and some producers, assuring these producers of 100 per cent Class I prices, (4) the large number of individual-handler pools to be supervised, (5) unstandardized accounting procedures used by the dealers, (6) arrangements between producers and dealers to substitute 100 per cent Class I prices in lieu of paying mandatory butterfat differentials, and (7) the lack of necessary information upon monthly report forms submitted to the Commission by dealers. Production and marketing of fluid milk and cream are closely supervised by state and municipal health authorities. The use of legal and institutional barriers tends to restrict production and distribution to a local market. These factors result in lack of homogeneity of product between markets. Within individual markets the disregard of established butterfat differentials, the existence of long-term contracts assuring some favored producers of large proportions of Class I prices and the uncanny ability of some producers in securing large Class I bases while some producers could not re-establish

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<sup>75</sup>These producers were all located in areas where Class I prices were determined by the Commission.

a new base has led to lack of homogeneity within many of the individual markets.

MARKET KNOWLEDGE.--The second requirement for perfect competition is good communications between buyers and sellers. This means that there must be knowledge on the part of each buyer and seller of transaction prices, and of the prices at which other buyers and sellers are willing to buy or sell. In order to have these good communications a central market is necessary. This requirement of pure competition is relatively easy to obtain and is met in many regulated markets of the United States by market-wide pooling, and release of statistical market information by pricing authorities<sup>76</sup> or producer-cooperatives.

Information<sup>77</sup> widely disseminated results in greater market knowledge on the part of producers, dealers, interested consumers, and research personnel.<sup>78</sup> The release of such information could be of considerable aid to potential and present producers in their production planning, relocation, and

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<sup>76</sup>Eleven of the 15 other states, besides Florida, having milk commissions regularly release market information. The Florida Milk Commission is forbidden by law from doing so.

<sup>77</sup>See Handbook of Dairy Statistics, North Central Regional Fluid Milk Marketing Project, NCM-1, Dept. of Agricultural Economics, Illinois Agricultural Experiment Station, Urbana, Ill.

<sup>78</sup>Sufficient market information should relieve producers from much of their unfavorable publicity, ideas they are receiving too much surplus, surplus prices are too low, bases are set in secret, not sharing equitably in the Class I market.

so forth, while aiding dealers in their buying and selling policies. Consumers could gain a greater insight into the structure and problems of the industry, while both independent and public market and production research would be stimulated.

The use of statistical and information data serves to help any administrative agency in establishing prices. Without proper information and statistics about any product where prices are determined and established by an administrative agency, pricing can only be done in an arbitrary fashion.

STATISTICAL AND INFORMATION SERVICES.--In those states with milk control or regulative agencies setting milk prices, statistical information is of the utmost importance. Such information must be used in pricing the various milk classes, in determining the various products which should go into these classes, and in aiding the regulatory bodies in their supervision of the industry. In addition, information is necessary in regulating sources of supply, in assuring that payment is made on the basis of regulation and that unfair or discriminatory trade practices are held to a bare minimum, and in determining what producer prices and dealer margins "should" be. Information is also necessary in aiding the regulatory agencies in adjusting supply to demand, and in assuring that established class prices and butterfat,

quality, and locational differentials are observed. Information is absolutely essential as an aid in determining milk marketing areas, stabilizing prices, and in developing new and changing regulation in response to changing needs and conditions in the various markets. When any type of pooling whether individual-handler or market-wide is used adequate information is essential. When such seasonal production adjustment plans as base-quotas, base surplus or "put-and-take" plans are used, information must be adequate. Where formula pricing of producer and/or consumer prices is used, statistical data pertaining to economic factors and price movements must be kept.

Observers of state milk control agencies have been most critical of the statistical and information services typically maintained. Because of the necessity for a factual basis for the quasi-legislative actions of milk control agencies, it seems apparent that great emphasis should be placed on this work. Nevertheless, lack of appropriations and demands of other activities usually have subordinated the statistical and information services.

The important gap in statistical services has been partly filled by the efforts of men connected with the state universities. The University of Massachusetts has aided the Massachusetts Milk Control Board in the preparation of selected statistics on certain secondary markets. The Maine

Agricultural Experiment Station, on behalf of the Maine Commission, studies the changes in costs of milk distribution and presents the results at public hearings. This information is revised annually, showing estimated percentage changes in costs from year to year.

Report Forms.--The Distributor's Monthly Tax Report Form 1-16, used by the Florida Milk Commission, calls for the individual producer's name to be furnished, the number of gallons, and price paid for Class I, II, and other milk by the distributor. This information is not inclusive enough to enable the Commission to see if correct prices are paid for 4.0 per cent butterfat milk, plus or minus provided butterfat differentials, since the form does not require the reporting of the average monthly butterfat content of each producer's milk receipts. The same criticism holds true on information pertaining to production of milk on dealer owned farms, and on receipts of milk from other sources. Hence, even if the Florida Milk Commission were permitted by law to publish market data, full comprehension reports would be impossible if the present report forms were unchanged.

It is possible that many of the inequalities in treatment of individual producers, when one producer receives the Class I price for all of his milk while others receive large proportions of Class II and III, exist because of inadequate information being furnished to the Commission by

dealers on the required forms. These inadequate forms may also account for the gross disregard by the industry of base periods in those areas where base periods are established by the Commission, and in most areas, for total or partial disregard of the established butterfat differentials.

The Distributor's Monthly Processing Report Form 1-17, used by the Commission, did not provide for obtaining enough information to enable the Commission to check whether milk was paid for according to utilization. Since the butterfat content of producer milk receipts, and receipts of milk and cream from other sources was not required to be reported, and wasn't reported, and the butterfat contents of different class products sales were not reported, no adequate check could be made on monthly utilization. Use of this form did not account for butterfat use in any way. This lack of information on butterfat utilization makes it difficult for the Commission to detect standardization.<sup>79</sup> Data obtained from dealers and statements from them indicated that these practices may have been utilized by some dealers.

Many dealers interviewed furnished the field enumerator with copies of their monthly reports to the Commission; in at least two instances, reported Class I milk sales by the dealers were larger than Class I receipts, or even total

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<sup>79</sup>To add skim milk to whole milk or to remove a portion of the butterfat content. See Appendix B.

receipts from producers and other sources for each of the 12 months of 1952. Such inconsistencies, unless the reports to the Commission were inaccurately prepared, could only mean that these dealers were standardizing, reconstituting, or reconstructing milk in their plants. Inconsistencies on these reports, where Class I sales were reported as larger than Class I receipts, were as large as 22,000 gallons per month. In several other cases, information reported on these monthly reports to the Commission pertaining to individual producer payments for Class I, II, and III varied widely from the monthly producer check stubs in the possession of the producers stating the values of Class I, II, and III milk for which the individual producers were paid during the same months.

Accounting Practices.---Not only is there a pressing need for adequate report forms to be used by the Commission, but there is also a need for adequate accounting practices in dealer plants.

The importance of adequate accounting cannot be over-emphasized. Bigam and Roberts, in their book on transportation, state that,

Unless accounting systems are prescribed by competent authorities, the carriers (railroads) will not keep their accounts in a uniform manner. Neither will the carriers (railroads) keep their records so as to show the facts prerequisite to regulation. Some companies, indeed, will in all probability deliberately distort their accounts so as to make it appear that their costs are greater than they actually

are, hoping thereby to forestall decreases or to obtain increases in rates.<sup>80</sup>

The Interstate Commerce Commission stated in 1904, "Probably no one thing would go further than this (adequate authority over accounts) toward the detection and punishment of rebates and kindred wrongdoing . . . ." <sup>81</sup>

Bigham and Roberts further state that, "If regulation is to be made effective, the companies (railroads) clearly should be forbidden to keep any books and records other than those approved by regulatory authority (ICC)."<sup>82</sup> These statements, made in regard to accounting needs for adequate supervision of railroads, might well have been written with milk regulation in mind.

As was pointed out earlier, no universal, uniform, systematic accounts were kept by the 27 milk dealers interviewed. Several kept no records whatsoever. One dealer said his accounting system had been specifically devised in order to conceal standardization, reconstruction and reconstitution practices. Although many dealers kept adequate plant records to enable them to track down and account for milk and butter-fat losses within the plant, several did not even attempt to

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<sup>80</sup>T. C. Bigham and M. J. Roberts, Transportation, Second Edition, McGraw-Hill Book Company, Inc., 1952, p. 223.

<sup>81</sup>Annual Report of the Interstate Commerce Commission, 1905, p. 11.

<sup>82</sup>Bigham and Roberts, op. cit., p. 293.

do so. Many dealers appeared to have only the vaguest idea of how many gallons of fluid Class I milk and other products they had sold during 1952.

#### PRODUCER KNOWLEDGE

Terms of Sale.--In spite of small administered milk marketing areas in central and south Florida; and in spite of little spatial distances between some areas, producers had little knowledge of prices in adjacent areas. In fact, producers (sellers) within the same area appeared to have only the vaguest idea of prices paid other producers by dealers within the same marketing area. This situation arose because only the Class I price had been established by the Commission, while Class II and III prices were not regulated. As a result there was a wide range in Class II and III prices paid producers, and these prices in turn affected the producer's blend price. Since there have been no organized methods of dispensing market information, producers did not know the class prices paid by the various dealers, nor did they know the utilization made of whole milk by the different dealers. Hence, the average blend prices paid in the same market and in different markets was unknown. Discrimination among producers by dealers, and failure of many dealers to pay established butterfat differentials, further confused the picture. Differences in producer and dealer terms of sale also tended to confuse producers (Table 25), (see Appendix B).

TABLE 25

ORAL OR WRITTEN TERMS OF SALE BETWEEN 117 WHOLESALE MILK  
PRODUCERS IN CENTRAL AND SOUTH FLORIDA  
AND THEIR MILK OUTLETS, 1952

Provisions	Number of Producers
Base is re-established yearly; production over base may be either Class I or Class II, sometimes base amount is paid for as part Class II milk . . . . .	50
Oral or written contracts calling for 100 per cent Class I . . . . .	8
Distributor pays only for amount he needs as Class I; pays no butterfat . . . . .	8
New bases set yearly; receive 100 per cent Class I for base amount; no new producers to be taken on . . . . .	8
No base; paid for by use . . . . .	7
Bases have been frozen for years; production over base may or may not be Class I . . . . .	6
Base is re-established yearly; full amount of base is always Class I; milk not accepted over the base amount . . . . .	4
Base re-established yearly; receive 100 per cent Class I for base amount; production over base is all Class II or lower . . . . .	4
Nine months of each year is paid all Class I but no butterfat; June, July, August receives specified percentage Class II . . . . .	3
Base set yearly; get Class I price plus one cent for base amount; Class II and III prices established by distributor . . . . .	1
Base re-established yearly; 100 per cent Class I up to base figure; cannot vary production over 20 per cent from base figure . . . . .	1

TABLE 25--Continued

Provisions	Number of Producers
Base frozen six years ago; distributor will not allow it to be changed; receive 100 per cent Class I for specified base gallonage . .	1
Unspecified . . . . .	16
<b>Total</b>	<b>117</b>

Average Market Blend Prices.--Producers' lack of knowledge about their market was illustrated by producer responses to a question asked during interviews, "Do you think you are sharing equally with all other producers in your area?" Of the 117 producers interviewed, only 23.9 per cent thought they were sharing equally in their market, 10.3 per cent thought they were receiving less than the average annual market blend price, while 50.4 per cent thought they were receiving more than their proportional share. About 15 per cent of the producers did not answer the question.<sup>83</sup>

<sup>83</sup>Producers who felt that they were receiving less than the market average, said that their dealer cut into their bases while other dealers did not, or that their dealer would not allow them to establish a base, and hence they absorbed all surplus milk. The 50.4 per cent who felt that they were receiving a much better yearly blend price than other producers selling to other dealers, said that this was due to (1) the producer cutting production below

In regard to equally sharing dealer Class I sales, it was extremely difficult to know whether all of the 117 wholesale milk producers interviewed accurately appraised their own situations with respect to all other producer situations. Seventeen of these producers, however, were located in one area of south Florida where sufficient information was obtained from most producers during 1952 to establish what producer prices would have been if they had shared equally in the market using the established January-February base period. In this area, only nine of 17 producers were able to appraise their market position accurately. (Appendix D, Effects of a Market-Wide Pool Upon Producers Within the Miami Market). This indicated a high degree of imperfect market knowledge on the part of central and south Florida producers.

Average Individual-Handler Blend Prices.--Perhaps a more realistic example of imperfect market knowledge was shown by answers to the question "Do you feel that you are sharing equally with other producers shipping to your outlet?"

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a base-quota established several years ago, (2) their production of a special grade of milk, (3) an oral or written contract with their dealer under which they received 100 per cent Class I, (4) the producer's beginning base was set high enough so that Class I was received for all production, (5) the producer better regulating production, (6) the distributor being short of milk, so he paid 100 per cent Class I, (7) producers having agreements with their dealer not to take on any new producers, and then proceeding to produce only 90 per cent of the dealer's Class I needs.

One hundred of 117 producers or 85.5 per cent said that they were sharing equally. Only 11 of the 117 producers or 9.4 per cent said that they were not sharing equally. Eight of these 11 producers felt that they were receiving more than their proportional share of the Class I market while three felt that they were receiving less than their proportional share. Six producers or 5.1 per cent of the 117 producers did not answer the question.

The 11 producers who replied that they did not feel that they were sharing equally with other producers who sold to their outlets were then asked why they felt as they did. The three producers who said that they were receiving less than their proportional share of the Class I sales of their outlet all had different reasons for their opinions. One producer said that he sold milk to a dealer who had only one other producer and the other producer had a contract calling for 100 per cent Class I prices. One producer said that his dealer had not allowed him to establish a base even after four years, and that he had to absorb all the non-Class I milk handled by his outlet. The third producer said that his dealer had paid him less Class I than his established Class I base, but had not cut into the other producer's bases. These three cases clearly showed the gross marketing inequalities among some producers in central and south Florida.

The eight producers who replied that they were receiving more than a proportional share of their distributor's

Class I sales cited four different reasons for their replies. Three of these eight producers said that they were receiving more than their proportional share of their dealer's Class I sales. These three producers said this situation existed because of written contracts between them and their dealers. These contracts disregarded base setting periods; three producers said their initial base was arbitrarily set so high that they would always receive payment on the basis of 100 per cent Class I use. One producer stated that he had adjusted production below his base quota, which had been established more than five years previously. The last producer said that he received 100 per cent Class I because he produced a high grade milk, and demand exceeded the supply at all times.

Six of the 25 dealers interviewed, who were located in administered price areas, did not use individual-handler pools exclusively. These six dealers had oral or written contracts with one or more of their producers during 1952. The contracts assured these producers of 100 per cent Class I prices.

Twenty-eight of 29 other producers who did not have 100 per cent Class I contracts and who sold to these dealers, did not know of the existence of these Class I contracts and assumed that an individual-handler pool was being used. These 29 producers were asked if they thought they were sharing equitably with other producers selling to their dealer.

Twenty-three producers said they were sharing equitably. Two said they were receiving more Class I than the other producers by producing a better grade of milk or by not producing up to the amount allowed by a base-quota which was several years old. Three said they didn't know, or did not attempt to answer the question. Only one producer said that he was not sharing equally. This producer said he knew one producer had a Class I contract and did not share in the surplus milk (non-Class I) that the milk dealer handled.

The very existence of 100 per cent Class I contracts between some dealers and producers, without other producers having any knowledge of these contracts, indicated the lack of producer knowledge. This lack of knowledge indicates also the presence of the imperfect competitive conditions which prevail in the central and south Florida dairy industry.

Class Price Determination.--In still another attempt to measure producers' knowledge of market conditions, the 113 producers in Class I price administered areas were asked, "How are your class prices determined?" Of the 113 milk producers located in areas where Class I prices were established by the Florida Milk Commission, 108 producers knew the current Class I price (Table 26). This indicated the importance of the Class I price in influencing the average blend prices received by producers and the extent to which these producers operated on a Class I market.

TABLE 26

HOW 113 WHOLESALE MILK PRODUCERS IN MILK ADMINISTERED  
AREAS BELIEVE CLASS PRICES ARE ESTABLISHED,  
CENTRAL AND SOUTH FLORIDA, 1953

Prices Set By	Class I Price		Class II Price		Class III Price	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Milk Control Commission	108	95.6	21	23.6	2	10
Distributor	...	....	39	43.8	7	35
Mutual Agree- ment	1	.9	9	10.1	2	10
Unknown	4	3.5	20	22.5	9	45
<b>Totals</b>	<b>113</b>	<b>100.0</b>	<b>89</b>	<b>100.0</b>	<b>20</b>	<b>100.0</b>

The 113 producers were then asked how their Class II prices were established. Market knowledge was not nearly as widespread among producers concerning Class II prices as it was for Class I prices. Only 89 had been paid for any Class II milk within the past year. Twenty-one or 23.6 per cent of the 89 producers stated that their Class II prices were established by the Florida Milk Commission. Evidently some producers were in error about how their Class II prices were determined, since only 18 of the 89 producers were in an area where Class II prices were established by the Florida

Milk Commission. Other replies as to how producer Class II prices were determined indicated that the usual practice was one of pricing by the individual dealer, although some Class II prices were established by mutual agreement between the dealer and his producers (Table 26).

Only 20 of the 113 wholesale milk producers had sold any Class III milk during the previous year. Nine of these 20 did not know how the price of Class III milk was determined. Seven thought that the dealer established Class III prices, two producers said that they were established by the mutual agreement of producers and dealers, and two producers said the Commission established them (Table 26).

That there was not perfect knowledge as to who establishes these prices was shown not only by the 45 per cent. (9 out of 20) of producers who said that they did not know how their Class III prices were determined, but also by the two producers who said the Commission regulated Class III prices. Only one of these two producers was in an area where the Commission established Class III prices.

As a follow-up of the question, "How are your class prices determined?" producers were asked, "What are the prevailing class prices in your marketing area?" These answers were then checked against prices actually paid to these producers by milk dealers or being paid to other producers by their milk dealers. Nearly every producer (95.6 per cent)

knew the prevailing Class I price. Only about 29 per cent knew the Class II price, while only 10 per cent knew the Class III price (Table 27).

TABLE 27

KNOWLEDGE OF 113 WHOLESALE MILK PRODUCERS AS TO PREVAILING MILK PRICES, CENTRAL AND SOUTH FLORIDA, 1953

Measure of Knowledge	Class I Prices		Class II Prices		Class III Prices	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Yes	108	95.6	26	29.2	2	10.0
No	5	4.4	46	51.7	13	65.0
Questionable	...	....	17	19.1	5	25.0
Totals	113	100.0	89 <sup>a</sup>	100.0	20 <sup>b</sup>	100.0

<sup>a</sup>Twenty-four producers received no Class II during the previous year.

<sup>b</sup>Ninety-three producers received no Class III during the previous year.

Several factors contributed to poor producer knowledge of prices in their market or of prices paid other producers selling to the same outlet. (1) In most markets prior to 1954, dealers were not required to operate on an individual-handler pool basis, but could bargain with individual producers as to the amount of Class I, II and III which the producer would be paid for. (2) Many dealers did not pay established

butterfat differentials. This confused producers, particularly of high butterfat content milk, who might have preferred being paid the butterfat differential while receiving large proportions of non-Class I milk rather than receiving all Class I milk and no differentials. (3) There were no market news services of any kind. There were neither producer cooperative pools (other than cooperatives acting as producer-distributors) nor producer cooperatives which published information for the benefit of their members. The Florida Milk Commission published no information (other than minimum prices in their orders) which might have aided producers in acquiring some knowledge of market prices. In fact, the Commission was forbidden by law from releasing information.

Termination Notice.--In a further attempt to gain some insight into the degree of general market knowledge (other than prices) of producers, they were asked, "How much termination notice must you give your distributor?"

The length of termination notice which producers felt was required varied from three years to no notice at all. Over one-third of the producers said that they did not know how much notice was required. Only about one-fourth knew that the termination notice, as required by state law, was 90 days. (Table 28).

Milk producers were then asked how much termination notice their distributors were required to give. The extent

TABLE 28

LENGTH OF TERMINATION NOTICE PRODUCERS FELT THEY  
SHOULD GIVE THEIR MILK DEALERS, CENTRAL  
AND SOUTH FLORIDA, 1953

Length of Notice	Producers	
	(Number)	(Per Cent)
2-3 years	3	2.7
90 days	28	24.8
60 days	14	12.4
30 days	13	11.5
15 days	6	5.3
None	11	9.7
Unknown	38	33.6
Total	113 <sup>a</sup>	100.0

<sup>a</sup>Doesn't include four producers in area where termination notice was not specified by the Commission. Two of these four producers said no notice was required and two said they did not know.

of producer knowledge about this point was rather vague. More than one-third of the producers did not know, while only one-fourth knew the correct termination notice of 90 days.

(Table 29.) A rather interesting aspect of written contracts was shown by one producer who said that his distributor could not terminate business with him for two or three years, and by six producers who said that their dealers could not

terminate their contracts at all. All of these seven producers operated on written 100 per cent Class I contracts.

TABLE 29

LENGTH OF TERMINATION NOTICE WHICH PRODUCERS FELT  
DISTRIBUTORS WERE REQUIRED TO GIVE THEM,  
CENTRAL AND SOUTH FLORIDA, 1953

Length of Notice	Producers	
	(Number)	(Per Cent)
Indefinite	6	5.3
2-3 years	1	1.0
90 days	28	24.8
60 days	14	12.4
30 days	11	9.7
15 days	4	3.5
None	11	9.7
Unknown	38	33.6
Totals	113	100.0

The small proportion of producers knowing the termination notice that they were required to give dealers as well as the length of termination notice dealers were required to give them, indicated rather poor knowledge of this phase of their general marketing situation.

DEALER KNOWLEDGE.--In an attempt to see if milk dealers possessed a realistic idea of the extent of producer market

knowledge, they were asked, "Do your producers know how their class prices are derived?"

All of the 13 distributors and the 14 producer-distributors believed that their producers knew how Class I prices were established (Table 30). Since nearly 97 per cent

TABLE 30

EXTENT OF MARKET KNOWLEDGE TWENTY-SEVEN MILK DEALERS IN CENTRAL AND SOUTH FLORIDA ASSUMED THEIR PRODUCERS KNEW, 1952

Milk Classes	Distributors			Producer-Distributor		
	Yes <sup>a</sup>	No <sup>b</sup>	Total	Yes <sup>a</sup>	No <sup>b</sup>	Total
Class I	13	0	13	14	0	14
Class II	10	1	11	5	3	8
Class III	4	1	5	1	0	1

<sup>a</sup>Number of dealers who thought that their producers knew how the class prices were derived.

<sup>b</sup>Number of dealers who thought that their producers did not know how the class prices were derived.

of the producers knew how their Class I prices were derived and nearly 96 per cent of them actually knew the prevailing Class I price (Tables 26 and 27), milk dealers were entirely justified in believing that their producers knew how Class I prices were derived.

Fifteen of the 19 milk dealers who handled some Class II milk, or slightly less than 80 per cent, thought

that their producers knew how the producer Class II prices were derived. Information given by producers indicated that nearly 80 per cent thought they knew how their Class II prices were derived (Table 26) but only about 30 per cent knew the prevailing Class II prices (Table 27). This indicated that producer knowledge concerning Class II pricing might not be as widespread as milk dealers believed it to be.

Twenty-one, or four-fifths of the 27 milk dealers, handled no Class III milk during the previous year. Four of the six dealers who handled some Class III milk thought their producers knew how the prices were derived. Information obtained from producers indicated that only about one-half of them had any idea of how Class III prices were derived (Table 26), and only about 10 per cent knew the prevailing Class III prices (Table 27). This indicated that milk dealers also over-estimated the degree of producer knowledge of how Class III prices were derived.

From the foregoing discussion it is evident that the second requirement of pure competition, market knowledge, has not been met by the Florida Milk Commission. Statistical and informational services are not furnished by the Commission. Producers have little knowledge of the terms of sales in various markets or even within individual markets. Producers do not know whether their blend prices are higher, lower, or the same as the market averages or the average individual-handler blend prices. While producers know how and who

established Class I prices and the level of these prices, producer knowledge of Class II and III prices was limited. Producers, in general, did not know that the termination notice period was 90 days, as required by state law.

INTERFERENCE WITH SUPPLY AND DEMAND.--The third requirement of the existence of pure competition is that price of a good must be determined by the joint action of the forces of supply and demand without governmental intervention.

This condition is not met in Florida, and in fact, cannot be met by very many fluid milk markets in the United States. Most of the larger markets are operated under either state milk control agencies or Federal marketing orders or agreements. In most state and Federal regulated markets this is probably the only condition of pure competition which is not met in full or in part. This condition of pure competition is not met largely because of governmental attempts to adjust supply to demand, although governmental regulation in many markets has undoubtedly increased the degree of competition at producer and dealer levels.

Adjusting supply to demand has been undertaken by the Florida Milk Commission to some extent. These adjustments have been for both short-run and long-run periods.

SHORT-RUN AND LONG-RUN ADJUSTMENTS.--Prior to 1954, the Florida Milk Commission left the problem of adjusting supply to demand in the short-run largely to the producers and milk dealers.

