UNITED STATES DEPARTMENT OF LABOR
Frances Perkins, *Secretary*

BUREAU OF LABOR STATISTICS
Isador Lubin, *Commissioner* (on leave)
A. F. Hinrichs, *Acting Commissioner*

Labor Aspects of the Chicago Milk Industry

Prepared by the
DIVISION OF WAGE ANALYSIS
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Letter of Transmittal

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D. C., June 1, 1942.

The SECRETARY OF LABOR:

I have the honor to transmit herewith a report covering a study made by the Bureau of Labor Statistics of the distribution of milk in the Chicago marketing area, with particular regard to the "vendor system."

The study was conducted in the Division of Wage Analysis, of which Robert J. Myers is chief, and was under the general direction of Sidney C. Sufrin. The field investigations were supervised by Philip L. Jones, with the assistance of John F. Laciskey and Paul E. Warwick (supervisor of the Chicago field staff). Background research was conducted and the report written by Mary Gresham, assisted by Joseph W. Bloch.

A. F. HINRICHS, *Acting Commissioner.*

Hon. FRANCES PERKINS,
Secretary of Labor.

PREFACE

This bulletin is primarily concerned with the "vendor system" of distributing consumer goods, under which the distribution function is performed not by the traditional employed "deliveryman" but by an independent small entrepreneur. Although well established in several industries as early as the twenties, the vendor system appears to have expanded rapidly during the depression and has since provided the livelihood of many thousands. The system presents serious problems to labor unions and to administrators of social legislation. Its importance is attested by decisions of the United States Supreme Court, the most recent of which involved the bakery industry in New York City. (*Bakery and Pastry Drivers and Helpers Local 802* v. *Wohl*, 62 Sup. Ct. 816. May 30, 1942.)

As a conveniently small segment of the economy, vitally related to the public welfare, the Chicago milk industry provides an appropriate background for an initial study of the vendor problem. An appreciable proportion of the milk drivers in that city have been supplanted by vendors and the relatively favorable standards of work maintained by the powerful milk drivers' union have been threatened. The factors influencing the Chicago milk industry, however, are exceedingly complex, and it would be a mistake to ascribe to the vendor system all of the ills which beset the milk-wagon driver. In any study of this industry, moreover, it is necessary to recognize the price of the product as an important factor in the problems of the wage earner.

This study was undertaken in the late fall of 1941 and was hurried to completion after the attack on Pearl Harbor. As this bulletin goes to press, substantial changes in the organization for distributing milk have already occurred as a result of the war program, and it is doubtful whether many of the conditions described herein will again prevail while the war continues. These changes, however, are not believed to reduce the significance of the study as an approach to the permanent problem involved in vendor distribution.

Preliminary copies of this report in mimeographed form were submitted for criticism to the cooperating distributors, the union, and a number of other interested individuals and agencies. All comments received were given careful consideration in the final revision of the bulletin.

Bulletin No. 715 of the

United States Bureau of Labor Statistics

Labor Aspects of the Chicago Milk Industry

Summary

In the bitter, competitive struggle in which the Chicago milk industry has been engaged during the past 8 or 9 years, the milk vendor has played an important part. Recognized not as an employee of the distributor, but as an independent, small businessman who buys products outright and sells them to his own customers, the vendor has been closely associated with cut-rate milk distribution and with the rising trend of sales through retail stores. The vendor system and the growth of store distribution have consequently contributed to the displacement of employed milk drivers, and have constituted a serious threat to the drivers' union.

A study by the Bureau of Labor Statistics in the winter of 1941–42 reveals that the price charged by vendors per single quart of milk delivered to the home is typically about 1½ cents lower than the price received by employed drivers. The price differential, however, does not appear to be due to any greater efficiency on the part of the vendors, whose stops are, in fact, somewhat more scattered than those of the drivers. On the other hand, this commendable saving to the consumer is made at a considerable cost to the vendor, for vendors' weekly incomes, averaging $46 in the week of the Bureau's survey, are some $6 lower than the incomes of employed drivers. About two-thirds of the vendors fail to attain the $48 basic wage paid to union drivers.

Vendors also have less favorable working conditions than drivers. Nearly four-fifths of the vendors work 7 days a week, while drivers work 6, and the weekly hours of vendors are somewhat longer than those of drivers. Vendors must sometimes press other members of their families into service without extra remuneration; neither the vendors nor their helpers are ordinarily protected by a minimum wage nor by other forms of social security. In consequence, the vendor system menaces the working standards even of those drivers who are able to retain their jobs.

The limitations of the Bureau's study, restricted as it was to the milk industry in the Chicago market, forbid the formation of any definitive conclusions regarding the vendor problem in general. In view of the complex economic and legal background of the vendor problem, however, it is apparent that its solution will be difficult. Insofar as the Chicago milk market is concerned, the recent organization of the vendors by the union is unlikely by itself to relieve completely the pressure on labor standards, since the union can exercise at best only limited control over the vendor's income or his hours of

work. A program of education regarding income and costs, however, should be beneficial, for many vendors do not appear to know whether they are making money or not. Any wartime restrictions on deliveries may be expected to affect vendors more drastically than drivers and thus may reduce the relative importance of the vendor problem in the months immediately ahead. In the long run, however, an extension of existing legislation may be required to achieve the double aim of assuring economical milk distribution and safeguarding labor standards.

Introduction

The present study by the Bureau of Labor Statistics is primarily concerned with the distribution of fluid milk in the Chicago market area with specific reference to the drivers and vendors in that market. The problem in Chicago was clearly defined in the opinion of the Supreme Court delivered by Mr. Justice Black in November 1940.[1]

> With the approach and continuance of the depression of the early thirties, the milk business, like other industries, was in acute distress. Loss of profits from decreased demand stimulated dairies to devise new and cheaper methods to obtain and serve customers. Under the long-existing practice in Chicago, dairies had owned milk trucks and wagons, and had operated them with employee drivers—chiefly members of the A. F. of L. local. A major part of the business consisted of door-to-door deliveries to retail customers. Some of the A. F. of L. drivers also delivered milk to retail stores, those stores in turn selling to their customers. What appears to have been an insignificant part of the milk supply of predepression Chicago was delivered by retail milk "peddlers" who bought from the dairy at wholesale and sold at retail from their own trucks or wagons. But with the depression this practice of sale by "peddlers" expanded, branched out into sales to retail stores, and developed into what is called the "vendor system" * * * With the spread of this new competitive system, the business of the dairies employing union milk-wagon drivers decreased. Many of the union drivers lost their jobs and were dependent upon their union's relief funds and upon public relief agencies for their support.

The vendor system is not restricted to Chicago nor to the milk industry, but appears in other cities and other industries. While not born of the depression, its growth was undoubtedly encouraged by the economic maladjustments of the 1930's. It is a manifestation of the trend toward replacement of employees by independent outside salesmen and commission men that has been evident during the past decade.

Such a system presents possibilities of serious social and economic repercussions. There is the danger of its nullifying, in part at least, existing social legislation designed for the protection of labor. If vendors are businessmen, they are presumably outside the jurisdiction of the Fair Labor Standards Act, and in addition they appear not to be subject to the Federal Social Security law, State unemployment compensation laws, nor State workmen's compensation acts. An employer lacking any compulsion to pay a minimum hourly rate and also free from certain State and Federal taxes has an opportunity to operate at a lower cost than that of the employer who is subject to such added burdens. The forces of competition thus tend to encourage the conversion of employee salesmen to independent commission salesmen or to vendors.

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[1] *Milk Wagon Drivers' Union, Local No. 753 et al.* v. *Lake Valley Farm Products, Inc. et al.,* 311 U. S. 91.

It was with the purpose of investigating the vendor system in the light of these repercussions that the survey was conducted. An understanding of the vendor problem makes it necessary to discuss the characteristics of the fluid-milk industry, its price structures and the changes in these structures, the traditional methods of distribution and the changes in these methods. The vendor system has stimulated, if not actually caused, these changes and they have, in turn, created problems of unemployment and pressure on wages, as well as other labor problems. The first three sections of the report, therefore, present as background a picture of the Chicago industry as a whole.

Economic Organization of the Chicago Milk Industry

The Chicago milk-marketing area, with a population in 1940 of 3,567,628, includes Chicago, Evanston, Wilmette, Kenilworth, Winnetka, Glencoe, and Oak Park.[2] This area receives its supply of raw milk from sections of Illinois, Indiana, Wisconsin, and Michigan, known as the Chicago "milkshed." During the 2-year period from September 1939 to September 1941, approximately one-half (49.4 percent) of all the milk shipped to Chicago handlers came from Wisconsin, 43.3 percent from Illinois, 5.7 percent from Indiana, and 1.6 percent from Michigan. (Chart 1.)

The products of the milk industry are fluid milk (that is, pasteurized milk which is delivered to homes or sold at the store),[3] cream, butter, buttermilk, cheese, ice cream, ice cream mix, evaporated and condensed milk, dried or powdered milk, casein, etc. For the purposes of this report, the discussion is restricted primarily to fluid milk and its distribution in the Chicago market area.

Producers

During the year 1941 an average of 17,533 producers delivered 2.3 billion pounds of milk to handlers in the Chicago marketing area for which they received 48.5 million dollars.[4] Of the total amount produced, 43.2 percent was used as fluid milk, the remainder going into cream, cheese, manufactured milk, and other milk products. (Chart 1.)

Production in 1941 was 243 million pounds greater than in 1940, but the distribution according to class changed somewhat in 1941; the proportion used as fluid milk decreased from 47.6 percent of the 1940 production to 43.2 percent of the 1941 total, while a larger proportion was used in manufactured milk. The war demands for condensed, evaporated, and powdered milk for export probably caused this increase in production and utilization for nonfluid purposes.

The production goal set by the Department of Agriculture for 1942 is even higher than the production for 1941. An announcement

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[2] U. S. Department of Agriculture: Compilation of statistical material covering the Chicago marketing area, April 1941, sec. 4. Prepared by the Dairy Division of the Surplus Marketing Administration.

[3] A very small proportion of fluid milk is sold in a raw (unpasteurized) state. Such milk has to be labeled as "certified" and conform with rigid rules and regulations of the board of health for certified milk.

[4] Federal Milk Market Administrator, Chicago, Ill. Reporter, January 1942.

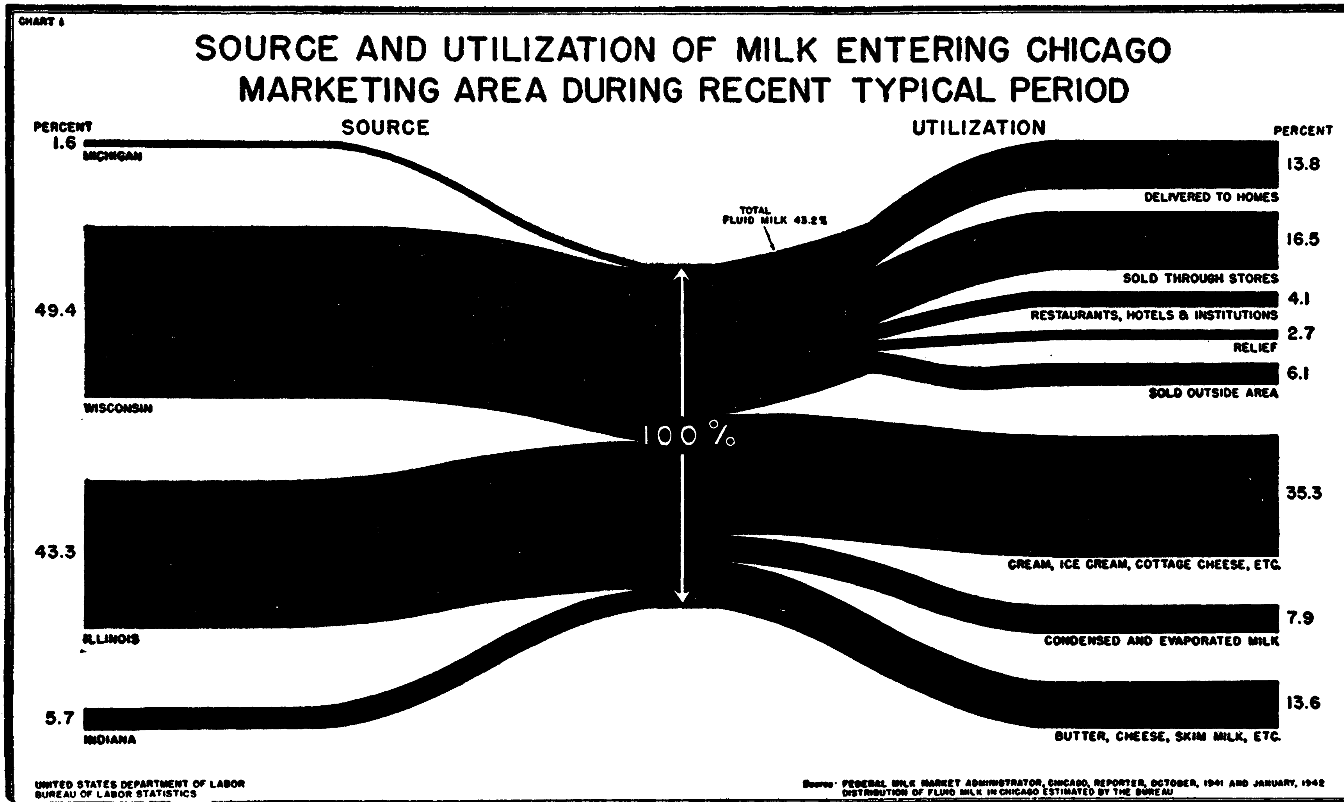
CHART 1
SOURCE AND UTILIZATION OF MILK ENTERING CHICAGO MARKETING AREA DURING RECENT TYPICAL PERIOD
PERCENT
SOURCE
UTILIZATION
PERCENT
1.6
MICHIGAN
49.4
WISCONSIN
43.3
ILLINOIS
5.7
INDIANA
TOTAL FLUID MILK 43.2%
100 %
13.8
DELIVERED TO HOMES
16.5
SOLD THROUGH STORES
4.1
RESTAURANTS, HOTELS & INSTITUTIONS
2.7
RELIEF
6.1
SOLD OUTSIDE AREA
35.3
CREAM, ICE CREAM, COTTAGE CHEESE, ETC.
7.9
CONDENSED AND EVAPORATED MILK
13.6
BUTTER, CHEESE, SKIM MILK, ETC.
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
Source: FEDERAL MILK MARKET ADMINISTRATOR, CHICAGO, REPORTER, OCTOBER, 1941 AND JANUARY, 1942
DISTRIBUTION OF FLUID MILK IN CHICAGO ESTIMATED BY THE BUREAU

by the Secretary of Agriculture states that "Wartime foods for 1942 call for increases of 20 percent in the production of evaporated milk, 46 percent in dry skim milk, and 33 percent in the output of cheese over the estimated production totals for 1941." [5]

Producer cooperatives.—The first producer cooperative organization in the Chicago milkshed was the Milk Shippers' Union, established in 1887.[6] After a brief and unsuccessful existence, it was succeeded in 1896 by an incorporated body bearing the same name. In 1909 the Milk Producers' Association was formed. The principal activities of these organizations were price bargaining and opposing proposed legislation requiring tuberculin testing of dairy herds. A city ordinance in 1926, providing that only milk from tuberculin-tested herds could be sold in Chicago, was instrumental in causing the disbanding of this organization since most of the members could not conform to the ordinance.[7]

The Pure Milk Association, one of the largest producers' cooperatives in the country,[8] was incorporated as an organization of dairy farmers in the Chicago milkshed in 1926. "Being a bargaining association of producers, the primary object of the Pure Milk Association is to establish and maintain relations with milk distributors, and to meet with them to discuss market conditions and arrive at agreements as to prices to be paid the producers for milk." [9] Before the end of 1935, the association had a membership of 17,000 farmers and in June 1935 they supplied 72 percent of the fluid milk sold by all licensed dealers in Chicago during that month. Membership had declined to approximately 12,000 by 1939.[10] In November 1941 the Pure Milk Association claimed its members produced approximately 80 percent of the supply of fluid milk shipped to the Chicago market.[11]

Distributors

During 1941, 144 dealers [12] distributed to Chicago consumers more than 400 million quarts of milk [13] valued at over 40 million dollars.[14] More than 3,000 vehicles [15] were licensed for the purpose of distributing milk. The major portion was distributed to the ultimate consumer through 12,000 licensed stores [16] and through hospitals, institutions, restaurants, and hotels, while the smaller portion was delivered directly to homes.

[5] Federal Milk Market Administrator, Chicago, Ill. Reporter, January 1942.

[6] Report of the Federal Trade Commission on the Sales and Distribution of Milk and Milk Products, Chicago Sales Area, 74th Cong., 2d sess., H. Doc. 451, p. 58.

[7] Ibid., p. 59.

[8] "It is rather well recognized that the cooperatives sell a significant portion of the total volume of milk sold to distributors in many markets * * * such as New York City, Philadelphia, Pittsburgh, Chicago, and Milwaukee. By and large, cooperative associations of milk producers are found to be significant factors in the trade and the structure of the market in most large milk markets as well as in many small ones. It is in the markets where the supply is organized that such devices as the classified-price plan of selling milk to distributors and the several plans of prorating among producers the proceeds of sales to distributors are to be found." E. W. Gaumnitz and O. M. Reed: Some Problems Involved in Establishing Milk Prices, U. S. Department of Agriculture, 1937, pp. 26 and 27.

[9] Report of the Federal Trade Commission, op. cit., p. 60.

[10] Testimony presented by the Pure Milk Association at the A. A. A. Hearings of Proposed Marketing Order, Chicago, 1939.

[11] Estimate by A. H. Lauterbach, manager of the Pure Milk Association, in a personal interview.

[12] City of Chicago, Collector's Office, License Division.

[13] Federal Milk Market Administrator, Chicago, Ill., op. cit.

[14] Estimated by the Bureau of Labor Statistics.

[15] City of Chicago, Collector's Office, License Division.

[16] Ibid.

Despite early tendencies toward concentration, as late as 1915 the industry in Chicago was still characterized by numerous small units. At that time there were 1,260 milk dealers in Chicago.[17] Then, in July 1916 the Commissioner of Health issued an order "requiring that, with the exception of certified milk, all milk sold or used in Chicago be pasteurized."[18] As a result, hundreds of small dealers were forced out of business because they were not equipped for pasteurization and could not meet the requirements for additional capital. By 1918 there were only 603 milk dealers in Chicago, and 2 dealers handled 40 percent of the fluid milk the year after the compulsory pasteurization ordinance.[19]

Thus pasteurization played an important part in the development of concentration in the milk industry.

