

## Chapter I.—FOOD STORES AND THEIR OPERATION

(For restaurant section see p. 22)

**Description of the business.**—Food stores described in this report are stores selling food to the consumer, at retail, as their principal activity. They may and usually do sell other commodities than food but in lesser amount. Other stores sell food, but unless food is their principal commodity they are not classified as food stores.

**Number of food stores.**—There are 18 kinds of stores which are included in the food group. Of these by far the greatest in number are *grocery stores* (without fresh meats) of which there are 191,876. There are 115,549 combination stores (groceries and meats) of which 91,888 are grocery stores with meats, and 23,661 are meat markets with groceries. The next most important classification in order of stores but not in the order of sales is that of *confectionary stores* of which there are 60,607 in addition to 2,658 specialized candy stores or nut stores.

*Meat markets* (without groceries) number 43,788. There are 22,904 *fruit and vegetable markets*, many of which are operated as stands in general food markets or public markets.

The kinds of business in the food group are shown in the following summary of food stores:

KIND OF BUSINESS <sup>1</sup>	Number of stores	KIND OF BUSINESS <sup>1</sup>	Number of stores
Total.....	481,891	Delicatessen stores.....	11,168
Grocery stores (without meats).....	191,876	Fish markets—sea foods.....	6,077
Combination stores:		Dairy products stores (including ice cream).....	4,488
Grocery stores (with meats).....	91,888	Milk dealers.....	3,990
Meat markets (with groceries).....	23,661	Egg and poultry dealers.....	3,258
Confectionary stores.....	60,607	Candy stores—nut stores.....	2,658
Meat markets (without groceries).....	43,788	Coffee, tea, spice dealers.....	1,286
Fruit and vegetable markets.....	22,904	Farm products stores.....	674
Bakeries—bakery food stores (except man- ufacturing bakeries).....	11,003	General food stores (miscellaneous).....	686
		Bottled water and beverage dealers.....	621
		Caterers.....	110

<sup>1</sup> Definitions of the several kinds-of-business designations referred to in the food group (ch. 1) and the restaurant group (ch. 2) may be found in the appendix (pp. 90-92).

In addition to these stores of the food group there are four kinds of stores in other groups which are large distributors of food. Country general stores all sell food, and there are 104,089 such stores. There are 460 department stores with food departments, 2,182 general merchandise stores selling food and 7,127 feed-grocery stores. The total sales of food stores in 1929 were about \$11,000,000,000. There are many other stores which sell food in relatively small amounts, but whose aggregate sales approximate \$2,080,000,000. These are described later in this report.

**Sales of food stores.**—In the order of relative sales, combination stores lead with total sales of \$3,903,662,000. *Grocery stores* (without fresh meats) show total sales of \$3,449,129,000, and *meat markets* are next in order with sales of \$1,253,259,000.

The 18 kinds of business in the food group are as follows:

KIND OF BUSINESS <sup>1</sup>	Total net sales (1929) <sup>2</sup>	Percent of total sales of food group
Total, food group only.....	\$ 810, 966, 922, 407	100. 0
Combination stores.....	3, 903, 662, 067	35. 6
Grocery stores with meats.....	3, 025, 304, 722	27. 6
Meat markets with groceries.....	878, 357, 345	8. 0
Grocery stores (without meats).....	3, 449, 129, 144	31. 4
Meat markets (without groceries).....	1, 253, 259, 544	11. 4
Milk dealers.....	690, 496, 509	6. 3
Confectionery stores (candy and fountain).....	536, 636, 045	4. 9
Fruit stores and vegetable markets.....	308, 379, 359	2. 8
Delicatessen stores.....	194, 820, 089	1. 8
Bakeries and caterers.....	201, 092, 782	1. 8
Bakeries.....	193, 563, 093	1. 7
Caterers.....	7, 529, 689	0. 1
Dairy products stores.....	165, 965, 016	1. 5
Fish markets—sea foods.....	83, 698, 479	0. 8
Egg and poultry dealers.....	70, 858, 063	0. 7
Coffee, tea, spice dealers.....	44, 938, 342	0. 4
Candy stores—nut stores.....	34, 913, 329	0. 3
Bottled water and beverage dealers.....	11, 533, 231	0. 1
Farm-products stores.....	8, 942, 183	0. 1
General food stores (miscellaneous).....	8, 598, 165	0. 1

<sup>1</sup> Definitions of the several kinds-of-business designations referred to in the food group (ch. 1) and the restaurant group (ch. 2) may be found in the appendix (pp. 90-92).

<sup>2</sup> Includes food and nonfood sales. For food sales of these and other stores see table 26.

<sup>3</sup> *Subsequent volume of sales.*—The Progressive Grocer, trade paper in the food field, estimates that independent grocers, combination and general store food and grocery sales in 1932 totaled \$4,609,000,000 as compared with \$0,581,000,000 in 1929. Food and grocery sales in 1932 of meat markets, fruit and vegetable stores, bakeries, confectionery, and other independent retail food stores are estimated at an additional \$1,813,000,000 compared with \$2,675,000,000 in 1929. The estimated total of food and grocery sales of all retail independent food stores in 1932 (sum of above) is \$6,422,000,000 compared with \$9,256,000,000 in 1929.

Chain grocery and combination store sales of 1932 are estimated by the Progressive Grocer as \$2,303,000,000 as compared with \$2,920,000,000 in 1929. Chain meat, bakery, confectionery, dairy, and miscellaneous chain sales account for an additional food and grocery volume in 1932 of \$467,000,000 as compared with \$625,000,000 in 1929. Total food and grocery sales of chain stores in 1932 were \$2,770,000,000 as compared with \$3,554,000,000 in 1929.

The estimated total of both chain and independent food and grocery sales in 1932 is \$9,192,000,000 compared with \$12,810,000,000 in 1929. The Department of Labor retail food price average index of 1932 was 84.8 percent lower than the average for 1929.

Combination stores, consisting of grocery stores selling fresh meats or meat markets selling a substantial proportion of groceries, report the largest volume of sales of any kind of business in the food group, even though they do not lead in the number of stores operated. There is some difference between combination stores which have developed from grocery stores, and combination stores which have developed from meat markets. The census report shows that the former are able to operate at slightly lower expense rate, and the proportion of meats and groceries in each is still influenced to some extent by the nature of the primary food field out of which they developed. However, for the purpose of this report and to avoid meaningless confusion they are frequently combined under the general description of combination stores.

Since grocery stores, combination stores, and meat markets constitute the principal food-store classifications, special attention is given in this report to these three outstanding kinds of business. Sections in less detail are devoted to dairy-products stores, fruits and vegetable markets, bakeries, and delicatessen stores.

In addition to the 18 kinds of stores listed in the food group (p. 4) the four other kinds of business in which large quantities of food are regularly sold, are treated herein in almost as much detail as if they were component parts of the food group. They are general stores, feed stores which sell groceries, general merchandise stores with food departments, and department stores with food departments. According to the best information available, the total food sales of these four kinds of stores alone is \$1,797,500,000. This does not include the sale of meals which would add another \$30,000,000.

**Operating expenses of food stores.**—Food stores, as a group, operate at an average expense rate of \$19.50 per \$100 of sales. This average, however, is not representative of the expense rate of two kinds of stores which make up the bulk of the food group, namely: Combination stores and grocery stores. The average operating ratio of combination stores is \$16.10 per \$100 of sales and that of grocery stores is \$17.36. Meat markets (without groceries) operate at an average expense ratio of \$19.61. The average for the group is affected by the higher expense of such stores as fruit and vegetable markets, confectionery stores, bakeries, and fish markets, and the high operating expense of milk dealers who constitute an important factor in the food field. However, the food group average of \$19.50 is about 25 percent lower than the average for all retail stores outside of the food group, which is \$26.34 per \$100 of sales.

In comparison with the food-group average of \$19.50, the expense ratio for country general stores is \$13.59; feed-grocery stores, \$12.13; general merchandise stores with food departments, \$16.17; and department stores with food departments, \$28.19. These latter four ratios are averages covering all kinds of commodities sold by such stores, and not merely the expenses of food departments. This subject is discussed more fully in later paragraphs.

Grocery stores and combination stores operate at almost the lowest expense ratio of all retail businesses. Food, shelter, and clothing constitute the three basic necessities. As a commercial commodity, food has many advantages over all other commodities in that it is in constant, predictable demand, its turnover rate is rapid, the whims of style or fashion are negligible or take place over a considerable period of time, and the public is educated to buy food with less customer-service than it demands with any other class of commodity. In a period when even such low-expense commodities as feed and farm supplies are requiring more and more servicing, better display, and more competitive selling, grocery stores are tending toward a further curtailment of service costs by attracting more consumers to the minimum-service or self-service stores, and teaching them that they can buy foods satisfactorily on the cash-and-carry basis. The nature of grocery commodities, particularly packaged items, lends itself to the self-service method of selling. The same is not true of most other commodities, either because of the nature of the goods, the danger of indiscriminate open display, the element of size and fitting, or the lack of technical knowledge of the goods on the part of the public, which must be supplied by salespeople.

In buying food, the public knows what it wants, influenced by satisfactory experience or by persuasive advertising, and actually there is little salesmanship required or exercised in the retailing of food, other than the promotional value of display. Whether real salesmanship would increase the consumption of specialties or improve the demand for highly seasonal foods in season is beside the point, in view of the fact that comparatively few grocery stores are so organized as to develop the selling capacity of their employees in any event. Sales effort in grocery stores is largely confined to advertising and display, except in the few so-called "quality stores" which provide full customer-service, necessarily at somewhat higher prices. Manufacturers cannot look to food retailers for salesmanship. Specialties must sell on their appearance and merits alone, or by actuating the consumer in advance by effective advertising.

The habit of stopping at a food store on the way home from a shopping trip, and carrying the purchases or having them delivered informally at a small extra cost to the purchaser, is becoming widespread and its convenience accounts to a large extent for the growth of the cash-carry grocery store and its resulting lower operating expenses. It is also an important consideration in planned marketing of food products.

**Employees and wages.**—Table 2 shows in detail, so it is unnecessary to discuss it here at length, that the stores of the food group in 1929 employed an average of 569,632 full-time employees, 153,775 part-time employees and the services of 468,301 active proprietor-owners. The total amount paid out in wages that year was \$767,207,000 to which must be added the wage value of proprietors' services in order to arrive at wage cost. Proprietors' services for this purpose are computed at the rate of wage paid, in the same kind of business, to the average full-time employee. It is the measure not of the proprietor's value to the business but of the clerk-value of his time.

In addition to any amounts withdrawn by proprietor-owners for their own use, the food stores of the country paid out in wages an average of \$14,753,988 per week, as shown below.

## PAY ROLL AND WAGE COST, FOOD STORES

KIND OF BUSINESS	Total annual pay roll	Wage cost (percent to sales)
Total.....	<sup>1</sup> \$790,628,267	11.88
Combination stores.....	254,263,477	10.00
Grocery stores with meats.....	192,604,127	9.78
Meat markets with groceries.....	61,759,350	10.74
Grocery stores (without meats).....	183,430,001	10.92
Meat markets (without groceries).....	84,893,203	12.00
Milk dealers.....	<sup>1</sup> 124,347,894	13.98
Confectionery stores (candy and fountain).....	41,358,924	13.52
Fruit stores and vegetable markets.....	20,583,348	15.62
Delicatessen stores.....	10,693,981	11.53
Bakeries and caterers.....	31,060,451	15.45
Bakeries.....	29,327,722	22.09
Caterers.....	1,732,729	24.36
Dairy products stores.....	13,582,048	11.52
Fish markets—sea foods.....	7,500,379	13.10
Egg and poultry dealers.....	3,919,756	10.64
Coffee, tea, spice dealers.....	7,437,642	19.24
Candy stores—nut stores.....	4,365,395	17.68
Bottled water and beverage dealers.....	2,598,401	29.11
Farm products stores.....	455,775	14.49
General food stores (miscellaneous).....	617,617	14.87
Average weekly pay roll.....	15,202,466	

<sup>1</sup> These figures include data for additional milk dealers whose sales are shown separately in table 1.

**Expenses by size of city.**—Analysis of expenses in towns, small cities, and the larger cities discloses several facts which have a bearing on operating as well as marketing problems. One is that the combination store is primarily a larger-city institution, the smaller places still using the separate grocery stores and separate meat markets to a much greater extent. Another is that both grocery stores and meat markets cost more to operate in places of less than 10,000 than they do in larger cities, whereas combination stores cost less. The exception to the general rule of decreasing expenses in the case of grocery stores and meat markets undoubtedly is influenced to a large extent by the fact that the place of these more or less specialized kind of stores is taken, in the small communities, by the general or so-called "country general stores". Cities of 10,000 to 30,000 population show the lowest average expense ratio for grocery stores as well as for meat markets.

It is a well-established principle in retail distribution that expense varies directly with the size of city, other factors being equal. This principle has been substantiated repeatedly throughout retail census reports. There is no reason to believe that it does not apply to food stores. The apparent explanation for the higher expenses in the smaller places is that the cash-carry principle is less popular proportionately, most of the stores in the smaller places continuing to provide a higher grade of selling service, telephone orders, charge accounts, and delivery. The same does not apply to the newer kind of combination stores. In this connection it is well to keep in mind that small-town stores are not synonymous with small-size stores, there being about the same proportion of \$10,000-per-year stores or \$50,000-per-year stores in the smaller towns as in the larger cities.