In only one or two areas in central and south Florida had the Commission established a method of adjustment by use of the base-quota or base-surplus system. In the other areas of central and south Florida where prices were administered by regulations, use of a base-quota or base-surplus plan was not a part of the Commission's regulation. The common practice in these areas, however, was for milk dealers to use a form of the base-quota or base-surplus plan with their producers. During 1954, the Commission made the use of a base-surplus plan mandatory in every price regulated area in central and south Florida. While the base-surplus plan has been used in some markets outside Florida, apparently with good results, the plan has been used for other than to provide seasonal production incentives in Florida (see Appendix B).

In Florida the base-surplus plan has been used not only as a seasonal production incentive, but also as a monopolistic device to enhance individual producers' prices. In the area of south Florida, where a base period is established by the Commission, and base-quotas are mandatory, the effects of the plan were slightly different from those in the areas where a base period is not mandatory, and dealers may use other seasonal incentive plans. In these areas where base periods are prescribed by the Commission, the first effect is that producers operate under individual-handler pools. Some producers selling to individual dealers

have been quite successful in bargaining with their dealers in restricting production. By common agreement between a dealer and his producers, if the dealer needs more milk, his present producers are to be given the opportunity to produce it. The entry of new producers, who might be more efficient, has been discouraged because of the difficulty they have encountered in finding a market for whole milk at more than Class II or III prices or because they lack the capital to establish their own distribution facilities to market milk they might produce on the farms.<sup>84</sup> In these markets, where the numbers of consumers have been increased at a phenomenal rate, this has meant that existing firms have grown larger and larger.

In areas of central and south Florida, where base periods had not been prescribed by the Commission, effects similar to those in areas where base periods are established were experienced. Most producers in these areas operated on a base-quota, and there was some attempt to restrict

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<sup>84</sup>The Florida Dairy Association during 1954 published a report entitled Questions and Answers on the Florida Milk Commission. One answer stated that producers in the Miami Milkshed decreased from 92 to 79 from 1952 to 1954, a decrease of 12 per cent. During this same period milk sales (Class I) increased about 20 per cent. The varying degrees of this same experience were reported in other parts of Florida. The reason given for this decrease was reported to be producer price fixing at such a level that inefficient producers were driven out of business. Obviously, this may not be the entire answer.

production by use of producer-handler agreements and use of base-quotas. Another effect in these areas, however, was the absence of individual-handler pools in many cases. Many times a producer's yearly blend price depended entirely on his bargaining power and position in the market.

The second period for adjusting supply to demand is generally considered as a long-run adjustment for a period of one year or more. The Florida Milk Commission has relied on testimony at public hearings in adjusting Class I milk prices over the long-run period.<sup>85</sup> Adjusting prices of the various Class I milk uses established by the Commission<sup>86</sup> has been the sole means of making this adjustment.

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<sup>85</sup>These public hearings have generally, if not always, been held at the request of interested producers. Producer cost of production records, usually based on the previous years' operation, are usually presented at such public hearings. These records are witnessed by a notary public and sworn to be correct by the presenting producers appearing before the Commission. Generally, any producer who cares to can present testimony. Only those producers who care to do so present such testimony at these public hearings. In several instances, the Commission has made market-wide cost of production studies.

<sup>86</sup>The Commission is specifically directed by law to base producer and consumer prices upon cost of production. The law states,

"The Commission shall take into consideration all conditions affecting the milk industry including the amount necessary to yield a reasonable return to the producer and to the milk dealer. In determining what is a reasonable return to the producer, the Commission shall take into consideration the necessary cost incurred in that particular locality in maintaining dairy animals in a healthy condition, paying wages and supplying working conditions to employees sufficient for their subsistence at levels generally

LOCAL OPTIONS VERSUS AREA OR STATE OPTIONS.--In Florida milk prices are regulated on a local option basis. This method allows producers in local areas to decide whether producer and consumer prices will be established by the Commission, or will be determined by "competition." If the producers are dissatisfied under the Commission's regulations, they can vote, and have voted, to discontinue regulation. This places pressure (whether it has ever been used or not) upon the Commission to satisfy producer price demands in various local areas. Another effect of having local options in Florida has been the formation of many small marketing areas of one county or less, containing in some cases, 10 or fewer producers. This results in higher costs of administration and greater inflexibility of prices, due to the time required in holding individual local price hearings and the greater number of hearings required.

In most of the 15 other states with Milk Commissions or Boards, area or state options are found. In the five

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obtaining, and for the safeguarding of their health in defraying the ordinary fixed charges and operating expense incidental to the ownership, control and management of a herd of average numerical size, including a reasonable amount representing annual rent of land, equipment, necessarily utilized therein and in addition to afford such producers a reasonable return in excess of their cost of production. In determining the reasonable return to the milk dealer, the Commission shall take into consideration reasonable average operating expense in processing, storage, transportation and delivery charges and all necessary reasonable expenses connected therewith."

New England states of Maine, Vermont, Massachusetts, Connecticut, and Rhode Island, the enactment of the milk statutes provides that the Commissions, or Boards, have the power to establish regulation, at least at the producer level, in every area of the state.<sup>87</sup>

Other states having Milk Commissions or Boards, such as Pennsylvania, Alabama and Georgia, have statutes which enable their Commissions or Boards to regulate the industry in any market, or all markets of the state, at their own discretion.

New Hampshire, California, and possibly other states,<sup>88</sup> have statutes similar to those in Florida, which permit local options. In most of these states, in view of the relatively high density of milk production and the overlapping of the milkshed areas of various large markets, competition for producer milk could be expected to be greater than in Florida, where density of production is relatively low and markets are separated spatially at the producer

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<sup>87</sup>The original Maine law provided that the Board could not exercise its powers in any market except upon written application of a producers', Producer-dealers', or dealers' association that handles a substantial portion of the milk consumed in the market. This provision was repealed March 30, 1939. G. F. Dow, Receipts, Utilization, and Prices of Milk and Cream in Maine Milk Control Areas, Maine Ag. Exp. Sta. Bul. 399, March, 1940, p. 81.

<sup>88</sup>These other states consist of Montana, Rhode Island, New York, Virginia, and New Jersey. Whether these states operate on local options, or area, or state options is not known.

level. Most state agencies have attempted to regulate their industries by economic areas.

ECONOMIC AREAS.--The 15 counties under milk control regulations in central and south Florida are separated by the Commission into 11 price-administered marketing areas

(Figure 11). These areas are:

Orange-Seminole County Area

Brevard County Area

Polk County Area (excepting Lakeland Area)

Lakeland Area (a separate area within Polk County)

Plant City Area (eastern half of Hillsborough County)

Tampa Area (western half of Hillsborough County)

Pinellas County Area

Manatee-Sarasota County Area

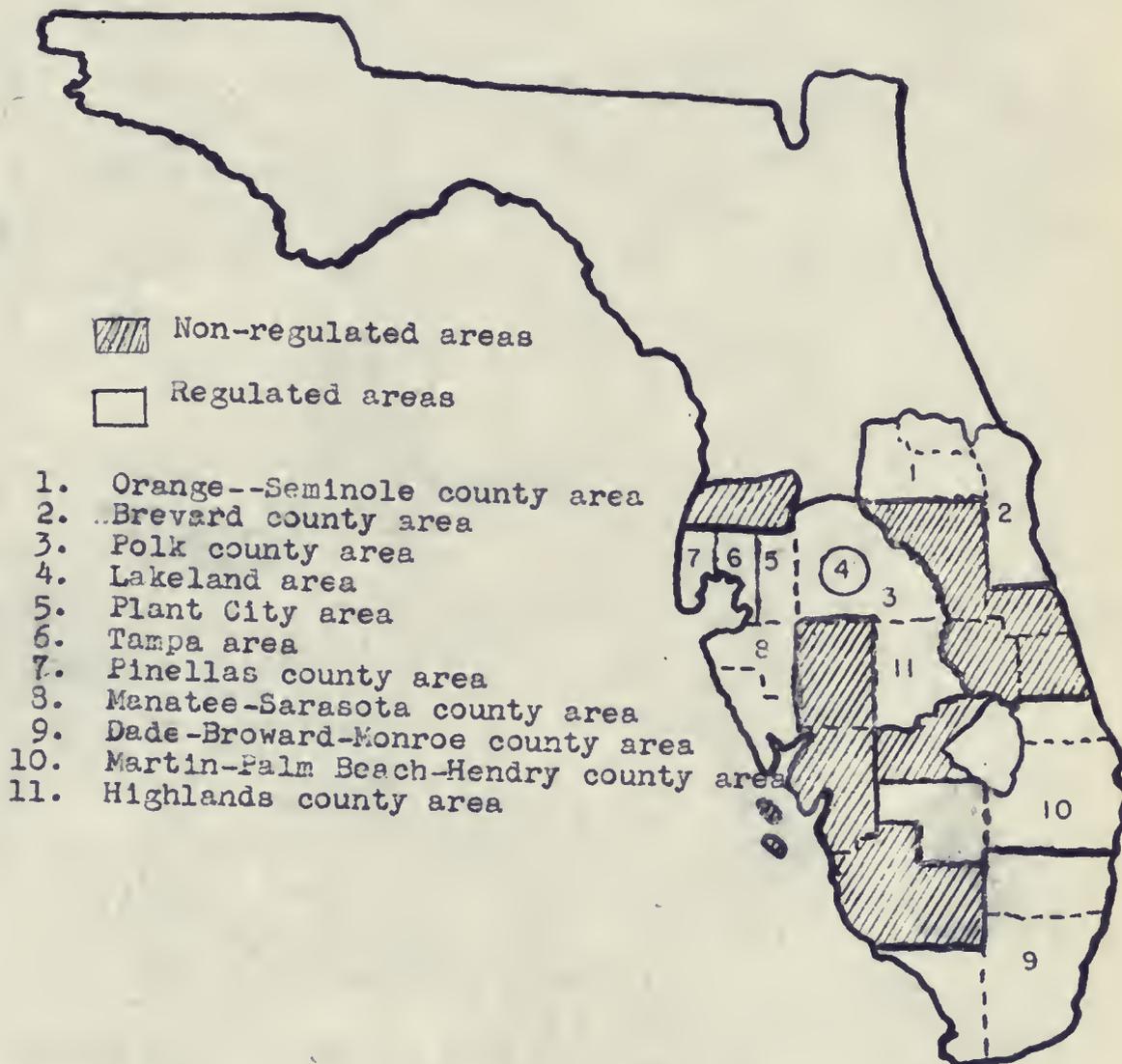
Dade-Broward-Monroe County Area

Martin-Palm Beach-Hendry County Area

Highlands County Area

Generally, producers in these areas petitioned the Commission to regulate their area. Since these requests have come from individual counties (local options), the markets when established by the Commission, have been single county areas. Highlands, Brevard, and Pinellas Counties are single county areas. Polk and Hillsborough Counties have been divided into four market areas. The Orlando Market is

FIGURE 11 AREAS OPERATING UNDER REGULATION OF THE  
FLORIDA MILK COMMISSION, CENTRAL AND SOUTH  
FLORIDA, JANUARY 1, 1953.



comprised of the two county areas of Orange and Seminole; the Palm Beach and Miami Areas are comprised of three counties each (Figure 11).

Within a 40-mile radius of Tampa there are, at present, six different established milk marketing areas. The largest, and evidently the primary market in this area, is Tampa. The three milk dealers interviewed in the Tampa Area do not restrict their sales area to the Tampa Milk Marketing Area, but sell milk into the Pinellas, Polk, Lakeland, Plant City, Manatee-Sarasota, and Highlands County Marketing Areas. In addition, they also sell milk into the non-control counties of Hernando, Pasco, Hardee, DeSoto, Charlotte, and Lee (Figure 12). The volume of milk moving into the different milk marketing areas around Tampa is not known, but in most, if not all of these areas, local milk dealers regard the Tampa dealers as their chief source of competition. The milk dealers in the Tampa Area, on the other hand, regard most of central Florida as one large marketing area.

Milk flows from dairy farms into the Tampa Area not only from the Tampa Marketing Area, but also from Pinellas, Pasco, Polk, Highlands Counties (Figure 13). In the surrounding marketing areas, there is not only competition for milk sales from the primary market of Tampa, but also competition for sales between the other nearby established marketing areas. Milk dealers in the Pinellas County Area sell milk

FIGURE 12 SALES AREA OF THREE TAMPA MILK DEALERS,  
FLORIDA, 1953.

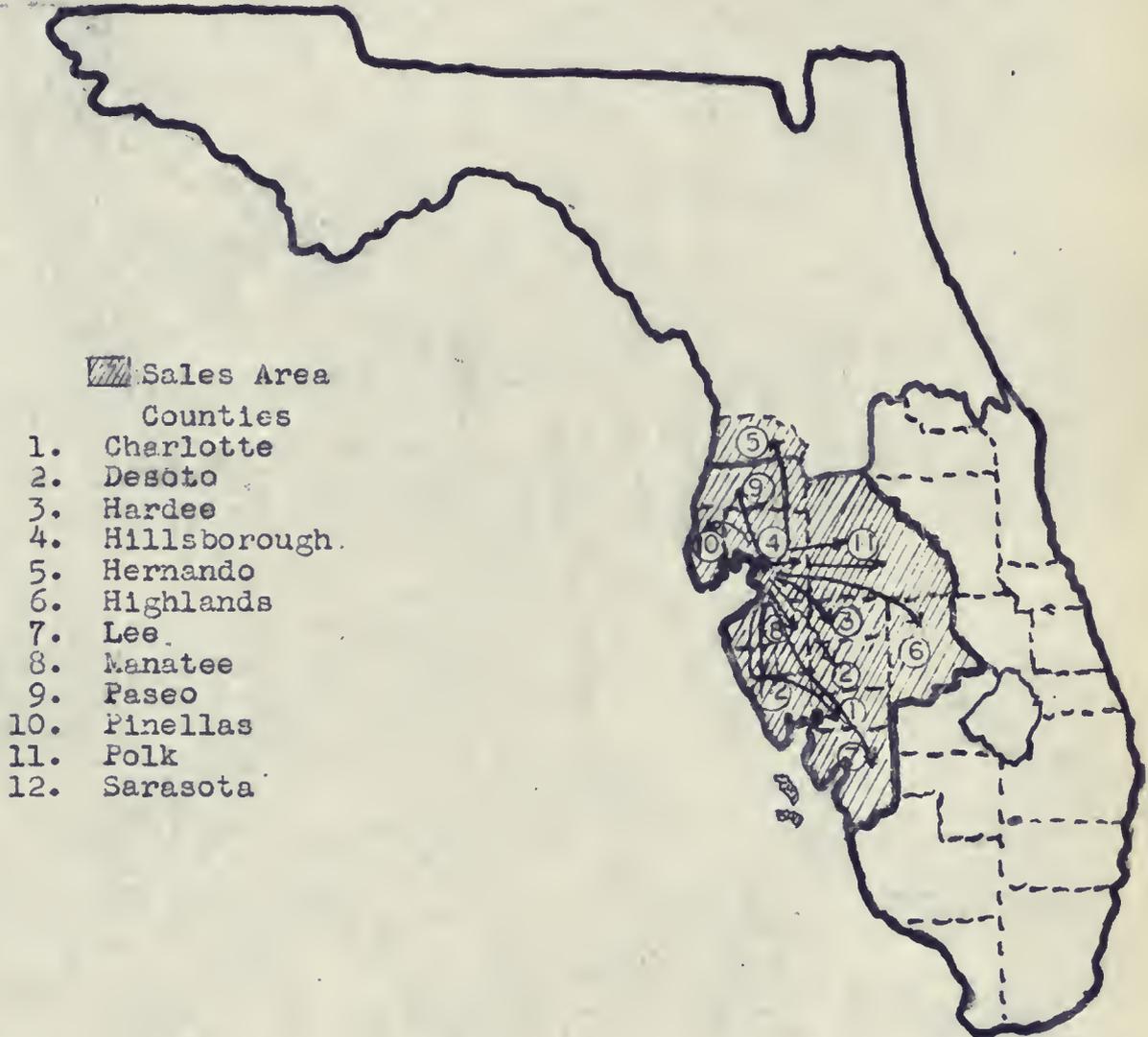
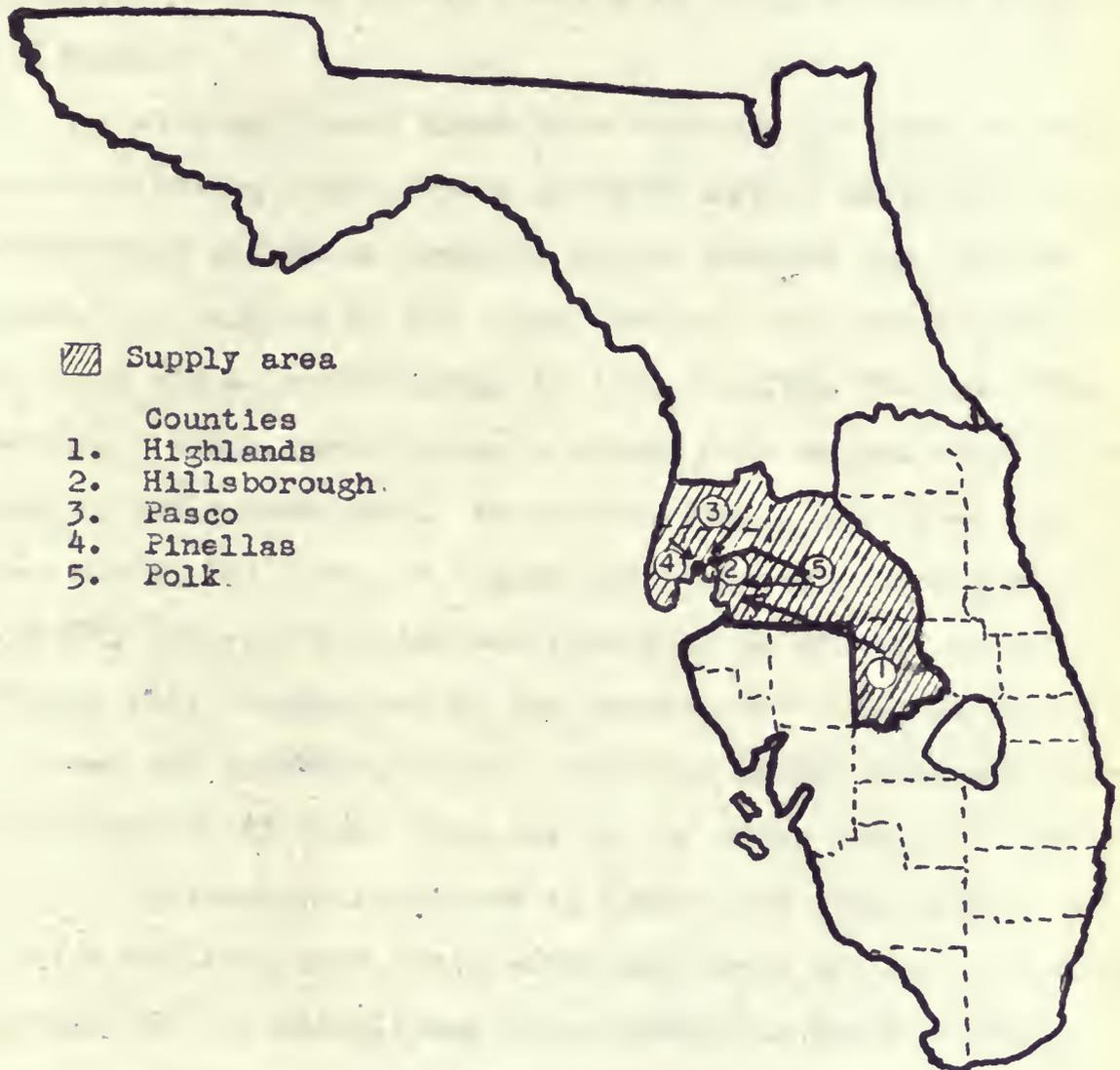


FIGURE 13 MILK SUPPLY AREA OF THREE TAMPA MILK DEALERS, FLORIDA, 1953.

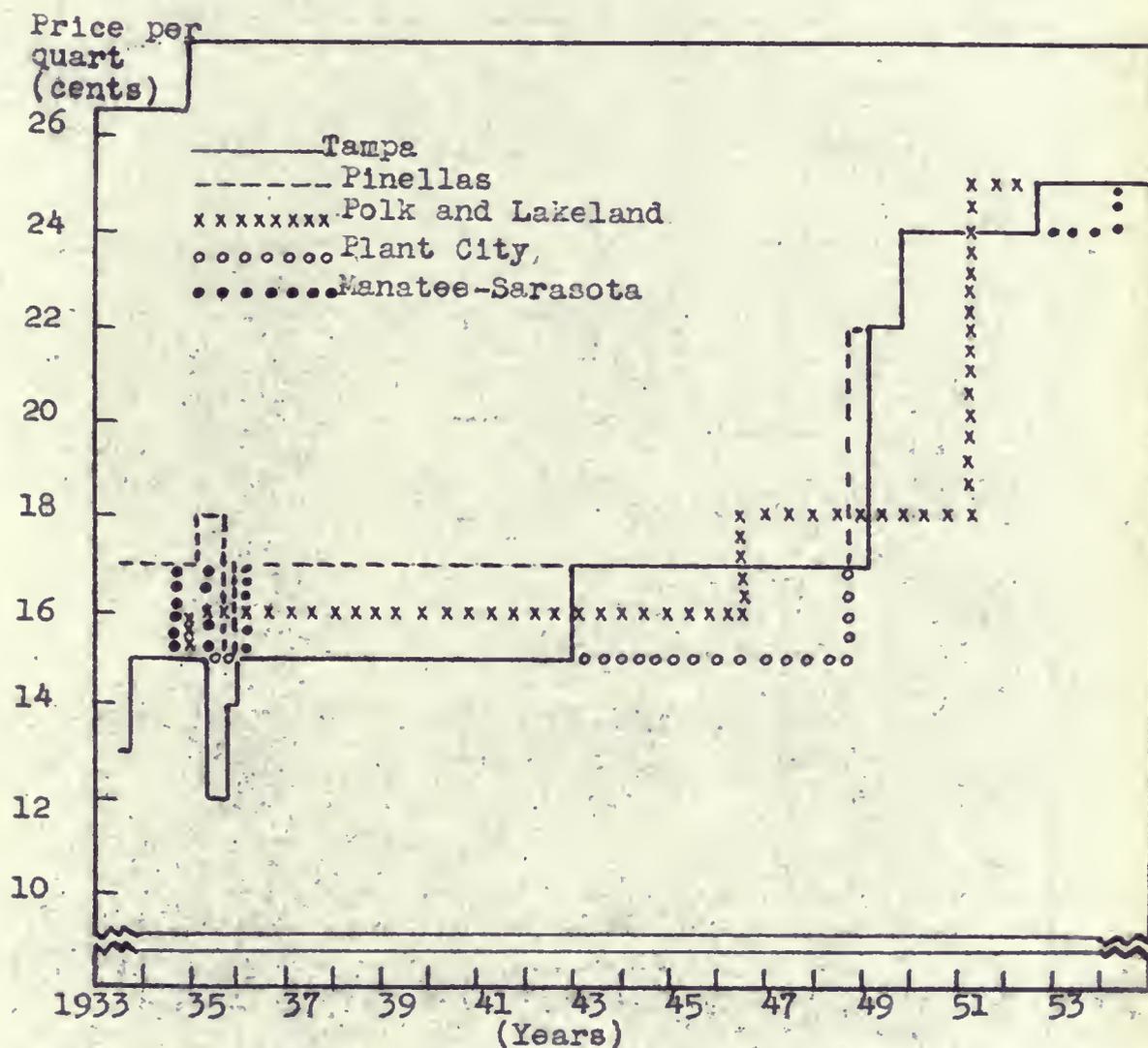


into Pasco and Hillsborough Counties. Dealers from the Polk and Lakeland Areas sell milk into other areas. In brief, the established marketing areas in this section of Florida appear to mean very little insofar as being economic marketing areas.

Although these areas have been administered as separate marketing areas, there has been little variation in established retail or producer prices between the various areas. Comparison of the retail prices, from the inception of these six marketing areas in 1933 and 1934 through 1952, reveals a close correlation in prices with no one significant high or low priced area. At various times, each area has been one of the lower or higher priced areas. During most of 1952, the retail price was identical in all six areas (Figure 14). Comparison of the established producer prices in these six marketing areas, show that no one area has been consistently different from any of the other areas (Figure 15).