> A paraphernalia of machinery and skills * * * came into use. The old-fashioned milk can gave way to the sanitary glass bottle; again an investment in bottles and machinery for their sterilization was too much for the petty financial resources of the producer. It was also too much for the small peddler with a meager investment and an incapacity to adapt to the new order. Over a period of 50 years—from 1875 to 1925—thousands of itinerants disappeared; and a few giant companies in each local market came to dominate the milk trade.[20]

Although it is now possible to purchase a small pasteurization plant for two or three thousand dollars, the investment necessary to go into business even on a small scale is greater than such a figure would indicate. There are other items which are important to a successful business that must be considered, such as trucks for distribution, and advertising. While it is true that the investment required is relatively small and many small plants do exist in the industry, the fact remains that in all the larger markets by far the greater part of the sale and distribution of fluid milk is in the hands of only a few dealers.

The two largest companies handling fluid milk in Chicago are the Borden-Wieland, division of The Borden Co., and the Bowman Dairy Co., Inc.

The Borden Co., the second largest concern [21] engaged in processing, manufacturing, and distributing milk and milk products in the United States, was organized and incorporated in 1899.[22] After 1927, it expanded rapidly and by 1932 had acquired 207 separate enterprises in 18 different States and in Canada, of which 53 were engaged chiefly in processing and distributing fluid milk. In 1935 the Wieland Co. of Chicago merged with Borden Farm Products of Illinois and in that year sold approximately 21 percent of the total fluid milk in Chicago.[23]

The Bowman Dairy Co., the largest fluid-milk distributor in Chicago, was incorporated in Missouri in 1886 and operated until 1891 in St. Louis.

> Since 1889 the company has been operating a fluid-milk business in Chicago * * *. The company's enormous business in the Chicago sales area was built up by purchasing milk companies and routes in Chicago and country plants and properties in the Chicago milk-shed.[24]

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[17] Report of Federal Trade Commission, op. cit., p. 20.
[18] Ross, H. A.: The Marketing of Milk in the Chicago Dairy District, 1925. University of Illinois, Agricultural Experiment Station, vol. 18, Bull. 269, p. 464.
[19] Duncan, C. S.: The Chicago Milk Inquiry, Journal of Political Economy, April 1918.
[20] Till, Irene: Milk—The Politics of an Industry, in Price and Price Policies by Walton Hamilton and Associates, McGraw-Hill Book Co., Inc., N. Y., 1938, pp. 450 and 451.
[21] National Dairy Products Co. is the largest such concern.
[22] Originally incorporated as Borden's Condensed Milk Co., in 1919 the corporate name was changed to The Borden Co.
[23] Report of the Federal Trade Commission, op. cit., p. 27.
[24] Ibid., pp. 27, 28.

In June 1935, when there were 131 licensed distributors in Chicago, these two largest accounted for 553,004 quarts or nearly 50 percent of the total daily sales of fluid milk in Chicago.[25] No data are available on how much of the present market these two companies serve, but it is probable that their proportion has declined somewhat since 1935.

Dealer associations.—Prior to 1935, distributors in Chicago tended to join one of two dealer associations. The Chicago Milk Dealers' Association, incorporated in 1895, had in 1935 about 100 members in Chicago and its environs. Milk Council, Inc., had 18 members, including the 5 largest milk dealers in Chicago at the time of the Agricultural Adjustment Administration marketing agreements in 1933. These 2 organizations merged in January 1935 to form the Associated Milk Dealers, Inc., which in June of that year had a membership of 82 dealers in Chicago.[26]

The principal activities of the Associated Milk Dealers are negotiating with the Milk Wagon Drivers' Union with regard to wages and other working arrangements, negotiating with the Pure Milk Association regarding contract matters other than price arrangements, and representing the dealers' interests at hearings of the Agricultural Adjustment Administration on producers' prices.

At the time of the Federal Trade Commission's report (1935), it was stated that nearly all the distributors under contract to purchase milk from the Pure Milk Association belonged to the Associated Milk Dealers, Inc., while a majority of the distributors purchasing from independent producers were not members of Associated Milk Dealers.

Recently, the Chicago Milk Dealers' Association has again become active as a separate organization. Its membership appears to consist of small dealers, most of whom had previously belonged to the Associated Milk Dealers, Inc.

Competitive Practices

Characteristics of the Fluid-Milk Market

All milk products are made from the same raw material—cow's milk purchased from the farmer—but they "find their way into different markets where customs are unlike, ways of thought are different, and the mechanisms for price making bear little resemblance to each other." [27] Butter, cheese, and manufactured milk move in a national market and prices are set by whatever competition exists in that market. Fluid milk, on the other hand, moves in an entirely different market with unusual customs and practices and exceedingly complicated price structures.

Although products other than fluid milk are distributed in Chicago by milk drivers and vendors, it is in the distribution of fluid milk that the vendor system has had the most serious repercussions. In that part of the milk industry, the retail price structure, traditional methods of distribution, and union wage standards have all felt the impact of the vendor system. An analysis of some of the economic

[25] Ibid., p. 8.
[26] Ibid., p. 7.
[27] Till, Irene, op. cit., p. 461.

characteristics which distinguish fluid milk from most other commodities is, therefore, necessary in order fully to understand the problems involved in vendor distribution.

Public control—Chicago regulations.—Fluid milk and all milk produced for the fluid-milk market are subject to the regulations of the city municipal government.[28] Unsafe milk was an evil that resulted from concentrations of populations in cities. City governments were the first to recognize that milk could spread disease and as a result the first regulations to correct the evil were municipal in character. This custom of municipal responsibility for the safety of the milk supply has continued to the present time.

The existing standards and requirements for milk and milk products for the Chicago milk market are set forth in the Mayor Kelly Milk Ordinance, passed by the city council in January 1935, and the Chicago Board of Health is responsible for the enforcement of this ordinance.[29] Practically every step in the production, handling, and distribution of milk is regulated, beginning at the farm and continuing until the milk reaches the consumer.

The regulations governing dairy farms require certification by a veterinary as to the health of each animal in the dairy herd, and regulate the feeding of cows; the construction and cleanliness of the dairy barn; the grading and draining of the cow yard; the location, construction, and cleanliness of the milk house; the location and operation of the water supply; treatment of utensils; cooling of milk; and numerous other farm activities. Dairy farms must be inspected at least once every 6 months.

Once the farmer has satisfactorily met all these requirements for his dairy farm, he can deliver his milk to one of the country milk stations or to a distributor who sells his milk in the Chicago market. Having been accepted by the distributor, the milk is usually transported in refrigerated tanks mounted on special motortrucks or in specially built railroad cars to a pasteurization plant.

The regulations for pasteurization plants deal in detail with such matters as material, drainage and cleanliness of floors, condition of walls and ceilings, types of doors and windows, lighting and ventilation, protection from contamination, cleaning and sterilizing of containers and apparatus, and numerous other matters. In addition, the ordinance states the temperature for pasteurization,[30] for cooling after pasteurization, and the maximum permissable bacterial plate count.

In order to be sold as fluid milk, milk must conform to the following standards: (1) The milk fat content must be not less than 3.25 percent, (2) the milk solids-not-fat content must be not less than 8.5 percent, and (3) milk must be clean, free of sediment, and have a normal flavor, odor, and appearance. The milk must then be delivered in vehicles owned by distributors or vendors which meet the

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[28] Some of the milk produced for the fluid-milk market is used for purposes other than fluid milk, but all milk which enters the market must be produced under the conditions required for its use as fluid milk.

[29] The ordinance of the city of Chicago and the rules and regulations of the board of health adopted in connection with that ordinance are patterned very closely after the milk ordinance and code of the United States Public Health Service.

[30] The pasteurization process consists of heating to a temperature of not less than 144 degrees F. and holding at that temperature for at least 30 minutes or holding at a temperature of 160 degrees F. for 15 seconds.

board of health specifications, and all pasteurized milk "shall be sold not later than midnight of the day beginning 25 hours after the day of pasteurization." [31]

These are only a few of the many rules and regulations affecting milk in the Chicago market. No milk can legally enter or be sold in the Chicago market area until satisfactory compliance with all these requirements has been determined by inspectors of the Chicago Board of Health. The enforcement program of the board has been vigorous.

This type of milk ordinance is typical of most of the large cities in the country, although there are some variations in the specific requirements. Thus by local statute a sheltered market has been created and maintained for the purchase and sale of fluid milk.

Economic effects of a sheltered market.—The very mechanics of a system of local inspection have tended to limit the milkshed and restrict supply. In the interest of municipal economy it is cheaper to inspect nearby farms and plants within a set area. Also, there is little doubt that the size and shape of the milkshed has been influenced at times by political pressures.

In such a market the price of fluid milk within the market is protected from the competition of fluid milk from outside the market. Distributors in the Chicago market do not have to compete with distributors in other markets where wages may be lower, or where producers may be receiving less, or where surpluses (market milk not sold as fluid milk) may be larger. They do not have to fear dumping, since local inspection has erected a wall against supply from outside. As a result, the fluid-milk price can be maintained within the market despite lower prices in other markets or even at the very edge of the city limits just beyond the domain of municipal control. It is for these reasons that milk prices vary so widely from market to market.

Recognition of the inadequacies and evils of such a system was partly responsible for the Department of Agriculture's statement in the 1940 Yearbook [32] that "There is a real opportunity to remove the barriers to interstate trade in milk and cream and other dairy products by devising a system under which each State and each municipality will accept inspection by accredited inspectors located in other States."

The classified-price plan.—Closely related to the sheltered market are the price structures used in purchasing milk from farmers in the large markets. An understanding of these price structures is fundamental to the analysis of the economics of the milk industry. The system of pricing milk has evolved gradually during the past 20 years as a result of attempts to solve problems of both producers and distributors. The inflexibility of these price structures, however, became an important factor in the expansion of the vendor system during the depression period of the 1930's.

The development of large-scale organization and operation of the milk-distributing business changed the relationship between the producer and his market. As a result of this development, the few large distributors purchased supplies from numerous relatively small

[31] Mayor Kelly Milk Ordnance, 1935, sec. 154–16.
[32] U. S. Department of Agriculture, Yearbook of 1940: Farmers in a Changing World, p. 662.

producers. Such a situation obviously placed the distributor in the stronger bargaining position and producers felt that they were not getting fair treatment. In an attempt to gain equal bargaining power with distributors, producers began to market their milk through cooperatives in the early 1900's.[33]

The immediate problem facing the cooperatives was one of selling all the milk produced by each of their members. Cooperatives formed "during the period of the World War and immediately thereafter * * * apparently bargained with distributors for flat prices for all milk. They were successful for a time in securing flat prices that they considered satisfactory, probably because of the high level of prices for milk used in manufactured dairy products."[34] Also, "before the first World War the presence of surpluses in the fluid-milk market was less troublesome; sanitary regulations were not so stringent, and the differences between the production cost of fluid and manufacturing milk was smaller. It made little difference whether milk was sold fluid or used for butter, cheese, or condensed milk."[35]

As the surplus problem became more acute, due to the stimulation of fluid-milk production, and sanitary regulations became more rigid, the situation changed. A producer could sell all his milk to creameries, cheese factories, or condenseries which were located outside of his fluid-milk market. In this case the farmer's production costs were relatively low, since none of the fluid-milk regulations would apply. To produce for the fluid-milk market, however, and to meet the sanitary regulations in a market like Chicago where the ordinance was rigid, required a greater capital investment and higher costs. Furthermore, the perishability of fluid milk made it imperative for producers to sell all their milk each day. Since the milk stream cannot be turned off and on at will, the farmers were confronted with a serious problem of selling their total daily output of milk during the high season of production. Such considerations caused the producers to demand a higher price if they were to produce for the fluid-milk market.

The distributor was confronted with the problem of meeting a demand for fluid milk which fluctuated daily, depending on the season of the year, the temperature, the weather, and other variables. He had to be assured of a supply sufficient to meet the daily demand. As a result, surpluses—consisting of milk that must be disposed of in some way other than as fluid milk—were unavoidable. The distributor desired a price system which would lessen his risk of loss in disposing of these surpluses.

The effort to overcome some of these difficulties confronting both producers and distributors resulted in a system of pricing milk according to the form in which it was sold by the distributor. Apparently, the existing plan was first used on an extensive scale in Boston, Washington, and Philadelphia about 1918[36]—and came into use in Chicago the following year. At the present time this system, known as a classified-price plan, is in effect in most large markets.

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[33] Gaumnitz, E. W., and Reed, O. M., op. cit., pp. 20, 21.
[34] Ibid., p. 29.
[35] Roadhouse, C. L., and Henderson, J. L.: The Market-Milk Industry, McGraw-Hill Book Co., Inc., New York, 1941, p. 471.
[36] Gaumnitz, E. W., and Reed, O. M., op. cit., p. 31.

Although the specific plan may vary from market to market, the principle remains the same—the dairy farmers receive for raw milk a price determined by the end use to which the milk is put. There may be as many as eight different prices in one market depending on the classification of uses for milk in that market.

Under such a price system the distributor can measure each day's supply to meet the demand for fluid milk, convert the remainder into other products, pay for the raw milk in terms of the quantity used for each purpose, and thereby avoid an over-supply of fluid milk which would endanger the retail or wholesale price structure. With the distributor thus protected, the producer has a better chance of disposing of all of his milk daily.

Under a classified-price plan, the distributor pays more for raw milk which is used as fluid milk than for milk used for any other purpose. The problem therefore arises as to how to give each producer an equitable share of the fluid-milk market. In Chicago this problem was solved in different ways at different times. The plan in operation at present is known as the "market-pool plan."

Under the market-pool plan, each producer's share of the Chicago fluid-milk market is determined by the total quantity of all classes of milk sold in the entire market. Producers therefore ship milk to the dealers, who dispose of it and who pay into a pool [37] a sum determined by the use of the milk. Producers then receive from the pool an average or "blend" price of all milk sold in the market. This price is computed by multiplying the quantity sold in the market for each use by the price set for that class of milk and dividing the total amount in dollars by the total quantity of milk sold in the market for all uses. As a result of this plan, the receipts of each producer are determined by the over-all distribution of milk as between low-priced and high-priced outlets. The ultimate use of the milk from a particular farm has nothing to do with the payment to that farmer.

In the Chicago market the classes of milk and price [38] of each class in December 1941 under Federal Market Order No. 41,[39] as amended, were:

	Price per cwt. to farmer
Class I.—All milk disposed of in the form of fluid milk, except such milk as is used for purposes for which no approval by health authorities in the marketing area is necessary and all milk not accounted for in other classes	$2.93
Class II.—All milk, except skim milk, disposed of in the form of flavored milk and flavored-milk drinks, and all milk disposed of in the form of cream, sweet or sour, cottage cheese, buttermilk, frozen cream, ice cream, and ice-cream mix	2.55
Class III.—All milk whose butterfat is used to produce a milk product other than one of those specified in class II and class IV, and all milk disposed of for those purposes for which no approval by health authorities in the marketing area is necessary	2.23
Class IV.—All milk the butterfat from which is used to produce butter and cheese except cottage cheese, and all milk accounted for as actual plant shrinkage, but not to exceed 2 percent of the total receipts	1.87

[37] This pool is operated by the Federal Milk Market Administrator.

[38] All prices to farmers are based on fluid milk of 3.5 percent butterfat. These prices are subject to butterfat and location differentials. Milk is bought from the farmer by the hundred pounds (46.5 quarts).

[39] This order became effective in September 1939 and with some amendments has remained in effect.

The "blend" or average price which the farmer received for all milk in December 1941 was $2.60 per hundredweight.

Growth of the Vendor System

The vendor system of distributing milk had been used in the Chicago market at least as early as the year 1921. Prior to 1931, however, the vendors usually maintained regular retail routes and sold at prevailing prices; they caused little trouble to the Milk Wagon Drivers' Union or to the distributors who had agreements with this union. The expansion of the vendor system thereafter was made possible only by the existence of conditions in the Chicago market favorable to its growth. Seen in retrospect, the principal reason for the expansion of the vendor system lay, not so much in the competitive advantage to be gained by the use of vendors instead of drivers, but rather in the chance to break away from the inflexibility of the organized market's price structure and the traditional method of distribution. The Chicago market in the early thirties presented a golden opportunity to the aggressive investor willing to reap a reward by circumventing established practices in the face of strong opposition.

Several factors contributed to assuring success to such a venture:

(1) Although most distributors in the market were purchasing milk through the Pure Milk Association under the "classified-price" plan, milk was available at a lower cost on a "flat-price" basis. Prices of fluid milk to the farmer declined very slightly during 1930 and 1931 as compared with the sharp decline in manufactured-milk prices. This disparity served to increase the flow of fluid milk, not only from regular producers but from producers who had not shipped fluid milk prior to 1930. As a result, milk to be used for fluid purposes could be purchased from individual producer-members of the cooperative at a "flat price" equal to or higher than the "blend price" they received through the cooperative for all milk, and many nonmember producers were willing to sell their fluid milk for whatever terms they could get. The Pure Milk Association did not have sufficient control to protect the high fluid-milk price from these two sources of competition.

(2) The major part of the milk in the market was distributed by firms employing union drivers under a contract guaranteeing the highest base wage in the history of the industry.[40] It was possible to avoid this added cost by distributing through vendors. Unemployment among milk drivers resulting from the depression had increased the number of potential vendors.

(3) Store distribution had not been exploited despite the lower costs of such distribution as compared with home delivery. Retail prices of home-delivered and store milk had been maintained at the same level for more than 7 years,[41] and as a result there had been little incentive for store buying. Some cut-rate stores had appeared in Chicago before 1932, but they were not very numerous.

(4) The decline in consumer incomes resulting from the depression created strong consumer pressure for milk at lower prices.

[40] A 5-year contract was negotiated in May 1927 between union dealers and Local 753 setting rates for retail routemen at $50 per week plus commissions.
[41] See following section on Milk Prices, p. 16.

In May 1932, Meadowmoor Dairies, Inc., entered the Chicago market prepared to distribute milk through vendors exclusively. Meadowmoor was not the first firm to oppose the organized market but it was the largest and one of the most successful. It attracted the greatest amount of notoriety and before long became the symbol of cut-rate competition.

Meadowmoor, along with some other distributors, made the most of all their advantages in the Chicago market. They bought milk from farmers at a flat price, distributed through vendors, and began an aggressive exploitation of store distribution. With the lower costs made possible by this method of operation, they were able to "underprice" all distributors who were under contract to pay cooperative fluid-milk prices and to pay the union wage scale.