The following comparison of operating ratios shows that combination stores bear out the principle that expense varies directly with the size of city, whereas grocery stores and meat markets in the smaller places entirely offset by increased service the expense advantage which otherwise would be theirs.

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FOOD RETAILING

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COMPARISON OF OPERATING EXPENSES BY SIZE OF CITY

KIND OF BUSINESS	OPERATING EXPENSES PER \$100 OF SALES			
	Average	Cities of more than 30,000	Cities of 10,000 to 30,000	Places of less than 10,000
Combination stores.....	\$16.10	\$16.63	\$15.62	\$15.37
Grocery stores (without meat).....	17.36	17.24	16.64	17.81
Meat markets (without groceries).....	19.61	19.73	18.96	19.60

**Stocks on hand and turn-over.**—The census reports show only the stock on hand at the end of the year 1929, and closing figures alone are not sufficient for the purpose of computing turn-over rates. The rate of stock turn, or turn-over, should indicate the number of times that a stock turned over during the year—the number of times that it came into stock as purchases and went out again as sales. To determine turn-over, therefore, it is necessary to put both factors on the same basis of *retail values* and to know the retail value of the *average* stock, not merely the cost value of the stock at the end of the year. The standard method for determining average stock is to add together the opening inventory for the year and the closing inventory at the end of each month (making 13 components) and dividing the sum by 13. This information is not available.

There is considerable value, however, in comparing the stock-sales ratios of the different kinds of food stores. Stock-sales ratio is merely an inadequate substitute for turnover figures, and is the ratio of cost stock at the end of the year to retail sales during the year. The ratio has no value or significance of itself, and becomes interesting only when it may be assumed that the closing stock is approximately the average stock (which is seldom true) and then only for limited comparison between stores in the same business field.

The following table compares sales, stocks, and stock-sales ratios for four kinds of food stores, subject to the limitations described above. For example, the average combination-store stock (at cost) is 5.7 percent of the year's sales, but in the larger cities it drops to 5.1 percent of sales.

KIND OF BUSINESS	Sales, year 1929	Stock at cost end of 1929	STOCK-SALES RATIOS, PERCENT			
			Average	Cities over 30,000	Cities 10,000-30,000	Places under 10,000
Combination stores.....	\$3,903,662,067	\$223,212,040	5.7	5.1	5.8	6.8
Grocery stores (no meats).....	3,449,129,144	261,019,370	7.6	6.8	7.5	8.8
Meat markets (including sea foods).....	1,336,958,023	26,105,330	1.9	1.6	2.1	2.9
Country general stores.....	2,670,744,006	646,265,480	21.2	19.5	22.0	21.1

SALES BY SIZE OF CITY

**Grocery stores.**—Of the nearly 200,000 grocery stores, 45 percent are located in cities of more than 30,000,<sup>1</sup> 11 percent in cities of 10,000 to 30,000,<sup>1</sup> and 44 percent in cities and places of less than 10,000<sup>1</sup> population. Sales, however, are not in the same proportion. The 45 percent of stores in the larger cities sell 52.8 percent of the total of all grocery stores; the 11 percent in cities of 10,000 to 30,000 sell 12.87 percent; and the 44 percent in places of less than 10,000 sell 34.33 percent. (For summary see table 3A.) These percentages vary greatly in the different States, as shown in detail in table 5. The same table also shows the proportion of grocery stores and their sales in each State in relation to the United States total.

**Meat markets.**—Of the nearly 50,000 meat markets, 63 percent are located in cities of more than 30,000; 8 percent in cities of 10,000 to 30,000; and 29 percent in cities and places of less than 10,000 population. Sales do not vary greatly from these same proportions. The 63 percent of stores in large cities do 67.43 percent of the business; the 8 percent in the smaller cities do 10.10 percent of the business; the 29 percent in places of less than 10,000 to 22.47 percent of the

<sup>1</sup> Proportion of population in each of these size-of-city groups is as follows: Cities of more than 30,000, 33.7 percent; 10,000 to 30,000, 8.9 percent; less than 10,000, 52.4 percent.

total business of meat markets. (For summary see table 3B.) Variations between States and the proportion of the total business done by markets in each State are shown in table 6.

**Combination stores.**—Cities of more than 30,000 population contain 52 percent of all the combination stores in the country and they do 54.78 percent of the total business of such stores; cities of 10,000 to 30,000 contain 14 percent of the stores and show 15.87 percent of the business; places of less than 10,000 contain 34 percent of the stores, whose sales aggregate 29.36 percent of the total business of all combination stores in the United States. (For summary see table 3C.) Table 7 shows the variations between States and the proportion of stores and sales in each State in relation to total stores and sales.

**Dairy products stores and milk dealers.**—As is to be expected in this kind of business, of which a substantial proportion represents milk dealers, 80.33 percent of the total business which can be classified by size of city is found to be in the larger cities of more than 30,000 population, handled by 65 percent of the dealers. Cities of 10,000 to 30,000 include 11 percent of the dealers and 8.38 percent of the sales; places of less than 10,000 contain 24 percent of the dealers, with 11.29 percent of the sales. Many dairy products stores and some milk dealers sell ice cream. Because of the nature of the business and the location of the premises, the field enumerators overlooked a number of the milk dealers, the omissions being caught in final review. Completed too late to be spread in detail throughout the published State reports, these additional milk-dealer sales totaled \$129,500,822 and are shown, by States, in table 8.

**Fruit and vegetable markets.**—About 80 percent of the fruit stores and vegetable markets are located in cities of more than 30,000 population and they do 77.92 percent of the total business; 7 percent are in cities of 10,000 to 30,000 population, with sales aggregating 10.37 percent of the United States total; 13 percent are in places of less than 10,000 and they do 11.71 percent of the total business. It is apparent that in this business the markets are substantially uniform in size in all three sizes of cities. Variations between States and the proportion of stores and sales in each State in relation to the United States totals are shown in detail in table 9.

**Delicatessen stores.**—Delicatessen stores are found mostly in the larger cities; 89 percent of them are in cities of more than 30,000 population and they do 89.58 percent of the business. Cities of 10,000 to 30,000 population contain 5 percent of the stores and show 5 percent of the sales; places of less than 10,000 contain 6 percent of the stores and they do 5.42 percent of the total business. Variations between States (some of which have no delicatessen stores at all) are shown in detail in table 10.

**Bakeries (including caterers).**—Of the 12,013 bakeries in the country, 57 percent are in cities of more than 30,000 population and they do 62.22 percent of the business; 10 percent are in cities of 10,000 to 30,000 population with 10.1 percent of the total sales; 33 percent are in places of less than 10,000 population and they do 27.68 percent of the total business. It should be understood that the retail census contains principally those so-called bakeries which are in fact bakery products stores, selling the products of manufacturing bakeries enumerated in the manufactures census, although the retail count also includes small bakeries of less than \$5,000 annual production (too small for the manufactures census) which sell their own products. A few caterers (110 in the entire country) are included in this classification. For details of the analysis by size of city and by States, see table 11.

### ANALYSIS BY SIZE OF BUSINESS

**Grocery stores.**—More than one half of all grocery stores (without meats) do an annual business of less than \$10,000, although the total sales of the 100,496 stores in that category aggregate only 10.65 percent of all grocery stores (without meats). At the other extreme of size there are 3,002 large grocery stores whose combined sales also aggregate 10.65 percent of all grocery store sales, all of whom do more than \$50,000 per year and 60 percent of whom do more than \$100,000 each.

Average sales of the nearly 200,000 grocery stores show nearly \$18,000 per store, but they may be separated nearly equally into two groups—those doing less than \$10,000 each and averaging \$3,654 per store, and those doing more than \$10,000 each and averaging \$33,726 per store.

The summary follows.

## GROCERY STORES (WITHOUT MEATS)

AMOUNT OF ANNUAL SALES	STORES		SALES		Average sales per store
	Number	Percent	Amount	Percent	
\$500,000 and over.....	22	0.01	\$19,724,000	0.57	\$896,545
\$300,000 to \$500,000.....	58	0.03	21,492,000	0.62	370,552
\$200,000 to \$300,000.....	139	0.07	32,563,000	0.94	234,266
\$100,000 to \$200,000.....	1,583	0.83	198,575,000	5.70	125,442
\$50,000 to \$100,000.....	15,196	7.92	984,550,000	28.55	64,790
\$30,000 to \$50,000.....	23,865	12.44	926,075,000	26.85	38,805
\$20,000 to \$30,000.....	18,290	9.53	445,933,000	12.93	24,381
\$10,000 to \$20,000.....	32,227	16.80	452,988,000	13.13	14,056
Total, upper group.....	91,380	47.63	3,081,006,000	89.35	33,726
Less than \$10,000 each.....	100,496	52.37	367,223,000	10.65	3,654
Total, all stores.....	191,876	100.00	3,449,129,000	100.00	17,976

**Meat markets.**—About one half of the meat markets do less than \$20,000 of business annually, this group averaging \$10,183 per market per year. The other half (48.69 percent), all of whom sell \$20,000 or more per year, average \$48,050 per store. There are 43,788 meat markets in all. The 21,321 which do \$20,000 or more of business annually account for 81.75 percent of the total business of all meat markets, while the 22,467 small markets account for only 18.25 percent.

The summary follows:

## MEAT MARKETS

AMOUNT OF ANNUAL SALES	STORES		SALES		Average sales per store
	Number	Percent	Amount	Percent	
\$500,000 and over.....	38	0.09	\$26,534,000	2.12	\$698,263
\$300,000 to \$500,000.....	92	0.21	33,822,000	2.70	367,630
\$200,000 to \$300,000.....	193	0.44	45,869,000	3.66	237,663
\$100,000 to \$200,000.....	1,178	2.69	155,106,000	12.38	131,669
\$50,000 to \$100,000.....	4,309	9.84	285,483,000	22.78	66,253
\$30,000 to \$50,000.....	7,601	17.13	284,289,000	22.68	37,900
\$20,000 to \$30,000.....	8,010	18.29	193,375,000	15.43	24,142
Total, upper group.....	21,321	48.69	1,024,478,000	81.75	48,050
Less than \$20,000 each.....	22,467	51.31	228,782,000	18.25	10,183
Total, all stores.....	43,788	100.00	1,253,260,000	100.00	28,621

**Fish markets.**—In this kind of business, because it includes the innumerable fish stands in public markets, more than 60 percent of the places do less than \$10,000 of business annually, and average \$4,080 per year. The remaining 2,372 markets of more than \$10,000 annual volume average \$23,916 each. The average for all fish markets, regardless of size, is \$13,773 of sales per year.

The summary follows.

### FISH MARKETS

AMOUNT OF ANNUAL SALES	STORES		SALES		Average sales per store
	Number	Percent	Amount	Percent	
\$300,000 and over.....	5	0.80	\$1,735,000	2.07	\$347,000
\$200,000 to \$300,000.....	9	.15	2,142,000	2.50	238,000
\$100,000 to \$200,000.....	72	1.19	9,650,000	11.54	134,111
\$50,000 to \$100,000.....	219	3.00	14,887,000	17.10	65,694
\$30,000 to \$50,000.....	342	5.03	12,669,000	15.14	37,044
\$20,000 to \$30,000.....	448	7.37	10,695,000	12.78	23,870
\$10,000 to \$20,000.....	1,277	21.02	17,302,000	20.67	13,649
Total, upper group.....	2,372	39.04	68,589,000	81.05	28,016
\$5,000 to \$10,000.....	1,416	23.30	9,854,000	11.77	6,959
Less than \$5,000 each.....	2,289	37.06	5,255,000	6.28	2,200
Total, all stores.....	6,077	100.00	83,698,000	100.00	13,773

**Combination stores.**—The average combination store does nearly twice as much business as that of the average grocery store and more than that of the average meat market. For the 115,549 combination stores, the average is \$33,784 of sales per year. Approximately one fourth of the stores do less than \$10,000 per year; 48 percent do less than \$20,000 per year, and 52 percent do more than \$20,000. The average annual sales of those doing less than \$20,000 is \$9,291 per year, while that of the stores doing more than \$20,000 is \$56,582 per year per store.

The summary follows.