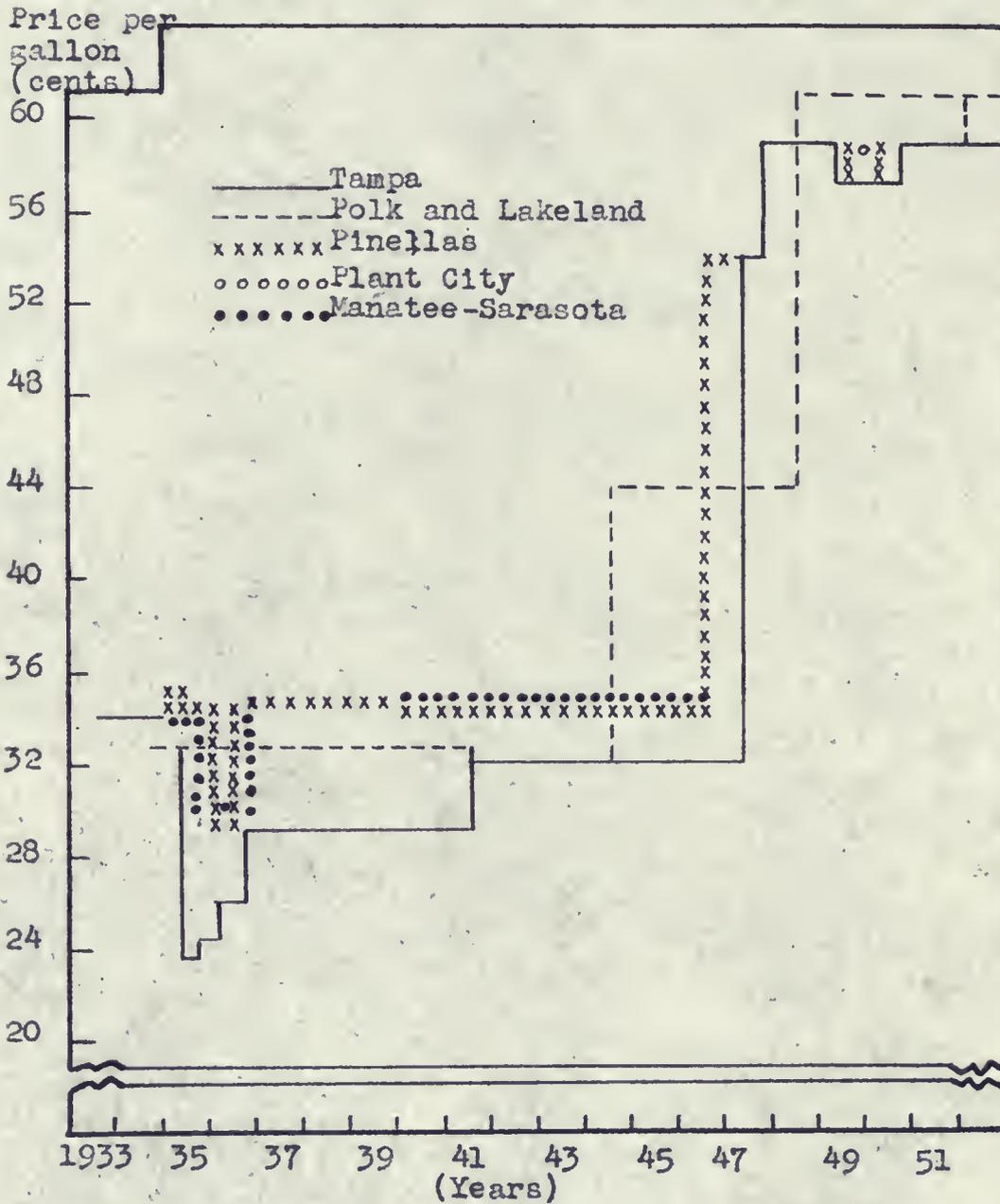
Information furnished by three milk dealers in Orlando indicate that their marketing areas extend beyond the confines of the established Orange-Seminole Counties milk marketing area. These distributors sold milk into the counties north and west of the area of this study, as well as in Osceola and Brevard Counties (Figure 16). Sales of retail milk into Osceola and Brevard Counties, by these three milk dealers, were reported to be in quite substantial quantities.

FIGURE 14 DELIVERED RETAIL PRICE PER QUART\* OF MILK IN THE TAMPA, PINELLAS, POLK AND LAKELAND, PLANT CITY AND, MANATEE-SARASOTA MILK MARKETING AREAS, FLORIDA, 1933-52.



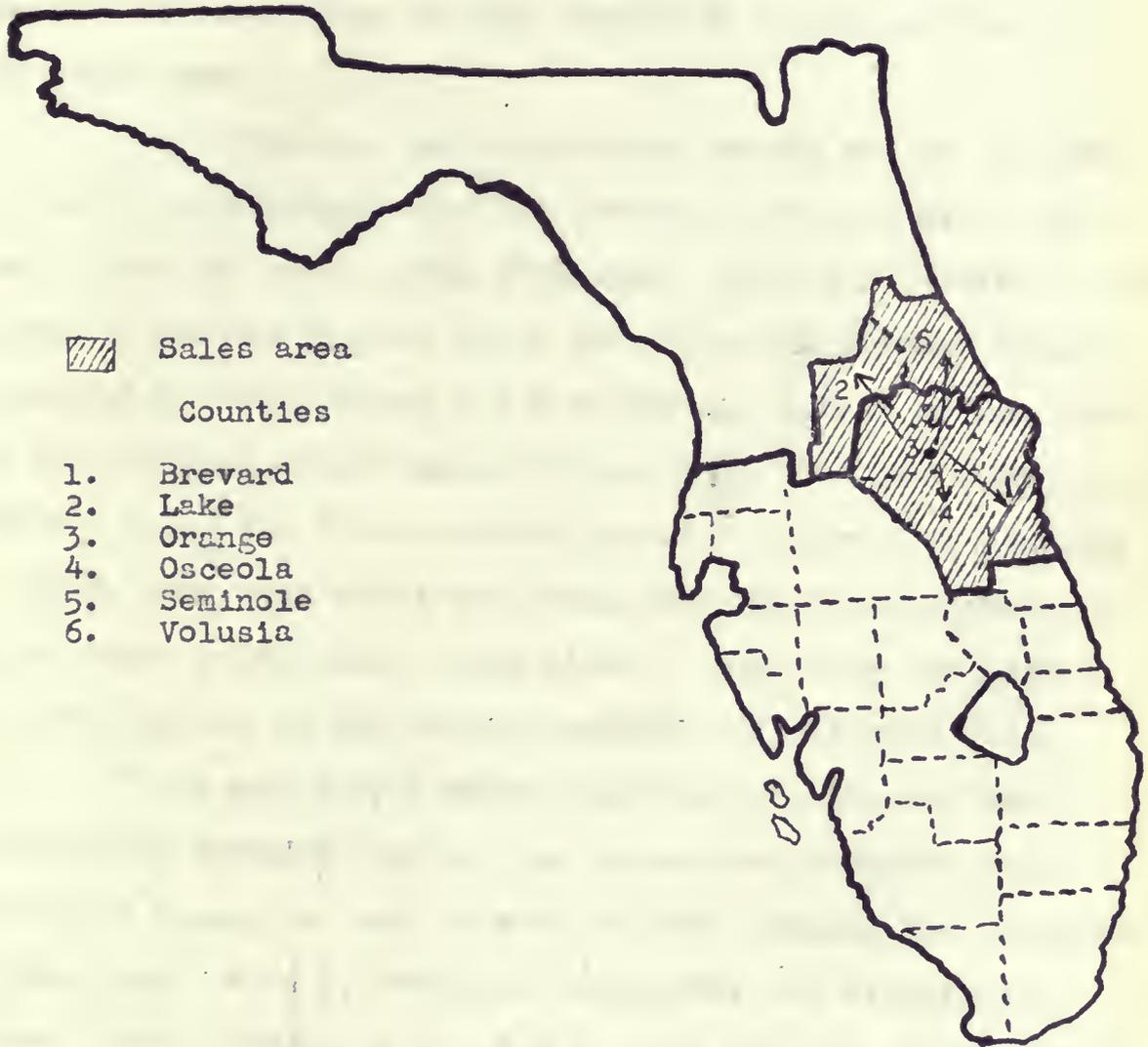
\* Source—Official Orders of the Florida Milk Commission, 1933-52. Prices were for four percent butterfat content milk.

FIGURE 15 PRODUCER PRICE PER GALLON OF MILK\* IN THE TAMPA, POLK AND LAKELAND, PINELLAS, PLANT CITY AND MANATEE-SARASOTA MILK MARKETING AREAS, FLORIDA, 1933-52.



\*Source--Official Orders of the Florida Milk Commission, 1933-52. Prices were for four percent butterfat content milk.

FIGURE 16 SALES AREA OF THREE ORLANDO MILK DEALERS,  
FLORIDA, 1953.



All producers interviewed in Osceola County, reported that their milk moved to Orlando, no producer sales from Brevard County to Orlando were found, and only a small amount of producer milk moved into Orlando from Polk County and the Lakeland Area.

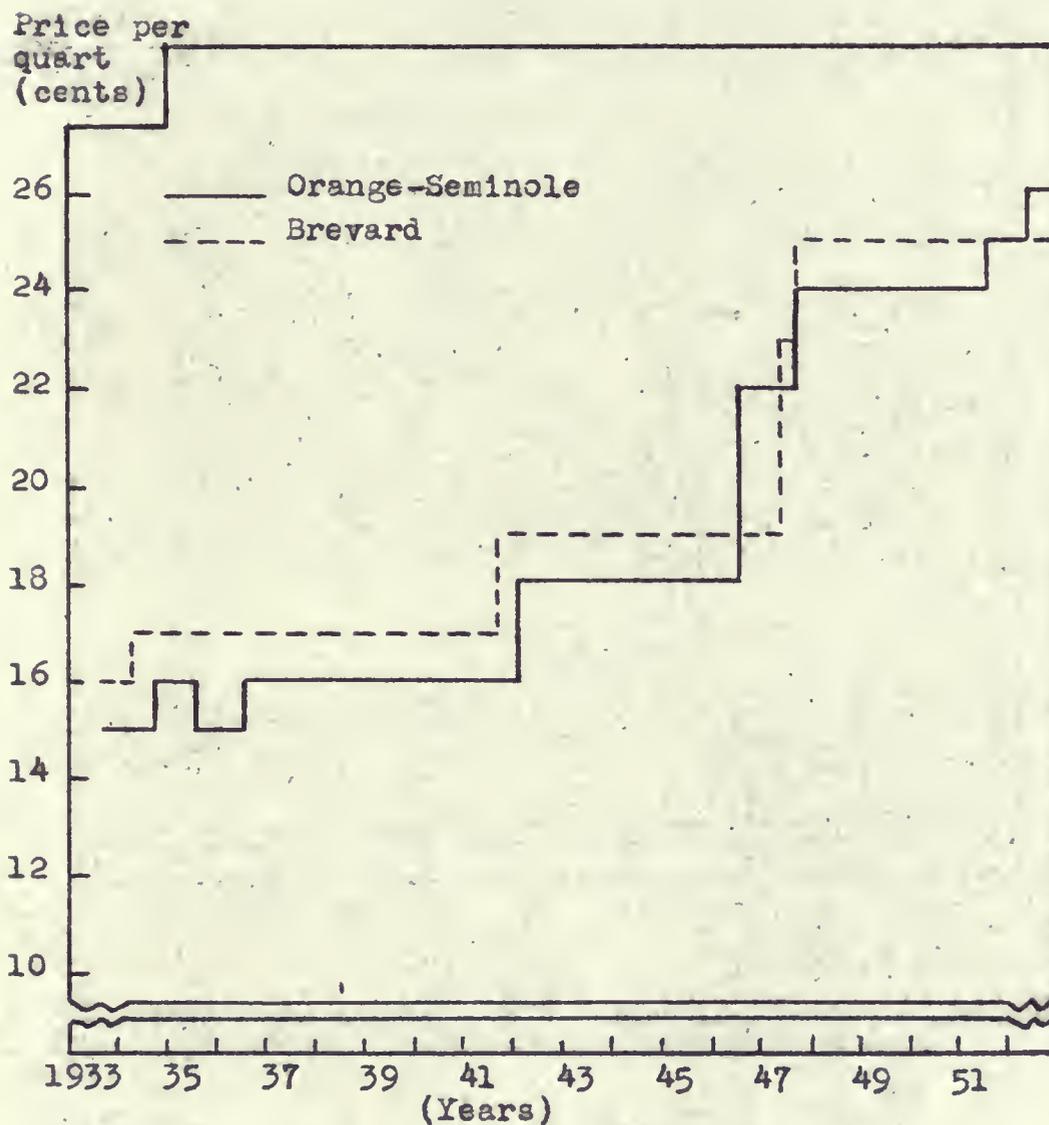
Historically, the established retail prices of milk in the Orange-Seminole and the Brevard Marketing Areas has been about the same. From 1933 until 1946, the Brevard County retail price was higher; since that time the Brevard County established retail price has been lower, higher, or the same as the Orange-Seminole price (Figure 17). The producer prices, since the first Brevard producer price establishment in 1947, have been about the same, with the Brevard producer price first being lower, then higher, then lower than the producer prices in the Orange-Seminole Area (Figure 18).

There are strong trade relationships between the Martin-Palm Beach-Hendry and the Dade-Broward-Monroe Milk Marketing Areas, as well as with several unregulated counties, on the basis of both producers' shipments and distributor sales. While little or no milk is sold into the Martin-Palm Beach-Hendry Milk Marketing Area by producers located in the Dade-Broward-Monroe Area, substantial quantities of milk are sold by Martin-Palm Beach-Hendry producers<sup>89</sup> into the Dade-Broward-Monroe Area. Little milk is sold by Martin-Palm

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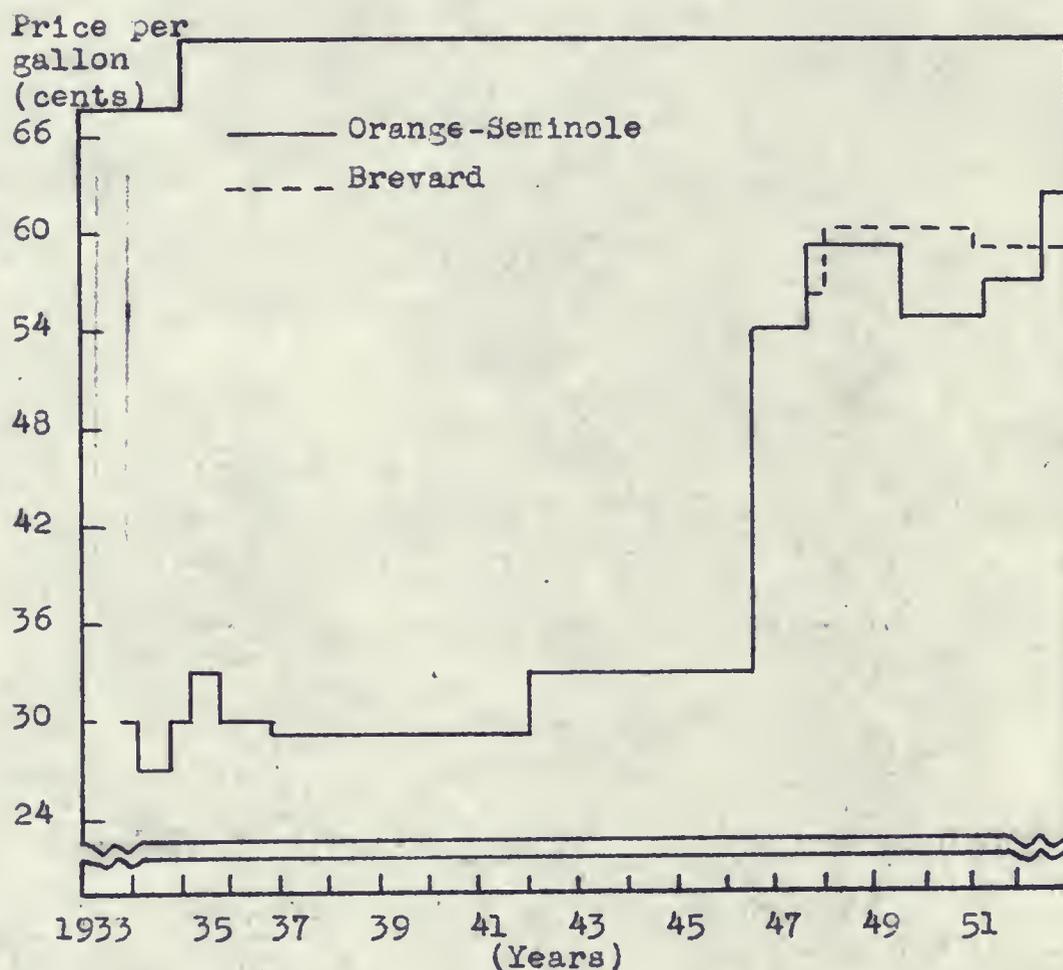
<sup>89</sup>McPherson and Luckey, op. cit., p. 21.

FIGURE 17 RETAIL PRICES PER QUART FOR MILK\* IN THE ORANGE-SEMINOLE AND BREVARD MILK MARKETING AREAS, FLORIDA, 1933-52.



\* Source—Official Orders of the Florida Milk Commission, 1933-52. Prices were for four percent butterfat content milk.

FIGURE 18 PRODUCER PRICES PER GALLON OF MILK\* IN THE ORANGE-SEMINOLE AND BREVARD MILK MARKETING AREAS, FLORIDA, 1933-52.



\* Source—Official Orders of the Florida Milk Commission, 1933-52. Prices were for four percent butterfat content milk.

Beach-Hendry Area milk dealers into the Dade-Broward-Monroe Area, but several milk dealers in the Dade-Broward-Monroe Area sell considerable quantities into the Martin-Palm Beach-Hendry Area (Figures 19 and 20).

Retail milk prices in the Martin-Palm Beach-Hendry and the Dade-Broward-Monroe Areas have been substantially the same since the formation of the two areas. Since 1946, the retail prices have been identical most of the time (Figure 21). In the period 1940 through 1952, producer prices in the two areas were never identical. The Dade-Broward-Monroe price was lower in seven years and higher in six years during this period. The difference in prices, however, has become smaller, so that in 1952 they were nearly identical (Figure 22).

There appears to be no logical reason why the Pinellas, Tampa, Plant City, Lakeland, Polk, Manatee-Sarasota Areas should not be considered as one marketing area, both in theory and in practice. There is also a possibility that the present non-control counties of Pasco, Hardee, DeSoto, Charlotte, and Lee Counties are, and should be, considered as part of the same area (Figure 23).

It would appear that Brevard County, which is a separate marketing area, and Osceola County, a non-control area, may well be a part of the Orlando economic marketing area (Figure 23).

FIGURE 19 SALES AREA OF FIVE MIAMI AND THREE WEST PALM BEACH MILK DEALERS, FLORIDA, 1953.

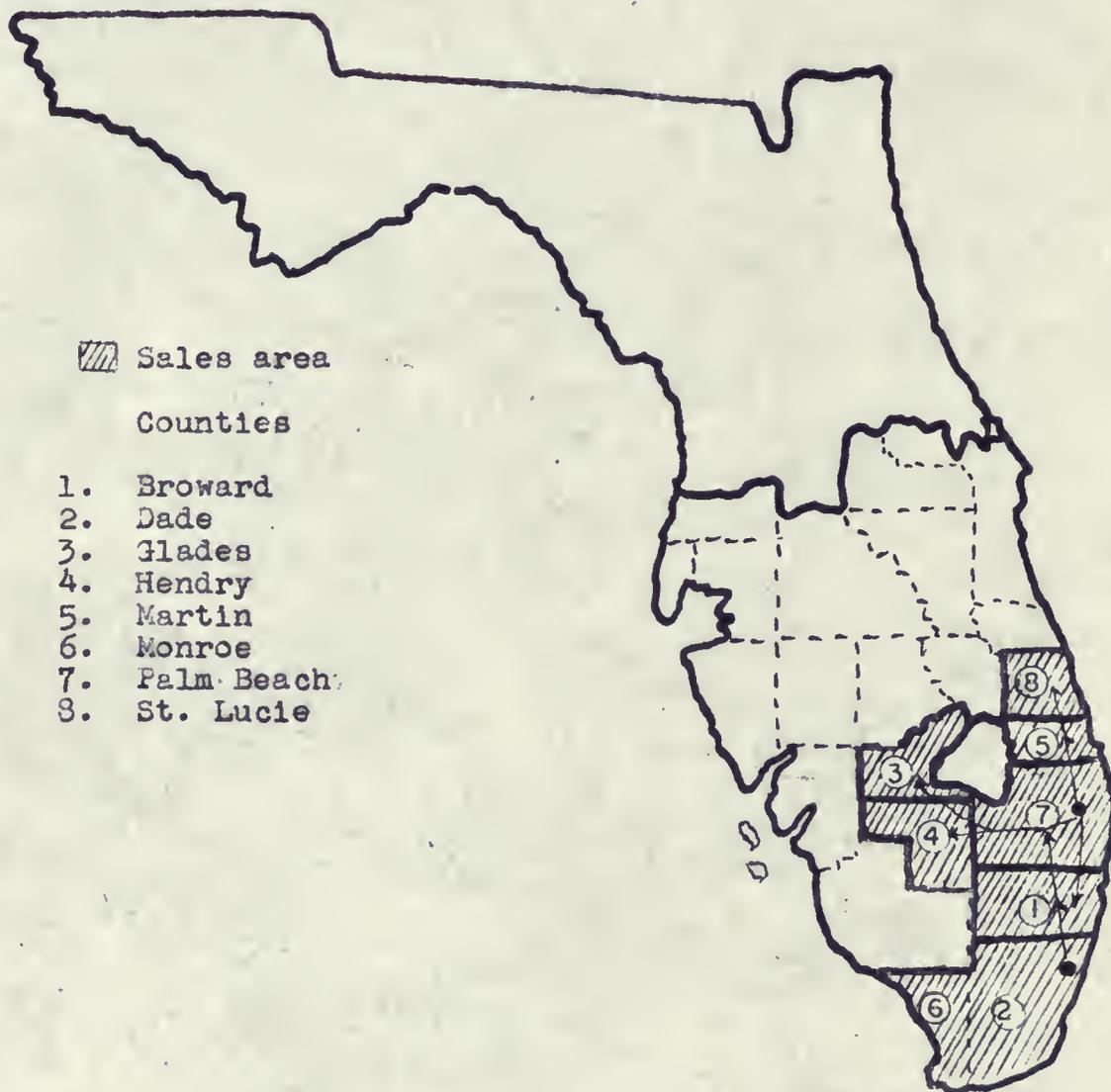
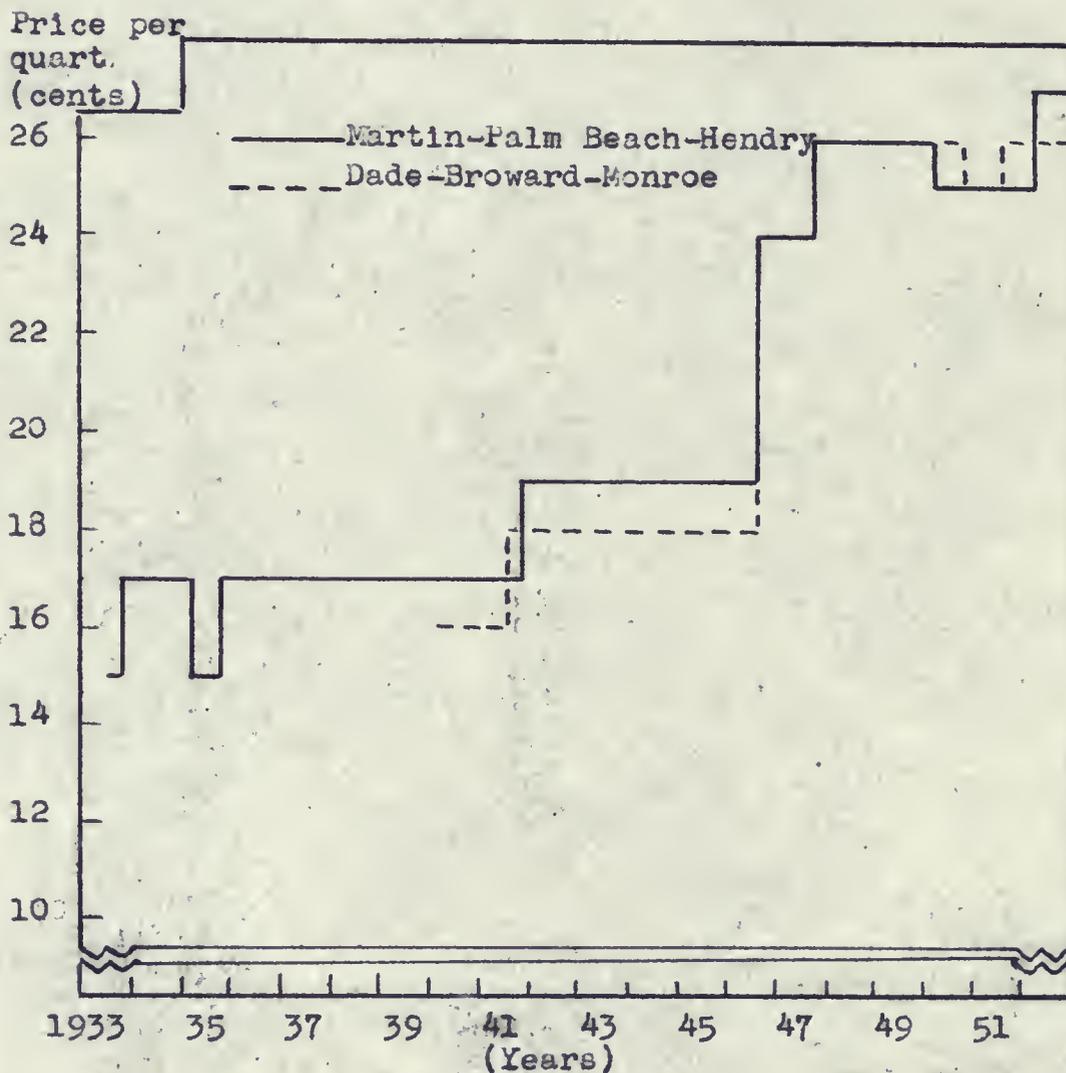


FIGURE 20 MILK SUPPLY AREA OF FIVE MIAMI AND THREE WEST PALM BEACH MILK DEALERS, FLORIDA, 1953.