By means of price cutting and promoting the cut-rate method of store distribution, as well as through the nonunion vendor system, Meadowmoor rapidly rose from a position of obscurity to one of importance in the Chicago market. Under the pressure of this competition, prices to the farmer began to break, the union agreed to two reductions (amounting in all to $10 per week) in base rates of milk-wagon drivers,[42] retail prices of milk began to fall, and the volume of sales of the large distributors declined. The explosion of a bomb which damaged the Meadowmoor plant on the day it opened was only the beginning of the violence which attended its early career. Stores were bombed, windows smashed, milk trucks overturned, and drivers and vendors were beaten during the long period of unsettled market conditions and legal controversy which followed. The strenuous opposition of the Pure Milk Association, the Associated Milk Dealers, and the union to the increasing number of cut-rate distributors, however, failed to dislodge the vendor system, and failed to reestablish the pre-1930 equilibrium.

The Milk Wagon Drivers' Union attempted to organize the vendor companies and convert them to an employee wage system. Proselytism by appeal, however, was consistently rebuffed by the vendors and the cut-rate distributors, and even after other means less reasonable were devised, the vendor companies remained aloof from any relationship with the organized market. Picketing of the vendors' primary outlet, the cut-rate stores, began in 1934, and might well have compelled an agreement had it been able to continue unmolested, but injunctions against picketing were secured by the vendor companies. Two legal disputes involving these injunctions reached the United States Supreme Court, the more important of which the union lost.

The victory of the union in the Lake Valley case,[43] in which the bill for injunction was dismissed, was greatly overshadowed by the union's unsuccessful legal defense against Meadowmoor Dairies, Inc.[44] In their strenuous efforts to force Meadowmoor to conform to the established practices of the market, the drivers succeeded only in erecting a wall around the Meadowmoor business through which not

[42] A new contract, effective May 1, 1932, reduced the rates by $5 in answer to the dealers' plea for a reduction to meet competition. In December of the same year the union agreed to another $5 reduction in base rates.

[43] *Milk Wagon Drivers' Union, Local 753 et al.* v. *Lake Valley Farm Products, Inc. et al.*, 311 U. S. 91.

[44] *Milk Wagon Drivers' Union, Local 753 et al.* v. *Meadowmoor Dairies, Inc.*, 312 U. S. 287.

even a peaceful picket could penetrate. The record and decisions of the courts hearing the case leave no doubt as to the extent and direction of the violence, but Mr. Justice Reed in his dissent stated: "There is no finding that violence was planned or encouraged by the union." What moved the membership to violence was undoubtedly the threat to their jobs and income offered by the Meadowmoor competition and a "gangster" stigma that had been attached in the minds of the drivers to that kind of competition in Chicago.

Meadowmoor filed the original bill of complaint on February 2, 1935, but the final decision of the Supreme Court was not handed down until February 10, 1941, when the Supreme Court of the United States sustained the lower court's permanent injunction against picketing.

The period of fluctuating prices and sharp changes in established practices inaugurated by the cut-rate distributors brought distress to the members of the Pure Milk Association and the Associated Milk Dealers. In 1933, producers and dealers sought relief through the Agricultural Adjustment Act in the form of controlled producer and retail prices, but this proved to be ineffective. Numerous violations and widespread dissatisfaction caused the abandonment of retail price control after a few months and finally resulted in the cancellation of the market agreement in early 1935. The various methods devised to control and limit competition, thereafter, eventually led to charges of violation of the Sherman Act and to the indictment of the entire organized market under that charge.

Antitrust Suit in Chicago

The antitrust suit in Chicago, probably the most significant legal controversy in the history of the industry, had a definite influence, direct and indirect, obvious and subtle, on many phases of the Chicago milk business. The case was unique in antitrust history in that it was the first prosecution to be conducted on the principle that all restraints in a given industrial situation should be attacked simultaneously.[45] The object of the Department of Justice was to assure a free competitive market for Chicago milk with one grand action.

The indictment charging violation of the Sherman Act was handed down by a grand jury on November 1, 1938. Fourteen corporations and associations and 43 individuals were indicted and arraigned before the District Court of the United States for the Northern District of Illinois, Eastern Division. The principal defendants were:

Ten major distributors selling approximately 65 percent of fluid milk sold in Chicago;[46]

The Associated Milk Dealers, Inc., dominated by the major distributors;

The Pure Milk Association, controlling 80 percent of milk produced on approved dairy farms;

The Milk Dealers' Bottle Exchange, a corporation engaged in collecting, exchanging, and distributing milk bottles, cans, and other containers used by dis-

[45] Arnold, Thurman: Bottlenecks of Business, Reynal and Hitchcock, New York, 1940, p. 192.

[46] The Borden Co., Borden-Wieland, Inc., Bowman Dairy Co., Sidney Wanzer and Sons, Inc., Hunding Dairy Co., Capitol Dairy Co., Western-United Dairy Co., Western Dairy Co., United Dairy Co., and International Dairy Co. Actually, these consist of only seven separate organizations.

tributors—dominated and controlled by major distributors who owned 80 percent of stock;

The Milk Wagon Drivers' Union, Local 753,[47] 75 percent of whose members were employed by major distributors;

The president of the Chicago Board of Health and the chief sanitary officer in charge of the dairy section, board of health.

Four complaints were registered against the defendants, all acting together in concert, and charged with each count. In brief, they were:

Count one.—The defendants had combined and conspired to fix, maintain and control artificial and noncompetitive prices to be paid to all producers for all fluid milk shipped into Chicago.

Count two.—The defendants were charged with conspiring and combining to fix and maintain uniform, arbitrary, and noncompetitive prices for the sale of fluid milk in the City of Chicago.

Count three.—The defendants had conspired and combined to hinder and prevent prospective independent distributors from distributing milk; to hinder and prevent existing independent distributors from distributing milk in competition with major distributors; to hinder and prevent the sale of milk to stores and by stores; and to hinder and prevent any distribution of fluid milk except by the method and manner determined by defendants.

Count four.—The defendants had combined and conspired to restrict, limit, and control, and to restrain and obstruct the supply of fluid milk moving in interstate commerce.

In addition, the officials of the board of health were charged with performing preferential, arbitrary, and capricious action in aid of the other defendants, and with giving preferential treatment to the Pure Milk Association by burdening independent producers and refusing to inspect dairy farms in close proximity to approved farms.

The period of time involved in each of the four counts of the indictment began in January 1935 and continued thereafter up to the date of the indictment, November 1, 1938. Since March 2, 1935, the Chicago market had not been covered by a Federal marketing license, but on December 15, 1938, 1 week after arraignment in the District Court, the Pure Milk Association petitioned the Department of Agriculture for a hearing on a proposed milk-marketing agreement.

After 2 years of dilatory proceedings and prolonged legal controversies revolving principally around the applicability of the Sherman Act to the Pure Milk Association, the United States Supreme Court finally defined the points of law involved.[48] The case was then ready for trial, but no trial was ever held. Instead, the Government and the defendants came to terms and a consent decree was entered September 16, 1940.[49] The defendants named in the complaint included the Associated Milk Dealers, the Pure Milk Association, the Bottle Exchange, Local 753, and the officers and agents of these associations, but excluded the indirect participants in the alleged conspiracy.

The decree was written in the same sweeping terms as the indictment, and thus represented a considerable victory for the Department of Justice. Inasmuch as the Department of Agriculture had set up a marketing agreement in Chicago, the relationship between producers and distributors with regard to setting prices, fixing quantities, etc.,

[47] A local of the International Brotherhood of Teamsters, Chauffeurs, Warehousemen, and Helpers of America, an affiliate of the A. F. of L.

[48] *United States* v. *The Borden Co., et al.* 308 U. S. 188.

[49] Civil action No. 2088. Complaint filed September 14, 1940.

of milk could no longer be subject to antitrust procedure, but all the restraints, compulsions, coercions, and agreements that might spring up in the shadow of the marketing agreement were enjoined.

Thus, the Pure Milk Association was enjoined from interfering in the activities of independents, from interfering in the sale of milk in Chicago, and from refusing to sell to any distributor because of his sales policy or price. The Associated Milk Dealers and the major distributors were enjoined from agreeing upon prices to be charged, from interfering with the prices, sales policy, and method of distribution of any distributor in Chicago, and from interfering in the affairs of the Pure Milk Association and the Milk Wagon Drivers' Union, Local 753. The Bottle Exchange was enjoined from committing any acts of favoritism, such as delaying the return of, or refusing to return milk bottles to distributors who did not purchase milk at agreed prices.

The union was enjoined from attempting to set prices, from preventing competition for customers, from placing restrictions on store sales, milk depots, vendors, size and type of container, size and type of vehicles used, the kind of dairy products distributed, the manner of solicitation of business, the use of more than one employee on the delivery truck, and the purchase of the business of any dairy. The union was further enjoined from denying membership to any qualified driver employed by a distributor because of price policy, and from hindering by force or violence the delivery of milk. The union was not prevented from using lawful means to organize the vendors.

Milk Prices

Nature of Demand for Milk

Data on consumption and prices of fluid milk are inadequate to permit even a rough approximation of the interrelationship. In the opinion of some experts, changes in milk prices appear to have little effect upon consumption, particularly if the retail-price change is relatively small. Distributors and producers generally, but not consistently, hold a similar view. Some useful work, however, has been accomplished by numerous persons outlining the broader and more important aspects of the problem of consumption.

The per capita consumption of milk in Chicago, as in the United States as a whole, is well below what health authorities consider to be minimum standards. The deficiency of fresh-milk consumption is most prevalent among families in the lower income levels, many of whom buy no fresh milk at all. A decline in income levels generally results in a decrease in milk consumption and, conversely, a rise in income levels brings about an increased demand for milk. An increase in middle and upper income levels, however, appears to result in very little increase, if any at all, as compared with that which follows a rise in the income of consumers in the lower brackets. Secondary effects of a declining income level which is not followed by a commensurate decline in milk prices are noticeable in the increase in store buying (assuming a price differential) and in the use of substitute milk products.

Continued high prices or continued low prices eventually exercise a telling effect at least on type of consumption. A relatively high price for fresh milk diverts many consumers from having milk delivered to their homes to buying at the store in order to save the difference in price. Other consumers turn to evaporated milk, which is consistently cheaper than fluid milk.

There is a large untapped market of thousands of families who need and want more milk than they can buy with limited incomes. The experience of the Chicago relief milk program, despite its limited scope, throws important light on this problem. Over 60,000,000 quarts, or almost 8 percent of the total amount of fluid milk consumed, was distributed as relief milk in Chicago during 1940 and 1941. In addition to relief recipients there is probably a considerable number of potential consumers in Chicago who could be drawn into the market by lower prices, possibly without disturbing the prices paid and services received by those able to pay.

The Department of Agriculture has stated that—

> There is no reason why prices cannot be classified on the basis of the consuming groups and of different services attached to different segments of the supply. Thus, while a small reduction in the general retail price of milk might not lead to an appreciable expansion of consumption, a somewhat larger reduction reflecting in part lessened processing and service applied to the low-income market where milk consumption is particularly inadequate might increase total consumption considerably and even increase the returns to producers over those obtained under the traditional pricing system.[50]

Such an endeavor, supported by a well-organized educational campaign, would possibly be very effective in increasing consumption and the results in improved health of children and adults who at the present time do not receive proper nourishment might be well worth the cost of such an undertaking.

Trend of Prices Paid by the Distributor

In Chicago, during the period from 1923 to 1930, the reported prices paid to farmers for fluid milk (class I) fluctuated between $2.25 and $2.67 per hundredweight (approximately 5 to 6 cents per quart). In 1931 the price declined only slightly, but the decline continued in 1932. The fluid-milk price could not be maintained in the face of the sharp decline in manufactured-milk prices during this depression period and the Pure Milk Association was finding increasing difficulty in meeting the competition of new or irregular sources of supply. By the early part of 1933 the price had reached the lowest level in the history of the Chicago market, $1.45 per hundredweight (a little more than 3 cents per quart). (Chart 2.)

Faced with this situation, dairy farmers saw in the Agriculture Adjustment Act of 1933 a possible solution. Producers and dealers therefore worked out an agreement for the Chicago market and presented it to the Department of Agriculture on May 12, the day the Act was signed. The agreement finally put into effect in August 1933 provided that producers receive $1.75 per hundredweight for fluid milk and set resale prices and a schedule of fair trade practices. The agreement was accepted voluntarily by all dealers who could be induced to sign it and was imposed upon others by the issuance of a blanket license covering all handlers in the market.

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[50] U. S. Department of Agriculture, Yearbook of 1940, Farmers in a Changing World, p. 339.

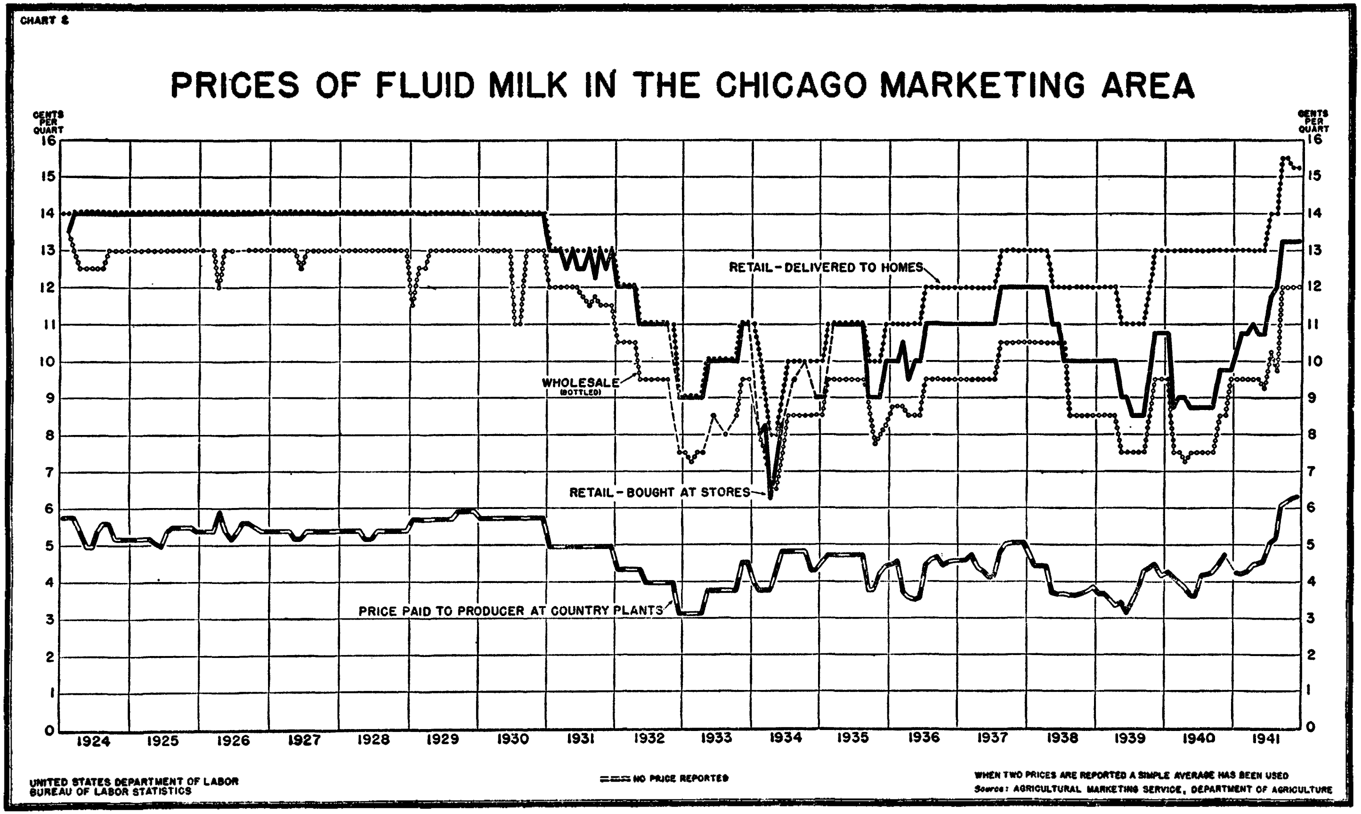
CHART 2
PRICES OF FLUID MILK IN THE CHICAGO MARKETING AREA
CENTS PER QUART
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
RETAIL - DELIVERED TO HOMES
WHOLESALE (BOTTLED)
RETAIL - BOUGHT AT STORES
PRICE PAID TO PRODUCER AT COUNTRY PLANTS
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941
UNITED STATES DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
NO PRICE REPORTED
WHEN TWO PRICES ARE REPORTED A SIMPLE AVERAGE HAS BEEN USED
Source: AGRICULTURAL MARKETING SERVICE, DEPARTMENT OF AGRICULTURE

The resale-price-fixing policy of the agreement was subject to so much attack and the violations were so numerous that it was finally abandoned and a new policy was put into operation in January 1934. Under the new plan, agreements were to be made between producers and the A. A. A., and distributors would be licensed to live up to the agreement. Not only were resale prices left unregulated, but the producers' prices were to be fixed with greater attention to active competitive levels. The price to farmers for fluid milk was set at $1.75 per hundredweight and the spread between the price of fluid milk and manufactured milk was narrowed. This agreement remained in effect until March 2, 1935, when it was canceled at the request of the Pure Milk Association. By this time prices to farmers were almost at the 1931 level. From then until September 1939 there was no A. A. A. control in Chicago.

The general improvement in business conditions in 1937 brought the farmers' prices back to the 1931 level of $2.32 per hundredweight, but from this point prices consistently declined under the strain of cut-price competition within Chicago and the antitrust indictment, until in June 1939 the price was equal to the low point of 1933 (a little over 3 cents per quart).

In December 1938, the Pure Milk Association petitioned the Department of Agriculture for a hearing on a proposed milk-marketing agreement and the resulting Federal marketing order went into effect September 1, 1939.

By November 1939 the price had advanced to 4½ cents, and after that time was below 4 cents only during one brief period in 1940. The year 1941 was one of consistently rising prices for fluid milk. By the end of that year the farmer was receiving the highest price in the entire history of the industry, 6¼ cents per quart. (See chart 2.) This increase in price was due, in large part, to the stimulus of large-quantity "lend-lease" buying of manufactured milk products,[51] which may be expected to increase during the war period. Whether or not the war and post-war period will necessitate a significant curtailing of milk for the fluid-milk market to meet the need for manufactured milk remains to be seen.