### COMBINATION STORES (GROCERIES AND MEATS)

91,888 grocery stores with meats..... \$3,025,305,000  
23,661 meat markets with groceries..... 878,357,000

AMOUNT OF ANNUAL SALES	STORES		SALES		Average sales per store
	Number	Percent	Amount	Percent	
\$1,000,000 and over.....	45	0.04	\$83,021,000	2.12	\$1,844,011
\$500,000 to \$1,000,000.....	86	.07	58,198,000	1.49	676,721
\$300,000 to \$500,000.....	278	.24	103,700,000	2.66	373,022
\$200,000 to \$300,000.....	573	.50	133,971,000	3.43	233,806
\$100,000 to \$200,000.....	5,443	4.71	711,614,000	18.23	130,739
\$50,000 to \$100,000.....	16,216	14.03	1,111,542,000	28.48	68,546
\$30,000 to \$50,000.....	19,914	17.24	705,120,000	19.60	38,422
\$20,000 to \$30,000.....	17,280	14.96	418,903,000	10.73	24,232
Total, upper group.....	50,845	51.79	3,386,143,000	86.74	56,582
Less than \$20,000 each.....	55,704	48.21	517,519,000	13.26	9,201
Total, all stores.....	115,549	100.00	3,903,662,000	100.00	33,784

Combination stores may predominate in the sale of groceries, with meat secondary, or meat may dominate and groceries may be secondary. The census shows the two kinds separately in many tables. In the matter of size, the former average about \$33,000 while the latter average about \$37,000. Proportionately, there are many less very small stores in the latter classification. Only 18.32 percent of them do less than \$10,000 of business annually, whereas 28.05 percent of the former classification show sales of less than \$10,000. Otherwise, throughout the size-groups the proportions are about the same. In both kinds of stores the most numerous size-group is made up of those stores doing between \$10,000 and \$20,000 per year. For grocery-meat stores this group includes 21.84 percent of all stores and does 9.54 percent of the total business, while for meat-grocery stores the group includes 23.37 percent of the stores and does 9.21 percent of the total business.

POSITION INDEX OF THE VARIOUS FOOD STORES

Per capita sales are frequently misleading as an index of relative buying power of a community, because such a large part of a city's retail sales is made to the citizens of surrounding and nearby cities. The proportion of sales to the city's residents and to the residents of other places varies greatly between cities and even more between various kinds of business. If there is any proper use of per-capita sales as a guide it is in measuring food sales and filling-station sales. For all other kinds of merchandise it is varying misleading and meaningless.

A better index is the ratio of the sales of a given kind of store, or of a given commodity, to the total retail sales of the city or State. The percentage of this ratio, in a given State, to the ratio in the entire United States provides an index figure which expresses the relative position of that kind of store in that State. It is known as the *position index*.

POSITION INDEX

(Relative importance of the kind of store, in each State, in comparison with the importance of the store in the United States)

STATES	KIND OF BUSINESS						
	Grocery stores	Meat markets	Combination stores	Dairy products stores	Fruit and vegetable markets	Delicatessen stores	Bakeries
United States.....	7.02% =100	2.72% =100	7.05% =100	1.88% =100	0.63% =100	0.40% =100	0.42% =100
Alabama.....	80	28	108	19	30	25	81
Arizona.....	63	47	143	40	35	5	114
Arkansas.....	62	13	95	9	13	3	69
California.....	106	113	79	79	143	73	88
Colorado.....	74	53	134	55	60	28	83
Connecticut.....	138	93	126	141	75	123	69
Delaware.....	106	105	120	103	110	58	60
District of Columbia.....	58	82	140	174	203	320	67
Florida.....	103	60	145	53	65	30	62
Georgia.....	109	40	112	16	30	23	10
Idaho.....	106	97	70	17	8	3	62
Illinois.....	105	130	79	155	111	198	62
Indiana.....	79	71	161	78	44	88	64
Iowa.....	77	70	98	43	30	8	62
Kansas.....	52	39	142	28	17	3	76
Kentucky.....	78	54	141	44	35	53	86
Louisiana.....	103	67	72	19	121	13	107
Maine.....	114	35	142	40	113	3	119
Maryland.....	67	101	143	104	146	103	153
Massachusetts.....	110	67	164	122	117	85	153
Michigan.....	98	101	118	93	35	25	90
Minnesota.....	104	119	93	95	37	8	71
Mississippi.....	99	29	70	7	17	5	40
Missouri.....	45	34	148	78	41	35	69
Montana.....	118	105	66	15	11	3	74
Nobraska.....	55	66	104	34	19	10	95
Novada.....	104	113	82	21	17	None	76
New Hampshire.....	133	57	160	82	187	8	62
New Jersey.....	149	191	82	178	194	338	162
New Mexico.....	83	40	92	19	5	None	100
Now York.....	116	174	51	177	202	250	153
North Carolina.....	104	44	106	19	29	3	14
North Dakota.....	64	73	64	9	5	3	79
Ohio.....	87	94	135	95	86	78	136
Oklahoma.....	53	28	140	21	14	5	55
Oregon.....	141	154	56	59	54	25	86
Pennsylvania.....	118	94	105	127	144	103	114
Rhode Island.....	111	36	170	91	79	60	180
South Carolina.....	163	40	73	18	44	3	17
South Dakota.....	60	71	66	15	19	8	102
Tennessee.....	67	40	132	63	35	18	26
Texas.....	82	44	109	31	37	8	45
Utah.....	60	50	114	42	40	8	74
Vermont.....	112	37	108	66	135	8	79
Virginia.....	96	54	108	47	37	35	45
Washington.....	129	164	56	80	114	28	100
West Virginia.....	79	34	117	30	87	13	52
Wisconsin.....	106	142	75	128	81	40	67
Wyoming.....	93	61	92	24	5	55	100

For instance, the sales of combination stores in the United States constitute 7.95 percent of the total retail sales. In New York State the sales of combination stores constitute only 4.03 percent of the total retail sales in that State. Hence the position index of combination stores for New York is 51 (that is, 4.03 is 51 percent of 7.95). On the other hand, straight grocery stores and straight meat markets both show a higher percentage of sales in New York than in the country as a whole, so that the position index of grocery stores for New York is 116 and for meat markets 174. Likewise, the position index of dairy-products dealers is 177, fruit and vegetable markets 202, delicatessen stores 250, and bakeries 158, all considerably higher than the 100 which represents the United States average for each kind of business. It is obvious, therefore, that at the time of the census, combination stores had not developed in New York to the extent that they had in other parts of the country, and that the several specialized food stores were doing a correspondingly higher proportion of business—a business which in many other States was being done in combination stores.

This method of comparing the relative standing of various kinds of stores gives quite a different result from that which takes population into account, and the difference is more marked the further the business is removed from the sale of prime necessity or daily recurring purchase merchandise, such as food and gasoline. The table shown on the preceding page gives the relative position of each of seven kinds of food stores in each State.

### SUMMARY OF SALES BY GEOGRAPHIC DIVISIONS

Tables 12 to 18 show the total sales of each of these same kinds of stores by States, with the States arranged in the order of sales. Below is a summary by geographic divisions, of the sales of the three principal kinds of stores.

#### GROCERIES (WITHOUT MEATS)

DIVISION	Stores	Sales	Percent
United States total.....	191, 876	\$3, 449, 129, 144	100. 00
New England.....	16, 124	310, 967, 786	9. 02
Middle Atlantic.....	56, 084	1, 081, 723, 107	31. 36
East North Central.....	31, 492	702, 992, 738	22. 12
West North Central.....	11, 967	245, 980, 449	7. 13
South Atlantic.....	25, 958	283, 210, 841	8. 21
East South Central.....	13, 001	121, 176, 366	3. 51
West South Central.....	17, 749	199, 085, 214	5. 77
Mountain.....	4, 411	91, 574, 541	2. 66
Pacific.....	15, 090	352, 418, 112	10. 22

#### MEAT MARKETS—INCLUDING FISH MARKETS

DIVISION	Stores	Sales	Percent
United States total.....	49, 865	\$1, 336, 958, 023	100. 00
New England.....	2, 765	67, 153, 945	5. 02
Middle Atlantic.....	19, 838	527, 751, 745	39. 48
East North Central.....	10, 502	337, 623, 992	25. 25
West North Central.....	3, 484	93, 909, 152	7. 03
South Atlantic.....	3, 044	66, 492, 936	4. 97
East South Central.....	1, 219	22, 840, 116	1. 71
West South Central.....	2, 619	41, 181, 954	3. 08
Mountain.....	826	27, 969, 312	2. 09
Pacific.....	4, 968	152, 034, 791	11. 37

COMBINATION STORES—GROCERIES AND MEATS

DIVISION	Stores	Sales	Percent
United States total.....	115,549	\$8,908,682,067	100.00
New England.....	11,400	444,030,596	11.39
Middle Atlantic.....	20,374	722,714,987	18.51
East North Central.....	28,485	909,683,781	24.84
West North Central.....	13,102	463,724,818	11.02
South Atlantic.....	15,936	400,725,806	10.27
East South Central.....	7,841	201,382,563	5.15
West South Central.....	10,048	323,816,987	8.30
Mountain.....	3,059	131,594,368	3.37
Pacific.....	5,304	255,379,161	6.54

CREDIT BUSINESS

**Grocery stores.**—Credit sales of grocery stores equal 15.1 percent of total sales, and 44.5 percent of the sales of stores which extend credit. More than 93,000 of the 170,595 grocery stores included in a detailed analysis according to degree of credit sales report that they sell entirely for cash. The balance report varying proportions of credit and cash sales. Of the \$3,164,066,000 included in the analysis, \$476,546,000 is credit business, which is 15.1 percent of the entire amount. But it is nearly one half of the total sales of the 77,535 stores which extend credit. In the case of combination stores, the percentage of credit business is considerably greater. For a detailed analysis see table 19A.

A breakdown of the same stores and sales according to States is contained in table 20. This table does not show for each State how much of the business of the cash-credit stores (those which extend credit and, of course, also do a certain proportion of their business for cash) is actual credit sales, but the basis for such a computation is contained in the various State reports of the retail census.

**Meat markets (exclusive of fish markets).**—The credit sales of those meat markets which extend credit is 43 percent of their total sales, practically identical with that of grocery stores (without meats). It amounts to 20.9 percent of the total sales of all meat markets included in the cash-credit analysis, including the 18,674 which report that they sell entirely for cash. For details, see table 19B. For a breakdown by States, see table 20B.

**Fish markets.**—The proportion of credit sales in this kind of business is practically identical with that found in meat markets. It amounts to 45.5 percent of the total sales of markets which extend credit, and 21.7 percent of the total sales of all fish markets, including the 3,439 shown in the analysis as markets which sell entirely for cash. For details see table 19C. For a breakdown by States, see table 20C.

**Combination stores.**—Combination stores, in spite of the fact that the expense analysis shows that they operate at the lowest expense of any of the four, do a larger proportion of credit business than do straight grocery stores, meat markets, or fish markets. Credit sales constitute more than one half (51.6 percent) of the sales of combination stores which extend credit and amount to 27.8 percent of the total sales of all combination stores, despite the fact that 37,652 of the 105,912 stores included in the cash-credit analysis report that they sell entirely for cash. See tables 19D and 20D.

Combination stores deserve special emphasis throughout this food report for the reason that, as they are now constituted, they are a new development in food retailing. Although many old-established independent grocery stores have sold fresh meats for years, it was not until the advent of the grocery chains that the present type of combination store was developed, making of the meat business a separate department which had to stand or fall on its own merits and therefore had to perfect its operating technic until it could justify its operation. Until very recently (1926-28) most chain combination stores were operated by the smaller chains and they are the organizations which should be credited with the real development of this particular kind of store.

The larger chains were unsuccessful at first in their attempts to emulate the example of the smaller chains, in that they could not make the meat departments profitable. They soon discovered, however, that by extending more authority to the meat manager and relieving him of some of the restrictions imposed on the grocery manager they were able not only to make the department

pay its way, but that the existence of the meat department increased the sales also of the grocery department. They also discovered that the combination store operates at a lower average expense than either the grocery store or the meat market. Since 1929 the growth of the combination store has been even more rapid, on the part of the large chains, than it was previously. It is now developing into a kind of food department store, with sections devoted to fruits and vegetables, dairy products, candies and nuts, household supplies and even cigarettes and boxed cigars, in addition to the prosaic groceries and meats.

**Dairy products stores (including milk dealers).**—Milk dealers are largely on a credit basis, while dairy products stores sell primarily for cash. In many cases, however, milk dealers also operate stores in which butter, cheese, and eggs are sold together with milk and ice cream. Not infrequently, such stores maintain a lunch counter and fountain.

Based upon an analysis of 9,487 stores and dealers who operate routes, doing a total business of \$885,290,000 (which includes the additional milk-dealer schedules referred to before), it would appear that credit sales constitute 75 percent of the business of dealers who extend credit. Taking into consideration also those dealers who report that they sell entirely for cash, and whose sales aggregate \$207,297,000, the proportion of credit sales to the entire sales of all dealers is 57.4 percent. For details, see table 19E. For an analysis by States see table 20E.

**Fruit and vegetable markets.**—Credit sales of fruit and vegetable markets constitute 30.1 percent of the total sales of those markets which extend credit. Adding also the sales of markets which sell entirely for cash, the total credit sales amount to 9.2 percent of the total sales of all fruit and vegetable markets. For details see table 19F. The analysis by States is shown in table 20F.

**Delicatessen stores.**—All but 5.2 percent of the total sales of delicatessen stores is cash business, and 7,029 stores out of a total of 9,037 analyzed, report that they sell entirely for cash. However, of the total sales of the remaining 2,008 stores which do extend credit, 23.2 percent is credit business. For details, see table 19G, and for the State analysis see table 20G.

**Bakery products stores.**—The great majority of these stores sell entirely for cash, but 2,106 of the 9,293 analyzed report that they also extend credit. Credit sales equal 30.4 percent of such stores' total sales, or 9.5 percent of the total sales of all bakery products stores, including those which sell entirely for cash. Details are shown in table 19H, and the analysis by States is shown in table 20H.