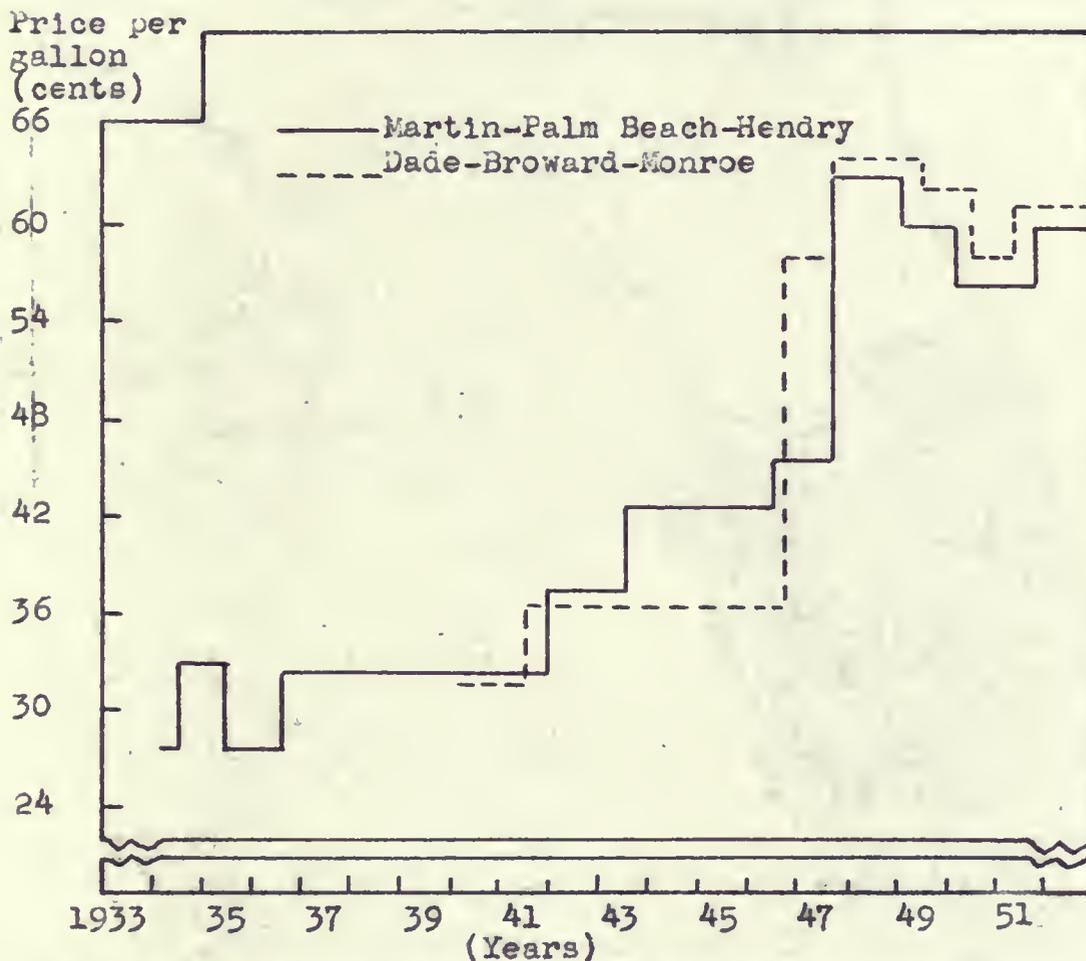


FIGURE 21 RETAIL PRICES PER QUART FOR MILK\* IN THE MARTIN-PALM BEACH-HENDRY AND THE DADE-BROWARD-MONROE MILK MARKETING AREAS, FLORIDA, 1933-52.\*



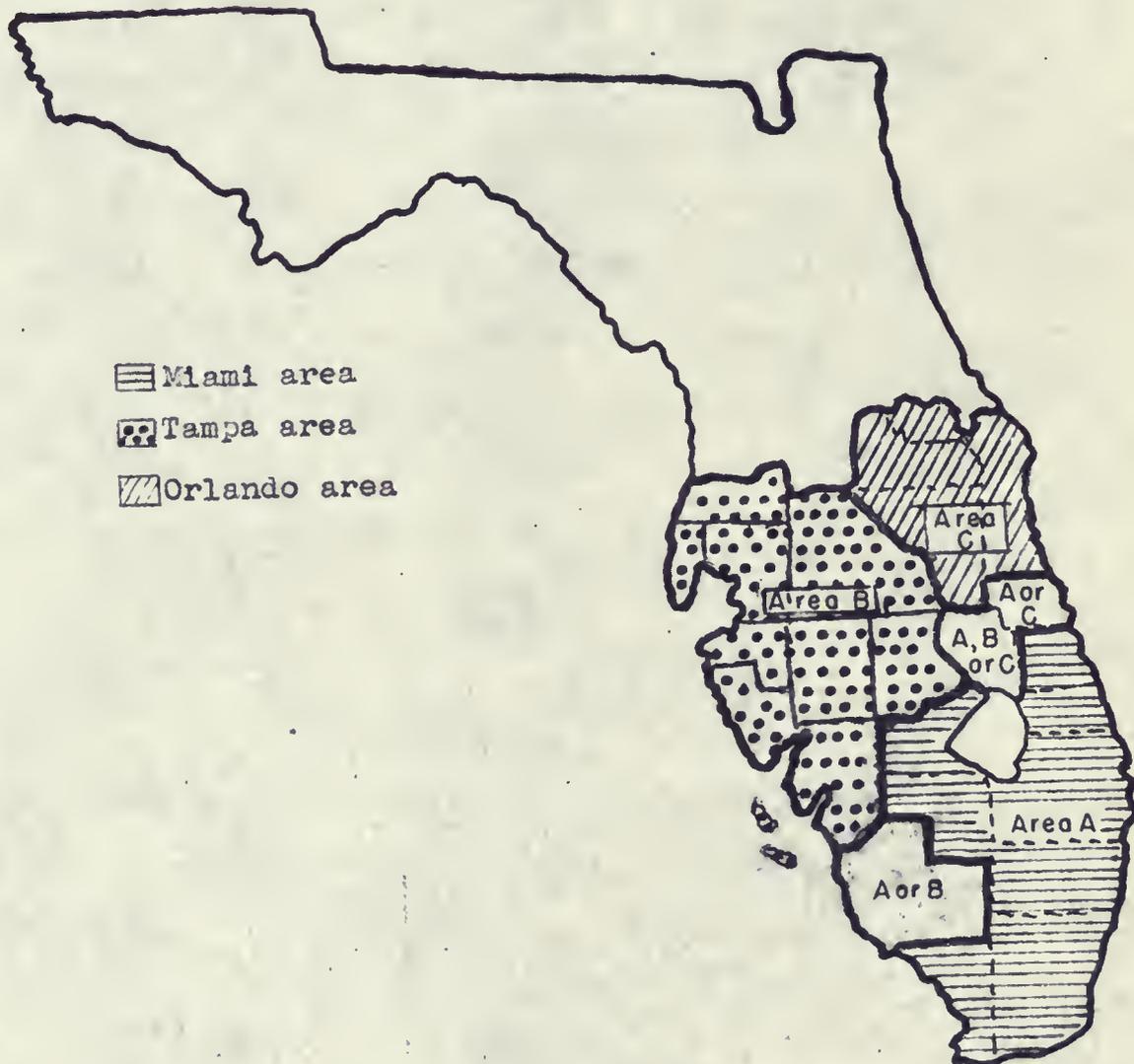
\* Source—Official Orders of the Florida Milk Commission, 1933-52. Prices were for four percent butter-fat content milk.

FIGURE 22 PRODUCER PRICES PER GALLON OF MILK\* IN THE MARTIN-PALM BEACH-HENDRY AND DADE-BROWARD-MONROE MILK MARKETING AREAS, FLORIDA, 1933-52.



\* Source: Official Orders of the Florida Milk Commission, 1933-52. Prices were for four percent butterfat content milk.

FIGURE 23 PROBABLE ECONOMIC MILK MARKETING AREAS  
IN CENTRAL AND SOUTH FLORIDA, 1953.



Apparently, the present Martin-Palm Beach-Hendry and the Dade-Broward-Monroe Marketing Areas are one single economic marketing area. There is also a possibility that Glades and St. Lucie Counties are also a part of this economic marketing area (Figure 23).

On the basis of information obtained from the 27 milk dealers and 117 wholesale milk producers interviewed during the course of this study, indications point to three well-defined economic marketing areas. These are the Tampa, Orlando, and Miami-West Palm Beach Areas (Figure 23).

RETAIL AND WHOLESALE PRICES OF MILK.--It is believed that price fixing authorities attempt to establish prices which would be expected to exist under purely competitive economic conditions. These authorities also attempt to eliminate pricing practices which would cause price changes from a stable marketing condition. In their zeal to establish and maintain stable marketing conditions, the authorities on establishing pricing have sometimes ignored changing marketing conditions and techniques which would have caused prices in an unregulated market to vary. Failure to recognize changing marketing conditions and practices has often caused deviations from regulated prices by means of concealing illegal discounting practices. When this condition occurs, the effect is one of meeting changing conditions, insofar as producers and milk dealers are concerned, but not at the

consumer level. Hence, there are some changes on the supply side, but the demand side of the market is ignored.

In Florida as in other states where milk prices have been fixed at producer and consumer levels, major emphasis has been placed on producer costs of production and dealer costs. As was true in other states during the 1930's, price fixing in Florida was not intended to equate supply and demand but was intended to increase producer incomes. As price fixing has developed into a continuing program, cost of production and distribution costs have come under sharp criticism because the demand side of the market equation has been largely ignored. The difficulty in determining whose cost of production and whose processing and distribution costs to use in price fixing has also been a factor for consideration. Regardless of the method or methods the Florida Milk Commission has used in establishing prices, the level of prices in nearby regulated states has probably been a factor considered by the Commission. The regulated prices in nearby states has probably also been influenced by the Florida regulated prices.

In Florida as in regulated markets in most other states, differential pricing of retail and wholesale fluid milk has been ignored. Research work indicates that delivery costs on wholesale accounts has been lower than on retail accounts. Even in states where Milk Commissions have

established lower differential prices the differentials have been one-half cent per quart less than in unregulated areas. Competition has been responsible for a 1.6 cent per quart differential (Table 23, Part b) in these competitive markets.

The failure of the Florida Milk Commission in establishing wholesale price differentials has apparently been responsible for much of the wholesale price discounting previously discussed under "Price Structure Prevailing in Central and South Florida." Only the recognition by the Commission of the factors responsible for these wholesale price wars and the establishment of proper differentials will eliminate these practices.

INDEPENDENCE OF BUYERS AND SELLERS.--A fourth marketing condition essential for pure competition is independence of buyers and sellers. This means that there must be no agreements, combinations or conspiracies among buyers or sellers for purposes of restricting purchases or production or rigging prices.

RESTRICTION ON ENTRY.--Seventeen milk dealers, representing 80.4 per cent of the fluid Class I milk sales of the 27 dealers during 1952, said that applicants had applied to them for a market outlet during the previous 12 months. Ten dealers, including one who refused to answer the question, representing 19.6 per cent of the fluid Class I milk sales by these dealers

during 1952, said that no new producers had applied to them during the preceding year.

The 17 dealers who said that new producers had applied to them for a marketing outlet during the previous 12 months were then asked if they had taken on, as new producers, any of the people who had inquired. Only six dealers reported taking on new producers (Table 30). These six dealers represented only 28.2 per cent of the fluid Class I milk sales by the 17 dealers during 1952. The other 11 dealers, who represented 71.8 per cent of total Class I fluid milk sales by the 17 distributors during 1952, said that they had not taken on any applicants who had applied for a marketing outlet. As to why they had not taken on any of the applicants as producers, two dealers, handling 20.4 per cent of the milk sold by dealers where new producers had applied, said that they had not taken on any new producers because it would not have been fair to their present producers. Three dealers handling 23.7 per cent of the fluid sales of this group said that they had not taken on any new producers because of agreements with their present producers not to do so. Six dealers handling 27.7 per cent of the total volume of sales said that they had not taken on any new producers because they did not need the milk (Table 31).

Hence, new producers were able to gain entry to the market during 1952 only through six milk dealers representing

slightly more than one-fifth of the total Class I milk sales of 17 dealers. Thirty-one new or potential producers<sup>90</sup> had applied to these 6 dealers and only 14 had been able to gain a market place. This percentage was in reality even smaller because one milk dealer had taken on a new producer only because he had bought out a former producer-distributor and given him a 100 per cent Class I contract for his production.

TABLE 31

DISTRIBUTION OF DEALERS WHO DID OR DID NOT TAKE ON NEW PRODUCERS WHO APPLIED TO THEM DURING 1952 FOR A MARKETING OUTLET AND REASONS WHY SOME DEALERS DID NOT TAKE ON THESE APPLICANTS, CENTRAL AND SOUTH FLORIDA

Dealers	Per Cent	Number
Dealers who took on new producers	28.2	6
Dealers who did not take on new producers	71.8	11
Because the dealers did not need the milk	27.7	6
Dealers had agreements with present producers not to take on new producers	23.7	3
Dealers did not think that taking on new producers would be fair to present producers	20.4	2
Total	100.0	17

<sup>90</sup>Some of these applicants might have already been selling milk wholesale to other milk dealers.

Six dealers handling 27.7 per cent of the volume denied new producers marketing outlets because they did not need their milk. Those dealers who tried to operate only on a Class I market were within their rights in not taking on new producers. However, their policies effectively barred producers from this portion of the market.

Three dealers handling 23.7 per cent of the volume had not taken on any new producers because they had agreements with their present producers not to do so. Thus, because of collusion between producers and milk dealers, market outlets were denied in nearly one-fourth of the market.

Two dealers handling 20.4 per cent of the trade had not taken on new producers because they did not think it would be fair to their present producers. This arrangement, while not outright collusion, was indicative of strong producer and distributor ties and barred new producers from entry in another one-fifth of the market. In effect, 80.4 per cent of the market was barred to the entry of new producers. Only a potential of 19.6 per cent of the market was open to new producers.

Another indication of the extent of the closed market is shown by the fact that of at least 77 new or potential producers<sup>91</sup> who applied for entry, only 14 producers or

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<sup>91</sup>This total was higher, but how much higher could not be determined. Two dealers said that quite a few or some producers had applied, but could not say exactly how many.

18 per cent were able to gain entry. Sixty-three or nearly 82 per cent were refused entry.

Replies to various questions answered by the 117 wholesale milk producers interviewed indicated that in Florida markets existing producers were limited in changing outlets by the number of available outlets willing to take on new producers (Table 32). Producers were also limited in

TABLE 32

REPLIES BY 117 WHOLESALE MILK PRODUCERS IN CENTRAL AND SOUTH FLORIDA DURING 1953 TO QUESTION, "COULD YOU HAVE SOLD YOUR MILK TO ANYONE ELSE WHEN YOU STARTED SHIPPING TO YOUR PRESENT OUTLET?"

Answer	Classification of Answer	Number
Yes	Producer could have continued selling to past dealer . . . . .	38
	Producer could have continued former producer-distributor operations. . .	8
	Producer could have sold to another outlet if he had waited five more months . . . . .	1
No	(No other chance to sell elsewhere)	22
Don't know	(Producers had not tried to sell elsewhere, some thought they could have sold elsewhere but weren't sure.)	48
Total		117

changing outlets by various market arrangements (Table 33, Reasons 1, 3, 4, 5, 9, 10, 11, 13, 16, and 17).

TABLE 33

REASONS WHY 117 FLORIDA PRODUCERS DECIDED TO SELL MILK TO  
THEIR PRESENT OUTLET, 1953

Item	Reason	Number of Producers
1.	Outlet was only one who would or could take the milk	19
2.	Producer thought he would get less surplus from present outlet	19
3.	Former producer on this farm had established base at this outlet	15
4.	Present outlet loaned or helped obtain the loan which set the producer up in business	8
5.	Producer's previous outlet was sold to present outlet and producers were reassigned to present outlet	6
6.	Producer was formerly a producer-distributor and sold retail routes to present outlet	6
7.	First place the producer had applied to for and outlet	6
8.	Closer haul to present outlet	6
9.	Present outlet gave producer a contract for 100 per cent Class I milk	5
10.	Producer was personal friend of present distributor	5
11.	Producer was a relative of present distributor	3
12.	Producer was formerly a producer-distributor and merged his business with present distributor	3
13.	Producer was given a larger base by present distributor	3

TABLE 33--Continued

Item	Reason	Number of Producers
14.	Present distributor came to see producer and requested that he sell his milk to him	3
15.	Producer disliked former distributor for personal reasons	2
16.	Only outlet to which the producer could buy a large base	1
17.	Miscellaneous	5 <sup>a</sup>
<b>Total</b>		<b>115<sup>b</sup></b>

<sup>a</sup>Producer received nine cents a gallon more for milk from present distributor than from former outlet located in a non-price administered area, former distributor was slow paying, producer leased his farm from present outlet, producer was encouraged to start dairying by relative of present distributor, producer's chance to join a cooperative and see that milk was paid for by use.

<sup>b</sup>Two producers did not state any reason.

In one of the larger established marketing areas, as measured by the number of inhabitants and number of producers and volume of milk produced during 1949, every dealer operated on a system of frozen bases during 1952. These bases had not been changed for three or four years. Every dealer in this area had agreements with his present producers not to take on any new producers without the approval of the existing producers. As a consequence, no new producers had been able to

start production or to enter the market for at least three years. A few producers had been able to enter production by buying out one of the existing producers and paying an appropriate monetary consideration<sup>92</sup> for the producer's base gallonage. Another result of the status quo position in this market was that the existing producers could not change marketing outlets.

EFFECT OF CREDIT TERMS ON MOBILITY OF PRODUCERS.--Independence of buyers and sellers has been limited by credit arrangements between some producers and milk dealers. This was shown by the immobility of producers in changing marketing outlets after being extended credit by their present milk dealers, as compared to the mobility of producers who were not extended credit.

In reply to the question, "Have you ever obtained credit from your milk dealer?" 19 producers said they had received credit loans from their dealers while 98 producers had not. Eight of the 19 producers still owed their dealers all or part of the loan (Table 34). These loans had been extended by milk dealers to producers for various reasons (Table 35).

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<sup>92</sup>The usual price for the purchase of a producer's Class I base-quota was \$30 per gallon (Appendix C). With a 200-gallon base this amounted to \$6,000. This value was in addition to the value of land, buildings, cattle, and equipment.

TABLE 34

CREDIT RELATIONSHIPS BETWEEN 117 WHOLESALE MILK PRODUCERS  
AND THEIR MILK DEALERS, IN CENTRAL AND SOUTH FLORIDA,  
1953

	Credit Had Been Extended by Distributor to Producers	Credit Outstanding Between Distributor and Producer
Yes	19 <sup>a</sup>	8 <sup>a</sup>
No	98 <sup>a</sup>	109
Total	117	117

<sup>a</sup>Includes two producers in non-Class I price administered areas.

TABLE 35

ORIGINAL PURPOSE OF DISTRIBUTORS EXTENDING CREDIT TO WHOLE-  
SALE MILK PRODUCERS IN CENTRAL AND SOUTH FLORIDA, 1953

	Number	Per Cent
Bought cows, land, built barn	10 <sup>a</sup>	52.6
Bought cows or increased herd	6	31.6
Information not obtained	3	15.8
Totals	19	100.0

<sup>a</sup>Included two producers in non-Class I price administered areas.

Of the eleven producers who had been extended credit by dealers, and who had repaid the loan, only one was not selling milk to the dealer who had loaned him money. This producer had changed outlets after seven years, due to leasing a larger farm whose base was to a different outlet. The ten producers who were selling milk to the dealers who had loaned them money which had been repaid had been in business from four to eighteen years.

All eight producers who had been extended credit by dealers and who had not repaid their loans were found to be selling to their credit source. These producers had been in business from one to twelve years. The average length of time these producers had been in business was 5.4 years. Three of these eight producers had received 100 per cent Class I prices during the previous year, and one had a written contract which called for 100 per cent Class I prices to be paid to him.

By comparison, 95 per cent of the producers who had been extended credit by their original milk dealers were still selling milk to these dealers after about seven years, while only 42 per cent of the producers who had not received credit were selling to their original milk dealers after nearly six years. Evidently, most of the producers who were extended credit by their dealers felt morally obligated to continue selling milk to their credit source even after the loan had been repaid.

In one case, one producer in south Florida stated that he had loaned money to enable his present dealer to begin operation. As a result, the dealer paid this producer 100 per cent Class I prices for milk produced. This type of credit loan, as well as loans by dealers to producers, restricted the mobility of producers between dealers.

BONDING.--In Florida, milk dealers are not required to be bonded. Bonding is a form of insurance which is often used to assure payment. In effect, producers have no insurance that they will be paid for milk delivered to dealer plants. In the past, the lack of a bonding law has resulted in some producers losing monies owed them by dealers.<sup>93</sup> The absence of a bonding law may also result in restricting production in certain areas, due to the poor credit reputations of local milk dealers. Producer ability to produce high standard milk and improve methods of production may also be affected by the

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<sup>93</sup>"The Dairy Farmers' Florida News Letter," Official views of the Florida Milk Producers' Association, The Florida Cattleman and Livestock Journal, October, 1954, p. 76.

"In the Lake Okeechobee area a few months ago a Miami dairy plant notified its producers that they were 'reorganizing and refinancing their operation' and that there would be some delay in the payment of milk checks to the producers. Their story was so effective that they managed to get some feed companies to go along with them. This 'stall' lasted long enough so that the plant eventually went to bankruptcy and, at the same time they went into bankruptcy, they owed approximately \$48,000 to producers for milk.

"None of this will ever be recovered by the milk producers."

absence of these economic laws. Producer independence is also restricted when the present dealer is in arrears, and the producer hesitates to find a new market for fear that he will lose the monies owed to him by his present dealer.

Bonding of dealers is a common practice in 11 out of 14<sup>94</sup> other states with Commissions or Boards. In most of these states, bonding was put into effect to establish producer confidence in their wholesale outlet's paying ability. The bonding laws of these various states commonly provide for the posting of a sufficient bond, so that monies due producers will be more than adequately covered during any single pay period.

NUMBER OF BUYERS AND SELLERS.---The last requirement of perfect competition is a large enough number of buyers and sellers so that the practices of no single firm can influence price.

For various reasons, each of the eleven marketing areas established by the Commission in central and south Florida tends to have separate production areas. Whatever the reason or reasons why the production areas of these marketing areas tend to be separate, they are separately regulated by the Commission. Only eight of the 117 milk producers interviewed sold milk in areas other than where their farms

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<sup>94</sup>Whether bonding is required in one other state with a State Milk Commission is not known.

were located (Table 36). Evidently, there is little

TABLE 36

REASONS WHY 117 WHOLESALE MILK PRODUCERS IN CENTRAL AND  
SOUTH FLORIDA DO NOT OR CANNOT SELL MILK IN  
ADJACENT MILK MARKETING AREAS, 1953

Reason	Producers (Number)
Never tried <sup>a</sup>	53
Too far <sup>b</sup>	41
Does go to adjacent area	8
No outlet there would take milk	4
Inspector from adjacent area won't inspect here	2
Did, but was paid 100 per cent surplus	1
Can't sell elsewhere since I lease my present farm from my outlet	1
No reply	7
<b>Total</b>	<b>117</b>

<sup>a</sup>How many of these 53 producers did not try to sell in adjacent areas, because they thought they would be unable to, is unknown.

<sup>b</sup>Usually the producer said his volume was too small to pay him to haul it and there were no commercial routes.

competition for producer milk by milk dealers located in the various regulated milk marketing areas. If there is competition for whole milk by dealers, it can only be found within

the different established marketing areas. But how much competition is there for producer milk in the different areas?

The Dade-Broward-Monroe Area has the greatest number of dealers (14 distributors and 6 producer-distributors--a total of 20 dealers) and wholesale milk producers (71). These numbers certainly cannot be considered as a large number of buyers and sellers. Assuming that all of the other five requisites of pure competition were met, the practices of any single dealer (buyer) could affect the competitive prices to producers. The practice of any one of the producers (particularly one with 500 or more milk animals)<sup>95</sup> would materially influence market price.

In one of the 11 price administered areas there are only 5 producers and 2 milk dealers. Producers in this area were relatively small and could not afford to haul their small volumes of milk production too far. There was no organized dairy farm pick-up system by any milk dealer located in adjacent areas. The nearest possible outlet (other than the two dealers in the area) for any of these producers was 40 or more miles away. Under these conditions, any producer who lost his market outlet would probably be forced out

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<sup>95</sup>In some areas of Florida, dairies of this size are the rule rather than the exception.

of production. The availability of marketing outlets for new producers was limited to two possibilities.