All distributors are subject to the price regulations of the marketing order whether their business is purely intrastate or interstate.[52] As a consequence of Federal control of producers' prices in Chicago the cut-rate distributors, compelled to pay the same price as other dealers, lost an important competitive advantage which they had enjoyed in an unregulated market and which had contributed so much to their early success.

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[51] Principally evaporated, condensed, and powdered milk.

[52] In the case of *United States* v. *Wrightwood Dairy Co.* (10 U. S. Law Week, p. 4192), Feb. 2, 1942, the Supreme Court stated: "We conclude that the national power to regulate the price of milk moving interstate into the Chicago, Ill., marketing area, extends to such control over intrastate transactions there as is necessary and appropriate to make the regulation of the interstate commerce effective; and that it includes authority to make like regulations for the marketing of intrastate milk whose sale and competition with the interstate milk affects the price structure so as in turn to affect adversely the congressional regulation."

Trend of Standard Retail Prices[53]

Standard retail prices are the prices established and announced by the larger distributors in the market. Prior to 1932 practically all milk in the Chicago market was sold at these prices.

From the middle of 1923 until the beginning of 1931, the retail price of fluid milk in Chicago was 14 cents a quart for both store and home-delivered milk. After a 1-cent drop in January 1931, store and home-delivered prices held around 13 cents for the entire year. It was not until 1932 that retail prices of milk, under the pressure of competition of distributors and vendors who were selling milk below the "standard" price, began a downward spiral.

By the early part of 1933, the standard price of fluid milk had dropped to 9 cents a quart, but the A. A. A. market agreement set the retail price at 10 cents a quart in August of that year and before the end of the year increased the price to 11 cents.

There was no differential between the price of home-delivered milk and milk bought in stores until 1934. In January of that year, as a result of competition from roadside stands and cut-rate stores, the chain stores started charging 1 cent less per quart than the home-delivered price. The entire year was one of unstable prices with store prices of milk reaching as low as 6 cents a quart and home-delivered prices falling to 8 cents a quart. By the latter part of 1935, a 1-cent differential between regular store and home-delivered price had been generally established, and in 1938 this differential was increased to 2 cents per quart, where it remained until early in 1940.

In January 1940, immediately after a 2-cent increase to 13 cents per single quart for home-delivered milk, the larger dairies introduced multiple containers, half-gallon and gallon, for home deliveries. At the same time, the Meadowmoor Dairy announced that its milk would be available at stores for 8½ cents per single quart, a price which other distributors were compelled to meet in store selling. During most of 1940[54] the typical prices to Chicago consumers for milk delivered to their homes was 13 cents per single quart, 22 cents per half-gallon, and 40 cents per gallon.[55] In February 1940, Chicago dealers reported a 10- to 15-percent increase in dollar sales in the three areas where they first introduced multiple containers.[56] Part of this increase in sales may have been due to a shift from store or depot to homes, although during most of 1940 the store price remained more than 4 cents below the home-delivered price.

In the summer of 1941 the established retail price of milk again rose 1 cent and another increase of 1½ cents, effective in the fall, brought the standard price to 15½ cents a single quart for home-delivered milk. At the same time, stores raised their prices generally

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[53] The discussion of prices in this section of the report is based on the retail prices released monthly by the Agricultural Marketing Service of the Department of Agriculture. According to the Agricultural Marketing Service, these prices are based on voluntary reports of the larger distributors in Chicago and represent the established or prevailing prices. They do not reflect the prices of milk sold below the established price.

[54] The University of Illinois, Department of Agriculture Economics, estimated that, by 1940, 52 percent of the commercial milk on retail routes in Chicago was sold in gallon- and half-gallon-lot quantities (either in quart containers or multiple containers). A. E. 1575, February 1941, p. 28.

[55] Department of Agriculture, Agriculture Marketing Service, Fluid Milk Price Report, monthly release.

[56] Chicago Federal Milk Market Administrator, Reporter, February 1940.

to 13 or 13½ cents.[57] According to the distributors, the increase in retail prices was necessitated by the increase in prices to farmers, which began in the summer of 1940 and was still continuing.

Tendency for Actual Price to Deviate From Standard Price

Beginning in the early 1930's, actual prices of milk delivered by some distributors to homes as well as to cut-rate stores were below the standard price, but no detailed information is available on the trend of such prices.

During the winter of 1941-42, however, data were obtained by the Bureau of Labor Statistics[58] on actual prices of "grade A" milk[59] sold in quart bottles[60] by 152 drivers and 164 vendors. Milk delivered in half-gallon and gallon containers was not included in the data.

Selling milk to different customers at different prices per quart is not unusual in the Chicago market. The giving of quantity discounts is an accepted practice among both drivers and vendors, having been encouraged since January 1940 by the need of meeting the competition of half-gallon and gallon containers. During the winter of 1941–42, prices per quart received by drivers for home-delivered milk ranged from 12 to 15½ cents, while vendors sold milk to homes at from 11 to 18½ cents per quart. (Chart 3.)

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[57] The chain-store price was 13 cents a quart.

[58] The Bureau's survey of vendors and drivers in the Chicago market was made during November and December 1941 and January 1942. The basic data for this study were secured by field representatives of the Bureau from 2 primary sources: (1) From 36 milk distributors in the Chicago market, and (2) from 168 drivers and 180 vendors engaged in milk distribution in the Chicago market.

Before undertaking the survey, officials of the Bureau of Labor Statistics discussed the study with officials of the Illinois State Department of Labor, industry trade associations, Milk Wagon Drivers' Union Local 753, the Pure Milk Association, the Chicago Board of Health, the Agricultural Adjustment Administration, the Chicago Federal Milk Market Administrator, and with other individuals interested in the milk industry in Chicago. From these discussions a great deal of information was secured which was extremely helpful in the launching and conducting of the survey itself.

In choosing the firms to be included in the study, a list of all firms (173 in number) was first secured from a Chicago Business Directory. With the assistance of the Federal Milk Market Administrator's office in Chicago this list was reduced to 144 distributing firms, after eliminating those no longer in business, owned and operated by a family, too small, or otherwise not representative. From this list 45 firms were selected by the following method: The 3 largest distributors in the Chicago market were included; the remainder were divided into groups of firms operating 1 route, firms with 2 to 6 routes, and firms with 7 or more routes. A representative sample was then chosen from each of these groups. Visits of the Bureau's field representatives to these 45 firms resulted in obtaining 36 usable schedules; 1 firm was out of business, 1 distributed cream only, 3 refused to cooperate, and 4 were strictly family businesses.

The 36 distributors scheduled currently handle the major portion of the milk in the Chicago market, and are estimated to represent approximately 75 percent of all workers engaged in the milk-distributing industry in Chicago. The principal data secured from the distributors dealt with drivers since the firms have little information about vendors.

The 168 drivers were chosen at random from the pay rolls of the 36 firms and the 180 vendors were taken at random from a Chicago Board of Health list of vendors and companies from whom they purchased milk. Except for the possible underrepresentation of "wholesale drivers," both groups are considered representative of the industry. The vendors and drivers were interviewed in their homes by Bureau field agents.

Many firms were unwilling to supply information on total value and quantity of sales and on actual hours worked by drivers. They considered sales data too confidential to release and they claimed to have no accurate records of actual hours. A few vendors and drivers also were reluctant to give some of the information requested. Despite the lack of complete cooperation, however, the results of the survey may be taken to present an adequate picture of the portion of the industry surveyed during the winter of 1941–42.

Further details regarding scope and method of survey and copies of questionnaires used may be secured by addressing the U. S. Department of Labor, Bureau of Labor Statistics, Washington, D. C.

[59] The term "grade A" milk is here used to designate standard fresh milk and excludes homogenized, vitamin D, and all other "special" milks. In practice, there are no "grades" of fresh milk sold in the Chicago market. All milk entering the Chicago market carries the designation "grade A."

[60] Although some milk was delivered to stores in paper containers, it was not included in this analysis. Relief milk was also excluded.

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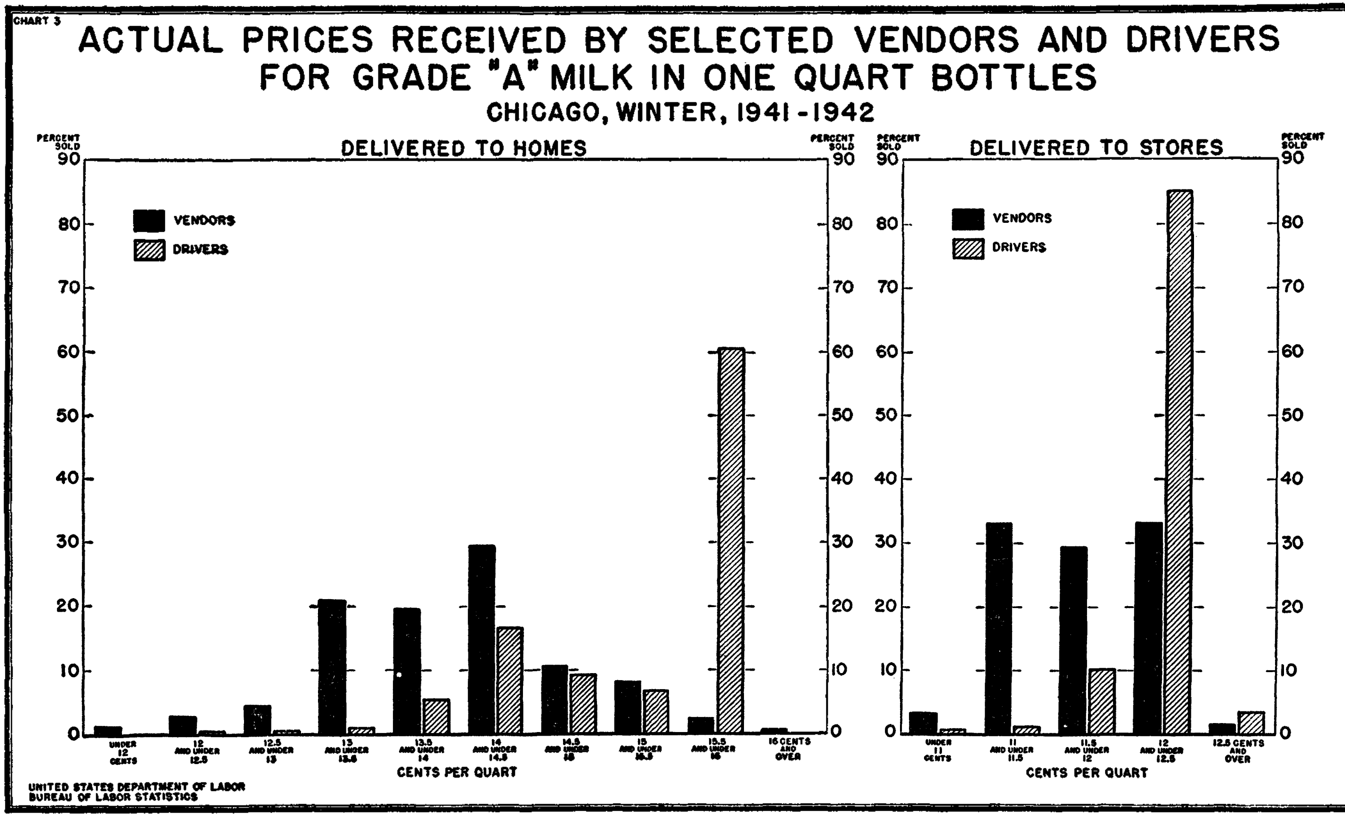

CHART 3

ACTUAL PRICES RECEIVED BY SELECTED VENDORS AND DRIVERS FOR GRADE "A" MILK IN ONE QUART BOTTLES

CHICAGO, WINTER, 1941-1942

Variations in price were more common in sales of milk delivered to homes than in sales to stores. As compared with the drivers, a larger proportion of vendors varied the price according to the customer.[61] Three-fourths of the vendors who delivered to homes and approximately one-third (32.5 percent) of those who delivered to stores, sold milk for more than one price per quart. Less than two-fifths (36.4 percent) of the drivers serving homes and only 13 percent of those serving stores received more than one price for a quart of milk.

For the major portion (60.6 percent) of their milk delivered to homes in quart bottles, drivers received the standard price of 15½ cents per quart, while vendors received the standard price for only 2.2 percent of their home-delivered milk. The average price of all milk delivered in quart bottles by drivers to home trade was 15 cents and the average for vendors was 13.7 cents a quart.

The standard price of 12 cents per quart bottle was received for 85.1 percent of the milk delivered to stores by drivers and for 33.1 percent of the milk sold to stores by vendors. There was only a slight difference between the average price received by drivers and vendors for milk sold in quart bottles to stores (11.9 cents and 11.5 cents, respectively). During this same period, roadside stands just outside the marketing area were selling pasteurized milk for as little as 11 cents a single quart, 21 cents a half-gallon and 39 cents a gallon.

Cost Components in the Price of Milk

The retail price of a quart of milk must include the costs of buying raw milk from the farmer, transportation costs to the distributor, the distributor's pasteurization and other plant costs, and delivery costs. The farmer producing for the Chicago market was receiving approximately 6½ cents per quart in December 1941. According to estimates of distributors, the cost of transporting milk to the plant plus the cost of processing amount to somewhat less than 2 cents a quart, with administrative costs amounting to possibly an additional quarter of a cent per quart. This means that in December 1941 the cost of milk at the distributors' platforms ready for delivery was approximately 8½ cents a quart.

The difference between this price of 8½ cents and the retail price represents primarily the cost of delivery plus any profit which the distributor, vendor, or retail store may be able to realize. Cost of delivery includes primarily the wages of drivers, reliefmen, and certain other employees, social security contributions, special delivery costs, and maintenance and depreciation on trucks. It is estimated that the wages and commissions of drivers delivering to homes typically amount to about 4 cents per quart of milk or other equivalent unit delivered. This wage, it should be noted, is not solely for delivery of milk, but covers other services rendered by the driver, such as sales promotion, collections, and bookkeeping.

Cost of delivery to stores is considerably lower than that for home delivery, but the cost to the consumer is augmented by the store's handling charges.

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[61] 164 vendors and 150 drivers delivered milk to homes and 151 vendors and 146 drivers delivered milk to stores.

Despite the roughness of these estimates it is apparent that a very substantial portion of the retail price obtained for a quart of milk is for delivery cost. Consequently, any improvement in the efficiency of distribution should result in an appreciable saving to the consumer in the form of lower retail prices. More efficient distribution might be accomplished by "every-other-day" deliveries, eliminating special deliveries, or consolidation and better planning so as to secure shorter and more concentrated routes. Any possible gains of this type, however, must be balanced against a possible reduction in the quality of consumer service and the threat of serious unemployment among workers engaged in milk delivery.

Increase in Importance of Store Distribution

According to the best available information it seems evident that well over half the fluid milk sold at retail in Chicago at the present time is distributed through stores. The shift from home delivery to store distribution has taken place largely during the past decade. In 1929 only about one-fifth of all fluid milk sold to consumers in Chicago was distributed through stores, but by 1939 the proportion had increased to 46 percent and in 1940 approximately half of all milk retailed in Chicago was bought from stores.[62] Sales data submitted to the Bureau of Labor Statistics by the three largest distributors in Chicago show an increase in store sales from 29 percent in 1936 to 51 percent of total fluid milk sold at retail in the winter of 1940–41. None of these estimates includes fluid milk sold at wholesale to restaurants, hotels, hospitals, and institutions. If this were added to the milk wholesaled to stores, the percentage of milk being delivered to homes would probably be less than 40 percent of the total fluid milk distributed in the Chicago marketing area.

The increasing importance of store sales in Chicago is indicated by the information concerning number of store routes operated which was obtained from the distributors included in the Bureau's survey. Of 25 distributors who had been in business since 1932, only 13 had store routes in 1932 and the number of routes operated was only 61. By 1939, 15 of the 25 distributors operated 296 store routes; in 1940, 17 of them operated 302 store routes; and in 1941 the number of store routes of these 17 distributors increased to 306. In December 1941, only 8 of the 25 distributors had no store routes. (Table 1.)

The use of paper containers instead of glass bottles may play an important role in the growth of store sales. Prolonged legal controversy delayed the introduction of paper containers in Chicago until October 1940, but the use of the new containers seems to have grown quickly since that time. Milk in paper occupies less space and weighs considerably less than milk bottled in glass. These advantages are important to the distributor, to the store, and to the consumer. Despite the controversy over the relative costs of paper and glass bottling, there is reason to believe that, with consumer resistance declining, the use of paper containers will eventually result in a further increase in store sales. During the war period, however, the supply of paper containers may be scarce.

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[62] Estimates from University of Illinois, Agricultural Experimental Station bulletins and Department of Agricultural Economics, 1939 and 1941.

The trend from home deliveries to store sales of milk is not peculiar to the Chicago market, but is characteristic of most of the large markets. Store sales first developed as an important part of total sales in Boston and New York. Chain stores helped to bring about the transition, having changed the buying habits of a large body of consumers. Many persons who formerly bought from stores operating on a "credit and delivery" system began buying from those on a "cash and carry" basis in order to secure lower food costs.[63]

TABLE 1.—*Total number of routes and number of store routes operated by drivers for 25 identical distributors in Chicago, 1932–41*

Year	All routes operated by drivers [1]	Routes serving stores exclusively	
		Number of firms with 1 store route or more	Number of store routes
1932	4,144	13	61
1939	2,661	15	296
1940	2,288	17	302
1941	2,469	17	306

[1] Includes store routes, home routes, and routes serving both stores and homes.

An important factor tending to increase the sale of milk through stores is the price differential between home-delivered milk and that obtained from stores. Store distribution is more efficient than the home-delivery system in the sense that the consumer does not pay for certain man-hours of work, tires, trucks, and gasoline. Store prices of milk in many cities range from 2 cents to 5 cents lower than prices of home-delivered milk. Increasing numbers of consumers have taken advantage of the saving. The differential between store and home-delivered price may have been more important in the growth of store distribution than the absolute level of store prices. At this time, however, purchasing at the store may have become a consumer habit which would not be easily broken even if the differential were decreased.

While it is true that the growth of the vendor system encouraged the trend toward store distribution, sales of milk to stores in Chicago at the present time are by no means confined to vendors. On the contrary, the large firms employing drivers have captured much of the chain-store trade as well as the trade in other retail stores. Nonetheless, the increased efficiency in distribution and the intense competition which have resulted in relatively lower prices of milk to the Chicago consumer were stimulated for the most part by firms selling through vendors.