### TYPES OF OPERATION

**Grocery stores (without meats).**—Of the 191,876 grocery stores, 139,440 are single-store independents, 2,805 are multi-unit independents, 9,754 are units of local chains, 9,044 are units of sectional chains, and 16,571 are units of national chains. There are 14,262 other miscellaneous types, such as leased departments, commissaries, and rolling stores. All of these miscellaneous classifications account for but 5.74 percent of total sales of grocery stores.

Single-store independents do 46.07 percent of the total business in this food-store classification; other independents, including the miscellaneous types, do 8.23 percent; chains do 45.70 percent. Local chains do 10.66 percent, sectional chains 10.48 percent and national chains 24.56 percent.

The chain proportion varies considerably in different sections of the country, and in different sizes of cities. For the United States as a whole, in the larger cities the chains do 51.32 percent; in cities of 10,000 to 30,000 they do 45.79 percent; in places of less than 10,000 population they do 37.02 percent of the total sales of grocery stores in all such places. This variation, however, is caused almost entirely by local and sectional chains. National chains do nearly one fourth of the total business throughout all sizes of cities, the proportions being 25.73 percent in the larger cities, 24.52 percent in the smaller cities and 22.76 percent in places of less than 10,000 population.

Geographically, the straight grocery chains are strongest in New England, with 67.16 percent of the total business of all grocery stores. They are weakest in the West South Central division (which consists of the States of Arkansas, Louisiana, Oklahoma, and Texas) where the proportion of chain business is 15.46 percent. The proportion of the total business of grocery stores which is done by the 3 types of chains in each of the 9 geographic divisions of the country is as follows:

## PROPORTION OF GROCERY STORE BUSINESS DONE BY CHAINS

GEOGRAPHIC DIVISION	All chains	Local chains	Sectional chains	National chains
United States.....	45.70	10.66	10.48	24.56
New England.....	67.16	8.75	30.44	27.97
Middle Atlantic.....	51.52	10.37	8.90	26.25
East North Central.....	55.92	10.29	9.83	35.80
West North Central.....	22.05	3.92	7.97	11.06
South Atlantic.....	45.15	8.53	7.04	29.53
East South Central.....	28.92	5.75	1.59	21.58
West South Central.....	15.46	6.19	1.47	7.80
Mountain.....	31.21	6.00	9.80	14.51
Pacific.....	29.68	7.18	11.93	10.62

Table 21 shows further data as to number of stores and sales in each division, and the proportion of business in large cities, small cities, and in places of less than 10,000 population. A note of caution should be repeated here as to comparisons between these figures and those shown in the report on food chains. (Merchandising series report R. 70.) Both are correct and use identical data, but in the report on food chains, the organizations classified as straight grocery chains often operate some stores of a different classification, notably combination stores and separate meat markets. Some of them operate separate fruit stores. In the food chain report, each chain necessarily must be classified in its entirety as a grocery chain, a combination-store chain, a meat-market chain or whatever is the principal business of the chain, regardless of the fact that some stores of the chain do not agree with the classification of the chain as a whole. In this present report on food retailing, both chain and independent, each individual store is classified separately in accordance with the nature of the business it is conducting, regardless of the classification of the chain which may own it. The same notation applies to the next two sections herein, describing combination stores and meat markets.

**Meat markets (including fish markets).**—Of the 49,865 meat markets, 47,061 are independents, 2,405 are units of local chains, and 399 are units of sectional chains. There are no national chains of meat markets and the 399 sectional units are operated by only 10 chains. This is the situation as it existed in 1929, and is likely to be quite different at the time of the next census if the meat packers, who are now prohibited from operating retail stores, are permitted to enter the retail chain field. On the other hand, the growth of meat markets is quite as likely to take the form of combination stores, selling groceries, vegetables, dairy products, and bakery goods as well as fresh meats, in which case they would appear in another classification and not as meat markets.

Independents do 89.45 percent of the total business of meat markets; local chains do 8.15 percent and sectional chains do 2.40 percent. The only sections of the country in which the independent proportions is lower than 90 percent are the Pacific coast with 84.50 percent, and the East North Central (Chicago) division with 84.73 percent. The proportions of stores and sales in each division are shown in detail in table 22 and the variations are not sufficient or significant enough to warrant separate summary here.

It is significant, however, that the chains do a larger proportion of the total meat-market business in cities of 10,000 to 30,000 than they do in larger cities or in smaller places. The proportion in that size of city is 14.51 percent, in comparison with 12.10 percent in cities of more than 30,000 population and 4.14 percent in places of less than 10,000 population.

**Combination stores.**—Of the 115,549 combination stores, 88,157 are single-store independents; 3,680 are multi-unit independents; 6,192 are units of local chains; 2,669 are units of sectional chains and 3,388 are units of national chains. There are 6,463 miscellaneous types, similar to the miscellaneous grocery store types described above, but they do only 4.63 percent of the total business of all combination stores.

Single-store independents do 57.35 percent of the total business; multi-unit independents and the miscellaneous types together do 10.43 percent; the 3 types of chains do 32.22 percent. Local chains account for 8.80 percent, sectional chains 5.62 percent, and national chains 17.80 percent.

The chain proportion of the total business varies considerably in different sections of the country, but nearly as much as the variations in other kinds of

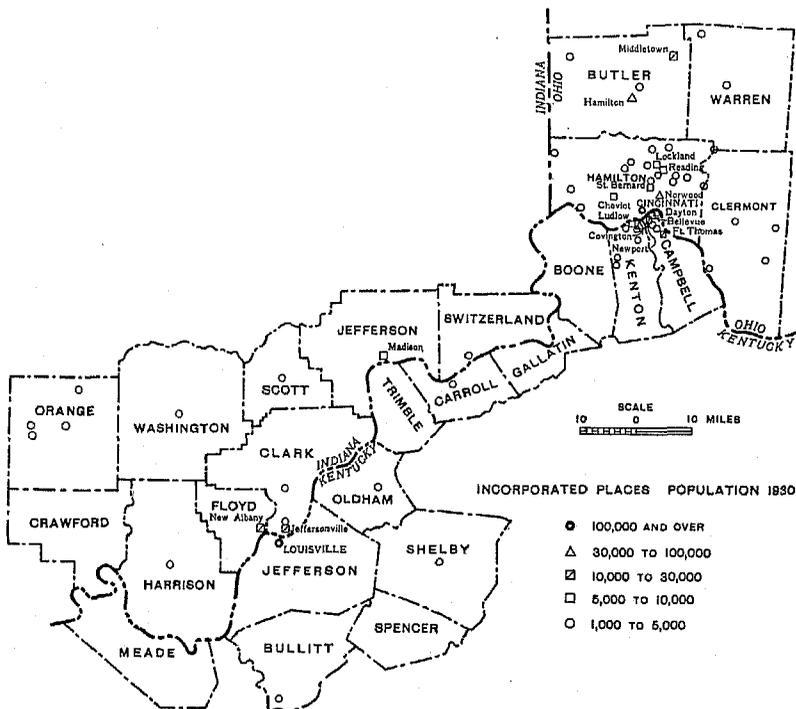
business. The extreme range is 44.67 percent in the Pacific Coast States and 21.47 percent in the West North Central division (the States of Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas). The Middle Atlantic (New York City) division is nearly identical in proportion with the Pacific coast, showing a chain ratio of 43.95 percent. The nine divisions compare as follows:

PROPORTION OF COMBINATION-STORE BUSINESS DONE BY CHAINS

GEOGRAPHIC DIVISION	All chains	Local chains	Sectional chains	National chains
United States.....	32.22	8.80	58.2	17.80
New England.....	20.71	8.89	7.04	13.78
Middle Atlantic.....	43.95	13.51	13.30	17.14
East North Central.....	29.31	5.02	1.17	22.52
West North Central.....	21.47	5.32	3.04	13.11
South Atlantic.....	30.79	6.95	5.77	18.07
East South Central.....	34.08	7.05	2.15	24.88
West South Central.....	26.78	12.08	1.43	13.27
Mountain.....	25.54	4.48	11.82	9.24
Pacific.....	44.67	15.94	7.54	21.19

Table 23 shows further data as to the number of stores and sales in each division, and the proportion of business in large cities, small cities, and in places of less than 10,000 population. The same note of caution as to comparisons should be emphasized here that is mentioned in an earlier paragraph on grocery stores. The 8,388 units of national chains shown in the combination-store classification are all units of national chains, and they are all combination stores, but they are not all units of combination-store chains. Other national chains, such as grocery chains, may operate combination stores and they would be included. Conversely, many of the stores owned and operated by combination-store chains are not

CINCINNATI-LOUISVILLE AREA



combination stores, and in the present analysis they fall into other-kind-of-business classifications. In the chain-store report (Retail Distribution by Food Chains, No. R-70, of the merchandising series of the retail census) the analysis is by kinds of chains, and necessarily all of the stores of a chain are included in that chain's figures. There is no discrepancy between the two sets of data. A grocery chain is a grocery chain as long as a majority of its business is the operation of grocery stores, even though it may and often does operate some other kinds of stores. When it changes the character of its stores to the extent that a majority of its business is the operation of combination stores, it becomes a combination-store chain. However, each of its units is classified according to the kind of business of that particular unit and is so shown in all city, county, and State reports, and in this present report. It is only in the merchandising series of chain reports that the chain is classified as a whole, according to its predominating business.

### CHAINS AND INDEPENDENTS COMPARED IN THE CINCINNATI-LOUISVILLE AREA

In order to make a comprehensive study of the facts concerning the actual operation of chain grocery stores in comparison with independent grocery stores, it was decided to select two central cities and the entire area between them and handle the combined area as a unit. Cincinnati and Louisville were selected as the two cities, combination stores were selected as the classification to be studied, and every combination store in both cities and in the entire area between and surrounding them was included, regardless of size or type of operation. There were 2,521 combination grocery-meat stores included.

The total sales of these 2,521 stores in 1929 was \$88,882,757. Of the total, 614 were chain stores and 1,907 were independent stores, in the proportion of 24 and 76, respectively. Of the total sales, the 614 chain stores did an aggregate business of \$37,078,343 and the 1,907 independent stores did a total of \$51,804,414, in the proportion of 42 and 58, respectively. The proportions are not far from those which exist for the entire country.

All of the figures produced in this comparative study are contained in tables 24 and 25 herein. Outstanding conclusions are as follows:

**Conclusions.**—The 1,907 independent combination stores operate at a slightly lower average expense ratio than do the 614 chain combination stores. Independent-store expenses are lower in each of the five size-classes except one, and that one is the very small stores of less than \$10,000 annual volume.

Independent-store expenses include the wage value of proprietors' services, at the same rate as that paid the average full-time employee, regardless of whether the amount is withdrawn by the proprietor or not.

Chain-store expenses do not include the expenses of the central administrative and buying organization, nor any warehouse costs. They are strictly the expenses reported as store operating expenses.

Chain-store rent averages \$2.30 per \$100 of sales, and independent-store rent averages \$2.31. In both instances, rent is expressed in terms of sales in leased premises. Thirty-five million of the 37 million of chain store sales is in leased premises, whereas 28 million of the 51 million of independent-store sales is in leased premises.

Wage cost in chain stores averages \$8.14 per \$100 of sales, all of which is pay roll. Wage cost in independent stores averages \$9.12 per \$100 of sales, of which 57 percent is paid to employees and 43 percent is the computed wage value of the services of active proprietors, working themselves in place of clerks.

Total reported expense of chain stores averages \$14.36 per \$100 of sales. Total reported expense of independent stores, plus the arbitrary adjustment for the value of proprietors' services which is used consistently in all Retail Census reports, as described above, averages \$14.80 per \$100 of sales.

For all stores of more than \$100,000 annual volume the expense ratios are: Chain stores 16.09 percent, independent stores 15.59 percent.

For all stores of \$60,000 to \$100,000 annual volume, the expense ratios are: Chain stores 13.86 percent, independent stores 13.30 percent.

For all stores of \$25,000 to \$60,000 annual volume, the expense ratios are: Chain stores 14.18 percent, independent stores 12.69 percent.

For all stores of \$10,000 to \$25,000 annual volume, the expense ratios are: Chain stores 16.31 percent, independent stores 14.47 percent.

For all stores of less than \$10,000 annual volume, the expense ratios are: Chain stores 24.83 percent, independent stores 25.79 percent. In this size-class there are only 8 chain and 410 independent stores. The number of stores in each classification, and more detail as to pay rolls and rent, are contained in table 24.

**Comparisons by size of business and size of city.**—Combining chain and independent stores for the purpose of a more comprehensive comparison of costs on the basis of size of store, and on the basis of size of city, some outstanding conclusions are as follows:

On the basis of the 2,521 stores analyzed, the stores of \$25,000 to \$60,000 annual volume show the lowest expense ratio (13.24 percent) and those of \$60,000 to \$100,000 annual volume show the next lowest ratio (13.70 percent). Expenses increase in both directions from these two size-classes. Stores of \$10,000 to \$25,000 show an average ratio of 14.55 percent while those of less than \$10,000 show the very high ratio of 25.76 percent. In the other direction, stores of \$100,000 to \$250,000 show an average expense ratio of 15.19 percent, while those of more than \$250,000 average 18.86 percent. In the tables supporting these conclusions (p. 79) the two latter classifications are combined into one labelled "more than \$100,000" in order to avoid revelations when the figures are broken down into cities and types, but the separate ratios are as stated above.