An average of only 35 wholesale milk producers and 8.5 milk dealers was found in the 11 central and south Florida regulated areas as of March 12, 1952 (Table 37).

TABLE 37

NUMBER OF DEALERS AND PRODUCERS IN EACH OF THE ELEVEN REGULATED AREAS IN CENTRAL AND SOUTH FLORIDA, 1952

Area	Number of Dealers	Number of Producers
Pinellas County	15	49
Tampa and Plant City <sup>a</sup>	20	103
Polk County and Lakeland <sup>a</sup>	13	37
Orange-Seminole	11	45
Brevard	3	9
Highlands	2	5
Manatee-Sarasota	4	28
Martin-Palm Beach-Hendry	6	39
Dade-Broward-Monroe	20	71
Totals	94	386
Average number in each area	8.5	35.0

<sup>a</sup>The number of producers and dealers for two areas was difficult to separate, so only a total is given for both areas.

Assuming that each of the 11 areas stood alone as a production area, as it tended to do, each area was unconcerned with production in the other 10 areas. Thus, in each area, each of the 35 producers had a maximum of 8.5 outlets for milk. Each milk dealer had an average of only 7.5 competitors. However, out of the total number of milk dealers, 58 per cent (55 out of 94) were producer-distributors who either supplied all of their own milk requirements or had only one or two other producers. The opportunity for producers to sell to this group was exceedingly small. Hence, each producer or potential producer had less than four possible outlets for his production. It is reasonable to assume that because of distance and institutional barriers in the area a producer would find it difficult to sell to more than two or three outlets.

Under the individual-handler pool basis which prevailed to some degree in most of the markets, about nine producers (35 divided by 4) sold to each of the four dealers who bought any large quantities of milk from producers.

Each of these nine producers was strongly interested in the policies of his outlet. Action by any one of these nine producers would undoubtedly affect prices received by the other eight. Such actions as going out of business or discontinuing purchases from the nine producers by their

dealer would not only greatly affect the dealer's own nine producers, but all other producers in the marketing area.

In an effort to determine how much competition there was for producer milk, the 117 producers interviewed were asked, "Could you have sold your milk to anyone else when you started shipping to your present outlet?" Of 69 producers who answered this question, either affirmatively or negatively, 22 or nearly one-third said that they could not have sold their milk to any location other than their present outlet (one buyer). Of the two-thirds who said they could have sold their milk elsewhere none listed more than one other possible outlet (two buyers). In nine cases this other sales' outlet consisted of the producer selling his own milk retail (Table 32). Clearly, there was little evidence of competition for whole milk sold by producers.

The 117 wholesale milk producers were also asked, "Why did you decide to sell your milk to your present outlet?" Replies to this question also indicated very little competition by dealers for producer milk. At least 50 of the 115 producers gave reasons which indicated that they had no choice as to where they could sell their milk (Table 33, Items 1, 3, 4, 5, 16 and one reply under 17). At least 14 other producers gave replies which indicated that they had little free choice in choosing their present outlet (Table 33, Items 6, 10, and 11).

Evidently, there is little reason for suspecting that the last requirement of pure competition--that of having a large enough group of buyers and sellers, so that no single firm could effect prices--was fulfilled in the administered areas of central and south Florida. Neither does there appear to be effective competition for producer milk.

The absence of a large number of buyers and sellers indicates the possibility of discrimination. While there is more than one type of discrimination possible between buyers and sellers, personal discrimination is the most common deviation from the model of pure competition. Among the milk producers and dealers interviewed in central and south Florida this type of discrimination was widely practiced.

At least six of 27 milk dealers interviewed had one or more producers who had oral or written contracts which assured them of 100 per cent Class I prices. Other producers shipping to these dealers had no such contracts and did not, in general, receive 100 per cent Class I prices during 1952. Other methods of personal discrimination encountered were: (1) refusal of some dealers to allow one or more of their producers to establish a base-quota; (2) the practice of some dealers in giving beginning base-quotas to some producers, without reference to base period milk shipments--their base-quotas in many cases were so large that the producer was assured of 100 per cent Class I; (3) use of a

frozen base period, which in one case was established 10 years previous, for some producers while other producers selling to the same dealer were allowed to set new base-quotas yearly (see Appendix B). Ten wholesale milk producers were found to have written contracts with dealers.<sup>96</sup> These contracts, while varying in terms, usually called for payment of all milk delivered by the producer at 100 per cent Class I prices, regardless of use (Table 38).

Variations in the duration of these written Class I producer contracts also constituted personal discrimination. The variations in duration of 10 contracts are shown in Table 39.

In an attempt to determine if former producer-distributors who had sold their retail routes to their present wholesale marketing outlet were receiving preferential treatment, the terms of sale of 15 former producer-distributors were analyzed.<sup>97</sup>

Five former producer-distributors selling wholesale milk to the dealer who had purchased their retail business were found to have 100 per cent Class I written contracts. These five had sold out their retail businesses within the

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<sup>96</sup> Doesn't include yearly marketing agreements wherein producers agree to sell their product for one year to a distributor who agrees to purchase it or cooperative members with market agreements.

<sup>97</sup> All of these former producer-distributors were located in Class I price administered areas.

TABLE 38

TERMS OF WRITTEN CONTRACTS BETWEEN 10 WHOLESALE MILK  
PRODUCERS AND THEIR DEALERS IN CENTRAL AND  
SOUTH FLORIDA, 1953

Terms of Contract	Number of Contracts
100 per cent Class I with maximum acceptable gallonage	5
100 per cent Class I with maximum and minimum gallonage	3
New bases to be set yearly, no guarantee of 100 per cent Class I	2
TOTAL	10 <sup>a</sup>

<sup>a</sup>These 10 producers constituted about 8 per cent of  
the 117 wholesale milk producers interviewed.

TABLE 39

VARIATIONS IN DURATION OF 10 CONTRACTS BETWEEN PRODUCERS  
AND DEALERS, 1952

Duration	Number of Producers
Indefinitely . . . . .	4
5 years . . . . .	1
3 years . . . . .	3
2 years . . . . .	2
Total . . . . .	10

previous two years. Another former producer-distributor had a written contract but had to establish a new base figure yearly. During 1952 this former producer-distributor had received nearly 90 per cent Class I and 10 per cent Class II prices. This man had sold out two years earlier. Three other former producer-distributors had merged their former retail operations into cooperative plants. These producers had merged into a cooperative 4 to 11 years previously. Six former producer-distributors decided to sell their retail businesses because of a favorable price and the dealers' reputation of paying little or no surplus. These six former producer-distributors had sold the distribution part of their business from three to ten years previously. It is interesting to note that only one of the fifteen former producer-distributors received less than 99 per cent Class I prices during 1952 from his milk dealer.

Apparently, the pricing policies of dealers in buying out producer-distributors in the past few years, shifted from one of offering them a favorable price plus an attractive wholesale outlet wherein they shared equally with other producers to one of paying less than the market value for the retail businesses and making up the difference with highly favorable written contracts assuring the former producer-distributor of 100 per cent Class I prices for milk produced. This pricing policy is felt of course by other wholesale

producers selling to the same outlets, who must absorb more than their equitable share of the non-Class I milk purchases.

In an effort to determine if dealers practiced any discriminatory pricing policy or policies in regard to taking on new producers, only those dealers who used a modification of the base surplus plan were asked, "How would you determine the proportions of Class I, II, and III to be paid new producers, who you might take on other than during the base period?" Many respondents who answered this question said they would not take on new producers at all, and most said they would not consider taking on a new producer except during the base period (see Appendix B).

In nearly every instance, dealers would have practiced discriminatory pricing policies toward new producers who might be allowed to sell milk to them after the base period was over (Table 40).

Several dealers said they were more than willing to see the existing discriminations eliminated. These dealers said if they discontinued discriminatory practices in regard to Class I contracts and purchases of milk from new producers, the result would be the loss of local milk supplies. This would result in the necessity of importing milk at higher costs.

TABLE 40

METHODS USED BY ELEVEN MILK DEALERS<sup>a</sup> USING A BASE-SURPLUS PLAN IN CENTRAL AND SOUTH FLORIDA IN DETERMINING THE PROPORTIONS OF CLASS I, II, AND III TO BE PAID PRODUCERS WHO MIGHT BE TAKEN ON AS PRODUCERS AFTER THE BASE PERIOD IS OVER, 1952

Method	Number of Dealers
New producer absorbs all of dealer's surplus until new base period opens up	4
Depends on the individual	2
However the dealer's present producers want to handle it	1
New producer would be paid 100 per cent Non-Class I	1
Milk would be paid for on dealer's terms	1
No set policy	2
<b>Total</b>	<b>11</b>

<sup>a</sup>Eight dealers said they would take on new producers only during base-setting periods if at all.

#### SUMMARY OF COMPETITION IN THE REGULATED AREAS OF CENTRAL AND SOUTH FLORIDA

Not one of the five requisites of pure competition has been met by the central and south Florida dairy industry. The first requisite, homogeneity of product, has not been met due to four major factors. These are: (1) the disregard of established butterfat differentials by nearly one-half of the 25 dealers interviewed, (2) the existence of Class I contracts

for a minority of producers, (3) the ability of some producers to secure larger Class I bases without regard to base shipments while other producers were unable to change bases and (4) the existence of regulations and laws which barred milk movements between areas.

The second requisite of pure competition, market knowledge, has been completely violated. No agency has published any market data other than the existing Class I prices. Producers have been confused by (1) the various terms of sale, (2) the variation in blend prices, and (3) little or no knowledge of Class II and III prices. In addition, only one-fourth of the 117 producers interviewed knew the termination notice established by the Commission.

The third requisite of pure competition, interference with supply and demand, has been violated by use in some areas of (1) base-surplus plans which have not only been used for seasonal supply adjustments but to enhance producer prices and to discourage new producers from entering the industry and (2) individual producer-dealer agreements which have discouraged the expansion of production by some producers. In addition, the local options of Commission regulation have restricted competition. Reliance upon producer cost of production and dealer cost by the Commission in establishing minimum prices has ignored the demand side of the market.

The lack of independence of buyers and sellers was shown by (1) restrictions placed upon the entry of new producers by producer-dealer agreements, and (2) the effect upon producers' mobility due to dealer credit arrangements.

Last, but not least, the small number of buyers and sellers in individual markets has resulted in little competition for milk and has restricted the availability of market outlets. The small number of buyers and sellers has resulted in discriminatory practices among existing producers and toward new producers. These deviations from the model of pure competition have resulted in monopolistic-oligopoly, or bilateral-oligopoly conditions.

VII. METHODS OF STIMULATING COMPETITION  
IN FLORIDA MARKETS

The five requisites of pure competition form the basis for the following suggestions. These suggestions deal with methods of stimulating competition in the Florida milk markets. All suggestions relate to increasing the market homogeneity, market knowledge, independence of buyers and sellers and the number of buyers and sellers, while decreasing the degree of interference with supply and demand forces by governmental regulation. The suggestions are made under the assumption that the dairy industry will continue to operate under the Florida Milk Commission and/or under Federal Market Orders. Most of the following suggestions would be applicable to either type of regulation.

HOMOGENEITY OF PRODUCT

When the physical product of different producers is the same, payments are expected to be the same at any given location at any given time. To assure equal payment for an identical product within the same market, check testing of milk weights and butterfat contents, butterfat differential

payments, uniform milk classification and pricing techniques are necessary.

CHECK TESTING OF MILK WEIGHTS AND BUTTERFAT CONTENTS.--At

present there is no specific provision in the Florida Statutes which deals with check testing of milk weights and butterfat contents of producer milk. Regardless of whether producer complaints of receiving unjustifiably low butterfat tests were based on fact or fancy, under the present system of butterfat testing the possibilities of dishonest tests are present.<sup>98</sup> To correct this situation, the Commission or some other agency should be empowered and specifically directed to employ, and maintain adequate check testing services. Dealers should be required to keep milk samples for an adequate period of time so that check testing would be possible.

BUTTERFAT DIFFERENTIAL PAYMENTS.--Data presented earlier

showed that 11 of the 25 milk dealers interviewed in these administered areas ignored the Commission's orders which provided for payment of butterfat differentials. Forty of the 112 wholesale milk producers interviewed in these administered areas did not receive payment for their milk on the basis of established butterfat differentials.

Earlier it has been pointed out that the widespread lack of compliance with the Commission's established

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<sup>98</sup>Over 30 per cent of all producer problems dealt with weights and butterfat tests. One producer-distributor also regarded this as his major marketing problem.

butterfat differentials has restricted competition. In order to stimulate competition, it will be necessary for the Commission not only to establish butterfat differentials, but to see that the established differentials are paid to producers. Adequate supervision can be provided by requiring milk dealers to report monthly purchases from individual producers, the average butterfat content and the average payment per gallon or hundredweight of milk purchased. Spot checking with producers could be used to determine whether these dealers' reports were accurately reported.

#### MARKET KNOWLEDGE

Market knowledge on the part of Florida milk producers and dealers has been extremely limited. This may be largely due to the state law which forbids the Florida Milk Commission to release statistical or other data to the public. Only two of the other 15 states with Commissions have similar statutes.

In order to increase market knowledge by means of public releases of data by the Florida Milk Commission it will be necessary for the state law to be changed. Any revised law should not only permit the Commission to release information but should require the Commission to do so.

The use of statistical information by the Commission needs to be expanded. In order for the Commission to be able to release valuable information, it will probably be necessary

for some system of adequate, standardized, accounting practices to be devised for dealer use. The use of these practices by dealers must be required by the Commission. Obviously, the Commission needs to establish uniform accounting practices and forms which will readily enable the Commission to enforce its regulations in regard to butterfat payments, base-quotas, pools, and utilization.

Statistical data will also be needed by the Commission if its role of pricing is to be effectively continued. If administered pricing is to be continued all milk classes must be priced. Adequate data must be continually compiled and analyzed in order to aid in regulating sources of supply, and in insuring that regulations dealing with class prices, butterfat, quality and locational differentials are observed. These data could be used in determining milk marketing areas, stabilizing prices, regulating and enforcing pooling and seasonal adjustment regulation, as well as, in developing new and changing regulations in response to changing needs and conditions in the various markets. The ultimate development of a program for determining actual profits of dealers (and probably producers as well) under price regulation seems not only desirable but almost inevitable. However it may not be possible to obtain this goal immediately because of: (1) opposition on the part of the industry, (2) apathy on the part of the consuming public, (3) lack of interest and skill on the part of the milk control agencies, and (4) the policy of

some state legislatures which established an ambitious program of control on one hand, but by financial starvation prevents its effective administration.

However, during 1952 and probably as late as 1955, some of these factors may have affected the activities of the Florida Commission. Most of the data which would be required by the Commission in fulfilling the role of the pricing function could have and would be obtained by modifying the report forms which have been used. The Distributor's Monthly Tax Report Form 1-16 should be modified to include average monthly butterfat tests of individual producers and the average amount paid for the milk. Complete production information should be furnished relative to milk obtained from dealer owned farms. Receipts of Class I, II and III milk from other than producer sources should include the source, amount, butterfat test and prices paid.

A separate form should be required to be used once yearly in showing individual producer shipments to a milk dealer during each base period. The individual base for each producer to be used during other than base periods should be stated.

The Distributor's Monthly Processing Report Form I-17 used by the Commission has not provided for obtaining sufficient information to enable the Commission to determine whether milk was paid for according to utilization. A revised

report form requiring the butterfat content of producer milk receipts and receipts of milk and cream from other sources, as well as the butterfat contents of different class products sales should be required. Use of this type of report by the Commission would go far in reducing the opportunity for standardization, reconstruction or reconstitution of milk by dealers (see Appendix B).

During 1952 the potential effectiveness of the Commission in assuring payments to producers, based on milk utilization, had not been reached. It is believed that this was due to deviations in base periods, non-use of bases in some instances, Class I contracts and the large number of individual-handler pools to be supervised.

Producer knowledge of milk classifications, utilization and prices could be increased by three methods: (1) establishment and enforcement of standardized base periods in each of the central and south Florida milk marketing areas, (2) establishment and enforcement of individual-handler or market-wide pools without exceptions, (3) stopping all arrangements which substitute such things as 100 per cent Class I prices in lieu of paying butterfat differentials.

#### INTERFERENCE WITH SUPPLY AND DEMAND ADJUSTMENTS

ADJUSTING SUPPLY AND DEMAND.--In view of the restrictive nature of base-quota systems as used in Florida, any attempt

to bring about more competition in the short-run must be based upon a different method of providing for seasonal incentives. Either seasonal class changes or a fall-premium plan might provide the incentive while avoiding production restrictions. However the use of either seasonal price changes or fall-premium plans, in conjunction with individual-handler pools, might not result in less restriction of entry into the production side of the Florida industry. Most of the restrictive nature of the base-surplus plan, as used in Florida, would also be removed by use of market-wide pooling arrangements.

Another necessary technique needed in order to properly adjust supply to demand in the short-run is the pricing of all milk classes rather than only Class I. By pricing only Class I milk any desired, necessary, equating price cannot be reached.

LOCAL OPTIONS VS. AREA OR STATE OPTIONS.---One of the prerequisites to stimulating competition is to remove the present system of local options. At present, a majority of the producers in a small geographical area producing 51 per cent or more of the milk in that area can ask for regulated pricing. The contrary is also true, that the majority of producers producing 51 per cent or more of the milk in an area can cause the discontinuance of regulated pricing. If the Commission is given the power to declare any area of the state

to be under regulation, the possibility of undue producer pressure for unreasonable producer prices would be effectively barred.<sup>99</sup> If regulation is "good" for one area of the state, it is "good" for other areas of the state. If regulation is "bad" for one area of the state, it is "bad" for all areas of the state. A more reasonable basis for deciding whether Commission pricing should be mandatory or not, might be a state-wide referendum of producers and/or consumers rather than the present system of local options at the discretion of producers in individual areas. Under state-wide regulation prices could vary from area to area.

Since Florida is a large state as measured by area, institution of pricing on a uniform state-wide pooling basis, as has been done in Connecticut, would probably be unworkable. Some Florida markets are separated spatially from other markets, and production costs throughout the state are not uniform. Hence, the alternative to pricing on a local option basis is pricing on an area basis. These areas should be composed of economic marketing areas.

ECONOMIC AREAS.--One of the greatest incentives to competition would be the re-classification of Florida into economic marketing areas. As was previously discussed this would

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<sup>99</sup>A discussion of some of the limitations imposed on the Florida Milk Commission in regulating areas is found on pages 46 through 50.

involve change by the legislature to permit the Commission to reasonably classify and group counties into marketing areas.

With the opportunity to classify the state into economic marketing areas the present 11 regulated areas and 15 non-regulated counties in central and south Florida would probably be composed of only three areas (Figure 23). With only three areas, supervision of the central and south Florida industry would be simplified and savings would result from the reduced number of hearings required. Pricing could be made more flexible, and production and distribution would be more competitive due to increasing the scope of the individual markets.

If the Commission desired to combine these price regulated areas and non-price regulated counties into three marketing areas, certain legislative and policy changes would be necessary. The Florida law would need to be changed to give the Commission the power to regulate and supervise the dairy industry, and to delineate marketing areas as they might consider necessary; the Commission would then be required to hold a public hearing in each of the areas and counties concerned. After receiving testimony both pro and con concerning the advisability of regulating only three large marketing areas, the Commission would then be able to delineate the enlarged marketing areas.

Reorganization of the present 11 regulated marketing areas and 15 non-regulated counties into three large economic marketing areas could be expected to stimulate competition. This stimulus could come from a more flexible price structure, greater ease in administering prices and greater ease in establishing pooling practices. If competition were stimulated by the reorganization of existing areas into larger regulated areas, some of the existing dealer-producer arrangements in regard to discrimination toward area producers would disappear. Dealers would be confronted with larger existing supplies of whole milk in the various markets since supplies would be more homogeneous due to changed conditions. Additional possibilities would open up for existing producers to shift from one dealer to another outlet. With this greater opportunity for producers to shift sales outlets some new producers might also be given sales outlets.

RETAIL AND WHOLESALE PRICES.---The Commission, during 1955, discontinued retail and wholesale price fixing. However, the Commission's power to re-establish such price fixing still exists. If in the event that monopolistic control of distribution becomes evident or conditions change to the extent that retail and wholesale price fixing is re-established, definite action should be taken concerning pricing. Emphasis should be placed on processing and distribution costs. The economies present in delivery of large quantities of milk

should be recognized and priced accordingly. This would involve establishment of store differentials to reflect to the public the lower cost of delivery.

Only a proper differential can eliminate discounting practices on wholesale sales as noted earlier. Prices to consumers on milk bought from stores could be lowered by the approximate amount of the discounts.

With lowered prices to consumers on store-purchased milk, consumers would use more milk and dealers would process and sell more milk. Because a greater proportion of their milk would be used in Class I channels, producers would be stimulated to produce more milk, or new producers would be able to enter the industry to supply the increased quantity which consumers would buy.

With establishment of differentials, the only losers would be wholesale outlets which were receiving the discounts. Their established legal handling margin of two cents a quart would, however, remain the same. Without retail and wholesale price fixing and with competition among milk dealers, there will not be the pressing need to emphasize or obtain representative processing and delivery costs by a public agency. The need for establishing a regulated store differential will also be unnecessary.

## INDEPENDENCE OF BUYERS AND SELLERS

Among the factors necessary to maintain independence of buyers and sellers is economic independence. When a buyer owes a seller money, the seller is unlikely to start to sell to another buyer. The extension of credit by dealers to some milk producers also limits the independence of the seller.

BONDING.--In order to insure some degree of independence of buyers and sellers, bonding of dealers needs to be required. Bonding is a form of insurance which is used to assure payment for goods received. Bonding would assure producers of prompt payment for milk and cream and would result in increased production by lowering producer risk (see Appendix B).

CREDIT.--The existence of credit between milk dealers and their producers also has tended to limit the independence of producers and has led to personal discrimination between producers by some dealers. Mobility of producers and competition would be increased if credit were obtained by producers from sources other than their milk dealer.

## NUMBER OF BUYERS AND SELLERS

There is no one single way of increasing the number of buyers and sellers. The only methods that can be used to increase the number of buyers and sellers are through statutory and institutional changes in pricing techniques. These have already been discussed under the previous headings, such

as increasing homogeneity of product, increasing market knowledge, decreasing interference with supply and demand forces, and increasing the independence of buyers and sellers. With increasing numbers of buyers and sellers, discrimination between producers by dealers would decrease.

In essence, the greatest single method of increasing the number of sellers (dairy farmers) is by freedom of entry. As has been pointed out earlier, there is probably no single method of increasing the number of buyers (dealers). Technological advances have tended to cause the number of dealers to decline.

One method of increasing the degree of freedom of entry would be to eliminate or control discriminatory practices between dealers and producers. Market-wide pools would eliminate or control some of these practices (see Appendix D).

## VIII. SUMMARY AND CONCLUSIONS

Only about 3 per cent of Florida's farmers sell whole milk from their farms as compared with about 20 per cent in the United States. The number of Florida dairy farmers has been declining in recent years, while the converse is true for the United States. Although the number of dairy farms has been decreasing in Florida, there has been a rapid increase in the number of dairy cattle. As a result, the average herd size in Florida has increased rapidly as compared with those in other states. In spite of the presence of very large dairy farms, per capita production of milk in Florida is lower than in any of the other states, except Massachusetts and Rhode Island.

While some dairy markets in the United States receive fluid milk supplies from farms located hundreds of miles away, markets in Florida have been characterized by having the dairies located within a few miles of the consuming area. Other unique characteristics of Florida's dairy industry include (1) a significant portion of the milk retailed has been sold by producer-distributors, (2) a high proportion of the milk produced by farmers has been sold as

whole milk, and (3) both producer and consumer milk prices have been among the highest in the United States.

Commercial wholesale milk dairies in Florida are essentially single proprietorship firms which tend to be highly specialized, one product (milk) producing farms. These Florida dairies are large, relative to dairies in other states, when measured by acreage or number of animals in the individual herds.

Florida dairy farmers have made about equal use of improved and unimproved pasture, and in general have not raised supplementary pastures or feed crops. Nearly three-fourths of Florida's dairy farmers hauled their own milk from their farms to their milk outlet. In other states commercial haulers have performed the hauling function to a much greater extent.

Producer-distributors and distributors differed greatly in the volume of fluid milk sold yearly. The smallest producer-distributor sold only 43,200 gallons of fluid milk during 1952, while the largest producer-distributor sold nearly 1,800,000 gallons. The amount sold by distributors ranged from 85,000 to over 2,000,000 gallons of fluid milk during 1952.

In Florida both administered and non-administered pricing have been used in arriving at producer and consumer prices. This lack of uniformity has been uniquely different

from other states in the United States where only one type of pricing has been used. An unstable pricing situation exists in Florida due to the conflicting policies under which the Florida Milk Commission operates. These policies state that the Commission will regulate and supervise the natural milk marketing areas of Florida on one hand, and then prohibit the Commission from initiating regulation in any area except upon request of a majority of the producers in an individual area. The conflicting policies have resulted in a patchwork system, wherein natural economic milk marketing areas are divided into numerous, separately administered areas as well as into non-administered areas. A second result of the conflicting policies has resulted in undue pressure upon the Commission to satisfy producer demands for high prices.