Present indications are that the trend toward store distribution is growing and probably will continue to grow. Recent restrictions on the sale of tires may act to encourage this trend by curtailing home

[63] University of Illinois, Department of Agricultural Economics, Report 986, 1938 (mimeographed). "Scientific studies made by several colleges and universities have shown that prices at food chain stores have ranged from 8.4 percent to 14.3 percent below those of individual retailers operating in the same cities, the average price being at least 10 percent lower."

deliveries. In some cities "every-other-day" deliveries have been inaugurated, while in many others plans are being made to reduce the number of milk wagons.

This situation presents a serious problem to the workers, a problem which appears to be technological in character. The change in the method of distribution from a system by which milk was primarily delivered to homes to one by which most milk is distributed to stores, of necessity, leads to a displacement of drivers. The present demand for labor resulting from the war effort, however, can be expected to reduce the distress resulting from the transition.

Labor Problems in Milk Delivery

The relative importance of vendors in the Chicago market in terms of value or quantity of milk handled could not be determined accurately in the Bureau's survey because of the unwillingness of most distributors to supply data on sales. Some information is available, however, on the numbers of vendors and drivers engaged in milk distribution in the Chicago market and numbers of vendor and driver routes operated during recent years. The number of drivers delivering milk in Chicago is estimated at approximately 3,000 and the Chicago Board of Health lists 700 vendors to whom licenses were issued during 1941. Some of these vendors did not operate exclusively in the Chicago market and it is unlikely that all of them were ever operating at the same time.

According to information secured by the Bureau from distributors, the number of firms serving vendors and the number of vendor routes operated have gradually increased during the past 10 years. Of the 36 firms covered in the survey only 9 sold through vendors in 1932, and these served 187 vendor routes. By 1939 fully 21 served vendor routes (numbering 335); 24 served 394 vendor routes in 1940; and 25 served 433 vendor routes in 1941. Similar information was obtained regarding driver routes operated by the 28 firms employing drivers. Driver routes of these 28 firms declined from 4,144 in 1932 to 2,297 in 1940, but increased to 2,480 in 1941. Thus in 1941 the 36 firms included in the Bureau's survey were operating 2,480 driver routes and 433 vendor routes. Since evidence from the survey indicates that, in general, a vendor serves fewer customers than a driver, it would appear that the amount of milk delivered by vendors in the Chicago market was a small proportion of the total.

Types of Trade Served by Drivers and Vendors

The sales of the vendors and drivers interviewed were almost equally divided between retail sales to homes and sales to stores and other types of trade. Somewhat more than half of the products handled by drivers were delivered to homes, while vendors distributed a slightly larger proportion of their sales to stores and outlets other than homes. These proportions may not be applicable to the market as a whole, however, since the Bureau was unable to obtain the amounts or types of sales from all of the firms included in the survey. (Table 2.)

TABLE 2.—*Value of sales of milk-wagon drivers and vendors in Chicago, Ill., by type of trade and type of product sold, during one week, winter 1941–42*

Type of trade	Number serving type of trade	Grade A milk	All other products	Total all products
	Drivers			
Total sales	[1] 163	$36,525.23	$18,501.46	[2] $55,532.21
Homes	147	19,303.04	9,300.30	[3] 29,096.77
Stores	137	16,419.00	8,341.55	[4] 24,772.64
Other [5]	40	803.19	859.61	1,662.80
	Vendors			
Total sales	180	$42,215.03	$14,774.16	[6] $57,624.18
Homes	164	20,851.12	5,448.93	[7] 26,665.99
Stores	148	21,028.23	9,124.81	[8] 30,442.09
Other [5]	16	335.68	200.42	536.10

[1] For 5 additional routes surveyed there was no record of sales.
[2] Includes 2 routes with sales totaling $505.52 for which the value of grade A milk and all other products were not reported separately.
[3] Includes 2 routes with sales to homes totaling $493.43 for which the value of grade A milk and all other products were not reported separately.
[4] Includes 2 routes with sales to other stores totaling $12.09 for which the value of grade A milk and all other products were not reported separately.
[5] Includes factories, hotels, restaurants, bakeries, schools, and institutions.
[6] Includes 2 routes with sales totaling $634.99 for which the value of grade A milk and other dairy products were not reported separately.
[7] Includes 2 routes with sales to homes totaling $365.94 for which the value of grade A milk and other dairy products were not reported separately.
[8] Includes 2 routes with sales to stores totaling $269.05 for which the value of grade A milk and other dairy products were not reported separately.

Of the total value of all dairy products ($55,532) handled during a week by 163 drivers from whom such information was secured, 52.4 percent was delivered to homes, 44.6 percent went to stores, and the remainder to other types of trade, such as factories, schools, hotels, and institutions. Over half (52.8 percent) of all products ($57,624) handled during a week by 180 vendors was sold to stores and less than 1 percent was distributed to factories, institutions, and other types of trade.

Characteristics of Drivers and Vendors

The typical driver distributing milk in Chicago in the winter of 1941–42, according to the information received from interviews, was about 42 years old, and had been a milk-wagon driver for nearly 15 years. He had served his present employer for more than 11 years. The typical vendor was approximately the same age, but had been a vendor for only about 4 years.

The ages of drivers and vendors ranged from under 25 years to over 60. A greater percentage of vendors (45.3) than of drivers (40.7) reported ages below 40 years, but 25.6 percent of the vendors were 50 years or older as compared to 13.7 percent of the drivers. (Table 3.)

TABLE 3.—*Distribution of milk-wagon drivers and vendors by age, Chicago, winter 1941–42*

Age	Drivers			Vendors		
	Number	Simple percentage	Cumulative percentage	Number	Simple percentage	Cumulative percentage
Under 25 years	2	1.2	1.2	4	2.2	2.2
25 and under 30 years	13	7.8	9.0	18	10.1	12.3
30 and under 32 years	6	3.6	12.6	12	6.7	19.0
32 and under 34 years	11	6.6	19.2	9	5.0	24.0
34 and under 36 years	10	6.0	25.2	15	8.4	32.4
36 and under 38 years	12	7.2	32.4	13	7.3	39.7
38 and under 40 years	14	8.3	40.7	10	5.6	45.3
40 and under 41 years	4	2.4	43.1	4	2.2	47.5
41 and under 42 years	6	3.6	46.7	8	4.5	52.0
42 and under 43 years	7	4.2	50.9	5	2.8	54.8
43 and under 44 years	8	4.8	55.7	2	1.1	55.9
44 and under 45 years	8	4.8	60.5	7	3.9	59.8
45 and under 46 years	11	6.6	67.1	5	2.8	62.6
46 and under 47 years	11	6.6	73.7	6	3.4	66.0
47 and under 48 years	5	3.0	76.7	8	4.5	70.5
48 and under 49 years	8	4.8	81.5	3	1.7	72.2
49 and under 50 years	8	4.8	86.3	4	2.2	74.4
50 and under 55 years	14	8.3	94.6	25	13.9	88.3
55 and under 60 years	8	4.8	99.4	14	7.8	96.1
60 years and over	1	.6	----------	7	3.9	----------
Total[1]	167	100.0	100.0	179	100.0	100.0

[1] Excludes 1 driver and 1 vendor who did not report ages.

Over twice as many drivers (54.4 percent) reported from 10 to 20 years of service as reported under 10 years (25.8 percent). These long periods of service reflect the reduced rate of hiring drivers during the past decade. In fact, the number of drivers reporting less than 10 years of service is surprisingly large, in view of the sharp reduction in the total number of drivers employed by the Chicago milk industry during the years since 1932.[64] (Table 4.)

TABLE 4.—*Distribution of milk-wagon drivers and vendors by total length of service, Chicago, winter 1941–42*

Total length of service	Drivers[1]			Vendors		
	Number	Simple percentage	Cumulative percentage	Number	Simple percentage	Cumulative percentage
Under 1 year	6	3.6	3.6	14	7.8	7.8
1 and under 2 years	----------	----------	3.6	25	13.8	21.6
2 and under 4 years	6	3.6	7.2	51	28.2	49.8
4 and under 6 years	11	6.6	13.8	23	12.8	62.6
6 and under 8 years	10	6.0	19.8	19	10.6	73.2
8 and under 10 years	10	6.0	25.8	16	8.9	82.1
10 and under 12 years	18	10.8	36.6	15	8.3	90.4
12 and under 14 years	18	10.8	47.4	3	1.7	92.1
14 and under 16 years	24	14.6	62.0	3	1.7	93.8
16 and under 18 years	22	13.4	75.4	4	2.2	96.0
18 and under 20 years	8	4.8	80.2	1	.6	96.6
20 and under 25 years	18	10.8	91.0	3	1.7	98.3
25 and under 30 years	10	6.0	97.0	1	.6	98.9
30 years and over	5	3.0	----------	2	1.1	----------
Total	166	100.0	100.0	180	100.0	100.0

[1] Excludes 2 drivers who did not report length of service.

[64] See section on Milk Wagon Drivers' Union, Local 753, p. 36.

Information regarding the number of years the vendors have operated as such, stands in contrast to the length of service of the drivers. Over four-fifths (82.1 percent) of them had operated for less than 10 years, nearly half (49.8 percent) had operated for less than 4 years, and only about 3 percent (3.4) had operated as vendors for 20 years or more. In many cases the vendor's length of service dated from the time of his transformation from a driver to vendor relationship. Almost half (87) of the vendors interviewed had formerly been employed as milk-wagon drivers, and 17 others had been connected with the dairy industry in some other capacity. Of the remaining vendors, 11 had been delivering other products, 8 had been salesmen, 10 had been mechanics or maintenance men, 11 had been clerical workers, and the remaining 36 represented almost as many other occupations.

The distributions of drivers and vendors by length of association with present distributor follow the same patterns as the distributions by length of total experience. The drivers show longer periods of continued association than the vendors. (Table 5.) A study of the individual reports indicates that a larger proportion (72 percent) of vendors had made no change in source of supply as compared with drivers who had remained with the same employer (62 percent). This difference, however, appears to be determined primarily by the relatively shorter life of the vendor system, since an analysis of changes made during the past 10 years reveals that the proportion of vendors who changed sources of supply was larger than that of drivers who changed employers.

TABLE 5.—*Distribution of milk-wagon drivers and vendors by length of service with present distributor, Chicago, winter 1941–42*

Length of service with present distributor	Drivers [1]			Vendors		
	Number	Simple percentage	Cumulative percentage	Number	Simple percentage	Cumulative percentage
Under 1 year	8	4.8	4.8	23	12.8	12.8
1 and under 2 years	9	5.4	10.2	41	22.8	35.6
2 and under 4 years	12	7.2	17.4	49	27.3	62.9
4 and under 6 years	15	9.1	26.5	17	9.4	72.3
6 and under 8 years	16	9.6	36.1	15	8.3	80.6
8 and under 10 years	10	6.0	42.1	15	8.3	88.9
10 and under 12 years	19	11.5	53.6	7	3.9	92.8
12 and under 14 years	24	14.6	68.2	5	2.8	95.6
14 and under 16 years	16	9.6	77.8	2	1.1	96.7
16 and under 18 years	12	7.2	85.0	4	2.2	98.9
18 and under 20 years	8	4.8	89.8			98.9
20 and under 25 years	11	6.6	96.4	2	1.1	100.0
25 and under 30 years	3	1.8	98.2			100.0
30 years and over	3	1.8				
Total	166	100.0	100.0	180	100.0	100.0

[1] Excludes 2 drivers who did not report length of service.

Among the several factors making for continuity of employment or source of supply, the practice of selling dairy products by brand name probably exerts the strongest influence. Vendors and drivers are reluctant to abandon the product name upon which their routes were built. Furthermore, conditions of employment under a standard union agreement tend to be equalized throughout the market. A clause in the union contract forbids "stripping the route" for two years after termination of employment, and it is not improbable that a study of contracts signed by vendors and distributors would reveal a similar restriction.

Working Conditions of Drivers and Vendors

Function.—The Chicago "milkman," whether an employee or vendor, performs the function of bringing the product from the loading platform of the distributor to the household doorstep or store refrigerator, either by wagon or truck. In addition, the "milkman" is the sole point of contact between the industry and the customer, and as such he must solicit the trade, sell the product, bill the customer, collect his receipts, adjust complaints, and in general keep the customer and distributor satisfied.

The performance of this composite function has been made more difficult by the inclusion in the milkman's sales of an array of products other than the classic grade A milk. These other dairy products consist of vitamin D, homogenized, soft-curd, and 4-percent milk, flavored milk, buttermilk, several grades of sweet cream, sour cream, certified milk, cottage cheese, butter, eggs, and numerous special products. One large dairy in Chicago sells 30 dairy products, which, packed in various sizes and types of containers, amount to over 90 different packages. The 1-quart bottle of grade A milk, however, is still the principal item in the list and the storm center of competition.

Custom and tradition have formulated two practices, both instituted during the days of inadequate refrigeration, which make the delivery job more hazardous than it would ordinarily be. The practice of daily delivery often carries the milkman into harsh weather and other difficulties to place the bottle on the doorstep, while early-morning delivery is accomplished only by some work being done in the dark. To be sure, these traditional practices have built for the milkman a niche in American folklore, but they have also subjected him to ailments and accidents beyond the minimum hazards of the job itself.

The daily routine of the Chicago milk-wagon driver begins around 4:45 a. m., which is the earliest starting time permitted by the union contract. The driver loads his wagon or truck at the plant door with the items ordered on the previous afternoon, and after icing his load, begins his deliveries after 5:15 a. m.[65] Deliveries and collections occupy him during the balance of the morning, and often extend into the early afternoon. He reports back to the station where he unloads his extras, makes out tickets for bottles, jugs, and cans returned, lists his collections, which he turns over to the cashier, writes up his daily report, orders his next-day's deliveries, and unhitches his horse or refills his gasoline tank. Once a month he must balance his accounts, make out statements, write up a new book and transfer accounts from the old to the new.

Legal and economic relations to the distributor.—There is no difference between the functions performed by drivers and vendors. The

[65] For many years the union restricted deliveries during the months from September to June to the starting time of 8 a. m., but this restriction was dropped by the current agreement.

difference lies in the legal and economic relations of each to the distributor. Milk-wagon drivers are employed by dairy firms or corporations and receive a guaranteed wage plus, as a rule, a commission based on weekly or monthly sales. The distributor furnishes the product, the ice, and the truck or wagon used for delivery, and provides for its operation, maintenance, and repair. The driver receives the protection or benefits of such social legislation as workmen's compensation, old-age insurance, unemployment insurance, etc., which are paid for, at least in part, by the distributing firms. In addition, through the trade union, a driver is afforded a certain security in his job, while his wages, hours, and working conditions are protected by the union contract.

As small businessmen, milk vendors have certain responsibilities of business ownership requiring them to arrange for the purchase of the milk and other dairy products in which they deal, as well as provision for ice or other means of refrigeration.[66] The vendor purchases milk and other products from the distributor, sells to whoever will buy, and charges whatever the trade will bear. The vendor must carry all the direct and indirect expenses of distribution; he must provide and maintain his own equipment, hire his own reliefman, helper, or driver,[67] and finance the risks of business. The difference between the cost of his milk and his receipts, less the expenses of doing business, is his net income. Part of this income, theoretically, represents payment for services rendered, and part is a return on his investment and profit for risks undertaken. It is probable that the typical vendor, in his neglect of bookkeeping practice, underestimates or disregards his indirect expenses such as bad debts, depreciation, and license fees. The net income of the vendor plus any personal satisfaction he may derive from his status as an independent business man are his compensation for giving up the security of a guaranteed wage, unemployment insurance, workmen's compensation, old-age insurance, and trade-union protection.

Regularity of employment and hours of work.—While milk deliveries are subject to day-to-day fluctuations, the fluid-milk industry is not a seasonal industry; the quantity of sales varies less than 5 percent between the low month and peak month.[68] A fairly steady flow of work is available to those engaged in the distribution of milk.

Although the milk-delivery business is operated largely on a 7-day week plan, the individual drivers and many of the other employees are required to work only 6 days. The distributing firms usually employ reliefmen, one for each six drivers, who substitute for drivers when the latter are off duty.

In contrast to the drivers, the majority of vendors (78.3 percent of those interviewed) worked 7 days a week; only 20 percent worked 6 days; while the remainder worked less than 6 days a week. Only 13 of the 180 vendors reported the use of reliefmen.

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[66] Most of the distributors in the survey (84 percent) furnished part or all of the ice used by vendors, mainly for the purpose of assuring proper care for their products.

[67] Occasionally the vendor's volume of business grows beyond his own capacity to handle it and necessitates splitting the route. In such an event a vendor may hire a driver, becoming, in the terminology of the market, a "master vendor."

[68] Variation in quantity of all fluid milk sold in the Chicago market computed from Federal Milk Market Administrator's Reports for 1940 and 1941.

The Bureau was unable to obtain information from distributors on actual hours worked by drivers. The union contract provides that drivers work a 9-hour day and a 54-hour week. That actual hours of drivers often exceed this, however, was indicated from information secured from the drivers who were interviewed. The average number of hours worked by all drivers during the week surveyed, based on memory and not on records, was approximately 56 hours.

Similar information obtained from vendors indicated that they worked a somewhat longer week than drivers, the average being a little over 58 hours for the week surveyed. The vendors probably underestimated the number of hours they worked, since it is doubtful whether they included in the hours reported the time spent by themselves or by members of their families on bookkeeping at home. The bookkeeping work by drivers tends to be included because much of it is required by the distributor and is performed on the distributor's premises during regular working hours.

Characteristics of routes—drivers and vendors.—Drivers and vendors interviewed in the survey usually served mixed routes, that is routes having both store and home stops. (Table 6.) Approximately 80 percent of the drivers and 77 percent of the vendors interviewed operated this type of route. A slightly larger proportion (13.9 percent) of vendors than of drivers (10.1 percent) delivered to homes only, while the same proportion of each had store routes exclusively (8.9 percent). Vendor routes, however, were primarily (62.1 percent) in residential areas, while drivers' routes were more evenly distributed between residential and "other than residential" areas (53.7 percent and 46.3 percent, respectively). (Table 7.)

The significant difference in vendor and driver routes was in their length, vendor routes being much longer on the average than driver routes. (Table 8.) Vendors traveled an average of 37 miles daily (from plant back to plant) to serve their customers, while driver routes averaged only 22 miles. More than half of the driver routes (53.7 percent) were less than 20 miles in total length, and 15.4 percent were less than 8 miles long. Only 16.7 percent of the vendor routes were under 20 miles from station to station and less than 2 percent (1.2) were under 8 miles. Nearly one-fifth of the vendors (19.5 percent) had routes 52 miles or more in total length, while very few driver routes (4.9 percent) were that long. The difference in the length of route is even more striking when distance from first to last stop is considered separately. (Table 9.) Vendors traveled twice as far as drivers between the first stop and the last (30 miles and 15 miles, respectively). The distance from plant to first stop and last stop to plant was approximately the same for both vendors and drivers.