Among independent stores the lowest ratio is found in stores of \$25,000 to \$60,000 annual volume, while among chain stores the lowest ratio is in the classification from \$60,000 to \$100,000. In both types, however, the ratio increases in either direction from these central classifications.

All cities and towns within the area were classified in five size-of-city groups in an effort to measure the relation between expense and size of city. With the exception of one classification, that of places between 5,000 and 10,000 in population with only 85 stores in all, there is a noticeable substantiation of the fundamental principle which the retail census has established and proved, that expenses increase directly with the size of city, other conditions being equal, and are seldom offset by the increase in sales which is supposed to result from the increased traffic in larger cities. Retail census data repeatedly prove that in the smaller cities and towns less of the consumer's dollar is paid to retailers as operating expense. To what extent this saving is offset by a higher cost for goods (which is not operating expense) is not revealed by the data available to the Census Bureau.

In comparison with the average expense ratio for the 2,521 stores of 14.20 percent, the average for the largest cities is 14.59 percent and for the places of less than 5,000 population 13.22 percent. The five classifications are as follows:

EXPENSE RATIOS COMPARED BY SIZE OF CITY—COMBINATION STORES

SIZE OF CITY (population)	Number of stores	Total sales	EXPENSES—PERCENT OF SALES		
			Total	Wage cost	Rent
All cities and places.....	2,521	\$98,982,757	14.20	8.71	2.31
Cities (2) of more than 100,000.....	1,526	57,490,369	14.59	8.74	2.40
Cities (3) of 30,000 to 100,000.....	311	12,800,512	13.61	8.58	1.80
Cities (5) of 10,000 to 30,000.....	244	6,079,230	13.46	8.07	2.08
Cities (8) of 5,000 to 10,000.....	85	3,039,349	13.91	8.09	2.04
Places (all) of less than 5,000 in 25 counties.....	355	8,483,267	13.22	8.46	1.99

The above is a brief summary of table 24 to which reference should be made for further details, and for a comparison of expenses by size-of-business classifications. The figures for cities of more than 100,000 population represent the combined figures for Louisville (307,745) and Cincinnati (451,160). The remaining classifications represent the combined figures for all of the several cities and towns of the sizes indicated, in the following counties:

*Kentucky.*—Bullitt, Boone, Campbell, Carroll, Gallatin, Jefferson, Kenton, Meade, Oldham, Shelby, Spencer, and Trimble.

*Indiana.*—Clark, Crawford, Floyd, Harrison, Jefferson, Orange, Scott, Switzerland, and Washington.

*Ohio.*—Butler, Clermont, Hamilton, and Warren.

**Turnover and profit margins by commodities.**—Since the Bureau of the Census gathers no data on turnover rates or profit margins, it may be pertinent at this point to include here a table prepared by the Bureau of Foreign and Domestic Commerce in connection with a detailed study of 26 grocery and combination stores in Louisville (both chain and independent) and presented in a series of reports published as part III of the Louisville grocery survey.

The table which follows brings together for ready comparison the more important data for a number of leading grocery commodity groups. These data include the rate of annual turnover and the percent of gross margin, operating expense and net profit in terms of sales of each commodity. The figures are averages of the results of the 26 stores which were studied for a year and analyzed minutely in the Louisville grocery survey<sup>2</sup> of the Bureau of Foreign and Domestic Commerce.

COMMODITY GROUP	Turnover (times)	PERCENT OF COMMODITY GROUP SALES		
		Gross margin	Operating expense	Net profit
Fresh fruits.....	62.9	35.3	16.2	10.1
Fresh vegetables.....	78.1	35.8	17.5	18.3
Fresh meats.....	97.2	29.7	15.6	14.1
Smoked meats.....	77.4	30.8	20.9	9.9
Fish and poultry.....	44.3	23.7	18.6	5.1
Dairy products.....	114.0	18.2	11.3	6.9
Canned goods.....	4.9	26.9	26.1	0.8
Cereals.....	10.0	24.5	23.5	1.0
Coffee.....	20.2	19.4	0.6	9.8
Flour.....	17.5	17.0	9.3	7.7
Jams and preserves.....	5.2	28.3	23.2	5.1
Salad dressing.....	8.5	26.0	16.7	9.3
Sugar.....	34.7	22.4	12.9	9.5
Tobacco.....	17.2	23.7	18.4	5.3

**FOOD SALES BY OTHER THAN FOOD STORES**

**Country general stores.**—A kind of store not strictly a part of the food group, but an important distributor of food at retail, is the country general store, also called the general store. Since it has been mentioned heretofore in this outline, it might be well to describe such stores further.

These stores are nearly always located in places of less than 10,000 population and correspond roughly to the classification known as general merchandise stores in the larger cities. These stores handle foods which constitute an important part of their sales.

Under this heading there are three related kinds of stores. First, there is the general store carrying, in addition to groceries, a general line of other merchandise. Next, there is the grocery store carrying clothing and often a limited line of shoes. The third kind of store, falling under this general heading, is the grocery store selling dry goods and notions. These stores also may carry fresh meats and still retain the classification of country general stores. Quite common in the smaller towns and rural areas, they are found occasionally in the small cities and on the outskirts of the larger cities.

As nearly as it can be determined, slightly more than one half of such stores' sales represents food. There are 104,089 country general stores, of which 2,512 are within the corporate limits of cities of more than 10,000 population. In all, they employ 107,023 full-time employees and 30,931 part-timers. The annual pay roll is \$115,511,168. There are 121,366 active proprietors, the wage value of whose services, at the same rate as that paid to full-time employees, is approximately equal to the entire amount paid to employees. The wage cost is therefore double the actual pay roll, and totals \$234,400,000 or \$9.12 per \$100 of sales. About 40 percent of the sales are in leased premises, for which rent averages \$1.47 per \$100 of sales in such leased premises. Total operating expense, including wage cost and rent, averages \$13.59 per \$100 of sales. (See table 3D for summary by size of city.)

In retail census reports, country general stores are shown in three classifications. One is groceries and apparel. There are 5,426 such stores, with total sales of \$111,074,663. Their total expense averages \$14.74 in comparison with \$13.59 for all general stores. Wage cost is \$9.92 and rent is \$1.78. This may be considered a specialized kind of general store, most likely to be found in the larger towns. Another specialized kind is the grocery-dry goods classification, and most such stores also sell apparel and accessories, and often clothing and furnish-

<sup>2</sup> Merchandising Characteristics of Grocery Store Commodities, part A (10 cents); General Findings and Specific Results (10 cents); part B, Perishables (10 cents); and part C, Dry Groceries (15 cents), are obtainable from the Superintendent of Documents, Government Printing Office, Washington, D. C.

ings. There are 40,159 such stores, with total sales of \$713,226,435. Their rent and wage costs are identical with those of the grocery-apparel stores described above, although their total operating expense ratio is slightly lower, averaging \$14.53, compared with the average for all country general stores of \$13.59.

By far the largest and most representative kind of country general store is that classified as carrying groceries and general merchandise. Such stores report total sales of \$1,746,442,908 with an average expense ratio of \$13.13. Rent averages \$1.31 for each \$100 of sales in leased premises. Only 39 percent of all sales of such stores are in leased premises. Wage cost averages \$8.74. This is the only kind of country general store in which the employees outnumber proprietors. These stores sell more food in proportion to total sales than is sold by either of the other classifications under the country general group. As nearly as it can be computed from the limited commodity data available, groceries average 42.4 percent of their total sales, and fresh meats (including sea foods) average 12.2 percent. The grocery percentage includes fruits and vegetables, eggs and dairy products.

COMMODITY	COUNTRY GENERAL STORE		
	With groceries and dry goods	With groceries, clothing, and apparel	With groceries and general merchandise
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Groceries <sup>1</sup> .....	60.3	51.0	42.4
Meats and fish.....	7.0	10.5	12.2
Dry goods and notions.....	20.4	1.2	7.6
Men's clothing and furnishings.....	1.5	18.8	7.4
Women's apparel and accessories.....	2.7	9.0	4.0
Shoes.....	4.6	5.2	4.4
All other merchandise <sup>2</sup> .....	8.5	4.3	22.0

<sup>1</sup> Includes also bakery goods, confectionery, fruits, vegetables, ice, milk, and bottled beverages.

<sup>2</sup> Hardware, furniture, drugs, toiletries, smokes, feed, coal, and gasoline.

**Feed stores with groceries.**—Feed stores have been shown throughout the retail census reports in two classifications; i.e., those which also sell groceries and those which do not. The former are of particular interest in any study of food retailing.

Straight feed stores (without groceries) operate at the lowest expense ratio of all stores, averaging only \$10.82 per \$100 of sales. Feed stores with groceries naturally incur a higher expense. Their average expense is \$12.13 per \$100 of sales. Of this total, \$8.21 is wage cost. Nearly 60 percent of the sales are in leased premises, for which the rent averages \$1.48 per \$100 of sales in such leased premises.

About 60 percent of such stores' sales represents food and therefore only a fair proportion of employees and pay roll can be considered as applicable to the retailing of food. The 7,127 stores report 8,163 full-time employees, 2,657 part-timers, and 8,306 active proprietors. The total pay roll reported is \$8,633,743, only about 5 percent of which is paid to part-timers. No stock figures would be applicable, as there are no data available to show how much was food and how much was other merchandise.

**General merchandise stores with food.**—The difference between general merchandise stores with foods, and country general stores, is primarily that of location and emphasis. General merchandise stores usually are located in small cities and in neighborhood districts of larger cities, whereas 98 percent of all country general stores are located in places of less than 10,000 population and along the highways in the open country. General merchandise stores emphasize the sale of food, with other merchandise secondary. The expenses of general merchandise stores average \$16.17 per \$100 of sales in comparison with \$13.59 in country general stores. The difference is accounted for by the well-established principle that expenses vary directly with the size of city and that the greater the proportion of food sold the lower the expense, other factors being equal.

**Department stores with food departments.**—Department stores sell a large quantity of food, but food sales constitute such a small part of their total sales that the effect on their total expenses is relatively little.

Of the 4,190 department stores in the country, only 460 have food departments. These 460 stores do a total business of \$939,411,294 of which only \$74,305,830 is the sale of food. Nothing in the available data indicate what part of the \$28.22 of average expense per \$100 of total sales would apply to the sale of food alone, but it is reasonable to assume that it would approximate that of food stores in the same size of city. If so, it would average \$16.63 to \$17.24 per \$100 of food sales, on the basis that most department stores are in cities of more than 30,000 population.

Because of the small proportion of food sales, there is no significance or value to be derived from a discussion of the number of employees in department stores, or pay rolls, wage cost and other operating expenses. Nor is there any other kind of business in which food is a considerable proportion of total sales, other than those described in preceding paragraphs, to justify inclusion in this section of the report.

## Chapter II.—RESTAURANTS AND THEIR OPERATION

**Description of the business.**—Restaurants described in this report are eating places of various kinds selling meals as their principal activity. They may and usually do sell commodities in the nature of related merchandise, such as candies, bakery products, bottled milk, smokes, and delicatessen foods, but in lesser amount than their sale of meals. Other places than restaurants sell meals, but unless meals constitute the principal source of income they are not classified as eating places.

**Number of eating places.**—There are eight kinds of businesses which are included in the restaurant group, although technically the term "restaurant" should be used only in description of the full-service eating place where meals are served at tables, with waiter service. Although such full-service restaurants do nearly one half of the total business of the restaurant or eating-place group, they constitute only one fourth of the number of eating places.

Lunch rooms constitute 43 percent of the established eating places of the country. There are 57,612 lunch rooms, meaning those eating places in which the customer may choose between table service and counter service. Wherever there is both counter service and table service, the place is classified as a lunch room.

Service restaurants constitute the second largest group, numbering 36,214. Lunch counters are third with 17,119 places of business. There are 10,393 soft-drink stands (in which meals as such are a negligible factor), 7,764 refreshment stands (meals about 10 percent of total sales), 3,124 cafeterias (self-serve restaurants), 1,906 fountain-lunches (in which meals average nearly 50 percent), and 161 businesses selling box lunches. Box lunches usually are delivered daily over prescribed routes, like milk or newspapers, in office buildings and industrial plants.

**Restaurant sales.**—Service restaurants report total sales of \$988,473,000 or nearly one half of the total sales of the entire eating-place group. Next in order are lunch rooms with total sales of \$541,701,000 and cafeterias with total sales of \$272,739,000. Lunch counters come fourth with total sales of \$162,180,000. Other classifications of the food group are shown in the table below. Automats (mechanical service cafeterias) are classed as cafeterias, and sandwich shops are classed as lunch counters.