Contrary to public belief that both producer blend prices and dealer marketing spreads have been regulated, the opposite was found. Under a system where only Class I producer prices have been regulated, producer blend prices have not been regulated. Since only consumer fluid milk and cream prices have been regulated and only producer Class I prices, in general, have been regulated, dealer marketing margins have also been unregulated.

The Commission's pricing regulations were found to be ignored by a large part of the dairy industry. Eleven

dealers out of 25 were found to be disregarding the use of established butterfat differentials as set up by the Commission. Ten dealers stated that their greatest marketing problems were illegal discount practices on wholesale business. These discounts ranged from 2 to over 15 per cent.

In unregulated areas, the industry was characterized by the small numbers of both milk dealers and producers. Dealers paid producers a flat price per gallon. Milk supplies, above the dealers' Class I needs, were turned back to producers. The only method used in adjusting supply to demand was that of breeding. By common agreement, dealers did not buy milk on the basis of butterfat content. Both producer and consumer prices appeared to follow the regulated prices in nearby areas.

When the Florida dairy industry was compared to a theoretical model of pure competition, none of the conditions of pure competition were fulfilled. By comparison, the dairy industry in other regulated markets in the United States complied to some degree with four of the five requirements of pure competition. The dairy industry in the United States is largely one of oligopsony. The industry in Florida might be said to range between oligopsony-oligopoly and monopsony-oligopoly conditions. As a result of imperfect competition in Florida's dairy industry, a high degree of producer and consumer price inflexibility was found. Producer blend

prices varied considerably, even when producers sold to the same dealer or to the same market.

Producers were dissatisfied with current utilization and butterfat payments, lack of alternative market possibilities, lack of security in the market, and regulations. In addition, existing producers had difficulty in shifting their sales from one outlet to another. New producers, who might be more efficient, were kept out of the dairy industry. The price and market structure restricted production and probably resulted in a higher cost of production and a higher cost to consumers for fluid milk. Agreements between existing producers and dealers restricted the entry of new producers into the market. In one market there has been total restriction of new producers for several years. In order to develop a more competitive market under governmental regulation, either by the use of a State Milk Commission or by use of Federal Market Orders, consideration needs to be given to several factors. It is assumed that these factors would be considered if Federal Market Orders are used, hence the following suggestions deal only with regulation at the State level.

It will be necessary for the Florida legislature to enable and require the Commission to properly establish and regulate milk marketing in Florida. Among the suggested needs are: the establishment of economic marketing areas, pricing of all milk classes, establishment of market-wide

pools, use of seasonal class price changes or use of a fall premium plan instead of the base-surplus plan, greater reliance on economic indicators and less dependence upon cost of production information in adjusting prices, institution of a wholesale milk price differential, a bonding law and restriction of dealer-producers credit practices.

In order for the Commission to initiate some of these suggested plans, it will be necessary to develop and use adequate standardized accounting procedures, practices and reports. A systematic body of information will need to be compiled and used, in order for some of these suggestions to be carried out.

## APPENDIXES

APPENDIX A

Age of (owner, manager) \_\_\_\_\_ Schedule Number \_\_\_\_\_  
Last school year completed \_\_\_\_\_ Area Number \_\_\_\_\_  
Producer Identification No. \_\_\_\_\_  
Enumerator \_\_\_\_\_  
Date \_\_\_\_\_

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Project 651

PRODUCER SCHEDULE

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I. Farm Characteristics

1. Acres owned \_\_\_\_\_ Rented in \_\_\_\_\_ Rented out \_\_\_\_\_

Total operated \_\_\_\_\_

2. a. Are all these acres used only for dairying? Yes \_\_\_\_\_  
(If yes, go to Q. 3.) No \_\_\_\_\_

b. If no, explain. \_\_\_\_\_

3. Acres of pasture used for dairy herd:

a. Total permanent \_\_\_\_\_ Improved \_\_\_\_\_ Native \_\_\_\_\_

b. Supplementary \_\_\_\_\_

c. Total pasture \_\_\_\_\_

4. a. Other than pasture, do you raise any feed for your dairy? Yes \_\_\_\_\_  
(If no, go to Q. 5.) No \_\_\_\_\_

b. Hay \_\_\_\_\_ am't. Sorghum cane \_\_\_\_\_ am't.

Corn \_\_\_\_\_ am't. Other \_\_\_\_\_ am't.

Remarks: \_\_\_\_\_

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5. 

	<u>Today</u>	<u>One year ago</u>	<u>Two years ago</u>
a. Number of cows milked:	_____	_____	_____
b. Number of cows dry:	_____	<u>XXX</u>	<u>XXX</u>
c. Total Cows:	_____	<u>XXX</u>	<u>XXX</u>
6. Number of heifers: Over one year \_\_\_\_\_  
Under one year \_\_\_\_\_  
Total heifers \_\_\_\_\_
7. a. Is this farm owned by (individual, corporation)? \_\_\_\_\_  
b. This farm is operated by: a. Owner \_\_\_\_\_  
b. Manager \_\_\_\_\_  
c. Other (Specify) \_\_\_\_\_  
(If b. c. go to Q. 9.)
8. What proportion of your total farm income comes from dairying? (Including cows, calves, butter, etc.) \_\_\_\_\_
- II. 9. a. How many years have you been operating a dairy? \_\_\_\_\_  
b. In this area? \_\_\_\_\_  
c. Other Florida areas? (Specify) \_\_\_\_\_  
d. Other areas? (Specify) \_\_\_\_\_  
e. Other dairy experience (Specify) \_\_\_\_\_
10. Did (you, the owner) start this dairy? Yes \_\_\_\_\_  
No \_\_\_\_\_  
Don't know \_\_\_\_\_  
(If yes, go to Q. 12)
11. How did (you, the owner) acquire this dairy? \_\_\_\_\_
12. a. Do (you or the owner) have any relatives in the milk industry in this area? (If no, go to Q. 13.) Yes \_\_\_\_\_  
No \_\_\_\_\_
- b. Check one: Producer \_\_\_\_\_  
Prod.-Dist. \_\_\_\_\_  
Distributor \_\_\_\_\_
- c. If producers, where do they ship their milk? \_\_\_\_\_

REMARKS: \_\_\_\_\_

## III. Relationships between producers and distributors

13. What dealer do you sell to? Name \_\_\_\_\_  
Location \_\_\_\_\_
14. When did you start shipping to him? \_\_\_\_\_
15. a. Could you have sold your milk to anyone else when you first started to your present distributor? Yes \_\_\_\_\_  
No \_\_\_\_\_  
(If no or don't know, go to Q. 16.) Don't know \_\_\_\_\_
- b. Enumerate \_\_\_\_\_
16. Why did (you, the owner) decide to ship to the distributor outlet that you now use? \_\_\_\_\_
17. a. Have you sold all your milk through your present distributor since you started shipping to him? Yes \_\_\_\_\_  
(If yes, go to Q. 18.) No \_\_\_\_\_
- b. What other distributors have you shipped to since you started shipping to your present distributor, (or since Jan. 1950)? \_\_\_\_\_
18. a. What distributor did you sell to before your present one?  
Name \_\_\_\_\_  
Location \_\_\_\_\_
- b. How long did you sell to this outlet? \_\_\_\_\_ Years
- c. Why did you change outlets? \_\_\_\_\_
19. What services are rendered by your distributor?  
\_\_\_\_\_ a. Selling feed  
\_\_\_\_\_ b. Hauling feed to farm  
\_\_\_\_\_ c. Selling supplies  
\_\_\_\_\_ d. Pick milk up at the farm  
\_\_\_\_\_ e. Managerial advice  
\_\_\_\_\_ f. Other (Specify) \_\_\_\_\_

Remarks: \_\_\_\_\_

20. Why don't you or why can't you sell your milk in? (Name close alternative marketing areas.) \_\_\_\_\_

IV. Transportation

21. What is the total distance to your point of delivery? \_\_\_ miles

a. Distance on hard-surfaced roads \_\_\_\_\_ miles

b. Distance on graded roads \_\_\_\_\_ miles

c. Distance on unimproved roads \_\_\_\_\_ miles

22. How often do you deliver to this outlet? \_\_\_\_\_

23. Type of hauling: (Check one)

a. Dealer hauled \_\_\_\_\_

d. Self \_\_\_\_\_

b. Commercial \_\_\_\_\_

e. Combination \_\_\_\_\_

c. Neighbor \_\_\_\_\_

(If a, b, or c, go to Q. 27.)

24. a. How much time is required in making each delivery? \_\_\_\_\_

b. How many men are used for delivery? \_\_\_\_\_

c. Are any other trucking jobs done on the way to and from the delivery point?

Yes \_\_\_\_\_

No \_\_\_\_\_

Don't know \_\_\_\_\_

If yes, enumerate. \_\_\_\_\_

d. What is the model, age, size of the truck you use in delivering your milk? \_\_\_\_\_

25. Do you personally deliver your own milk? Yes \_\_\_\_\_  
(If yes, go to Q. 28.) No \_\_\_\_\_

26. a. The (man, men) who deliver your milk are paid on a (monthly, weekly, hourly) basis at the rate of \_\_\_\_\_ (monthly, weekly, hourly).

Remarks: \_\_\_\_\_

b. Are any non-cash items (milk, beef, house, heat, etc.) furnished him? Yes \_\_\_\_\_  
If yes, enumerate—by amounts. No \_\_\_\_\_

c. The (man, men) who deliver your milk average how many working hours daily? \_\_\_\_\_

d. What does this (man, men) do, other than deliver milk? (Farm duties.) \_\_\_\_\_

(Go to Q. 28)

27. What does your (distributor, commercial hauler, neighbor) charge you per (gallon, cwt) for taking your milk to the delivery point? \_\_\_\_\_

V. Terms of Delivery

28. How many gallons of milk did you ship yesterday? \_\_\_\_\_

29. a. Are your milk shipments to your distributor tied to a base period? Yes \_\_\_\_\_  
(If no, go to Q. 30.) No \_\_\_\_\_

b. What is your base setting period? (Months) \_\_\_\_\_

c. What is your actual base at present? (Gallons) \_\_\_\_\_

d. How long a period does your present base apply to? \_\_\_\_\_  
(Ex. Up to next base setting period, or thru the next base period?)

30. What are your arrangements with your distributor in regard to his taking other than Class I milk? \_\_\_\_\_

31. Do you feel that you are receiving the same proportion of Class I as the other producers shipping to your distributor during the base period?  
Yes \_\_\_\_\_  
No \_\_\_\_\_  
Don't know \_\_\_\_\_

Remarks: \_\_\_\_\_

- b. Do you feel that you are receiving the same proportion of Class I as the other producers shipping to your distributor or producer-distributor during the rest of the year?

(If yes or don't know, go to Q. 32.)

Yes \_\_\_\_\_  
No \_\_\_\_\_  
Don't know \_\_\_\_\_

- c. What are these differences due to? \_\_\_\_\_

32. a. Do you feel that you are receiving the same proportion of Class I as all other producers in this area during the base period?

Yes \_\_\_\_\_  
No \_\_\_\_\_  
Don't know \_\_\_\_\_

- b. Do you feel that you are receiving the same proportion of Class I as all other producers in this area during the rest of the year?

(If yes or don't know, go to Q. 33.)

Yes \_\_\_\_\_  
No \_\_\_\_\_  
Don't know \_\_\_\_\_

- c. What are these differences due to? \_\_\_\_\_

33. a. How is your Class I price determined (by you and) your distributor?

1. Set by Control Commission	<u>Present Price</u>	_____
2. Distributor announces price		_____
3. Mutual agreement		_____
4. Unknown		_____

- b. How is your Class II price determined (by you and) your distributor?

1. Set by Control Commission	<u>Present Price</u>	_____
2. Distributor announces price		_____
3. Mutual agreement		_____
4. Unknown		_____

- c. How is your Class III price determined (by you and) your distributor?

1. Set by Control Commission	<u>Present Price</u>	_____
2. Distributor announces price		_____
3. Mutual agreement		_____
4. Unknown		_____

Remarks: \_\_\_\_\_

34. Which of the following affected your last milk payment?

	<u>Total Deduction</u>	<u>per gallon</u>
a. Coop. deduction	_____	_____
b. B.F. differential	_____	_____
c. Quality premiums	_____	_____
d. Collection fees (DHIA, credit, art. breeding)	_____	_____
e. Other (Specify) _____	_____	_____

35. a. Do you operate under a written contract with your distributor? Yes \_\_\_\_\_ No \_\_\_\_\_ Don't know \_\_\_\_\_  
(If no, go to Q. 36)

b. How long does your present contract run? \_\_\_\_\_

c. What are the Class I, II, III provisions? \_\_\_\_\_

d. How can this contract be terminated? (By you, by dist.) \_\_\_\_\_

e. Is this contract different from that of 1950? Yes \_\_\_\_\_  
No \_\_\_\_\_  
If yes, describe. Don't know \_\_\_\_\_

(Go to Q. 37.)

36. a. What is your present oral agreement with your distributor?  
(Base periods, II, III milk, termination notice, etc.)

b. Is this oral agreement different from that of 1950?  
Yes \_\_\_\_\_  
No \_\_\_\_\_  
If yes, describe. Don't know \_\_\_\_\_

Remarks: \_\_\_\_\_

37. a. Have you ever obtained credit from your distributor?  
 Yes \_\_\_\_\_  
 No \_\_\_\_\_  
 (If no, go to Q. 38.) Don't know \_\_\_\_\_
- b. Do you have any credit outstanding with your distributor  
 at present?  
 Yes \_\_\_\_\_  
 No \_\_\_\_\_  
 (If no, go to Q. 38.) Don't know \_\_\_\_\_
- c. What was credit extended for? \_\_\_\_\_

\_\_\_\_\_  
 (Ex. Buy fall freshening cows, feed, etc.)

38. a. Are you paid (weekly, every two weeks, twice a month,  
 monthly) by your distributor?
- b. Has your distributor ever been late in your payments?  
 Yes \_\_\_\_\_  
 No \_\_\_\_\_  
If yes, explain \_\_\_\_\_
- \_\_\_\_\_

39. In your own mind what are your present marketing problems?
- \_\_\_\_\_
- \_\_\_\_\_

40. What suggestions have you for improving your present marketing  
 system?
- \_\_\_\_\_
- \_\_\_\_\_

Remarks: \_\_\_\_\_

\_\_\_\_\_





Age of (Owner, Manager) \_\_\_\_\_  
 Last School Year Completed \_\_\_\_\_

Schedule Number \_\_\_\_\_  
 Area Number \_\_\_\_\_  
 Pro.-Dist. No. \_\_\_\_\_  
 Enumerator \_\_\_\_\_  
 Date \_\_\_\_\_

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 Project 651

Producer-Distributor Schedule

I. Farm Characteristics

1. Acres owned \_\_\_\_\_ Rented in \_\_\_\_\_ Rented out \_\_\_\_\_  
 Total operated \_\_\_\_\_

2. a. Are all these acres used only for dairying? Yes \_\_\_\_\_  
 (If yes, go to Q. 3) No \_\_\_\_\_

b. If no, explain. \_\_\_\_\_

3. Acres of pasture used for dairy herd:

a. Total permanent \_\_\_\_\_ Improved \_\_\_\_\_ Native \_\_\_\_\_

b. Supplementary \_\_\_\_\_

c. Total pasture \_\_\_\_\_

4. a. Other than pasture, do you raise any feed for your dairy? Yes \_\_\_\_\_  
 (If no, go to Q. 5) No \_\_\_\_\_

b. Hay \_\_\_\_\_ am't, Corn \_\_\_\_\_ am't., Sorghum Cane \_\_\_\_\_ am't.

Other \_\_\_\_\_ am't.

Today    One year ago    Two years ago

5. a. Number of cows milked: \_\_\_\_\_

b. Number of cows dry: \_\_\_\_\_ XXXXX    XXXXX

c. Total cows: \_\_\_\_\_ XXXXX    XXXXX

Remarks: \_\_\_\_\_

6. Number of heifers: Over one year \_\_\_\_\_  
 Under one year \_\_\_\_\_  
 Total heifers \_\_\_\_\_

7. a. Is this farm owned by (individual, corporation)? \_\_\_\_\_  
 b. This farm is operated by: a. Owner \_\_\_\_\_  
 (If b, c, go to Q. 9) b. Manager \_\_\_\_\_  
 c. Other (Specify) \_\_\_\_\_

8. What proportion of your total farm income comes from dairying?  
 (Including cows, calves, butter, etc.) \_\_\_\_\_

II. 9. a. How many years have (you, the owner) been operating a dairy? \_\_\_\_\_  
 b. In this area? \_\_\_\_\_  
 c. Other Florida areas? (Specify) \_\_\_\_\_  
 d. Other areas? (Specify) \_\_\_\_\_  
 e. Other dairy experience (Specify) \_\_\_\_\_

10. Did (you, the owner) start this dairy? Yes \_\_\_\_\_  
 (If yes, go to Q. 12) No \_\_\_\_\_  
 Don't know \_\_\_\_\_

11. How did you acquire this dairy? \_\_\_\_\_

12. a. Do you have any relatives in the milk industry in this area?  
 (If no, go to Q. 13) Yes \_\_\_\_\_  
 No \_\_\_\_\_  
 b. Check one: Producer \_\_\_\_\_  
 Prod.-Dist. \_\_\_\_\_  
 Distributor \_\_\_\_\_  
 c. If producers, where do they ship their milk? \_\_\_\_\_

III. Transportation (If pasteurizing plant is located on farm, go to Q 19)

13. What is the total distance from your farm to your plant? \_\_\_\_\_ miles.  
 a. Distance on hard-surfaced roads \_\_\_\_\_ miles.

Remarks: \_\_\_\_\_

- b. Distance on graded roads \_\_\_\_\_ miles,
- c. Distance on unimproved roads \_\_\_\_\_ miles.
14. How often do you take your milk to your plant? \_\_\_\_\_
15. a. Do you haul your own milk from your farm to your plant?  
(If yes, go to Q. 16) Yes \_\_\_\_\_  
No \_\_\_\_\_
- b. If no, enumerate (rates). \_\_\_\_\_
16. a. How much time is required in making each delivery? \_\_\_\_\_
- b. How many men are used for delivery? \_\_\_\_\_
- c. Are any other trucking jobs done on the way to and from your plant? Yes \_\_\_\_\_  
No \_\_\_\_\_  
If yes, enumerate. \_\_\_\_\_
- d. What is the model, age, size of the truck you use in transporting? \_\_\_\_\_
17. Do you personally transport your own milk? Yes \_\_\_\_\_  
(If yes, go to Q. 19) No \_\_\_\_\_
18. a. The (man, men) who haul your milk are paid on a (monthly, weekly, hourly) basis at the rate of \_\_\_\_\_ (weekly, monthly, hourly).
- b. What is the monthly value of other non-cash items furnished him? \$ \_\_\_\_\_ (house, heat, milk, beef, etc.)
- c. The (man, men) who haul your milk average how many working hours daily? \_\_\_\_\_
- d. What does this (man, men) do, other than haul milk? (farm duties). \_\_\_\_\_
19. How many gallons of milk did you take to your plant yesterday? \_\_\_\_\_
20. How many years have you been retailing and wholesaling milk in this area? \_\_\_\_\_
21. Do you render or make available any of the following services to your producers?  
\_\_\_\_\_ a. Selling feed  
\_\_\_\_\_ b. Hauling feed to farm  
\_\_\_\_\_ c. Selling supplies  
\_\_\_\_\_ d. Pick milk up at producer's farm  
\_\_\_\_\_ e. Give managerial advice  
\_\_\_\_\_ f. Other (Specify) \_\_\_\_\_

Remarks: \_\_\_\_\_

22. a. Do you haul the producer's milk for him? Yes \_\_\_\_\_  
 (If no, go to Q. 23) No \_\_\_\_\_
- b. Do you use a (contract hauler) or your (own hauler)?  
 (Underline one) \_\_\_\_\_
- c. How frequent are the farm pick-ups? Daily \_\_\_\_\_  
 E.O.D. \_\_\_\_\_  
 Other (Specify) \_\_\_\_\_
- d. This milk is hauled in (tanks, cans)? (Underline one) \_\_\_\_\_
- e. What are the hauling rates per (gallon, cwt)? \_\_\_\_\_
23. Do you buy (all, some, none, of your milk on a B.F. differential basis?  
 If some, enumerate. \_\_\_\_\_
24. Which of the following affected your producers' last milk payment through check-offs in your plant? per gallon
- a. Coop. deduction \_\_\_\_\_
- b. B.F. differential \_\_\_\_\_
- c. Quality premiums \_\_\_\_\_
- d. Collection fees (D.H.I.A., credit, artificial breeding) \_\_\_\_\_
- e. Other (Specify) \_\_\_\_\_
25. a. How is your Class I price to producers determined?  
 \_\_\_\_\_
- b. Class II \_\_\_\_\_
- c. Class III \_\_\_\_\_
26. a. Do you feel that your producers understand how their Class I prices are derived? Yes \_\_\_\_\_  
 No \_\_\_\_\_  
 Don't know \_\_\_\_\_
- b. Class II Yes \_\_\_\_\_  
 No \_\_\_\_\_  
 Don't know \_\_\_\_\_
- c. Class III Yes \_\_\_\_\_  
 No \_\_\_\_\_  
 Don't know \_\_\_\_\_
27. a. Are your producer deliveries tied to a base period? (If no, go to part f.) Yes \_\_\_\_\_  
 No \_\_\_\_\_
- b. What base setting period is used in determining your producer bases?  
 \_\_\_\_\_

Remarks: \_\_\_\_\_



30. b. Do you try to fill only your year around needs for fluid milk (Class I) from your regular producers and try to obtain your cream, skim milk needs from other producers and distributors? Yes \_\_\_\_\_  
No \_\_\_\_\_  
No comment \_\_\_\_\_
31. Do you buy your Class I milk from
- a. Producers in this area? \_\_\_\_\_
  - b. Producers outside of this area? \_\_\_\_\_
  - c. Distributors in this area? \_\_\_\_\_
  - d. Distributors outside of this area? \_\_\_\_\_
  - e. Other sources (Specify) \_\_\_\_\_
32. Do you buy your Class II milk from
- a. Producers in this area? \_\_\_\_\_
  - b. Producers outside of this area? \_\_\_\_\_
  - c. Distributors in this area? \_\_\_\_\_
  - d. Distributors outside of this area? \_\_\_\_\_
  - e. Other sources (Specify) \_\_\_\_\_
33. Do you buy your Class III milk from
- a. Producers in this area? \_\_\_\_\_
  - b. Producers outside of this area? \_\_\_\_\_
  - c. Distributors in this area? \_\_\_\_\_
  - d. Distributors outside of this area? \_\_\_\_\_
  - e. Other sources (Specify) \_\_\_\_\_
34. In your own mind what are your present marketing problems?  
\_\_\_\_\_
35. What suggestions have you for improving your present marketing system?  
\_\_\_\_\_
36. Approximately how many gallons of milk and cream (on 4.0% M.F. basis) are distributed by this plant yearly? \_\_\_\_\_

Remarks: \_\_\_\_\_  
\_\_\_\_\_



Schedule No. \_\_\_\_\_  
 Area No. \_\_\_\_\_  
 Distributor No. \_\_\_\_\_  
 Enumerator \_\_\_\_\_  
 Date \_\_\_\_\_

Confidential

Agricultural Experiment Station  
 University of Florida  
 Project 651

DISTRIBUTOR SCHEDULE

1. How many years has this plant or organization been operating in this area? \_\_\_\_\_
  
2. Do you render or make available any of the following services to your producers?
  - \_\_\_\_\_ a. Selling feed
  - \_\_\_\_\_ b. Hauling feed to farm
  - \_\_\_\_\_ c. Selling supplies
  - \_\_\_\_\_ d. Pick milk up at producers farm
  - \_\_\_\_\_ e. Give managerial advice
  - \_\_\_\_\_ f. Other (Specify) \_\_\_\_\_
  
3. a. Do you haul the producer's milk for him? Yes \_\_\_\_\_  
 (If no, go to Q. 4.) No \_\_\_\_\_
  
- b. Do you use a (contract hauler) or your (own hauler)? (Underline one)
  
- c. How frequent are the farm pickups? Daily \_\_\_\_\_  
 E.O.D. \_\_\_\_\_  
 Other (Specify) \_\_\_\_\_
  
- d. This milk is hauled in (tanks, cans)? (Underline one)
  
- e. What are the hauling rates per (gallon, cwt)? \_\_\_\_\_
  
4. Do you buy (all, some, none) of your milk on a B.F. differential basis? If some, enumerate. \_\_\_\_\_

Remarks: \_\_\_\_\_

5. Which of the following affected your producers' last milk payment through check-offs in your plant?

	<u>Total deductions</u>	<u>per gallon</u>
a. Coop. deduction	_____	_____
b. B.F. differential	_____	_____
c. Quality premiums	_____	_____
d. Collection fees (DHIA, credit, art. breeding)	_____	_____
e. Other (Specify) _____	_____	_____

6. a. How is your Class I price to producers determined? \_\_\_\_\_

b. Class II \_\_\_\_\_

c. Class III \_\_\_\_\_

7. a. Do you feel that your producers understand how their Class I prices are derived? Yes \_\_\_\_\_  
 No \_\_\_\_\_  
 Don't know \_\_\_\_\_

b. Class II Yes \_\_\_\_\_  
 No \_\_\_\_\_  
 Don't know \_\_\_\_\_

c. Class III Yes \_\_\_\_\_  
 No \_\_\_\_\_  
 Don't know \_\_\_\_\_

8. a. Are your producer deliveries tied to a base period? Yes \_\_\_\_\_  
 (If no, go to f.) No \_\_\_\_\_

b. What base setting period is used in determining your producer bases?  
 \_\_\_\_\_

c. How are these bases worked out for a producer? \_\_\_\_\_

d. Is this base period uniform for all your producers? Yes \_\_\_\_\_  
 NO \_\_\_\_\_

If no, enumerate. \_\_\_\_\_

e. If a producer starts to ship to you in other than the base period, how is his Class I, II, III utilization determined?  
 \_\_\_\_\_

Remarks: \_\_\_\_\_

f. How is the price determined on your milk and cream purchases from other distributors? \_\_\_\_\_

g. How is the price determined on your milk and cream sales to other distributors? \_\_\_\_\_

9. a. Did any producers offer to ship to you regularly during the past year? Yes \_\_\_\_\_  
(If no or don't know, go to Q. 10.) No \_\_\_\_\_  
Don't know \_\_\_\_\_

b. How many producers applied? \_\_\_\_\_

c. Did you take on any new shippers? Yes \_\_\_\_\_  
(If no, go to part e.) No \_\_\_\_\_

d. How many producers did you take on? \_\_\_\_\_

e. Why (did you) (didn't you) decide to take on the producers who applied?  
\_\_\_\_\_

10. a. Are your retail and wholesale deliveries confined to this marketing area? Yes \_\_\_\_\_  
No \_\_\_\_\_

b. If no, what other areas do you deliver to? \_\_\_\_\_

c. If yes, why do you confine your sales to this area? \_\_\_\_\_

11. a. Do you try to fill your year around milk, cream, skim (Class I and II) milk needs from your regular producers? Yes \_\_\_\_\_  
(If yes, go to Q. 12) No \_\_\_\_\_  
No comment \_\_\_\_\_

b. Do you try to fill only your year around needs for fluid milk (Class I) from your regular producers and try to obtain your cream, skim milk needs for other producers and distributors? Yes \_\_\_\_\_  
No \_\_\_\_\_  
No comment \_\_\_\_\_

Remarks: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

12. Do you buy your Class I milk from

- a. Other distributors in this area?
- b. Other producers in this area?
- c. Distributors located out of this area?
- d. Producers located out of this area?
- e. Other (Specify) \_\_\_\_\_

Class I

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

13. Do you buy your Class II milk from

- a. Other distributors in this area?
- b. Other producers in this area?
- c. Distributors located out of this area?
- d. Producers located out of this area?
- e. Other (Specify) \_\_\_\_\_

Class II

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

14. Do you buy your Class III milk from

- a. Other distributors in this area?
- b. Other producers in this area?
- c. Distributors located out of this area?
- d. Producers located out of this area?
- e. Other (Specify) \_\_\_\_\_

Class III

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

15. In your own mind what are your present marketing problems?

\_\_\_\_\_

16. What suggestions have you for improving your present marketing system?

\_\_\_\_\_

17. Approximately how many gallons of milk and cream (on 4.0% M.E. basis) are distributed by this plant yearly?

\_\_\_\_\_

18. Coops. only

a. What is your coop. deduction per (gallon, cwt) on member's milk?