Vendors traveled substantially greater distances than drivers on all types of routes—store, home, and combination (table 9). Vendor routes serving residential areas averaged 40 miles in length, while those in areas other than residential averaged 32 miles. Driver routes were slightly shorter on the average in residential areas than in areas other than residential (22 miles and 23 miles, respectively). (Table 10.)

In terms of the number of customers, driver routes were much more concentrated than those of vendors. Despite the relative shortness of their routes, drivers averaged 150 stops daily while vendors averaged 117 stops daily. In residential areas drivers made 160 stops per day to 122 stops by vendors. Both drivers and vendors had more stops per day in the residential areas than in areas other than residential. (Table 7.)

TABLE 6.—*Number of milk-wagon drivers and vendors by type of routes operated, Chicago, winter 1941–42*

Type of route	Drivers		Vendors	
	Number of drivers	Number of routes	Number of vendors	Number of routes
Total	168	168	180	190
Home stops only	17	17	25	26
Store stops only	15	15	16	19
Combination routes	136	136	139	145

TABLE 7.—*Average number of stops per route for drivers and vendors by type of area served, Chicago, winter 1941–42*

Type of area served	Drivers [1]		Vendors [1]	
	Number of routes	Average number of stops	Number of routes	Average number of stops
All areas	165	150	186	117
Residential	93	160	118	122
Other than residential	72	138	68	109

[1] Number of stops were not reported for 3 driver and 4 vendor routes.

TABLE 8.—*Distribution of milk-wagon drivers' and vendors' routes by length of route from plant back to plant, Chicago, winter 1941–42*

Total length of route	Drivers [1]		Vendors [1]	
	Number of routes	Percentage	Number of routes	Percentage
Under 4 miles	3	1.9	1	0.6
4 and under 8 miles	22	13.5	1	.6
8 and under 12 miles	23	14.2	9	5.2
12 and under 16 miles	23	14.2	10	5.7
16 and under 20 miles	16	9.9	8	4.6
20 and under 24 miles	17	10.5	17	9.8
24 and under 28 miles	6	3.7	9	5.2
28 and under 32 miles	12	7.4	15	8.6
32 and under 36 miles	12	7.4	15	8.6
36 and under 44 miles	15	9.3	41	23.6
44 and under 52 miles	5	3.1	14	8.0
52 miles and over	8	4.9	34	19.5
Total	162	100.0	174	100.0
Average length (miles)	22		37	

[1] The lengths of 6 driver and 16 vendor routes were not reported.

TABLE 9.—*Average length of route of milk-wagon drivers and vendors in Chicago, by type of route served, winter 1941–42*

Length of route	All types: Number of routes	All types: Average length of route	Home stops only: Number of routes	Home stops only: Average length of route	Store stops only: Number of routes	Store stops only: Average length of route	Combination home and store stops: Number of routes	Combination home and store stops: Average length of route
				Drivers				
Total	[1] 162	*Miles* 22	17	*Miles* 24	15	*Miles* 23	[1] 130	*Miles* 22
Station to first stop	162	3	17	6	15	4	130	3
First to last stop	162	15	17	12	15	15	130	16
Last stop to station	162	4	17	6	15	4	130	3
				Vendors				
Total	[2] 174	37	[3] 24	39	[4] 18	31	[5] 132	38
Station to first stop	174	2	24	3	18	5	132	2
First to last stop	174	30	24	32	18	17	132	32
Last stop to station	174	5	24	4	18	9	132	4

[1] Excludes 6 routes for which this information was not reported.
[2] Excludes 16 routes for which this information was not reported.
[3] Excludes 2 routes for which this information was not reported.
[4] Excludes 1 route for which this information was not reported.
[5] Excludes 13 routes for which this information was not reported.

TABLE 10.—*Average length of routes operated by milk-wagon drivers and vendors in Chicago, by type of area served, winter 1941–42*

Type of area served	Number of routes	Average length of route: Total length	Average length of route: Station to first stop	Average length of route: First stop to last stop	Average length of route: Last stop to station
		Drivers			
All areas	[1] 162	*Miles* 22	*Miles* 3	*Miles* 15	*Miles* 4
Residential	[1] 87	22	3	15	4
Other than residential	75	23	3	16	4
		Vendors			
All areas	[2] 174	37	2	30	5
Residential	104	40	2	32	6
Other than residential	70	32	3	26	3

[1] Does not include 6 routes for which no length of route was reported.
[2] Does not include 16 routes for which no report was made, 14 of which were in residential areas, and 2 of which were in areas other than residential.

The vendors' stops were more remunerative, on the average, than the drivers' stops. When the value of all weekly sales to each stop was computed, the average value per stop on vendor routes proved to be $2.61 a week and on driver routes $2.28 a week. This difference was due entirely to the influence of store deliveries. The average value of sales to each stop on home-delivery routes was the same for both driver and vendor routes ($1.26 a week). For store stops, vendors averaged $26.94 and drivers averaged $23.02 per stop during the week surveyed. (Table 11.)

Table 11.—*Average value of sales of milk-wagon drivers and vendors in Chicago during 1 week,*[1] *by type of customer, winter 1941–42*

Type of customer (stop)	Drivers			Vendors		
	Number of routes	Number of stops	Average weekly sales per stop	Number of routes	Number of stops	Average weekly sales per stop
	Total sales					
All stops	161	24,080	$2.28	187	21,781	$2.61
Home	145	22,951	1.26	167	20,635	1.26
Store	145	1,129	23.02	162	1,146	26.94
	Grade A milk					
All stops	159	23,635	$1.53	185	21,487	$1.94
Home	143	22,509	.85	165	20,353	1.00
Store	142	1,126	15.12	159	1,134	18.77
	Products other than grade A milk					
All stops	157	22,749	$0.80	181	19,963	$0.72
Home	140	21,697	.43	149	18,887	.27
Store	122	1,052	8.51	137	1,076	8.66

[1] Drivers and vendors not included in this table did not report sales data.

Vendors' stops showed a similar excess value per stop in terms of weekly sales of grade A milk alone, whether for the home or the store trade. In the case of products other than grade A milk, drivers sold on the average slightly more per stop (80 cents) than vendors (72 cents).

There was not sufficient information available on the total quantities of grade A milk or other products sold to determine the concentration of routes in terms of quantity delivered. It would appear, however, that the quantity of milk and other products delivered by vendors was not proportionate to the length of their routes. Longer routes involve a greater net expense of resources in the form of oil, gas, tires, time, and energy unless the quantity delivered is commensurate. Centralized control over a large number of routes is apparently more efficient than individual control over a few routes.

Helpers.—Helpers were employed by both drivers and vendors interviewed in the survey, but vendors employed such assistance much more frequently than drivers. A significant proportion of these helpers were 16 years of age or younger. Their earnings were relatively low. Their duties were relatively simple, consisting primarily of watching the milk truck while the driver or vendor made his calls and performing other slight tasks.

It is not a common practice in the Chicago market for drivers to employ helpers and when they do the helper is usually given a part-time job. Of the 168 drivers interviewed, only 12 employed a total of 15 helpers during the week surveyed. Two of these helpers earned 30 cents for a 3-hour day, another earned 50 cents for a

7.5-hour day, while 1 was paid 80 cents for working an 8-hour day. Weekly pay reported for the others varied from $1 for boys working an hour or so a day to $10 for 1 employed 4 hours a day. The ages of these helpers varied from 11 years to 54; 8 of them were 14 years or under, 3 were 16, 2 were 17, and 2 over 20 years. Most of them started work from 6 a. m. to 8 a. m., and finished their jobs 3 to 5 hours later. None of the drivers reported paying social security taxes for their helpers.

Of the 180 individual vendors interviewed, 55 employed a total of 60 helpers during the week. These helpers worked from 1 to 7 days and from 3 to 72 hours per week, and earned a weekly wage ranging from $1 to $35.

Most vendors' helpers worked 6 or 7 days per week, less than three-tenths (28.3 percent) being employed from 1 to 5 days. Only 4 helpers worked less than 6 hours per week, while 13 worked 20 but less than 30 hours, and 17 worked more than 40 hours, most of these in excess of 45 hours. There was no very close relation between the amount of time worked and earnings. For example, $10 was earned by 2 helpers, 1 of whom worked 21 hours, the other 42. Similarly, 7 workers earned $5, but their weekly hours ranged from 12 to 35, while 1 worker earning $5.25 worked 45.5 hours. The helpers, employed from 1 to 5 days, worked from 3 to 25 hours, and earned from $1 to $25 per week. These earnings did not vary widely from those of the 19 helpers working 6 days a week ($2 to $35), or from the 24 working 7 days a week ($3 to $28). No less than 26 of all the helpers earned $6 or less, while 40 earned $18 or less, and only 10 earned $25 or more.

The ages of the 60 helpers who worked for vendors varied from 14 to 54 years. Only 1 was 14 years, 9 were 15, 9 were 16, 10 were 17, 6 were 18, 4 were 19, 12 were 20 and under 25, and 9 were 25 and over. All were employed during the early morning hours, usually from 5 or 6 a. m. to 8 or 9 a. m. Only a few of the vendors reported paying unemployment compensation or old-age insurance for their helpers.

Milk Wagon Drivers' Union, Local 753

Jurisdiction.—The Milk Wagon Drivers' Union, Local 753, is a local of the International Brotherhood of Teamsters, Chauffeurs, Warehousemen, and Helpers of America, an affiliate of the American Federation of Labor.

Local 753 extends its jurisdiction over all outside workers employed by Chicago milk dealers and has enlisted virtually all these workers. In addition to those engaged in distributing milk to the consumer, solicitors, adjusters, route foremen, tank men, truckers, and van men are eligible for membership, and are covered by the standard union agreement. Vendors are eligible for membership, but, inasmuch as they are not employees, strictly speaking, they occupy a unique position in the union structure.

For purposes of wage determination, workers engaged in distribution are divided into six classes according to the type of route covered, type of trade served, or service performed. By far the largest category, and the one in which this study is primarily interested, is that of "retail routemen," who sell either entirely to the home trade or on a mixed home and store route.

"Store routemen" sell to stores only, and have no home trade. "Commission wholesale routemen" sell to the store trade and that part of the wholesale trade upon which commissions are paid. "Noncommission wholesale men" deliver wholesale bulk milk to institutions, hospitals, etc., where milk is not resold. "Assistant route foremen," or reliefmen, take over either retail or wholesale routes on the routemen's day off. "Special," or extra men, maintain no routes, but are on hand to service special orders or complaints.

Trend of wages.—Local 753 was organized on September 13, 1902. The first printed agreement, establishing a $15 wage scale plus commissions of six-tenths of a cent per point[69] was put into effect in April 1905.[70] By 1911 a membership of 1,700 was reported. Base rates rose slowly to $22 weekly by 1918, but rapid increases followed thereafter ($4 in 1918, $9 in 1919, and $6 in 1920). In 1921 the workweek was first defined in terms of 6 instead of 7 days.

Further gains in base rates were registered during the twenties (table 12), reaching a high level of $50 in 1927, while membership steadily increased to 7,400 by 1930.[71] Making allowance for changes in the general price level, it is evident that real earnings of the milk-wagon drivers had been increasing at a remarkable rate. The union had won for its members important gains from an industry that showed an increasing ability to pay.

The increase in the union scale in the form of additions to the base rate rather than changes in commission rates appeared to press more heavily upon the unit costs of the smaller dealers.[72] Furthermore, the union's efforts to protect the home-delivery system and the rigidity of milk prices helped to maintain a favorable market for the large, well-advertised distributors.

Wage rates of the retail routeman tended to follow the level of prices rather than the level of employment, falling to a low of $40 per week during the period between December 1, 1932, and May 1, 1935, and rising thereafter, with but one break, to the $48 scale of the current agreement (table 12). In 1937, the commission rate of 60 cents per 100 points above 1,333 points was increased to 75 cents, and an additional 15 cents paid per 100 points in excess of 4,000 per week, but it is unlikely that total earnings reflected the increase in commission rates. Strenuous price competition, only part of which was financed by the dealers, led to unofficial reductions at the point of sale. The burden of these concessions fell on the routeman. Other out-of-pocket expenses resulting from competition for trade further reduced the drivers' net earnings and constituted a constant source of complaint.

Negotiations for a new contract in 1940 failed to provide agreement on wages before the expiration of the old contract. A few days prior to May 1, 1940, the organized dealers posted notices in their plants stating that a new wage scale with a base of $30 was going into effect, and an 8-day stoppage of work was thereby precipitated. The union refers to this stoppage as a lock-out; the employers term it a strike. Negotiations were resumed after a truce; agreement was

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[69] See p. 39, footnote 75, for the current definition of a "point."
[70] McIntosh, L. N., Arbitration Between Associated Milk Dealers, Inc., and Local 753, 1940. Record of Proceedings.
[71] Weber, Henry, Chicago Tribune, January 27, 1940.
[72] Cf. Christenson, C. L., Collective Bargaining in Chicago, 1929–30. University of Chicago Press, Chicago, 1933, pp. 182–183.

reached on a 54-hour week and a seniority clause in the contract, but no agreement on wages was consummated. Previous to this agreement there had been no provisions relating to hours of work or seniority in the union contract. The determination of the wage scale was then handed over to an arbitration committee.

The arbitration hearings[73] were held in the summer of 1940 at a time when a 4½-cent differential between home and store prices prevailed, and the argument centered principally about the measures necessary to decrease this differential so as to preserve home delivery. The dealers repeated a proposal they had been making for many years, calling for a lower base rate ($30) and a higher commission rate, which, the dealers estimated, would have meant a $10 reduction in total earnings. This, the dealers maintained, would lead to a lower home price and a revival of home trade. The union countered this proposal by stating that the differential was primarily due to a low store price which was below reasonable costs, and that a reduction in wages might be used simply to finance this highly competitive store trade. Both parties agreed that the industry's ability to pay was not an issue.[74] Presentation of the evidence of both parties to the arbitration committee occupied 6 weeks.

The award of the arbitrator rejected the dealers' proposal, but provided for a cut of $4.26 in the base rate to be applied against all the occupations falling under the new 54-hour week. The decision, handed down on September 5, 1940, was, by agreement, retroactive to June 1, 1940, an arrangement which necessitated a return by the workers of wages received since June 1 in excess of the new scale. The wage scale fixed by the arbitrator remained in effect until May 1, 1941, when the current agreement, restoring the base rate to $48, became effective.

TABLE 12.—*Union wage rates for retail routemen, Chicago, 1920–41*

Period in effect	Basic rate[1] per week	Method of determination
May 1, 1920, to Apr. 30, 1924	$41.00	Negotiation.
May 1, 1924, to Apr. 30, 1927	45.00	Do.
May 1, 1927, to Apr. 30, 1932	50.00	Do.
May 1, 1932, to Nov. 30, 1932	45.00	Do.
Dec. 1, 1932, to Apr. 30, 1935	40.00	Voluntary reduction.
May 1, 1935, to Apr. 30, 1936	41.00	1935 arbitration award.
May 1, 1936, to Oct. 31, 1936	42.50	Do.
Nov. 1, 1936, to Apr. 30, 1937	43.00	Do.
May 1, 1937, to Apr. 30, 1938	45.00	Negotiation.
May 1, 1938, to Apr. 30, 1940	48.00	Do.
June 1, 1940,[2] to Apr. 30, 1941	43.74	Arbitration.
May 1, 1941, onward	48.00	Negotiation.

[1] Commission rates varied during this period.
[2] Rate for month of May not determined; arbitrator's award retroactive to June 1.

Sources: Federal Trade Commission, op. cit., pp. 16–17, 1940, Arbitration Proceedings, and current agreement.

Principal features of current agreement.—The current agreement covers the period from May 1, 1941, to April 30, 1943, but the matter of wages and hours may be opened for negotiation 60 days prior to May 1,

[73] Arbitration between the Associated Milk Dealers, Inc., and Milk Wagon Drivers' Union, Local 753, 1940, Record of Proceedings.
[74] Ibid., p. 5197.

1942. The following wage scale is embodied, covering all the occupations under the jurisdiction of Local 753:

Classification	Base rate per week
Retail routemen	$48.00
Inexperienced men	47.00
Route foremen	55.00
Assistant route foremen	53.00
Solicitors or adjusters	55.00
Store routemen	48.00
Commission wholesale routemen	49.50
Special and extra men	47.00
Truckers and van day men	52.00
Truckers and van night men	53.00
Tank day men	52.00
Tank night men	53.00
Noncommission wholesale men	56.26

Commissions for retail routemen are computed at the rate of 75 cents per 100 points[75] in excess of 1,333 and 90 cents per 100 in excess of 4,000 points. The same rates apply to commission wholesale men, except that the base is set at 2,000 points. The commission on butter sold at retail is 1 cent per pound; on eggs, 1 cent per dozen; on cheese, 1 cent per jar.

The unionized dealers operate under the principles of a union shop; that is, they may hire "members of the union or those who will become members within 30 days, subject to acceptance by the membership." The usual initiation fee is $100, and annual dues are set at $72. Departmental seniority, based upon length of service, prevails in rehiring and lay-offs, "provided that preference with respect to service shall not interfere with the selection of competent drivers properly qualified to serve the types of trade involved." "Stripping the route" by discharged drivers is prohibited.[76]

Retail routemen and store routemen work a 6-day week of 54 hours, including time spent at lunch and on book work. Actual hours worked often exceed 54, but there are no provisions for the payment of either straight-time or penalty rates for a 6-day route running above 54 hours. If a route is too large to be serviced within the proper time schedule, an adjustment in the length of route or size of load is to be made by the employer. Wholesale men work 48 hours, excluding a 30-minute lunch period. The employer agrees not to hire helpers on wagons or trucks.

All workers covered by the agreement are entitled to a 2-week vacation with full pay and commission at the end of any 52 weeks' service with one firm.

All matters in dispute, with the exception of those pertaining to wage scales and hours, are adjusted by a committee consisting of three representatives of the employer and the union.

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[75] According to the union agreement, "a point of goods sold on retail wagons shall consist of one quart of milk, one pint of milk, four one-half pints of milk, three one-third quarts of milk, one quart of skim, one-half pint or two gills of cream, one quart of buttermilk."