### SUMMARY OF RESTAURANT GROUP

RESTAURANTS <sup>1</sup> AND EATING PLACES	Number of establishments	All sales (in thousands)	Meals only (in thousands)
United States, total.....	134,293	\$2,124,890	<sup>2</sup> \$1,796,137
Restaurants (full-service).....	36,214	988,473	896,225
Lunch rooms.....	57,612	541,701	462,459
Cafeterias.....	3,124	272,739	252,848
Lunch counters.....	17,119	162,180	141,422
Fountain-lunches.....	1,906	64,565	32,048
Refreshment stands.....	7,764	46,005	<sup>3</sup> 4,300
Soft-drink stands.....	10,393	42,892	<sup>3</sup> 500
Box lunches.....	161	6,335	6,335

<sup>1</sup> Definitions of the several kinds-of-business designations referred to in the food group (ch. 1) and the restaurant group (ch. 2) may be found in the appendix (pp. 90-92).

<sup>2</sup> Exclusive of hotel dining rooms, clubs, dining cars, etc., and exclusive of meals sold in retail stores other than restaurants. Total of all known sales of meals, \$2,515,495,871.

<sup>3</sup> Estimated.

**Receipts from the sale of meals.**—Of the \$2,124,890,000 of total sales of the eating-place group, shown above, the sale of meals alone totals \$1,796,137,000, or 84 percent. The remaining 16 percent of sales is made up of various commodities, largely foodstuffs, bakery goods, tobacco products and the like.

As nearly as it can be determined, the total receipts from the sale of meals everywhere, except boarding houses and nonpublic eating places, aggregated close to \$2,500,000,000 in 1929, and therefore the meals sold through restaurants and the other regular eating places enumerated in the table above constitute approximately 72 percent of the total receipts from meals.

According to the hotels census, meals sold in hotel dining rooms totaled about \$358,301,000. It is a reasonable estimate that club dining rooms, dining cars, and other noncensus eating places sold an additional \$150,000,000 of meals. These amounts added to the reported or closely estimated receipts from the sale of meals in department stores, food stores, variety stores, drug stores, and cigar stores with fountains, and other less important vendors of meals, bring the total to \$2,515,495,871 as shown below.

TOTAL KNOWN RETAIL SALE OF MEALS IN THE UNITED STATES—IN ALL KINDS OF BUSINESS

Total United States.....	\$2, 515, 495, 871
ALL KINDS OF BUSINESS SELLING AT LEAST \$150,000 PER YEAR OF MEALS	
Restaurants with table service.....	896, 224, 581
Lunch rooms.....	462, 459, 110
Cafeterias.....	252, 848, 139
Lunch counters.....	141, 421, 545
Confectionery stores (including candy stores).....	84, 619, 529
Fountain-lunches.....	32, 047, 779
Department stores.....	27, 459, 032
Delicatessen stores.....	23, 757, 571
Grocery stores.....	16, 277, 519
Bakeries.....	11, 974, 155
Combination stores.....	9, 378, 915
Variety stores.....	9, 014, 902
Caterers.....	7, 529, 689
Box lunches.....	6, 334, 934
Cigar stores.....	5, 127, 860
Filling stations.....	3, 895, 844
Drug stores.....	4, 500, 000
Refreshment stands.....	4, 300, 000
News dealers.....	1, 952, 945
General stores.....	1, 650, 000
Meat markets and fish markets.....	514, 178
Coffee dealers.....	697, 415
Dairy products stores.....	651, 492
Soft drink stands.....	500, 000
General merchandise stores.....	449, 620
Women's exchanges.....	289, 778
Women's ready-to-wear stores.....	217, 180
Fruit stores and vegetable markets.....	179, 990
All other kinds of business selling meals.....	921, 169
	2, 007, 194, 871
Hotel dining rooms.....	358, 301, 000
Clubs, dining cars, other noncensus eating places.....	150, 000, 000
	2, 515, 495, 871

**Operating expenses of eating places.**—Every eating-place classification in this group is a high-expense business and the average ratio for the group exceeds 40 percent. The raw foods cost 50 to 60 cents per dollar of sales, but about 25 cents more is required to convert these foods into the form in which they are served as meals. There is no sharp line of demarcation between the cost of preparation and the cost of serving. Both are included as expense, so that the ratio averages more than 40 percent whereas the "selling" or serving expense is more nearly 15 percent. Even in restaurants with a high quality of table service the serving expense is low because of the custom of tipping or the giving of gratuities to waiters, which results in shifting that expense from the restaurant to the consumer.

<sup>1</sup> Estimated.

The highest expense in the restaurant group is that of soft-drink stands, due to the fact that they manufacture on the premises a large proportion of their products. In contrast, refreshment stands sell a majority of their beverages bottled and the expense rate is \$10 less per \$100 of sales than in the case of the soft-drink stands. Of course, in both cases a large part of the so-called operating expense is in reality the cost of preparing the commodities which they sell, and if it were possible to distinguish between strictly selling and operating expenses, and processing expenses, the latter properly would be added to cost of goods. Through the restaurant group, however, no such separation is possible, nor is it a practice in the trade to attempt such segregation. The lowest classification in point of expense is that of box lunches, which is 31.47 percent per \$100 of sales.

## COMPARISON OF SALES, EMPLOYMENT, AND EXPENSES

RESTAURANT GROUP	Number of stores	Net sales (1929)	Total number of employees	Total payroll reported
Total.....	184,293	\$2,124,890,455	477,776	\$396,075,991
Restaurants, cafeterias, and lunch rooms:				
Cafeterias.....	3,124	272,738,813	61,159	57,887,721
Lunch rooms.....	57,612	541,701,516	108,781	82,232,028
Restaurants with table service.....	36,214	988,472,912	246,745	208,579,748
Lunch counters, refreshment stands, etc.:				
Box lunches.....	161	6,334,934	1,331	1,277,603
Refreshment stands.....	7,764	46,004,898	8,440	5,014,465
Fountain lunches.....	1,906	64,564,735	14,427	12,207,013
Lunch counters.....	17,119	162,180,671	31,832	25,018,462
Soft drink stands.....	10,393	42,891,927	5,061	3,858,351

RESTAURANT GROUP	Proprietors and firm members (not on pay roll)	Value of proprietors' services at same rate as that paid full-time employees	Rent, per \$100 of sales in leased premises	Total operating expenses <sup>1</sup> (per \$100 of sales)
Total.....	148,948	\$122,981,755	\$7.36	\$40.04
Restaurants, cafeterias, and lunch rooms:				
Cafeterias.....	1,002	1,041,216	6.86	38.97
Lunch rooms.....	64,855	49,734,754	7.61	39.04
Restaurants with table service.....	42,990	37,137,505	6.93	40.50
Lunch counters, refreshment stands, etc.:				
Box lunches.....	170	148,206	1.60	31.47
Refreshment stands.....	8,003	6,399,416	13.14	41.79
Fountain lunches.....	1,658	1,475,237	8.24	38.60
Lunch counters.....	18,446	15,668,405	7.06	39.09
Soft drink stands.....	10,825	10,476,836	14.91	51.75

<sup>1</sup> Includes pay roll, rents, and all other reported expenses, exclusive of cost of food.

**Employment and wages.**—Restaurants employ 477,776 men and women, of which about 55 percent are men and 45 percent are women. On the other hand, 82 percent of the 148,948 proprietors are men. These proprietors are not included in the count of employees.

Part-time employees aggregate 57,782 of the 477,776.

According to table 3-A of the United States Summary, the peak of employment in the restaurant group occurs in the summer months. The table, which may be found on page 54 of the United States Summary, illustrates how the peak in one kind of business often complements the low point in another kind, thereby helping to provide the means by which part-time employees may shift from one kind of business to another and avoid a certain amount of otherwise idle time.

The total pay roll for employees (exclusive of compensation of proprietors) is \$396,075,000, of which \$14,445,000 is paid to part-time employees. After allowing a wage compensation for proprietors based upon the average wage paid to the average full-time employee in the same kind of business, the wage cost in the restaurant group is \$24.43 per \$100 of sales.

**Various kinds of eating places compared.**—Of the eight kinds of business included in the restaurant group, by far the largest in point of sales is the restaurant which provides table service. The aggregate sales of such restaurants is \$988,-

473,000, which is slightly more than 2 percent of the total retail business of the country and nearly 40 percent of total meals sold in the country. It is nearly one half of the total sales of the restaurant group.

The next largest classification is lunch rooms, whose sales total \$541,701,000. Lunch rooms combine table service and counter service.

Cafeterias constitute the third classification, the aggregate sales of which are \$272,739,000. Cafeterias are self-service restaurants with tables but not with table service. However, there is a growing practice in cafeteria circles to serve the evening meal at tables with waiter service in place of cafeteria service. In contrast to this, the practice is also growing in full-service restaurants of providing cafeteria service for breakfast.

The next largest kind of restaurant business in point of sales is lunch counters, whose aggregate sales are \$162,181,000. Lunch counters differ from lunch rooms in that they provide no table service, whereas lunch rooms provide an option of table service or counter service.

The next in order are fountain lunches, with total sales of \$64,565,000;<sup>1</sup> refreshment stands, with total sales of \$46,005,000; and soft-drink stands, with total sales of \$42,892,000.

There is a wide difference between the eight kinds of eating places, as to the relative importance of their receipts from the sale of meals and their receipts from other activities, especially from the sale of commodities in which there is no conversion in the process of sale—no change from the form in which the commodities are bought. Examples of the latter are bottled beverages, smokes, confectionery, and nuts. Since the process of conversion adds considerably to the operating expense, affecting the expense ratio and many other considerations, it is evident that the restaurant group cannot be regarded as a single classification, but must be divided according to the nature of the several kinds of business which constitute it.

A discussion of the various kinds of eating places with particular reference to their characteristic differences is contained in the Retail Census Report on Restaurant Chains (Distribution No. R-77) to which reference should be made.

<sup>1</sup> Not to be confused with fountain sales in drug stores, etc.

### Chapter III.—FOOD SALES, BY COMMODITIES

There is considerable difference between the sales of food commodities and the sales of food stores. Although the total sales of all stores in the food group constitute \$10,966,923,000,<sup>1</sup> the sales of foods themselves, exclusive of fountain sales, meals, and tobacco products, aggregate approximately \$12,323,400,000.<sup>2</sup> Although the total sales of the restaurant group amount to \$2,124,890,000, the total known receipts from the sale of meals (exclusive of incidental sales of tobacco products, candy, bakery goods, etc.) aggregate \$2,516,900,000.

The sale of those food commodities which are usually sold through grocery stores (as distinct from prepared delicatessen foods, confectionery, nuts, bottled beverages, fountain sales, ice cream, and tobacco products) total \$11,446,916,000 as shown by the table below. These items may be grouped into four major classes, as follows: Groceries (and bakery goods); meat, poultry, and fish; fruits and vegetables; eggs and dairy products (includes milk).

The sales of *groceries and bakery goods* aggregate \$5,148,780,000, which is 44.98 percent of the total of these four commodity groups and 41.78 percent of the total food sales (exclusive of meals and fountain). Sales by States are shown in the table below.

The sales of *meats, poultry, and fish* aggregate \$2,668,823,000, which is 23.31 percent of the commodities mentioned above and 21.66 percent of total food sales. Sales by States are shown below.

The sales of *fruits and vegetables* aggregate \$1,340,423,000, which is 11.71 percent of the food items mentioned above and 10.88 percent of total food sales. Sales by States are shown in the table below.

The sales of *eggs and dairy products* aggregate \$2,288,890,000, which is 20 percent of the food items mentioned above and 18.57 percent of total food sales. Sales by States are shown in the table below.

**Sales of principal food commodities by States.**—The following table shows by States the sales of the four groups of principal commodities referred to above:

<sup>1</sup> This includes the additional milk-dealer sales referred to in table 8.

<sup>2</sup> Commodity sales figures necessarily contain a degree of estimation or approximation, varying in the several kinds of business, and expressed in terms of commodity coverage. The percent of coverage indicates the proportion of total sales which is included in those reports which contain commodity data in detail. See census booklet entitled: "How to Use Commodity Sales Data" (Distribution R-176) or similar chapter in the final bound volumes of the Fifteenth Decennial Census (Retail Distribution) for a further explanation of this subject.