\_\_\_\_\_

b. How are your member deductions used?

\_\_\_\_\_

Remarks:

\_\_\_\_\_

\_\_\_\_\_



APPENDIX B

INFORMATION INDICATING THE NEED FOR IMPROVING  
THE PRICING MECHANISMS FOR MILK IN FLORIDA

MILK DEALERS

Summaries of statements made by milk dealers to interviewer  
in regard to;

- (1) Reconstituting and reconstructing milk
- (2) Restricting supply
- (3) Miscellaneous

RECONSTITUTING AND RECONSTRUCTING MILK

Number of  
Dealer<sup>100</sup>

- 1 We use this; symbol indicates that this volume is reconstituted and reconstructed milk. (In reference to records kept by the distributor, this dealer used a private code which denoted reconstitution to him, but legalized practices to anyone else.)
- 1 Everyone reconstitutes milk or skims it down to 4.0 per cent butterfat content. When we are short milk, we have to get it some way.

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<sup>100</sup> Individual dealers and milk producers were assigned an arbitrary number in order to conceal their identity.

Number of  
Dealer

- 2 I understand from my dairy plant inspector that there is a lot of reconstruction and reconstitution of milk in the \_\_\_\_\_ (adjacent) milk marketing area.
- 2 We don't skim our milk down to 4.0 per cent butterfat content the way most milk dealers do.
- 3 I compete with the big companies on quality (butterfat content). I sell 4.4 to 4.5 per cent butterfat milk and don't skim it to 4.0 per cent the way the other milk dealers do.

## RESTRICTING SUPPLY

Number of  
Dealer

- 2 I have an agreement with my present producers, that as long as they keep enlarging their herds and supply me with enough milk, I will not take on any new producers. I haven't had to take on any new producers in nearly five years.
- 4 Before I can take on any new producers, I have to have the consent of every one of my present producers, as per agreement.
- 5 I have an agreement with my present producers not to take on any new producers as long as they supply me with enough milk. I haven't had to take on any

Number of  
Dealer

5 (Cont.) new producers in three years.

6 I have frequent meetings with my producers and tell them how much more milk production each can furnish me with. I haven't had to take on any new producers in nearly six years.

7 We don't want a lot of small milk producers; we want big ones. There is less paper work and unloading problems with bigger producers.

and 8 I am willing to take on new producers as long as  
9 my present producers won't get any non-Class I milk because of it.

MISCELLANEOUS

10 I don't have any non-Class I milk. I pay Class I prices for milk used as chocolate drink and buttermilk (Class II).

8 I extend credit to my present producers so they will be able to expand production.

WHOLESALE MILK PRODUCERS

Statements made by wholesale milk producers to interviewer in regard to:

- (1) Juggling of bases by milk dealers and producers
- (2) Use of bases and agreements to restrict production
- (3) Need for a bonding law

(4) Pricing inequalities and trade practices

(5) Miscellaneous

#### JUGGLING OF BASES BY MILK DEALERS AND PRODUCERS

##### Number of Producer

- 1 When my dealer insisted I add some expensive barn improvements, I told him I couldn't do it unless I received a higher Class I quota. My dealer increased my Class I base quota 50 per cent without regard to the base-setting period.
- 2 I started my dairy during World War II when you didn't need to worry about a base. Now you can't get started unless you buy a base. My dealer told me if I ever needed money, to sell my base and he would continue to take my milk irregardless.
- 3 I bought an additional base of \_\_\_ gallons last year. My dealer had bought out a producer-distributor and was willing to sell me part of the base.
- 4 I wanted a bigger base from my dealer but couldn't get it, so I bought a herd of cows and their base from another farmer who sold to a different distributor. I then swapped the base I had bought to a fellow, who sold milk to my dealer, for his base. The man whom I swapped bases with now has a bigger base and I do too, so everyone is happy.

Number of  
Producer

- 4 (Cont.) This year my dealer will allow us to set new bases for the first time in five years.
- 5 There has been a little confusion this year about the size of my base. My dealer told me immediately after the base period that my base was 300 gallons. Later he said it was 250 gallons and now it is 220 gallons, the same as last year.
- 6 I gave 50 gallons of my new base this year to a relative of mine.
- 7 I told my dealer that I was going to sell my milk elsewhere. He said that if I stick with him, he will not cut into my Class I base this year the way he does with his other producers.
- 8 My established base was \_\_\_ gallons; then my dealer took on a new producer and gave him a Class I 100 per cent contract, so he cut my base 50 per cent.

## USE OF BASES AND AGREEMENTS TO RESTRICT PRODUCTION

- 9 I would move my dairy to \_\_\_\_\_, to avoid surplus milk, but I don't want to have to buy a base there in order to sell milk.
- 10 Dairying in this area is really closed up because of the use of frozen bases. I can't even get my son a market outlet so he can start in.

Number of  
Producer

- 11 Three years ago we dairymen got together with our dealer and he agreed not to take on any new producers unless we producers gave him our unanimous consent.
- 12 I came to Florida in 1948 and tried to find a marketing outlet in every area from Ft. Myers to Orlando. No distributor would take me on as a producer, but I decided to build a dairy barn at my present location anyway. The barn was built to state recommended standards and passed the local inspection service, but I could not get an outlet. I was forced to sell off part of my purebred herd I had brought with me in order to keep eating. I bought and raised calves for sale, drank milk and ate butter. I could have bought a base but refused to have to buy the poor quality livestock that went with it. In addition, the dairy farms I might have bought were larger than the one man operation I had intended. After 4 years of scraping by, I got a tip that a local dealer might need more milk. I went to see the distributor and he took me on as a producer.

The part that surprises me, was that every county agent I wrote before I moved to Florida told

- 12 me dairy farmers were needed badly. But this  
(Cont.) doesn't seem to be true.
- 13 You know that you can't start to sell milk (to a  
dealer) in this area unless you buy a base from  
someone already in the business.
- 14 I started my dairy in 1943 when milk was short and  
you didn't need to buy a base in order to sell it.
- 15 Bases in this area range from 25 to 40 dollars a  
gallon, depending on the size of the base. The  
smaller bases are generally higher priced.
- 16 The first two years I sold milk, no one would give  
me a base, so I got 100 per cent surplus prices.  
Some of my neighbors shipped some of my milk for  
me to help me out.
- 17 The only way I could sell my milk was to have my  
brother ship it as part of his own production.
- 18 At various times I have tried to help my neighbors  
out by shipping some of their surplus (over base)  
milk for them.
- 19 I'm going out of the dairy business in another  
month. I have only eight cows and my dealer won't  
let me increase the size of my herd and there is  
no other outlet around here.
- 20 We asked a dealer if he would take our milk when  
our cows started in production. He said it would

Number of  
Producer

20 be a year before he would take it. So we built our  
(Cont.) barn and waited for him to take our milk.

21 My dealer won't give me a base so all of my milk  
will be surplus before any of his other producers  
get a drop of surplus.

9 My brother took me down and introduced me to his  
dealer so I wouldn't need to buy a base.

NEED FOR A BONDING LAW

1 I lost over 2,000 dollars from selling to my former  
milk dealer. I won't sell to any small company now  
because I'm afraid of their financial situations.

22 My former dealer owes me thousands of dollars. So  
far, I haven't been able to collect from him.

23 When I quit selling to my former dealer, he owed me  
3,500 dollars. After six months he still owes me  
1,000 dollars.<sup>101</sup> I don't know whether I'll get it  
or not.

PRICING INEQUALITIES AND TRADE PRACTICES

21 Our dealer pays us two cents a gallon less for milk  
that he retails in the other end of our marketing  
area. He's making us pay part of his delivery costs.

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<sup>101</sup>These figures have been changed in order to conceal  
the identity of the producer.

Number of  
Producer

- 24 There is something wrong with our pricing set-up when a dealer can send milk in here for store sales from 70 miles away.
- 25 I make more money off surplus milk at surplus prices in the spring than on Class I at Class I prices in the winter.
- 9 My brother who sells to the same place I do, lives three miles further away but gets three cents a gallon more for Class I milk. His milk is supposed to be sold in the \_\_\_\_\_ (adjacent) area while mine is supposed to be sold here.
- 26 My dealer came to see me in order to get my milk production. He needed local production in order to hold his school milk contracts. He gave me 100 per cent Class I and said he would give me correct butterfat tests if I would sell to him.
- 27 My brother has a 100 per cent Class I contract with his dealer and he sends mine as part of his production so neither of us ever gets any surplus.
- 2 I know two former producer-distributors who sold out their retail businesses in order to get 100 per cent Class I contracts.

Number of  
Producer

- 28 Two years ago I was getting up to 40 per cent surplus and I knew my dealer was selling more Class I milk in this area than we producers were selling to him. I went to our Health Officer and he went to my dealer. The upshot of it was that my dealer agreed to pay all Class I to us up to the limit of his Class I sales before bringing in any milk from \_\_\_\_\_ (adjacent) area. Since that time I've received 100 per cent Class I.
- 29 My dealer is a personal friend of mine. When I wanted to start dairying, he loaned me money for cows and furnished a free farm until I could lease one. After I leased a farm, he paid 800 dollars on the lease.
- 8 When I started selling milk, the dealer I sold to took it for two weeks at surplus prices, then said he didn't need it for four months. During this time I couldn't sell it anywhere else as there were no other outlets available.
- 30 The only reason why I could get started in the dairy business was because a dealer from another milk marketing area wanted to expand into this area and wanted to be able to advertise that they sold locally produced milk.

Number of  
Producer

#### MISCELLANEOUS

- 31 When I started dairying I bought my cows and their base from one man and a farm, cows and their base from another man.
- 18 My former dealer shut me and two other producers off because we were supporting the \_\_\_\_\_ organization. At the same time he loaned money to my neighbor so he could expand his herd to make up our production.
- 32 When I started dairying I had to loan money to another man so he could start retailing milk and I could sell my milk to him.
- 33 Surplus doesn't bother me, I make a little on Class II and lose a little on Class III.

#### OTHER SOURCES

##### WHOLESALE DISCOUNTS

"Beswich and Castle, who are bob-tail distributors for Southern Dairies in the Lakeland and Bartow Area, recently sent a letter to all the Southern Dairies producers in the Lakeland Area charging that they had lost five big wholesale accounts due to discounts given these accounts by Foremost and Velda in that area. This action, if true, is in direct violation of the Milk Commission Law. A copy of

this letter from Beswich and Castle has been forwarded to the Milk Commission."<sup>102</sup>

#### BUTTERFAT TESTS

"We have had several instances where members were testing in Dairy Herd Improvement Associations and the plant tests varied as much as 10 points lower than their average tests in the DHIA."<sup>103</sup>

#### PRODUCER PAYMENTS

"Prior to the death of our late Governor, Dan McCarty, he and his brother, John McCarty, both stated that there was nothing that needed amending in the original Milk Commission Law. They stated that the thing that had not been done in connection with this Law was the full enforcement and administration of the Law..

"It is true that a lot of dairy farmers feel that their plants are furnishing them regularly with their sole source of income and hesitate to 'offend' or give the appearance of not 'cooperating' with the plants.

" . . . in the Pinellas County market where we hear that a large plant notified its producers that if they do

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<sup>102</sup>"The Dairy Farmers' Florida News Letter," Official Views of the Florida Milk Producers' Association, The Florida Cattleman and Livestock Journal, October, 1954, p. 76.

<sup>103</sup>"The Dairy Farmers' Florida News Letter," op. cit., December, 1954, p. 76.

not take one and one-half cents less than the established Milk Commission price per gallon, they could find another market for their milk by August 1, 1954."<sup>104</sup>

#### RECONSTITUTED MILK

"According to the Miami Herald of August 31, 1954: '18 milk adulteration cases pending against five major dairies in the Miami area will be dropped Wednesday because of legal barriers to further prosecution, The Herald learned Monday.

'The decision to drop all of the "watered milk" cases in Court of Crimes results from Dade and Leon County Circuit Court rulings, according to County Solicitor John D. Marsh and two assistants, A. C. Dressler and Steadman Stahl, Jr.

'Prosecution of the Five dairies by Marsh under the Florida Milk Law was halted in July when Judge Marshall Wiseheart granted an injunction here.

'Prosecution under the state pure food law was ruled out more recently in a Leon County ruling by Circuit Judge Hugh M. Taylor, who held that milk tests to show adulteration must be made under direction of the state's chemist--not laboratory technicians for the State Health Department.

'These 18 cases involving "eight to 16 per cent water," while heretofore confined principally to one area of

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<sup>104</sup>Ibid.

Florida, are the result of "reconstituted milk" which gives the public an inferior and unsatisfactory product.

'This results in less milk being consumed, which, in turn, causes the dairy farmer to receive more Class Two and Three milk. The competition of the dairy farmer and the distributor is not just a competing distributor selling milk alone, but Coca Cola, Pepsi Cola, coffee, tea, and every other beverage on the market.

'Anything that is done by any plant or producer that in any way affects the palatability or flavor of milk affects not only the individual distributor's sales, but the dairy farmer's income as well.

'We have a code of fair trade practices. We have the so-called Milk Commission Law. We have pure food acts. But none of the laws or acts that we now have on the books are apparently able to protect adequately the public and dairy farmers of Florida.'<sup>105</sup>

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<sup>105</sup>"The Dairy Farmers' Florida News Letter," op. cit., November, 1954, p. 66.

## APPENDIX C

### PRACTICE AND THEORY OF MARKET EXCLUSION WITHIN THE UNITED STATES

#### GEOGRAPHICAL BARRIERS

"The most important example of assistance to monopoly on a geographical basis is the protective tariff. Most of the nationwide monopolies have received some protection by this method. State barriers are gradually becoming equally familiar; they employ tax powers, highway controls, health and sanitation powers, and similar prerogatives in order to suppress out-of-state competition. A typical municipal example of the same type is the refusal of health authorities to inspect dairy farms lying outside a given area."<sup>106, 107</sup>

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<sup>106</sup>G. J. Stigler, The Theory of Price, The Macmillan Company, 1947, pp. 211-212.

<sup>107</sup>A few examples may be given. Taxation: in Alabama wine makers using 75 per cent or more of Alabama-grown raw materials pay an annual license fee of \$25, others pay \$1,000. Highway control: the itinerant merchant-trucker in Idaho or Washington annually pays a \$300 license fee to every county in which he does business and also posts a bond of \$500 with each county treasurer. Health and sanitation: when New York quarantined out-of-state cattle in 1932 to prevent the spread of Bang's disease, a milk cow could be imported only if it came from a herd which had shown three negative tests to the disease in the year preceding importation. No New York herd could meet this test. In many states the public institutions are compelled to buy local products, e.g., Colorado, Iowa, and numerous other states require

"Market restrictions of economic significance have existed within the United States for a long time, but the sharp shrinkage in demand and the drastic declines in prices have prompted many new efforts to stabilize prices locally by this means. It appears that the constitutionality of laws and regulations which are in fact acts of market exclusion, depends upon whether or not they are a reasonable exercise of the police powers of the state, city, or other division of the government."<sup>108</sup>

New York City authorities stopped issuing permits to milk sources beyond the western borders of New York and Pennsylvania in January, 1926. They felt that this was the city's normal milkshed. However, in a considerable part of the New York metropolitan district outside the jurisdiction of the New York City Department of Health, there was not a month from 1926 to 1932 when milk receipts from outside the normal milkshed exceeded 0.2 per cent of the total. Effective March 1, 1932, regulations forbid the bringing in from uninspected sources cream to be used for fluid use.

Dr. Spencer reported that the city of Rochester, New York, with a normal milkshed of a 40-mile radius, had

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institutions to buy locally mined coal; Nebraska requires purchase of local butter; and most states require that public printing be done within the state.

<sup>108</sup>Leland Spencer, "Practice and Theory of Market Exclusion Within the United States," Journal of Farm Economics, 1933, 15:141-158.

been requested to extend inspection by the Rochester Health Bureau to a number of milk plants beyond its normal shed. One of these plants holds a New York City permit and was located in the same village with another plant which shipped milk to Rochester. The additional plants were not inspected. The reasons given were that a further extension of inspection would involve needless costs, and that any further increase in the supply of milk in that market would be likely to cause a breakdown in prices with the resulting impairment of the quality and safety of the milk.

In several markets the source of supply has been restricted by unwritten agreements between the milk producers' associations and distributors. In some such cases the local department of health has lent its support to the policy agreed upon by the organized producers and the distributors.<sup>109</sup>

It may well be doubted whether the consumers are likely to derive any advantage from restriction other than protection against unhealthful and adulterated products. Gains from the expected greater efficiency of producers who have a partial monopoly are likely to prove illusory unless the phenomenon of decreasing cost arising from internal economies in the individual plant are present. But such economies are not claimed for dairies and they can scarcely

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<sup>109</sup>Ibid., pp. 142-158.

be important in the processing plants. Hence, the consumer should look forward to higher prices if restriction should become firmly established. Whether the consumer will retaliate cannot be predicted.

"If the states should carry to their logical conclusion their attempts to restrict or hinder within their boundaries the purchases of articles and commodities of other states, the inevitable results would be that Wisconsin must eat all her cheese, Pennsylvania burn all her coal, and the inhabitants of Michigan be the sole purchasers of Detroit's motor cars. One need not comment upon such an absurdity."<sup>110</sup>

#### BASE-SURPLUS SEASONAL INCENTIVE PLANS

Base-surplus, or quota plans, have been widely criticized because of their restrictive nature on production.

Pritchard states that, "Base-surplus plans also have been criticized as disguised means of erecting artificial monopolies. Base plans can be, and have been, constructed so as to erect barriers to free entry of producers to a market. Such barriers foster injustices and economic inefficiency. Some plans also discourage producers from expanding herds, thereby benefiting established producers, at the expense of young farmers trying to expand their enterprises.

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<sup>110</sup>Asher Hobson, Review of Dr. Leland Spencer's paper--"Practice and Theory of Market Exclusion in the United States," Journal of Farm Economics, 1933, 15:162.

As a consequence, in part of these criticisms of pre-war base plans, most markets adopting base plans since World War II now use sharply revised versions of the pre-war plans. These post-war plans, however, are not completely free of undesirable restrictive features. In contrast, fall premium plans cannot be justly criticized on any of the above points; complexity, restrictiveness or administrative difficulty."<sup>111</sup>

Cotton states, "That one of the objectionable features, found in base-surplus plans, is the tendency for bases to become fixed and thereby restrain the development of economical sources of supply."<sup>112</sup> Four other objections listed by this author are: (1) difficulty of establishing bases for all producers, (2) difficulty of establishing bases for new producers, (3) difficulty of establishing equitable methods of settlement when the base-surplus plan is used, and (4) problems involved in transferring bases.

The base-rating provisions of the original Federal Milk Marketing Order in Kansas City, Missouri, caused dissatisfaction among both producers and producer-distributors. The allocation of bases was administered under what amounted

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<sup>111</sup>Pritchard, op. cit., p. 26.

<sup>112</sup>W. P. Cotton, Milk Marketing Problems in North Carolina, Bulletin No. 370, Ag. Exp. Sta., North Carolina State College, June, 1950, p. 77.

to an essential "closed" system. Producers were operating on bases which had been established several years before. The Market Administrator stated, that prior to the Marketing Order, bases assigned to producers were often out of line with their actual production records, and inconsistent with sales records of distributors. The base-rating plan became increasingly difficult to administer. Many producers were shipping less than their base allotments, while others, who were able to supply excess milk, were insistent in their demands for re-allocation of bases.<sup>113</sup>

"The method of payment, which should theoretically have the greatest tendency to hold down production, is the 'base-rating plan.' Under such a plan each individual producer is assigned a fixed quota, or 'base,' upon which he is entitled to receive the Class I price. He then knows that for any surplus over this base, he will receive only the Class II price. The fundamental idea of the base-rating plan is that each producer must bear the full consequences of his own surplus production. Under this, and more elaborate payment plans, the individual farmer's milk check usually shows the two (or more) classes as separate items,

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<sup>113</sup>Early Development of Milk Marketing Plans in the Kansas City, Missouri Area, United States Dept. of Agriculture, Production and Marketing Administration, Dairy Branch, Marketing Research Report No. 14, Washington, D.C., May, 1952, pp. 72-75.

in order to make him 'surplus-conscious.' None of these plans has more than partially succeeded in attaining the desired objective of production control, however."<sup>114</sup>

The effect of the base-surplus plan was to modify the seasonal pattern of receipts by causing some diversion of milk to manufacturing, to encourage shipments in the fall base-forming period, and in other ways, to restrict total receipts.<sup>115</sup>

That quotas, or base plans, are restrictive of total production was evident in Southern New England, when quotas were put into effect for a short time in the mid-thirties. In this area, immediately prior to use of the quota plan, many dairy herds were being fed to the point where an additional 100 pounds of feed fed did not result in more than 100 pounds of increased milk production. Just before the quota plan went into effect, most farmers could sell additional milk for about \$2.25 per hundredweight at the farm; since feed costs were about \$1.50 per hundredweight, some additional economic incentive was present to stimulate production. After the quota plan went into effect, additional

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<sup>114</sup>W. H. Nicholls, Imperfect Competition Within Agricultural Industries, The Iowa State College Press, Ames, Iowa, 1941, pp. 187-188.