[76] "The union agrees at all times, as far as in its power, to further the interests of the employer. It is mutually agreed between the parties herein named that the customers and consumers of the employer belong to and are part of the assets and good will of the said milk dealer; that the driver solicits, serves, and sells such customers and consumers in a representative capacity only, and if for any reason whatsoever any member of the said union terminates his employment or is discharged or dismissed, or for any reason said employment ceases and is terminated, it is understood that any such driver or his agents shall not call upon, solicit, sell, or interfere with or divert the customers or consumers formerly serviced by him on behalf of his former employer for a period of 2 years from the date of his termination of employment."—Union agreement.

Trend in employment.—The growth of different methods of distribution during the 1930's brought about a severe loss in volume and earnings to the larger distributors, but the Milk Wagon Drivers' Union suffered the greater blow. Membership dropped steadily from 7,400 in 1930 to 4,550 in 1940, a 39-percent decline. It is unlikely that at any time there were more than 700 vendors operating in Chicago.[77] Consequently, even considering the possibility of vendors carrying heavier loads, only a small part of the loss in jobs can be attributed directly to the use of vendors in place of drivers. The impact of the vendor system was disastrous to the union membership primarily because it was used to sponsor and promote aggressively the system of store distribution which, in turn, caused a decline in home deliveries.

Union membership figures, submitted to the Bureau for the past 5 years, cover only the later phase of the decline during the past decade, but they are indicative of the changes taking place in the industry. (Table 13.) The sharp decline in the number of retail routemen was partly absorbed by increases in the other categories, but for the most part the decline is reflected in the loss in total membership.

Trends in the number of routes operated by Chicago distributors in 1932, 1939, 1940, and 1941 are indicated by other data submitted to the Bureau. Twenty-five distributors, operating 4,144 driver routes in 1932, reported a decline to 2,661 driver routes by 1939. During the latter part of 1940, these same 25 firms operated 2,288 driver routes, indicating a continuing decline, but by the winter of 1941 a slight recovery to 2,469 driver routes was registered. (Table 1.) A decline in the number of routes operated ordinarily results in a more than proportional decline in employment, inasmuch as workers other than the routemen, such as reliefmen, foremen, etc., are necessary for the maintenance of the routes.

TABLE 13.—*Membership reported by Milk Wagon Drivers' Union, Local 753, 1937–41*

Classification	Year				
	1937	1938	1939	1940	1941
Retail routemen [1]	5,020	4,350	3,500	3,100	3,250
Wholesale routemen [2]	180	150	225	525	525
Others [3]	690	1,000	925	925	925
Total	5,890	5,500	4,650	4,550	4,700

[1] Vendors are probably included in this group.
[2] Includes commission and noncommission men.
[3] Includes van and tank truckers, special delivery men, route foremen, and assistant route foremen.

[77] In 1941 approximately 700 vendor licenses were issued by the license division of the city of Chicago.

Principal problems confronting the union.—During the early part of the 1930's the union became concerned over the growth of the vendor system. It "believed that the vendor system was a scheme or device utilized for the purpose of escaping the payment of union wages and the assumption of working conditions commensurate with those imposed under union standards".[78] The increase in store distribution of milk, which was encouraged by the use of vendors, involved a still greater threat to union security; store distribution imperiled the very jobs and livelihood of thousands of drivers dependent upon the continuance of the home-delivery system.

The union fought against the vendor system and attempted to discourage the growth of store distribution, but in both efforts was unsuccessful. A series of adjustments followed.

The first reaction of the distributors to the decline in home delivery was to eliminate the low-volume routes and consolidate the remaining routes, dropping the unnecessary men. When it became apparent that store distribution was to play a permanent role, and an increasingly important one, each of the large dealers, with one conspicuous exception, set about to carve out a piece of the store trade. Store stops were taken off the mixed routes and combined into strictly store routes, and the consolidation of retail and mixed routes continued.

Within the scope of ordinary collective-bargaining practices, the union could only fight a delaying action; it could not prohibit the creation of store routes, but it could, and did, refuse to agree to any revision in commission rates on store deliveries. Store-route and commission wholesale men, delivering approximately four times the number of points usually delivered on a retail route, receive the same commission rate and have a greater opportunity to reach the high premium rate. As a consequence, they earn incomes far in excess of their base pay. The union's attempt by this means to discourage the transfer to store stops out of the mixed routes has been ineffective.

With the large distributors entering into store competition, the union's main concern gradually centered around the distribution of the lucrative store business among the drivers. The union opposed the creation of store routes at the expense of the retail routemen, and attempted to keep the differential between the retail price of home-delivered milk and store milk as small as possible. The union's attitude in this matter was expressed by a spokesman [79] as follows:

> We all readily realize that there is a difference in service between the two methods of distribution. The consumer who wants to save 1½ or 2 cents, which is justified by the labor distribution cost as between the two methods of distribution, has the right to do so. If a customer would rather save that money than have the service of having milk delivered to his home every morning and all the other attentions that a milk-wagon driver renders, the customer has a right to that. Those who want their milk delivered to the home will be glad to pay the reasonable difference. If after a reasonable differential is established based upon actual labor distribution costs there is unemployment, we then have a case of technological unemployment * * * (resulting) from the displacement of one method of milk distribution by another method of milk distribution.
>
> If the dealers will remove their subsidies from the store distribution and allow a reasonable differential on the price of their milk between store delivery and home delivery, you would then get a condition where each type of distribution would find its justifiable level.

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[78] *Milk Wagon Drivers' Union et al.* v. *Lake Valley Farm Products, Inc. et al.*, 311 U. S. 91.

[79] Riskind, David, attorney, Arbitration Between the Associated Milk Dealers, Inc., and Milk Wagon Drivers' Union, Local 753, 1940. Record of Proceedings, pp. 5293–5294.

When the union's major efforts to eliminate the vendor system were frustrated by the Meadowmoor case and the antitrust indictment, emphasis was placed upon organizing the vendors as union members. In this, the union has been quite successful. The enrollment of vendors into the union had been proceeding on a small scale ever since the vendor had appeared on the market, but the greater proportion have been organized only recently. Even the Meadowmoor Dairies, Inc., which had resisted the union for 9 years, gave up the immunity of its injunction to sign a union contract in January 1942.

The union vendor.—From the standpoint of organization, the vendors no longer constitute a problem to the union. For example, almost all (96 percent) of the vendors scheduled in the Bureau's survey held union cards.

The union vendor occupies a special position with respect to his membership in a union.[80] He is not an employee, therefore receives no wages; he has no regulated hours or days of work as set out in the union agreement; he cannot, by the nature of his position, receive a paid vacation or have his route automatically protected if he does take a vacation; he receives no protection from the union's seniority provisions. On the other hand, membership in the union safeguards his source of supply, inasmuch as organized dealers and inside workers are bound by the union agreement to service only union vendors. Nonunion dealers supplying nonunion vendors have found certain outlets of distribution—principally the large stores—reluctant to handle their product, and have found it expedient to come to terms with the union.

The unionization of vendors,[81] being ineffectual insofar as standardizing income, hours, and conditions of employment is concerned, has done only a little to lessen the conflict between the driver and the vendor. The organization of vendors by the union, however, is a relatively recent development and it is perhaps too soon to determine the exact function of the union with regard to vendors.

Income of Drivers

The total income of drivers consists, in general, of a base wage plus commissions. Wages of the 168 drivers interviewed in the survey amounted to 87.6 percent of their total weekly income of $9,082 and commissions represented 12.4 percent of their total income. Certain necessary expenditures, however, must be deducted from total income to arrive at a net earnings figure. These expenditures during the period studied represented 3.5 percent of the total income of the drivers. (Table 16.)

Methods of wage payments.—The traditional method of wage payments to outside wage earners in the Chicago milk industry is on a weekly basis but commissions are usually paid once a month. Over-

[80] The portion of the union contract with distributors applying to the vendor provides only that "processor agrees to service only vendors in good standing with the union or those presenting an O. K. card signed by the secretary-treasurer signifying intention to join."

[81] The legality of organizing vendors has been open to question. Cf. Consent Decree, *United States of America* v. *The Borden Co. et al.* The decree did not prevent the unionization of vendors but stated (p. 43) "it is not intended that this provision shall be construed to be an admission by any of the parties hereto or a finding by the court that the unionization of vendors is lawful or unlawful."

time pay is very rare and is not provided for in the union contract except in the case of workers who work an extra day during the week. Such workers receive straight time pay for the extra day's work.

Of the 36 firms scheduled in the survey, 28 employed drivers [82] for distribution, 11 of these using drivers exclusively. The Milk Wagon Drivers' Union, Local 753, had identical union agreements with 25 of the firms employing drivers and one other plant paid the union scale of wages. Thus, an overwhelming proportion of the drivers studied earned the standard base wage of $48 per week.

Table 14 reveals that all of the largest commissions were earned by drivers delivering exclusively to stores; these averaged $36.21. Drivers making part or all of their deliveries to homes averaged only a little over $4 per week.

TABLE 14.—*Distribution of 157 Chicago milk-wagon drivers, by average weekly commission and type of route, winter 1941–42*

Average weekly commission	Type of route: All routes		Home stops only		Store stops only		Combination home and store stops	
	Number of drivers	Percentage	Number of drivers	Percentage	Number of drivers	Percentage	Number of drivers	Percentage
None received	8	5.1					8	6.3
$0.01 and under $1	23	14.6	2	13.3			21	16.3
$1 and under $2	19	12.1	2	13.3			17	13.3
$2 and under $3	13	8.3	3	20.1			10	7.8
$3 and under $4	20	12.7	2	13.3			18	14.1
$4 and under $5	21	13.4	2	13.3			19	14.8
$5 and under $6	11	7.0	1	6.7			10	7.8
$6 and under $8	7	4.5	2	13.3			5	3.9
$8 and under $10	8	5.1					8	6.3
$10 and under $12	5	3.2					5	3.9
$12 and under $14	3	1.9	1	6.7			2	1.6
$14 and over	19	12.1			14	100.0	5	3.9
Total	157	100.0	15	100.0	14	100.0	128	100.0
Average weekly commission [1]	$7.15		$4.04		$36.21		$4.34	

[1] Based on all drivers.

Weekly commissions earned by drivers.—"Gross commissions," the gross amounts in addition to base wages which were paid for deliveries in excess of the minimum, were obtained from the firms scheduled for 848 drivers. All commissions were reported for a full month (September or October 1941) but these have been converted to a weekly average by the Bureau. An attempt was made to eliminate noncommission drivers from the tabulations and it is believed that all of the 848 were eligible for a commission if they could earn it. The number and size of commissions actually earned are indicated in table 15.

It will be noted that the commissions ranged from none at all to over $46, but that more than half of all the drivers (52.8 percent) earned less than $3 per week during the period of the survey. The average commission was $7.06. Approximately 10 percent of the

[82] The remaining eight firms distributed their milk through vendors.

drivers earned $22 or more, while 6.5 percent were reported as earning no commissions. Presumably most of the drivers earning very large commissions were routemen selling to stores.

TABLE 15.—*Distribution of 848 Chicago milk-wagon drivers, by average weekly commission and size of establishment, September and October 1941*

Average weekly commission	All establishments		Establishments having outside personnel of—							
			Under 20 persons		20 to 100 persons		100 to 300 persons		300 or more persons	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
None received	55	6.5	22	53.8	7	8.9	5	4.9	21	3.4
$0.01 and under $1	164	19.4	------	------	2	2.5	9	8.8	153	24.3
$1 and under $2	122	14.4	1	2.4	4	5.1	6	5.9	111	17.6
$2 and under $3	106	12.5	1	2.4	5	6.3	6	5.9	94	15.0
$3 and under $4	74	8.7	3	7.3	3	3.8	8	7.8	60	9.6
$4 and under $5	48	5.7	2	4.9	4	5.1	7	7.0	35	5.6
$5 and under $6	43	5.1	3	7.3	8	10.1	9	8.8	23	3.7
$6 and under $8	46	5.4	4	9.8	7	8.9	9	8.8	26	4.2
$8 and under $10	39	4.6	1	2.4	8	10.1	8	7.8	22	3.5
$10 and under $12	23	2.7	3	7.3	7	8.9	6	5.9	7	1.1
$12 and under $14	19	2.2	1	2.4	11	13.8	2	2.0	5	.8
$14 and under $18	13	1.5	------	------	6	7.6	4	3.9	3	.5
$18 and under $22	8	.9	------	------	2	2.5	3	2.9	3	.5
$22 and under $26	16	1.9	------	------	1	1.3	3	2.9	12	1.9
$26 and under $30	13	1.5	------	------	------	------	5	4.9	8	1.3
$30 and under $38	17	2.0	------	------	------	------	6	5.9	11	1.8
$38 and under $46	28	3.3	------	------	3	3.8	4	3.9	21	3.4
$46 and over	14	1.7	------	------	1	1.3	2	2.0	11	1.8
Total	848	100.0	41	100.0	79	100.0	102	100.0	626	100.0
Average weekly commission [1]	$7.06		$2.96		$9.71		$11.50		$6.27	

[1] Based on all drivers.

Size of establishment measured by the number of outside personnel had a significant influence on the amounts the drivers earned in commissions. Of the 41 drivers employed in plants with less than 20 outside workers, more than half were reported as earning no commissions, while the corresponding proportion for the largest firms was only 3.4 percent. Average commissions also tended to increase with size of firm, although the average for the largest firms, due to the concentration of commissions within the lower ranges, was lower than that for medium-sized concerns.

Information on gross commissions was also obtained from the 168 drivers interviewed in the Bureau survey. Drivers who delivered relief milk only and a few drivers who worked for firms reported as paying no commissions were excluded, leaving 157 drivers presumed to be eligible for commissions. Only 5.1 percent of these reported earning no commissions for the week surveyed and all of these operated combination routes. Commissions ranged to over $14, with 40.1 percent of all drivers receiving less than $3 and 12.1 percent receiving $14 or more. The average commission was $7.15, very nearly the same as the average obtained from plant records.

Expenditures of drivers.—Business expenditures of drivers during the period surveyed included charges by the company for loss or breakage of bottles or for stolen milk, losses due to selling milk below the company's established price, or to paying the sales tax [83] for the consumer, bad debts resulting from carrying customers beyond the credit period set by the company, license fees, and extra helpers' wages. (Table 16.)

TABLE 16.—*Consolidated weekly income and expenditures of 168 Chicago milk-wagon drivers during one week, winter 1941–42*

Item	Weekly income and expenditures	Ratio per $100 of total income
Total income	$9,082.49	100.00
Wages	7,959.50	87.64
Commissions	1,122.99	12.36
Total operating expenses	320.59	3.53
Company charges	31.28	.34
Loss on sales	121.64	1.34
Sales tax	50.20	.55
Equipment and refund to stores	11.68	.13
License fees	10.47	.12
Bad debts	53.57	.59
Helpers' wages	41.75	.46
Net income	$8,761.90	96.47
Number of drivers	168	
Average net income	$52.15	

The principal deductions from drivers' total income resulted from the effort of drivers to retain their customers. To meet the competition of other drivers and of vendors, some drivers allow customers to have milk at less than the price established by the distributor; or they may continue to serve customers after the company has ordered delivery stopped. Nearly 2 percent (1.9) of drivers' total income was dissipated by selling below the established price or by paying the sales tax for customers and a further 0.6 of 1 percent was lost due to bad debts. Five drivers donated equipment—such as refrigerators or signs—or made cash refunds to stores, as a means of retaining the stores' patronage.

Wages of helpers amounted to 0.5 of 1 percent of total income,[84] while only 0.3 of 1 percent of the total income of drivers was for charges by the company.

Expenditures reported by individual drivers during the week surveyed ranged from none at all to $12 or more. Over half of the drivers (52.2 percent) had expenditures of less than 60 cents, with one-fifth reporting no expenditures during the week. The average weekly expenditure of all drivers interviewed was $1.91. (Table 17.)

Net weekly income of drivers.—The average net income of all drivers interviewed in the Bureau's survey was approximately $52 a week. As was to be expected, this average was slightly lower than the average of the 848 drivers taken from plant records, since earnings from plant records did not include deductions of necessary expenditures of drivers except those for company charges.[85] Nearly 70 per-

[83] In Chicago there is a 2-percent sales tax on all retail sales.
[84] Under the union contract, employers cannot "employ helpers on wagons or trucks to avoid the payment of a routeman's scale of wages."
[85] See section on Expenditures of Drivers and table 16.

cent (69.5) of all drivers earned from $45 to $55, less than 10 percent earning more than $65 and only 5.4 percent earning less than $40. (For a distribution of drivers by classified net incomes see table 24 and chart 4.)

TABLE 17.—*Distribution of 168 Chicago milk-wagon drivers, by weekly operating expenditures, winter 1941–42*

Weekly expenditure	Number of drivers	Percentage	Weekly expenditure	Number of drivers	Percentage
None	34	20.1	$5.00 and under $6.00	4	2.4
$0.01 and under $0.20	32	19.0	$6.00 and under $8.00	5	3.0
$0.20 and under $0.40	14	8.3	$8.00 and under $10.00	2	1.2
$0.40 and under $0.60	8	4.8	$10.00 and under $12.00	5	3.0
$0.60 and under $0.80	11	6.5	$12.00 and over	5	3.0
$0.80 and under $1.00	9	5.4	Total	168	100.0
$1.00 and under $2.00	19	11.3			
$2.00 and under $3.00	7	4.2	Average weekly expenditure per driver [1]	$1.91	
$3.00 and under $4.00	7	4.2			
$4.00 and under $5.00	6	3.6			

[1] Based on all drivers.

Drivers who operated routes with home stops only earned from $43 to $58 a week, the entire group of 17 averaging $50 a week. On mixed routes (those serving both homes and stores) earnings averaged only slightly less ($49.28); three-fourths (75.1 percent) of the drivers who served mixed routes earned from $45 to $55, while none earned more than $70 a week. Drivers delivering exclusively to stores, however, averaged $81 per week, with all except 1 of them (14 in number) earning $65 or more during the week surveyed. One earned more than $100.

Annual earnings of drivers, 1940.—Annual earnings, rather than hourly, daily, or weekly wages, are most important in determining the standard of living of workers. Annual earnings [86] of outside employees for the calendar year 1940 were obtained from the pay-roll records of the 26 firms included in the survey.[87] They include wages and commissions, less charges made against the employee by the company, but do not take into account certain necessary expenditures of the type listed in table 16. Only 815 drivers and 153 reliefmen employed by the 26 distributing firms are included in the Bureau's tabulations of annual earnings, but these are believed to be representative of the permanent and regularly-employed workers in the industry.