SALES OF PRINCIPAL FOOD COMMODITIES, BY STATES EXCLUSIVE OF DELI-CATESSEN GOODS, CONFECTIONERY, NUTS, BOTTLED BEVERAGES, FOUNTAIN SALES, ICE CREAM, AND TOBACCO PRODUCTS

[Sales in thousands of dollars]

DIVISION AND STATE	Total sales of principal food commodities	Groceries and bakery goods	Meats, poultry, and fish	Fruits and vegetables	Eggs and dairy products
United States total.....	\$11,446,915	\$5,148,780	\$2,868,823	\$1,340,423	\$2,288,890
<b>NEW ENGLAND.....</b>	<b>936,260</b>	<b>407,072</b>	<b>241,968</b>	<b>111,189</b>	<b>176,031</b>
Connecticut.....	184,045	75,227	51,294	18,046	40,078
Maine.....	80,559	42,506	17,081	8,596	11,477
Massachusetts.....	501,243	207,022	133,385	63,754	97,081
New Hampshire.....	51,986	24,789	11,433	7,283	8,531
Rhode Island.....	79,074	36,700	20,846	8,889	12,549
Vermont.....	38,763	20,738	7,329	4,371	6,314
<b>MIDDLE ATLANTIC.....</b>	<b>3,043,249</b>	<b>1,104,776</b>	<b>775,770</b>	<b>360,457</b>	<b>793,245</b>
New Jersey.....	504,783	181,013	132,806	60,494	130,475
New York.....	1,606,640	520,083	432,092	205,812	448,653
Pennsylvania.....	931,821	403,680	210,872	103,151	214,117
<b>EAST NORTH CENTRAL.....</b>	<b>2,560,496</b>	<b>1,084,798</b>	<b>612,721</b>	<b>295,600</b>	<b>567,377</b>
Illinois.....	819,048	306,033	197,524	99,830	216,780
Indiana.....	280,036	140,942	68,097	27,088	48,909
Michigan.....	498,842	231,077	116,834	53,663	97,868
Ohio.....	660,158	283,305	153,175	79,174	189,603
Wisconsin.....	301,814	123,441	77,091	36,445	64,837
<b>WEST NORTH CENTRAL.....</b>	<b>1,118,340</b>	<b>543,559</b>	<b>260,110</b>	<b>136,175</b>	<b>173,496</b>
Iowa.....	201,230	97,534	44,557	25,755	35,383
Kansas.....	157,232	81,384	33,259	21,037	20,951
Minnesota.....	231,074	106,042	54,079	28,136	42,217
Missouri.....	311,904	149,985	77,436	32,628	51,945
Nebraska.....	114,953	56,853	27,210	14,091	15,898
North Dakota.....	49,922	26,489	11,421	6,404	6,608
South Dakota.....	51,935	26,672	12,148	6,624	7,492
<b>SOUTH ATLANTIC.....</b>	<b>1,084,157</b>	<b>567,130</b>	<b>220,986</b>	<b>130,001</b>	<b>166,041</b>
Delaware.....	24,466	9,578	6,710	2,641	5,528
District of Columbia.....	75,764	27,298	21,092	7,771	19,033
Florida.....	122,240	57,822	24,036	10,608	20,774
Georgia.....	154,704	89,313	30,973	18,849	18,568
Maryland.....	160,600	71,903	39,649	10,368	32,781
North Carolina.....	178,101	103,212	31,722	20,036	21,131
South Carolina.....	88,090	53,702	13,568	10,296	11,125
Virginia.....	151,673	87,132	28,697	17,641	18,203
West Virginia.....	129,928	70,170	24,039	10,791	13,928
<b>EAST SOUTH CENTRAL.....</b>	<b>583,472</b>	<b>330,559</b>	<b>110,298</b>	<b>59,438</b>	<b>83,178</b>
Alabama.....	142,588	79,404	27,213	15,802	20,170
Kentucky.....	163,735	82,051	34,581	14,700	22,133
Mississippi.....	127,353	77,163	20,788	12,529	16,869
Tennessee.....	149,746	81,936	27,416	16,407	23,986
<b>WEST SOUTH CENTRAL.....</b>	<b>843,096</b>	<b>486,850</b>	<b>156,215</b>	<b>92,319</b>	<b>107,712</b>
Arkansas.....	115,917	68,562	21,053	12,212	14,060
Louisiana.....	120,074	65,856	21,718	14,405	13,098
Oklahoma.....	165,034	89,133	34,609	20,623	21,310
Texas.....	441,421	263,294	78,805	46,074	54,249
<b>MOUNTAIN.....</b>	<b>350,239</b>	<b>179,607</b>	<b>78,324</b>	<b>38,044</b>	<b>53,264</b>
Arizona.....	42,516	20,950	10,275	3,955	7,336
Colorado.....	101,793	49,322	22,218	15,236	15,017
Idaho.....	37,557	19,278	8,796	3,840	5,843
Montana.....	57,448	30,163	14,017	5,541	7,727
Nevada.....	12,540	6,303	3,237	1,262	1,738
New Mexico.....	32,039	18,890	5,775	2,825	4,549
Utah.....	40,691	21,502	9,046	2,385	7,759
Wyoming.....	25,655	13,199	5,961	3,000	3,495
<b>PACIFIC.....</b>	<b>927,606</b>	<b>444,429</b>	<b>211,431</b>	<b>108,200</b>	<b>163,546</b>
California.....	643,025	309,099	145,227	78,153	110,544
Oregon.....	103,084	51,005	24,377	10,019	17,683
Washington.....	181,497	84,328	41,827	20,023	35,319

**Sales of all food commodities.**—The total known sales of all food commodities is \$13,221,000,000, exclusive only of the sale of meals. Of this total, commodities usually regarded as grocery items constitute 38.94 percent, fresh meats (including poultry and fish) constitute 20.19 percent, fruits and vegetables constitute 10.14 percent, dairy products (including eggs and milk) constitute 17.31 percent, and related commodities (delicatessen foods, confectionery and nuts, bottled beverages, fountain sales, ice cream, and tobacco products) constitute the remaining 13.42 percent.

Although the major part of the retail food business is transacted in food stores, a substantial amount of food is sold in stores not usually associated with the food group. Primarily they include country general stores, department stores, general merchandise stores, feed-grocery stores, variety stores, and the restaurant group.

Table 26 presents a detailed analysis of the sales of food in each of these kinds of stores. The aggregate figures are as follows:<sup>3</sup>

FOOD SALES, BY COMMODITIES <sup>1</sup>

COMMODITY	Sales (in thousands)	Percent to total
Total.....	\$13,221,103	100.00
Bakery products (fresh).....	614,103	4.64
Lard, cooking fats, etc.....	307,856	2.33
Flour.....	358,468	2.71
Sugar.....	545,932	4.13
Canned goods and other groceries.....	3,322,497	25.13
Fresh meats (including poultry).....	2,507,146	18.97
Fresh fish and other seafoods.....	101,677	1.22
Fruits and vegetables.....	1,340,423	10.14
Butter and cheese.....	952,222	7.20
Milk and cream.....	828,590	6.27
Eggs.....	507,701	3.84
Delicatessen ready-to-serve foods.....	186,384	1.40
Confectionery and nuts.....	512,274	3.87
Bottled beverages.....	142,501	1.10
Fountain sales (including ice cream).....	616,317	4.65
Cigars, cigarettes, and tobacco (food-group stores only).....	317,012	2.40

<sup>1</sup> For sale by kinds of stores see table on pp. 82-85.

**Bakery products (fresh).**—Of the total known sales of bakery products at retail (\$614,103,000) the four largest distributors are bakery goods stores, 27 percent; combination grocery stores, 27 percent; grocery stores (without meat), 23 percent; and country general stores, 10 percent. Confectionery stores sell nearly 4 percent of the total sales of bakery products and delicatessens sell more than 2 percent. No other kind of business sells as much as 2 percent. A detailed list of the stores through which bakery products are sold, with the proportion which each distributes, may be found in table 26.

**Lard, cooking fats, etc.**—A determined attempt was made to ascertain the total sales at retail of lard and cooking fats and the channels through which these products reach the public. It is felt, however, that the resulting figures are incomplete. Any commodity such as this, which is widely sold, and which of itself does not constitute a sufficiently important proportion of the total business of the stores to cause them to maintain accurate records of its sale is always difficult of separate enumeration because in so many cases the stores simply do not have the information. It may be safely assumed that lard and other shortenings of the same type are sold in larger quantities than the figures obtainable would indicate, but the best it can do under the circumstances is to report the facts which the stores are able to provide. These facts indicate that the total known sales of lard, cooking fats, etc., aggregate \$307,856,000. Of this amount, 42 percent is sold in grocery stores (without meats), 29 percent in combination grocery stores, about 19 percent in country general stores, and about 5 percent in meat markets. Other known retailers of this commodity are shown in table 26.

**Flour.**—The total known sales of flour at retail are \$358,468,000, which does not include, of course, the very large sale of flour to bakeries, caterers, restaurants of all kinds, hotels, boarding houses, hospitals, and public institutions.

<sup>3</sup> A detailed analysis of the nature of the sales of the kinds of business referred to above is contained in a series of tables nos. 27 to 39, inclusive.

Thirty-eight percent of the flour sold to home consumers is sold by grocery stores (without meats), 28 percent by combination grocery stores, 20 percent by general stores, and about 10 percent by feed stores. Other kinds of stores reporting the sale of flour are shown in table 26.

**Sugar.**—The same qualification referred to in the preceding paragraph applies to sugar. The total known sales at retail (that is, primarily to home consumers) is \$545,932,000, and the principal distributors are identical with those referred to in the preceding paragraph. Grocery stores (without meats) sell 41 percent of this amount, combination grocery stores 36 percent, country general stores 19 percent, and feed stores 2 percent.

**Canned goods and other groceries.**—This is an omnibus classification which is supposed to contain, in the case of each individual store reporting sales by commodities, the total of their food sales after segregating the specific commodities for which a separate accounting was requested. It is inevitable in dealing with so many hundreds of thousands of reporting stores that this particular classification will have in it a certain proportion of the specific commodities which were supposed to have been separately reported. The utmost care was taken by the Bureau to avoid this situation, and in tabulating the returns in every store which reported its food sales under this heading without separate figures for the other commodities was separately classified and the total of such lump sum was distributed over the other commodities in the proportion indicated by those returns in which the full list of commodities was reported. Thereby, the Bureau avoided, as far as it was possible to do so, the common mistake of under-reporting specific items which so often results in a mechanical tabulation of returns where the opportunity is provided for lumping many commodities in a single "all other" classification.

As far as it was possible to do so, therefore, the Bureau has made this classification mean exactly what it says—all grocery commodities (principally canned goods) except those specifically mentioned on the printed forms on which each store's returns were received. These specific commodities are as follows, the "all other" being whatever else is sold in grocery stores:

1. Bakery products, fresh. (Biscuits and crackers to be reported as "groceries" item.)
2. Beverages, bottled.
3. Confectionery and nuts.
4. Delicatessen and ready-to-serve foods (not canned or bottled).
5. Fish and other sea foods, fresh.
6. Fruits and vegetables, fresh.
7. Groceries:
  - a. Butter and cheese.
  - b. Eggs.
  - c. Lard, lard substitutes, and cooking fats and oils.
  - d. Flour.
  - e. Sugar.
  - f. Canned goods and other groceries.
8. Meats (including poultry).
9. Milk and cream, fluid.
10. Soda-fountain sales and ice cream.
11. Sales of non-food products:
  - a. Cigars, cigarettes, and tobacco.
  - b. Hardware.
  - c. Household supplies (general line).
  - d. Stationery and school supplies.
  - e. All other sales of non-food products.
12. Total sales, all commodities.
13. Receipts from sale of meals. (Report sales of confectionery, cigars, etc., above and not here.)

Total known sales of canned goods and other groceries as described above are \$3,322,497,000. Of this amount grocery stores (without meats) sell 43½ percent, combination grocery stores sell about 33 percent, country general stores are estimated to sell 17¼ percent, and no other kind of store sells as much as 2 percent of the total.

**Fresh meats (including poultry).**—Of the total known sales of \$2,507,146,000 meat markets (without groceries) sell about 46 percent; combination meat-grocery stores sell about 38 percent; country general stores sell about 10½ percent and egg and poultry dealers sell 2¼ percent. Grocery stores which do not sell meats often sell poultry. It is relatively a small item in those kinds of stores but the aggregate of such sales is more than \$48,000,000 and is nearly 2 percent of the total known sales of meats and poultry in the United States.

**Fresh fish and other sea foods.**—This classification is not included in the meat classification referred to above, and it is not a particularly important commodity item in most food stores. Its total known sales at retail are \$161,676,000 of which 46 percent is sold in strictly fish markets. Meat markets (without groceries) sell about 13 percent of the known total, combination grocery stores sell 24 percent, grocery stores (without meats) sell more than 6½ percent, and country general stores sell nearly 6 percent.

**Fruits and vegetables.**—No data are available to show separately the sales of fruits and the sales of vegetables, but these two important commodities together account for more than 10 percent of the total food sales of the country. The aggregate is \$1,340,423,000, of which one third is sold in combination grocery

stores, almost another one third in grocery stores (without meats), only 21.2 percent in fruit stores and vegetable markets, and 10 percent in country general stores. Practically all food stores sell a certain proportion of fruits and vegetables, but those mentioned above are the principal distributors. Table 26 contains a list of the various kinds of stores which sell this commodity and the proportion sold by each.

**Butter and cheese.**—According to the best data which the census could gather the retail sales of butter and cheese exceeded the retail sales of fluid milk and cream. The total is \$952,222,000, of which 37½ percent is sold by grocery stores (without meats); 32 percent by combination grocery stores; 13 percent by general stores; only 7 percent by dairy products stores; and 3.7 percent by milk dealers. Delicatessen stores sell 1.6 percent of the total sales of butter and cheese sold at retail in the country. These commodities, like so many others in the food field, are also distributed in large amounts through other than retail channels, to hotels, restaurants, clubs, hospitals, institutions, etc.