<sup>115</sup>J. B. Roberts, The Louisville Fall-Premium Plan for Seasonal Milk Pricing, Kentucky Agricultural Experiment Station Bulletin 510, November, 1947.

milk produced brought not more than \$1.00 per hundredweight, or 50 cents less than the cost of the grain.<sup>116</sup>

In the early thirties, the base-surplus plan was resorted to in Chicago, not primarily to encourage more even production, but to hold down production and give producers a price higher than they would receive under competition.<sup>117</sup>

Perhaps one of the most important measurements of the restrictive nature of base-surplus or quota plans is whether bases established by individual producers have any market value, and/or whether the individual bases can be transferred from one producer to another. Bases, of course, can only have value if the individual producer can transfer his base to another producer who might buy the producer's farm, livestock and base, or who may only be interested in buying part or all of the base. If the value of such a transfer is zero or very small, the base-quota plan does not serve to restrict production to any extent. It is only when the bases, established by the base-quota plan, enhance the producer's price beyond what his price would have been under competitive conditions, that bases will have value.

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<sup>116</sup>H. C. Fowler, The Competitive Position of Dairying in Southern New England, U. S. Dept. of Agriculture, Technical Bulletin No. 812, February, 1942.

<sup>117</sup>Bartlett, The Price of Milk, op. cit., p. 22.

Spencer in a study made in the Los Angeles milk market, found:

"The basic-surplus plan of prices has given rise to what is known as 'shipping rights,' which are transferable and have commercial value. A dairyman who has established a basic quantity or shipping right, may transfer it when he sells all or a part of his herd. In general, the shipping right is considered equal in value to 1.25 pounds of milk fat per cow per day. Shipping rights usually go with the cows. A cow sold with shipping rights brings about \$20 more than one of equal quality without a shipping right. Under the basic-surplus price plan that has been in effect since July, 1930, a new producer without shipping rights receives the base price for two-thirds of his production, surplus price for one-third."<sup>118</sup>

Three indications of the restrictive nature of the base-surplus or quota plans as used among producers and dealers interviewed in central and south Florida were found:

(1) One indication of the restrictive nature of these plans was the active market in buying and selling individual bases. Bases have been, and are, transferable in many cases between producers. These bases, when transferred, were found to be worth about \$30 per base gallon in most of

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<sup>118</sup> Leland Spencer, An Economic Survey of the Los Angeles Milk Market, California Agricultural Experiment Station Bulletin No. 513, May, 1931, pp. 63-64.

the administered central and south Florida milk marketing areas. Thus, a producer with a 200 gallon base had a base worth about \$6,000 when transferred to another producer. With an estimated average production of 1.7 gallons of milk per cow per day, the value of this base was worth about \$50 per cow. Usually bases are sold with the herd, but in some cases bases are sold separately.

(2) The second indication of the restrictive nature of the base-surplus plans used in central and south Florida was shown by the closed base system used by mutual agreement of some dealers and their producers. Under some of these agreements, bases had been established in some period three or four years previously. No new producer could produce and sell milk to these dealers and hope to receive anything but surplus prices for his production. In addition, other producers selling to other dealers in the same market could not change outlets and sell milk to one of these closed-base dealers without receiving Class II or III prices for all of his milk. Because of the rapid population expansion in central and south Florida, some provision had to be made in many cases for increased demands for fluid milk. Usually producers, operating under a closed-base period, had agreements with their milk handlers, that any increase in Class I fluid milk needs would be passed on to the present producers under a pro-rata plan based on the closed bases.

In one of the largest milk marketing areas of central and south Florida, as measured by population and milk

production but not by numbers of producers, every one of the milk dealers operated under closed base agreements with their producers. The only new producers in this area during at least the period from 1949 through 1952 are those who have bought the farms, livestock and bases of former producers.

(3) The third, and one of the major indications of the restrictive nature of base surplus plans as used in Florida, was furnished by answers supplied by the 27 milk dealers interviewed.

Seventeen out of 27 milk dealers, representing 80.4 per cent of the total fluid milk Class I sales, said that new producers, or existing producers, had applied to them during 1952 in an attempt to acquire a marketing outlet, or change marketing outlets. Only six of these 17 dealers said that they had taken on any new producers during 1952. These dealers represented only 28.2 per cent of the total fluid Class I milk sales of the 17 dealers during 1952. No new producers were taken on by the other 11 dealers, who represented 71.8 per cent of the fluid Class I milk sales, where new or existing producers had applied for marketing outlets.

Reasons given by these 11 dealers for turning away new producers were (1) the dealer did not need the milk, (2) the dealer and his present producers had an agreement whereby the dealer would not take on any new producers, and (3) the dealer did not think that his taking on new producers

would be fair to his present producers. These dealers thought that the average blend prices paid to their present producers would decline if new producers were taken on.

Of the six dealers who took on new producers during 1952 four used a base-surplus plan. Of the 11 dealers who did not take on as new producers any of the people who applied for a marketing outlet 10 used a base-surplus plan.

#### ALTERNATIVES TO USE OF BASE-SURPLUS

If all producers had the same seasonal variation in their production, and thus contributed equally to summer surpluses, no problem of distribution of Class I benefits would result. Because some producers' production varies widely from market demands, while others do not, a problem arises. Producers who maintain output similar to market demand naturally feel that it is unfair to them to accept an average price which is lowered by including surplus milk thrown on the market by other producers.

Substitution of a different seasonal production incentive to encourage better or as good an adjustment of supply to demand, as is now present under the base-surplus system, without the restrictive nature of the base-surplus plans, requires a great deal more study and research. A good sound economic seasonal production incentive might well be furnished by a plan commonly called the "Fall Premium Plan," "Louisville Plan" or the "put-and-take plan."

This "put-and-take" plan was first initiated in the Louisville, Kentucky market during 1944. Since then, at least 10 other markets have adopted similar plans. These 11 plans differ in many respects, due in part to differences among markets in seasonal milk production patterns, and in other production and marketing conditions.<sup>119</sup>

The common features of this plan should be adapted to Florida conditions, if such a plan were used. These common features are:

1. The "put-and-take" plan is an addition to, and not a substitute for, use-classification.
2. Premium funds (put in) would accumulate by withholding money from all producers in the various milk marketing areas during designated months when milk production is normally highest, in relation to Class I demand.
3. Premium funds (or funds put in) are held for the benefit of all milk producers as a group.
4. A responsible official or organization as the custodian of the premium fund.
5. Premium funds would be distributed in (take out) designated fall or winter months, when milk production normally is seasonally smaller in relation to Class I demand.

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Pritchard, op. cit.

6. Producers share in premium (take out) payments on the basis of their fall or winter milk deliveries, irrespective of quantities of milk they delivered during the "put-in" period.

Pritchard states, "that the 'put-and-take' plan and base-surplus plans can be about equal in effectiveness of providing incentives to producers to reduce spring (surplus milk period) in relation to fall (or winter) milk production. Fall premium plans, however, are simpler to administer and to understand, more flexible, and less restrictive on producers and production."<sup>120</sup> Roberts states, "instead of setting individual bases under the Louisville Plan, price alone is the primary motivating force. The plan allows the individual dairyman complete freedom in carrying on the dairy enterprise in accordance with his best interests."<sup>121, 122</sup>

Markets using the "put-and-take" plan during 1952 included Columbus, Ohio; Connecticut (entire state); Denver, Colorado; Duluth, Minnesota; Kansas City, Missouri;

<sup>120</sup>Ibid., p. V.

<sup>121</sup>Roberts, op. cit., p. 58.

<sup>122</sup>For further information see J. B. Roberts, The Louisville Fall-Premium Plan for Seasonal Milk Pricing, Kentucky Agricultural Experiment Station Bulletin 510, November, 1947, and Norris T. Pritchard, Fall Premium Milk Pricing Plans, Farm Credit Administration, United States Department of Agriculture, Circular C-147, September, 1952.

Louisville, Kentucky; New Bedford, Massachusetts; Omaha, Nebraska; Sioux City, Iowa; Topeka, Kansas; and Washington, D. C.

Other attempted solutions to reduce seasonal differences in production and consumption, besides base-surplus and the "put-and-take" plan, are:

- (1) Seasonal changes in retail milk prices.
- (2) Educational and advertising programs among milk producers.
- (3) Variable class price plans (reflected back to producers).

Attempts to effect milk consumption, by varying retail prices, have generally failed. Milk producers' responses to educational programs and promotional campaigns generally have been small, and the success of variable class price plans has been limited.

## APPENDIX D

### EFFECTS OF A THEORETICAL MARKET-WIDE POOL UPON PRODUCERS IN THE MIAMI MARKET

The largest milk market in Florida is the Miami Metropolitan Market. This market is called the Dade-Broward-Monroe Milk Marketing Area by the Florida Milk Commission. During 1949, this area produced and sold off dairy farms 17,704,909 gallons of milk.<sup>123</sup> The 1950 census report showed that 607,944 people resided in these three counties.

During 1952 between 75 and 85 wholesale milk producers<sup>124</sup> were located in, or sold milk into this three-county milk marketing area. During the spring of 1953 data were collected from 78 wholesale producers in this market in order to analyze how individual producers in the market would fare under a market-wide pool. Data obtained included monthly off-farm sales of each producer's milk broken down

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<sup>123</sup>1950 U. S. Census of Agriculture, Florida Counties and State Economic Areas, op. cit., Vol 1, Part 18, pp. 78-80.

<sup>124</sup>Obtained from a March 12, 1952 corrected list of Florida dairymen furnished by John M. Scott, Chief Dairy Supervisor, Florida State Department of Agriculture, Gainesville, and implemented by the Florida Milk Commission by adjusting for producers who discontinued or started dairy operations during 1952.

into the various use-classifications and the prices received for the different class uses corrected to a 4.0 per cent butterfat content basis. Complete sales and price records were obtained from 40 producers, 23 producers furnished 11 months' records, one producer furnished a 10 months' record, one furnished a 9 months' record, 11 producers furnished 7 months' records, and two producers furnished 6 months' records.

Sixty-five of the 78 wholesale milk producers from whom monthly class use and class prices were taken for the year 1952 furnished information for nine or more months. These 65 producers represented a total of 780 months (65 x 12). Information was complete regarding 752 of these months. The other 28 monthly figures were estimated by using the average volume figures for the prior and subsequent months. While this adds some possibility of error into the total figures for the 65 producers, such error would be exceedingly small, since only 3.6 per cent of the 780 months were estimated in this way. With an error of 10 per cent for these estimated months the total error would have been only .36 of one per cent. The 752 actual monthly records and the 28 estimated monthly records were then analyzed to see how these 65 producers would have fared under a market-wide pool using the milk commission's established January-February base as compared to the individual-handler pool basis used in the market.

The thirteen producers for whom only six and seven months' figures were available were not included in the market-wide pool calculations. It was felt that any estimation of the volumes of the missing months would have led to a chance for error that would more than offset any advantage to be gained by including these producers in the market-wide pool calculations.

Total off-farm sales for these 65 producers during 1952 was 15,360,560 gallons. This volume was nearly 87 per cent of the 17,704,909 gallons of milk sold off farms in Dade, Broward, and Monroe Counties during 1949.<sup>125</sup> Hence, it was assumed that these 65 producers accounted for a large share of the total production in these three counties in 1952.

The 15,360,560 gallons of milk sold by the 65 producers into the Dade-Broward-Monroe Milk Marketing Area during 1952 was composed of 93.73 per cent Class I, 5.91 per cent Class II and .36 of one per cent Class III milk. The Class I price as established by the Commission for 4.0 per cent butterfat content milk was 61.00¢ cents per gallon during 1952. The Class II price varied between

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<sup>125</sup>United States Department of Commerce, Bureau of the Census, 1950 United States Census of Agriculture, Florida Counties and State Economic Areas, Volume 1, Part 18, Government Printing Office, Washington.

45.93 and 51.46 cents per gallon, while the Class III price varied between 30.80 and 37.26 cents per gallon.

Dealer Class I milk sales, as measured by the total monthly Class I payments to these 65 producers, varied widely as compared to other markets in the United States. Using the January-February Class I sales as a base, the index of Class I sales varied from 78.9 to 103.4, a difference of 24.5 per cent. By comparison, such markets as Cleveland, Philadelphia, New York City, Boston, Nashville, and New Orleans have relatively little seasonality in fluid milk sales. The average daily index of sales seasonality, for 33 markets in the United States varied only 8.2 per cent or about one-third that found in the Miami Marketing Area (Table 41).

If milk produced and sold in a market were used and paid for entirely as fluid whole milk there could be no inequality among prices paid to producers. When production is in excess of fluid whole milk sales, as it must be, then the opportunity for inequalities among producers is present. Such inequalities can arise due to individual producers' differences in adjusting to the fluid whole milk demand, differences in the sales patterns and utilization of different dealers when the market is not operated as a market-wide pool, refusal of dealers to treat all their producers equitably, personal discrimination, immobility of producers in

TABLE 41

INDEX OF AVERAGE DAILY FLUID MILK SALES USING A JANUARY-FEBRUARY BASE IN THE MIAMI MARKET, COMPARED TO OTHER MARKETS IN THE UNITED STATES<sup>a</sup>

	Jan. & Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Cleveland	100	100.8	100.1	101.9	102.3	100.4	103.1	105.1	105.9	103.6	103.0
Philadelphia	100	103.0	100.2	102.2	100.1	91.2	92.8	101.7	101.1	102.0	98.7
New York City	100	100.5	99.3	101.0	104.4	96.7	98.1	102.0	102.5	102.0	99.7
Boston	100	101.7	100.2	101.7	99.5	91.3	92.3	97.9	100.2	98.9	96.8
Nashville	100	102.9	99.8	100.2	98.4	97.5	100.7	111.6	110.7	112.5	107.9
New Orleans	100	102.8	97.0	100.2	96.5	93.0	96.5	104.9	101.6	102.1	99.1
33 Markets	100	101.6	99.9	101.3	101.7	96.2	98.8	103.8	104.1	104.4	102.1
Miami	100	102.6	92.7	84.0	78.9	81.5	82.0	84.9	88.3	95.5	103.4

<sup>a</sup>Miami index figures are based on information obtained from 65 milk producers for 1952, index numbers for all other markets were computed from information obtained from Dairy Statistics and Related Series, United States Department of Agriculture, Bureau of Agricultural Economics, Statistical Bulletin No. 100, June, 1951, p. 62. These figures were for 1950.

shifting market outlets, lack of market knowledge, and other reasons. In the Miami Area with its small volume of production above fluid whole milk needs as compared to other markets of the United States, such opportunities for inequalities to arise and exist may be thought to be slight. However, inequalities can arise from other factors. Where the number of milk dealers in business in a given market is small, producers may not be very successful in shifting from one dealer to another to correct any inequality under which they may be laboring. When a dealer buys from only a few producers favorable treatment to one has a greater impact on the others than when the dealer buys from many producers. While the number of dealers in the Miami Market was as great as in other comparable markets, the number of producers in the market was small. With only about 80 producers in the Miami Market as compared with more than 50,000 in the New York Market, 13,000 in the Boston Market, 914 in the small Nashville, Tennessee Market, 2,800 in the New Orleans Market, preferential treatment by any one Miami dealer to any single producer might create great differences in the prices received by other producers.

In setting up the theoretical market-wide pool, all price calculations were adjusted to a 4.0 per cent butterfat basis to eliminate any price differences between producers due to butterfat content. The price used for Class I milk

was the Commission's established price of 61.00¢ per gallon for 4.0 per cent butterfat milk. Class II and III prices used in computations were those established by the Commission. The average annual blend price for all milk during 1952 was 60.15 cents per gallon. This price was, of course, the same under both the individual-handler pools and the theoretical market-wide pool, using a January-February base. The average number of gallons sold by the 65 producers was 236,316 gallons. At 60.15 cents per gallon and 236,316 gallons per producer the average gross sale of each producer was \$142,144 for 4.0 per cent butterfat milk.

Under the theoretical market-wide pool, using a January-February base period, 37 or 56.9 per cent of the producers would have received a larger annual average gross return than under the individual-handler pool basis. One producer would have received the same gross income under either the individual-handler or under the theoretical market-pool basis. Twenty-seven or 41.5 per cent of the 65 producers would have received less per gallon under the theoretical market-wide pool than under the individual-handler pool basis. The 37 producers<sup>126</sup> who would have gained under the

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<sup>126</sup>On the basis of the six and seven months' records obtained from 13 other producers in this market for 1952, 10 would have received a larger gross income under the theoretical market-wide pool while three would have received less. With complete records on these 13 producers, 47 (37 plus 10) producers out of 78 (65 plus 13) or 60.2 per cent would have

theoretical market-wide pool would have gained from .02 to 2.27 cents per gallon during 1952 (Table 42). Based on the

TABLE 42

COMPARISON OF BLEND MILK PRICES PAID TO PRODUCERS FOR 4.0 PER CENT BUTTERFAT MILK UNDER THE INDIVIDUAL-HANDLER POOLS USING A JANUARY-FEBRUARY BASE, COMPARED TO PRICES THAT WOULD HAVE BEEN PAID UNDER A MARKET-WIDE POOL USING A JANUARY-FEBRUARY BASE, DADE-BROWARD-MONROE MILK MARKETING AREA, FLORIDA, 1952

Producer Code Number	Price Per Gallon		
	Indiv. Handler	Market-wide	Difference
	(Cents)	(Cents)	(Cents)
100 <sup>a</sup>	58.15	60.42	2.27
6	57.38	59.60	2.20
10	58.57	60.74	2.17
54	58.17	59.41	1.24
77	59.31	60.45	1.14
65	59.07	60.76	.99
43	59.75	60.71	.96
44	59.18	60.02	.84
52	59.81	60.61	.80

received larger gross incomes from the theoretical market-wide pool, using a January-February base period, one producer or 1.3 per cent of the 78 producers would not have been affected, while 30 (27 plus 3) producers or 38.5 per cent would have decreased gross incomes.

TABLE 42--Continued

Producer Code Number	Price Per Gallon		
	Indiv. Handler	Market-wide	Difference
	(Cents)	(Cents)	(Cents)
50	59.85	60.52	.67
34	59.63	60.24	.61
24	60.08	60.66	.58
72	59.94	60.50	.54
60	55.46	55.93	.47
22	59.35	59.80	.45
35	59.75	60.15	.40
68	60.61	60.84	.33
25	59.71	60.05	.34
74	60.29	60.55	.26
J-16	59.24	59.59	.25
23	60.26	60.50	.24
31	60.67	60.85	.18
63	59.96	60.08	.12
57	60.53	60.65	.12
43	59.70	59.82	.12
19	60.64	60.72	.08
8	59.69	59.71	.02
49	60.84	60.86	.02

TABLE 42--Continued

Producer Code Number	Price Per Gallon		
	Indiv. Handler	Market-wide	Difference
	(Cents)	(Cents)	(Cents)
75	58.87	58.87	0
42	60.32	60.31	- .01
11	60.73	60.71	- .02
42	60.54	60.51	- .03
41	60.72	60.63	- .09
19	61.00	60.86	- .14
9	60.83	60.83	- .20
1	60.80	60.59	- .21
15	61.00	60.74	- .26
16	60.95	60.66	- .29
45	60.91	60.61	- .30
71	61.00	60.63	- .37
79	61.00	60.54	- .46
41	60.72	60.63	- .50
38	61.00	60.48	- .52
27	59.04	56.83	- .79
18	61.00	60.16	- .84
83	60.65	59.69	- .96
90	60.77	59.75	- 1.02
88	60.25	59.07	- 1.18

TABLE 42--Continued

Producer Code Number	Price Per Gallon		
	Indiv. Handler	Market-wide	Difference
	(Cents)	(Cents)	(Cents)
12	60.32	58.79	- 1.53
46	61.00	59.47	- 1.53
51	57.34	55.68	- 1.66
J-41	59.07	56.80	- 2.27
J- 7	60.83	58.39	- 2.44
30	61.00	58.54	- 2.46
13	61.00	58.51	- 2.49
67	61.00	57.50	- 3.50

<sup>a</sup>Code number represents 10 producers.

market-wide average of 236,316 gallons per producer, this would have meant gains of from \$47.26 to \$5,364.37 per producer. The 27 producers who would have decreased their gross incomes under the market-wide pool would have decreases ranging from \$23.63 to \$8,271.06 per producer.

Although about three out of five producers selling milk into the Miami Milk Marketing Area during 1952 would have increased their average return per gallon under a market-wide pool, most of these producers apparently thought

they were faring better under the existing market arrangement of individual-handler pools. This situation was largely due to inadequate market knowledge.

For example, sixteen of the 65 producers were asked if they thought they were sharing equally in the market with all other producers. Twelve producers believed they had received more than the average market price during 1952. Two said they received less than the market average. Only two producers thought they had received the average market price. Of the 12 producers who believed they had received more than the average market price only seven had actually done so. The other five would have fared better under a market-wide pool. The two producers who said they had received the average market price and the two producers who said they had received less would all have fared better under a market-wide pool. Hence, only 9 out of 16 producers were able to accurately appraise their market situation.

## APPENDIX E

### INTER-DEALER BULK SALES AND PRICES

An effort was made to obtain information from the 27 milk dealers interviewed concerning the volume of inter-dealer bulk sales and prices paid for such sales by classes of milk. Prices paid for the various bulk sales and purchases of the various classes of milk were intended to be compared with prices paid to producers for the same classes of milk.

Twenty-six of the 27 milk dealers were willing to release this information, but in most cases the data they provided could not be analyzed for various reasons. Among these reasons were: (1) lack of any records whatsoever, (2) incomplete dealer records, (3) failure of the dealer to keep past records, (4) poor accounting procedures which failed to furnish ready access to any desired type of information.

Data furnished by milk dealers indicated that the volume of inter-dealer sales of Class I milk in bulk was very small. Each dealer had encouraged production by his producers to a point where, on only rare occasions, was it necessary to buy (or sell) Class I milk from (to) other

milk dealers in bulk shipments. About one-half of these dealers reported that they paid Class I prices for milk which was used as Class II.

Data furnished by milk dealers also indicated that only a very small volume of inter-dealer bulk sales of Class II milk were made during 1952. Except for a few dealers during part of the spring months, when production was high as compared to Class I demand, every dealer interviewed bought Class III milk (cream) from other than producer sources on a year round basis. Very little local or state production was available or used as Class III. Most of the Class III milk bought by dealers was obtained from cream jobbers, located in Jacksonville, Miami and Tampa, Florida. These cream jobbers obtained all of their product (cream) from out-of-state sources. Some milk dealers, particularly the smaller ones, purchased their Class III needs from large local milk dealers. Without exception, however, these larger milk dealers had obtained their Class III purchases from cream jobbers (brokers).

Prices paid by dealers buying Class I milk in bulk from other dealers during 1952 were found to be the established Class I prices plus or minus differentials for butterfat contents in the various marketing areas.

The volume of Class II milk involved in inter-dealer transactions and the number of transactions were so small

that no attempt was made to compare prices of these sales to established Commission prices. Class III producer prices, as established by the Commission during 1952 in the Miami Area were lower than market prices of cream bought by dealers from jobbers in the Miami Area. The market price averaged 3.2 cents more than the established prices of 32.8 cents per gallon for Class III milk (Table 43). The market price in the Tampa-St. Petersburg Area averaged .3 cents less per gallon than market prices in the Miami Area. This was probably due to the greater transportation distance and cost of shipping 40 per cent cream to Miami.

TABLE 43

DIFFERENCES BETWEEN PRICES OF CLASS III (40 PER CENT CREAM)  
ESTABLISHED BY THE FLORIDA MILK COMMISSION IN THE MIAMI  
AREA AND THE MARKET PRICES OF CLASS III BOUGHT BY  
MILK DEALERS FROM CREAM JOBBERS IN THE MIAMI  
AND TAMPA-ST. PETERSBURG AREAS, 1952

Month	Miami	Miami	Tampa- St. Petersburg
	Established Prices	Market Prices <sup>a</sup> Differences	Market Prices <sup>b</sup> Differences
	(Gallons)	(Gallons)	(Gallons)
January	34.6	2.4	1.4
February	35.5	1.4	.4
March	37.3	.6	.1
April	32.8	3.7	2.9
May	31.5	5.1	3.7
June	30.8	5.7	4.4
July	31.0	4.1	3.4
August	31.9	3.4	3.5
September	32.7	3.2	2.9
October	32.6	3.3	3.1
November	31.9	2.8	3.8
December	31.1	...	4.8
Averages	32.8	3.2	2.9

<sup>a</sup>Median prices paid for 40 per cent cream bought by two milk dealers from cream jobbers in Miami.

<sup>b</sup>Median prices paid for 40 per cent cream bought by one in Tampa and one in St. Petersburg, from cream jobbers in Tampa.

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Ernest Evan Brown was born in Elizabeth Township, Pennsylvania, February 4, 1926. He attended the Elizabeth Township grammar school and Elizabeth High School, where he graduated in 1943. In July 1944, he entered the Pennsylvania State University. From October 1946 to April 1948, he served in the United States Army. He entered the Pennsylvania State University again in June 1948, and received his B. S. degree in January 1949, from the Department of Agricultural Education. After teaching agriculture in the Crawford County, Pennsylvania, public schools, he again entered the Pennsylvania State University. In January 1951, he received his M. S. degree from the Department of Agricultural Economics. From February 1952, to September 1954, he was employed as a Field Assistant by the University of Florida. During this period he also was enrolled in the graduate school of the University of Florida. In 1954, he accepted the position of Associate Agricultural Economist at Clemson College, South Carolina, where he is presently employed.

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This dissertation was prepared under the direction of the chairman of the candidate's supervisory committee and has been approved by all members of the committee. It was submitted to the Dean of the College of Agriculture and to the Graduate Council and was approved as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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