The absence of marked seasonality in the fluid-milk industry permits a fairly steady flow of work to milk-wagon drivers. While the period of time worked by the 815 drivers ranged from 1 to 52 weeks, only 6.4 percent of them worked less than 39 weeks in 1940. (Table 18.) The cases of relatively short employment periods were usually due to sickness, accidents, shifting from one firm to another or similar factors.[88] Nearly three-fourths (72.6 percent) of all drivers worked

[86] Annual-earnings data are for work with the distributors by whom the worker was employed at the time of the survey. They do not include earnings received from more than one employer.

[87] Annual earnings for 1941 were not available at the time field work was done for the present study. Two of the 28 firms employing drivers did not report annual earnings.

[88] The stoppage previously mentioned, lasting for 8 days during 1940, affected the number of weeks worked and the earnings of many of the workers in the plants under union contract.

from 49 to 51 weeks (inclusive) in 1940 and 9.9 percent worked the full 52 weeks.

Annual earnings of drivers ranged from under $500 to over $5,000, but nearly two-thirds (66.0 percent) of them earned from $2,250 to $2,750. Only about 3 percent (2.8) of the drivers earned less than $1,000 and less than 3 percent (2.6) earned $5,000 or more. The average amount earned by all drivers during 1940 was $2,640.

Reliefmen, who also enjoyed fairly regular employment, averaged $2,480 during 1940. (Table 19.)

TABLE 18.—*Distribution of 815 Chicago milk-wagon drivers, by weeks worked and annual earnings, 1940*

Number of weeks worked	Total	Percentage	Workers whose annual earnings were—												
			$1 and under $500	$500 and under $1,000	$1,000 and under $1,500	$1,500 and under $2,000	$2,000 and under $2,250	$2,250 and under $2,500	$2,500 and under $2,750	$2,750 and under $3,000	$3,000 and under $3,500	$3,500 and under $4,000	$4,000 and under $4,500	$4,500 and under $5,000	$5,000 and over
1 and under 39 weeks	52	6.4	8	13	14	15	1	----	----	----	1	----	----	----	----
39 and under 49 weeks	74	9.1	----	----	1	8	25	23	7	----	----	3	4	2	1
49 weeks	187	22.9	----	----	----	1	3	97	56	12	2	2	4	5	5
50 weeks	111	13.6	----	----	----	----	1	45	31	12	5	4	3	4	6
51 weeks	294	36.1	----	----	----	----	1	87	122	30	19	4	10	13	8
52 weeks	81	9.9	----	2	4	8	5	21	34	4	----	----	2	----	1
Not reported	16	2.0	----	----	1	----	1	2	12	----	----	----	----	----	----
Total	815	100.0	8	15	20	32	37	275	262	58	27	13	23	24	21
Percentage	------	------	1.0	1.8	2.5	3.9	4.5	33.8	32.2	7.1	3.3	1.6	2.8	2.9	2.6

TABLE 19.—*Average annual earnings of 815 drivers and 153 reliefmen in Chicago, by number of weeks worked, 1940*

Number of weeks worked	All workers			Drivers			Reliefmen		
	Number of persons	Percentage of total	Average annual earnings	Number of persons	Percentage of total	Average annual earnings	Number of persons	Percentage of total	Average annual earnings
1 and under 39 weeks	56	5.8	$1,158	52	6.4	$1,171	4	2.6	$978
39 and under 49 weeks	84	8.7	2,478	74	9.1	2,517	10	6.5	2,189
49 weeks	222	22.9	2,675	187	22.9	2,705	35	22.9	2,514
50 weeks	126	13.0	2,856	111	13.6	2,899	15	9.8	2,539
51 weeks	369	38.1	2,798	294	36.1	2,850	75	49.0	2,593
52 weeks	94	9.7	2,432	81	9.9	2,446	13	8.5	2,348
Not reported	17	1.8	2,527	16	2.0	2,521	1	.7	(1)
Total	968	100.0	2,614	815	100.0	2,640	153	100.0	2,480

1 Too few workers to justify computation of an average.

Influence of size of establishment on annual earnings.—Size of plant, as determined by the number of outside workers, had some influence on annual earnings. Drivers and reliefmen in the medium-sized plants (with outside personnel of 20 to 100 and 100 to under 300) earned more on the average than comparable workers in the smallest or the largest plants. The lowest annual earnings, averaging $1,940 during 1940, were reported by drivers and reliefmen in the smallest plants (having less than 20 outside workers) and the highest annual earnings, averaging $2,953, were reported by the group of medium-sized plants employing 100 but less than 300 outside workers. (Table 20.)

TABLE 20.—*Average annual earnings of 968 drivers and reliefmen in Chicago, by number of weeks worked and size of establishment, 1940*

Number of weeks worked	Establishments having outside personnel of—							
	Under 20 persons		20 and under 100 persons		100 and under 300 persons		300 or more persons	
	Percentage of total	Average annual earnings	Percentage of total	Average annual earnings	Percentage of total	Average annual earnings	Percentage of total	Average annual earnings
1 and under 39 weeks	17.3	$903	4.9	$815	3.6	$1,235	5.3	$1,254
39 and under 49 weeks	1.9	(1)	4.9	2,320	6.0	2,526	10.0	2,501
49 weeks	1.9	(1)	14.6	2,756	1.2	(1)	28.1	2,672
50 weeks	17.3	2,842	5.8	2,756	9.6	2,938	14.1	2,857
51 weeks	1.9	(1)	50.4	2,868	79.6	3,071	34.3	2,712
52 weeks	59.7	1,966	2.9	2,329			8.2	2,678
Not reported			16.5	2,527				
Total	100.0	1,940	100.0	2,647	100.0	2,953	100.0	2,619
Number of workers	52		103		83		730	

1 Too few workers to justify computation of an average.

Income of Vendors

Vendors' earnings can only be estimated in terms of their gross income from sales, less expenses. If the vendor's costs of doing business are subtracted from his sales and other income, the residual will represent the amount he receives for his services as a deliverer of milk and as enterpriser.

Only 175 vendors (operating 183 routes) reported complete information on sales, commissions, and operating expenses, and the gross income of these 175 during the week covered was $55,904. Total costs of all vendors for the week surveyed represented 85.6 percent of their gross income, leaving a net income of $8,074, or an average income of approximately $46. (Table 21.)

Investment of vendors.—Vendors' investments are substantial but not greater than those required by many other small businessmen. The primary investment is for a truck. Some vendors, however, have a fairly large additional investment in routes, purchased either from another vendor or from the firm whose milk they distribute. The distributor financed the purchase of only 16 percent of all trucks used by vendors included in the Bureau's survey.

Prices paid for trucks by vendors included in the survey ranged from $25 to $4,100, the average price being $805. These trucks were from 1 to 20 years old and varied in size from half-ton to 5 tons. The average age of all trucks, regardless of size, owned by vendors interviewed was 4 years. (Table 22.)

Less than one-fourth (22.1 percent) of the routes owned by vendors had been purchased either from the distributor or another vendor while over half of the routes (58.4 percent) had been developed by the vendors themselves. In the remaining cases (19.5 percent), routes were either secured from relatives, friends, or the company at no cost to the vendor or the source was not reported. Information was obtained from vendors on the cost of 37 routes which had been purchased. Nearly two-thirds of these routes (64.9 percent) were purchased from the distributor and the remainder from other vendors, the price paid varying from $75 to more than $2,000. More than half of them (51.3 percent) cost less than $1,000 and 27.1 percent of them cost $2,000 or more. (Table 23.)

TABLE 21.—*Consolidated income and expenditures of 175 Chicago milk vendors during 1 week, winter 1941–42*

Item	Weekly income and expenditures	Ratio per $100 of total income
Total income	$55,903.99	100.00
Sales	55,802.89	99.82
Other income—commissions	101.10	.18
Cost of dairy products	43,083.60	77.07
Gross operating profit	12,820.39	22.93
Operating expenses:		
Delivery expenses	3,940.83	7.05
Operation and maintenance of trucks	2,711.42	4.85
Gas and oil	1,327.45	2.39
Truck repairs	442.61	.79
Insurance	231.59	.41
Tires and tubes	130.43	.23
Washing and greasing	63.95	.11
Garage	108.24	.19
Depreciation	401.27	.72
Miscellaneous	5.88	.01
Wages paid (including insurance)	1,229.41	2.20
Drivers and reliefmen	482.50	.86
Helpers	717.24	1.29
Extra help	29.67	.05
Selling expenses	386.47	.69
Sales tax absorbed	129.44	.23
Bad debts	216.62	.39
Equipment and refunds to customers	32.24	.06
Miscellaneous	8.17	.01
Other expenses	419.49	.75
Ice	20.92	.04
Bottle cost	202.62	.36
License fees	187.14	.33
Sundry expenses	8.81	.02
Net income	$8,073.60	14.44
Number of vendors	175	
Average net income	$46.13	

TABLE 22.—*Average age and average price paid for trucks used by milk vendors in Chicago, winter 1941–42*

Size of truck	Number of trucks	Average age (years)	Average price paid	High price	Low price
½ ton	76	3.8	$628	$1,200	$50
¾ ton	35	3.9	662	1,475	75
1 ton	50	4.5	951	3,300	25
1½ tons	17	4.4	1,060	1,886	100
2 tons and over	5	3.8	2,160	4,100	1,100
Total	183	4.0	805		

TABLE 23.—*Distribution of 37 routes purchased by Chicago milk vendors, by cost of route*

Cost of route	Number	Percentage
Under $250	5	13.5
$250 and under $500	8	21.6
$500 and under $1,000	6	16.2
$1,000 and under $1,500	5	13.5
$1,500 and under $2,000	3	8.1
$2,000 and over	10	27.1
Total	37	100.0

Costs of vendors.—Vendors' operating costs included the cost of milk; bottle costs; the operation, maintenance, and depreciation of trucks; wages and insurance of drivers, helpers, reliefmen, and extra help; and other expenses for stolen or spoiled milk, bad debts, and such items.

By far the largest current expenditure of vendors consisted of the cost of products purchased, amounting to more than three-fourths (77.1 percent) of the total vendor income. The next largest item in the vendors' cost (4.9 percent) was for the operation and maintenance of trucks. The wages of helpers and reliefmen, including social insurance, amounted to 2.2 percent of the vendors' total income. A negligible part of this was for social insurance since the great majority (97.1 percent) of vendors carried no insurance for their employees.

Although the cost of his truck is usually a vendor's major investment, depreciation was not an important item among the vendors reporting, since it amounted to less than 1 percent of total income. Straight-line depreciation was computed by the Bureau on the basis of the price paid by vendor, using 8 years as average length of life of a truck. The Bureau of Internal Revenue estimates the useful lives of "auto trucks and delivery wagons, gasoline and electric" at from 4 to 8 years in the dairy-products industry.[89] For those few trucks (14 in all) that were more than 8 years old in 1941, useful service was arbitrarily assumed to end at the close of that year.

Net weekly income of vendors.—There is a strong probability that drivers' net earnings are less affected by slight changes in consumption than the incomes of vendors. This is due, in part, to the base wage below which drivers' earnings cannot easily fall. In addition, vendors' incomes probably tend to fluctuate more closely with total sales than do earnings of drivers. Although the milk industry cannot be considered a seasonal one, consumption, in general, tends to be somewhat lower during the winter months, the period in which the Bureau's survey was made. For this reason, vendors' incomes as shown in this study may be slightly below their usual level.

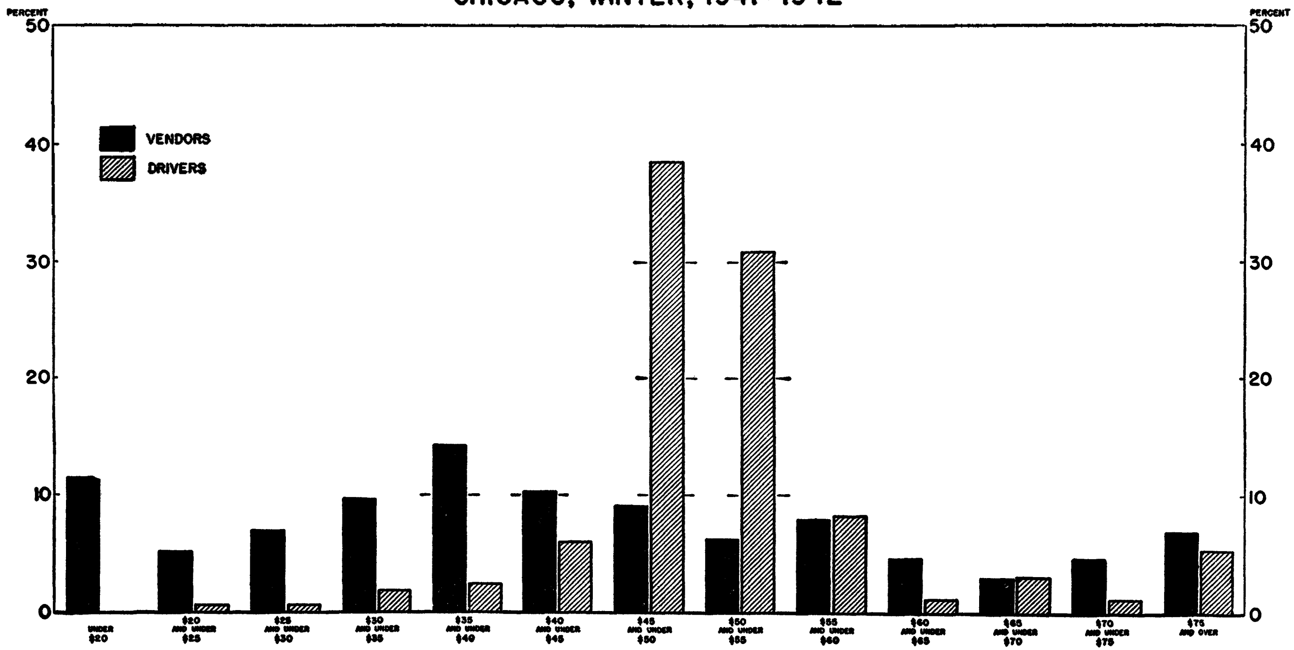
The average weekly income of the 175 vendors (including 8 master vendors) was $46,[90] and the average for vendors operating only one route was $44 a week. Nearly one-half (47.3 percent) of all vendors had incomes of $40 or less for the week surveyed, with a significant proportion (23.4 percent) below $30 a week, and 11.4 percent making

[89] U. S. Treasury, Bureau of Internal Revenue, Bulletin "F" (revised January 1942), Income Tax Depreciation and Obsolescence-Estimated Useful Lives and Depreciation Rates, p. 34.

[90] The eight master vendors included in the sample had an average income of $91.05 for the week surveyed.

CHART 4

PERCENTAGE DISTRIBUTION OF VENDORS AND DRIVERS BY NET WEEKLY INCOME
CHICAGO, WINTER, 1941-1942



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BUREAU OF LABOR STATISTICS

less than $20 a week. There were, however, 14.4 percent of vendors with weekly incomes of $65 or more. (Table 24 and chart 4.)

Vendors delivering exclusively to homes had an average weekly income of $39, with one-third of them making less than $30 and one-fourth making from $55 to $70 a week. All of the 15 vendors operating store routes only had weekly incomes of more than $50, except for 2 who made less than $20 during the week surveyed. Vendors operating combination routes had an average weekly income of $43, with more than half of them (50.7 percent) making less than $40 a week and 22.7 percent making less than $30 a week. Fully 10.2 percent of the vendors owning combination routes, however, had incomes of more than $70 during the week surveyed.

Comparison of Incomes of Drivers and Vendors

The income level of the vendors in the survey was, on the average, lower than that of drivers. Approximately 90 percent (88.6) of the drivers earned $45 or more a week, while nearly one-half (47.3 percent) of the vendors had weekly incomes below $40. None of the drivers earned less than $20 a week, but 11.4 percent of the vendors had incomes that low. (Chart 4.) A larger proportion of vendors (14.4 percent) than of drivers (9.6 percent) had incomes of $65 or more, but the inclusion of master vendors (those owning more than one route) influenced this income group.

TABLE 24.—*Percentage distribution of net weekly income of Chicago milk-wagon drivers and vendors, by type of route, winter 1941–42*

Net weekly income	Drivers				Vendors			
	Type of route				Type of route			
	All routes	Home stops only	Store stops only	Combination home and store stops	All routes	Home stops only	Store stops only	Combination home and store stops
Under $20					11.4	12.5	13.3	11.0
$20 and under $25	0.6			0.7	5.1	8.3		5.1
$25 and under $30	.6			.7	6.9	12.5		6.6
$30 and under $35	1.8			2.2	9.7	8.3		11.0
$35 and under $40	2.4			2.9	14.2	8.3		17.0
$40 and under $45	6.0	5.9		6.6	10.3	8.3		11.9
$45 and under $50	38.6	47.0	6.7	41.3	9.1	16.8		8.9
$50 and under $55	30.9	35.3		33.8	6.3		13.3	6.6
$55 and under $60	8.3	11.8		8.8	8.0	12.5	13.3	6.6
$60 and under $65	1.2			1.5	4.6	8.3		4.4
$65 and under $70	3.0		20.0	1.5	2.9	4.2	20.0	.7
$70 and under $75	1.2		13.3		4.6		6.7	5.1
$75 and over	5.4		60.0		6.9		33.4	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	168	17	15	136	[1] 175	24	15	136
Average weekly income	$52.15	$50.02	$80.59	$49.28	$46.13	$38.98	$84.86	$43.13
Percentage under $48	16.1	17.6		17.6	63.4	70.8	13.3	67.6

[1] Excludes 5 vendors for whom complete information was not reported. Of these, 1 had home stops only, 1 had store stops only, and 3 ran combination routes.

The base rate of drivers under the union contract in Chicago is $48 a week and by and large this can be considered as the prevailing wage of drivers in that market. Only 16.1 percent of the drivers received less than that amount during the week surveyed, while nearly two-thirds (63.4 percent) of the vendors interviewed had weekly incomes of less than $48. More than two-thirds (67.6 percent) of the vendors operating combination routes received incomes below the $48 level. Over 70 percent of the vendors with door stops only and 13.3 percent of those with store stops only had incomes below $48 (table 24). If the union's base wage be allowed as a fair remuneration for the vendor's own labor, it is apparent that most vendors operated their business at a loss.

The relatively low income level of vendors covered in the survey would appear to justify the claim of the union that vendors constitute a threat to the wage standards of drivers in the Chicago market. To what extent the organization of vendors by the union can offset any of the ill effects of the vendor system on drivers remains to be seen. It appears doubtful, however, whether the union can establish an effective lower limit on the vendors' income or an upper limit on their hours of work.