**Milk and cream.**—The total known sales of milk and cream through food stores and retail milk dealers are \$828,590,000, of which more than three fourths is sold by milk dealers directly to consumers, usually in the form of daily deliveries of bottled milk and cream. Straight grocery stores sell about 8 percent of the total; combination stores about 6.7 percent and general stores about 2.4 percent, milk being a relatively unimportant item in country general stores. Dairy products stores, which are found mostly in the medium and larger cities, are retail distributors of bottled milk, ice cream, butter, cheese, and eggs and their sales of milk account for 4¼ percent of the total known sales of milk through all kinds of retail distributors.

**Eggs.**—The total sales of eggs at retail aggregate \$507,701,000, of which straight grocery stores sell 38 percent; combination grocery stores sell 31 percent; country general stores 14 percent; dairy products stores nearly 7 percent; egg and poultry dealers only 2.1 percent; and milk dealers 1.3 percent. Meat markets (without groceries) sell more than 2 percent of the total known egg sales of the country and feed stores sell a little more than 1 percent.

**Delicatessen foods.**—This commodity classification covers prepared foods of various kinds peculiar to delicatessen stores, such as salads, fancy cheeses, cooked meats, and relishes and pickles. The known sales of this class of commodity aggregate \$186,384,000. More than 44 percent is sold in delicatessen stores but an even greater quantity (dollars of sales) is sold in other kinds of food stores. Straight grocery stores sell nearly 18 percent of the total sales of such foods, combination stores sell 12 percent, country general stores sell 6 percent, meat markets sell 3 percent, lunch counters 3 percent and refreshment stands 3 percent. Nearly every kind of business in the food and restaurant groups sells a small proportion of delicatessen foods as is shown in detail in table 26.

**Confectionery and nuts.**—This is another type of commodity which is sold in many kinds of stores, but in only a few it is an item of sufficient importance that its sale is recorded separately from other commodities. In producing the national sales figures, used in this report, it has been necessary in many cases to estimate the sale of confectionery and nuts, based upon an accurate reporting of them in a limited proportion of the stores in each classification. As nearly as it can be determined the total sales aggregate \$512,274,000. The two commodity types were reported together in all cases so that there is no basis for a breakdown between candy ("confectionery") and nuts.

Confectionery stores sell about 38 percent of the total known sales of candy, and candy and nut stores sell about 6.3 percent. Drug stores sell 10 percent. The next largest distributors are variety stores, which sell more than 9 percent of the total; straight grocery stores sell 8.4 percent; combination grocery stores 8.5 percent; country general stores 2.8 percent and department stores 2.7 percent. Restaurants, cafeterias, lunch rooms and other eating places as a group sell about 8.5 percent, and cigar stores sell 2.1 percent. A list of all known distributors and the proportion which each sells of the total is shown in table 26.

**Bottled beverages.**—The total known sales of bottled beverages approximate \$143,000,000, of which 22 percent is sold by grocery stores; 18 percent by combination stores; 17 percent by refreshment stands; about 8 percent by dealers in bottled beverages (usually delivered directly to the homes of consumers); about 6½ percent by country general stores and the balance by restaurants, lunch counters, drug stores, news stands, and variety stores. This commodity is so widely distributed that it is shown as an item in practically every classification in the food and restaurant groups, the detail of which is reported in table 26.

**Fountain sales (including ice cream).**—The known total of fountain sales, including ice cream, are \$616,300,000, of which about 40 percent is sold in drug stores and more than 30 percent in confectionery stores. Fountain lunches sell less than 3 percent of the total. This classification is a relatively insignificant item in all food stores. Department stores sell more than 2 percent of the total, variety stores more than 9 percent, and cigar stores about 1½ percent. The restaurant group as a whole accounts for 9.2 percent of the total.

**Cigars, cigarettes, and other tobacco products.**—At the time of the census the present wide-spread sale of cigarettes, particularly in grocery stores, did not exist to any such extent as to be a factor of great importance in food stores. However, food stores and restaurants as a group appear to have sold approximately \$317,012,000 of cigars, cigarettes, and tobaccos. This is exclusive of the sale of these products through other kinds of stores, estimated to amount to an additional \$579,000,000.

In the food group the combination stores sold 26.7 percent of the \$317,012,000; grocery stores without meats sold 15.1 percent; confectionery stores 5.7 percent. As nearly as can be estimated with the limited data available regarding country general stores, such stores sold about \$77,122,000 of these commodities, or 24.3 percent of the \$317,012,000.

The restaurant group of eating places sold 26.7 percent of the total, of which full-service restaurants and lunch rooms were the largest distributors, each with sales approximating \$33,000,000.

The total retail sales of tobacco products are unknown, but on the basis of those reported to the census, they aggregate \$891,663,000. Since these commodities are sold in many kinds of stores in which they are so small a factor as to be unrecorded as separate commodities, being included only as miscellaneous merchandise, it is probable that the total sales exceed \$1,000,000,000 through retail channels alone.

**What the various stores sell.**—Separate tables have been prepared which bring together on a national basis the aggregate sales of the various commodities, under each of the kinds of business included in the food group of stores.

These totals have been built up by computing the sales of the same items, State by State, and adding the figures for the 48 States and the District of Columbia to produce national totals.

In the absence of sufficiently comprehensive commodity analyses in any State, the breakdown for that same kind of business in an adjacent State has been applied to the known total sales to produce as nearly as possible an estimate of its known sales by commodities.

The individual State reports in each case indicate the commodity coverage, which is the proportion of total sales in that State (and in that kind of business) which are used for the basis of the commodity breakdown. (See explanation in full in the United States Summary on Retail Distribution, p. 158.) Approximations are necessary for the reason that many food stores, especially the smaller ones, were unable to report their sales by individual commodities. The Bureau is reluctant to use any process of estimates or approximated figures and that practice is restricted to the special series of trade reports, of which this is one. In the more formal State reports and in the United States summary the figures are reported without interpretation and without approximations. To do so, it is necessary to express commodity sales in percentages and then to show the degree of commodity coverage, or the proportion of the total sales in that particular classification from which the percentage has been obtained. It is left to the user to determine to what extent he desires to consider these percentages equally applicable to that proportion of sales which was not reported in detail.

In the absence of any better data for these sales coverages, the Bureau has used the percentages shown in the State reports. Tables 27 to 39, inclusive, result from such application of percentages and are presented as the best approximation which can be made from the data available, but with the reservation that any better data which may become available in future through reliable trade channels, or otherwise, should be given due weight in any careful study of food distribution.

## CENSUS OF DISTRIBUTION

## SALES BY KIND OF BUSINESS

KINDS OF BUSINESS	Sales (in thousands)	Percent to total
Total.....	\$13, 221, 103	100. 00
Grocery stores without meats.....	3, 333, 314	25. 21
Combination stores.....	3, 783, 057	28. 61
Grocery stores with meat.....	2, 913, 972	22. 04
Meat markets with groceries.....	869, 085	6. 57
Meat markets (without groceries).....	1, 252, 968	9. 48
Fruit and vegetable markets.....	305, 125	2. 33
Milk dealers.....	690, 142	5. 22
Dairy products stores.....	165, 514	1. 25
Egg and poultry dealers.....	70, 479	. 53
Fish markets.....	89, 231	. 68
Bakery goods stores (and small bakeries).....	181, 589	1. 37
Delicatessen stores.....	170, 217	1. 29
Coffee, tea, and spice dealers.....	44, 933	. 34
Confectionery stores.....	443, 901	3. 40
Candy stores—nut stores.....	35, 039	. 26
Bottled beverage dealers.....	11, 533	. 09
General stores.....	11, 022, 154	12. 27
Groceries with apparel.....	69, 077	. 53
Groceries with dry goods.....	402, 839	3. 73
Groceries with general merchandise.....	974, 415	7. 37
Department stores.....	74, 306	. 57
General merchandise stores.....	73, 613	. 56
Food stores with groceries.....	111, 261	. 84
Variety stores.....	110, 469	. 83
Feed stores (flour, feed, grain).....	19, 098	. 14
Coal and feed stores.....	3, 471	. 03
Restaurants with table service.....	85, 776	. 65
Cafeterias.....	17, 223	. 13
Lunch rooms.....	64, 440	. 49
Fountain lunches.....	31, 609	. 24
Lunch counters.....	17, 840	. 13
Refreshment stands.....	43, 245	. 33
Soft-drink stands.....	2, 545	. 02
Drug stores.....	302, 641	2. 29
Cigar stores.....	20, 935	. 16
News stands.....	4, 448	. 03
All other stores known to sell food.....	36, 885	. 28

<sup>1</sup> Includes sales to the amount of \$34,322,000 which cannot be distributed between the 3 subclassifications of General Stores.

**Restaurant sales.**—Because of the scarcity of dependable information on which to base a detailed study of commodities sold by restaurants, the Bureau contents itself in this report with a statement of the sale of meals in all kinds of retail stores, the proportion of meals sold in restaurants to the total sales of all commodities in restaurants and a brief section (ch. 2) discussing the restaurant business as such. No attempt has been made to show the nature of the commodities sold by the restaurant group other than food commodities, which are as follows:

Bakery products.....	\$18, 195, 405
Delicatessen stands.....	17, 861, 348
Confectionery and nuts.....	42, 227, 178
Bottled beverages.....	43, 193, 270
Fountain sales (including ice cream).....	56, 611, 026
Tobacco products.....	84, 888, 540
Total.....	262, 976, 767

The difference between the sales of restaurants and the aggregate of their sales of meals and the food items referred to above is the extent of their sale of commodities unrelated to the food field. The aggregate of these unrelated commodities is about \$65,800,000 and no data are available on a national basis to further analyze this relatively small factor in restaurant sales.

LIBRARY

## Chapter IV.—BUYER CONTACTS

For certain kinds of food products, especially grocery specialties, the number of possible buyer contacts is as great as the total of all stores which sell food. Their number and location are shown in this report, and in still greater detail in the State reports and the final volume on retail distribution. But in most instances the smaller grocery stores, and practically all stores other than food stores which sell food, buy their merchandise through wholesalers and the practical method of selling them is through such wholesalers.

For the purpose of this analysis, the three principal kinds of food stores will serve to show how buying is distributed throughout the country, and the approximate proportion of the business available in each geographic division and in a number of principal cities. Location herein refers to the place where the buying is done, rather than the place where the merchandise is sold.

**Grocery stores.**—There are 155,290 possible contacts with grocery stores (without meats) and 5,250 wholesale grocers. The grocery store contacts include 153,702 single-store independents, 1,275 principal stores of the 2-store and 3-store independents, and the buying offices of the 313 chains. The wholesaler contacts are those shown in the wholesale census, to which reference should be made for more detail.

### GROCERY STORES—WITHOUT MEATS

[Sales in thousands]

DIVISION AND CITY	SINGLE-STORE INDEPENDENTS		2- AND 3-STORE INDEPENDENTS		CHAIN STORES (BUYING OFFICES)		Total buyers' contacts (except wholesale contacts)	WHOLESALE MERCHANTS	
	Stores	Sales	Contacts	Sales	Contacts	Sales		Contacts	Sales
<b>United States total..</b>	<b>153,702</b>	<b>\$1,786,988</b>	<b>1,275</b>	<b>\$39,041</b>	<b>313</b>	<b>\$490,946</b>	<b>155,290</b>	<b>5,250</b>	<b>\$2,779,204</b>
NEW ENGLAND.....	10,396	97,650	82	2,020	28	152,529	10,506	283	120,294
MIDDLE ATLANTIC.....	42,283	506,537	309	8,114	65	159,654	42,657	872	475,591
EAST NORTH CENTRAL.....	22,517	322,676	199	6,201	54	51,013	22,770	667	453,525
WEST NORTH CENTRAL.....	10,518	182,655	86	3,124	33	18,030	10,637	472	355,158
SOUTH ATLANTIC.....	22,650	147,306	159	3,653	45	33,795	22,854	1,104	375,181
WEST SOUTH CENTRAL.....	11,956	85,537	75	1,178	21	34,881	12,052	680	241,726
EAST SOUTH CENTRAL.....	16,938	100,857	107	3,381	18	12,105	17,063	825	378,210
WEST SOUTH CENTRAL.....	9,915	57,918	40	2,305	13	8,741	3,977	208	119,002
MOUNTAIN.....	3,915	57,918	40	2,305	13	8,741	3,977	208	119,002
PACIFIC.....	12,529	227,850	209	0,065	36	20,198	12,774	230	260,517
New York.....	9,796	174,766	100	3,109	26	36,374	9,922	268	157,885
Chicago.....	3,364	44,988	40	1,159	9	4,301	3,413	76	96,760
Philadelphia.....	3,639	31,678	26	505	8	2,177	3,673	80	55,227
Detroit.....	948	14,631	7	368	1	23,663	956	36	16,424
Los Angeles.....	1,563	26,138	37	1,642	5	2,311	1,605	45	51,487
Cleveland.....	765	8,702	11	229	4	1,278	780	23	24,694
St. Louis.....	620	7,748	6	197	---	---	823	40	35,727
Baltimore.....	662	4,667	4	297	---	---	666	35	25,141
Boston.....	917	9,763	8	433	3	15,471	928	43	26,197
Pittsburgh.....	1,211	12,632	10	310	3	1,066	1,224	60	30,893
San Francisco.....	1,396	26,336	22	1,297	3	6,372	1,421	48	52,576
Milwaukee.....	1,084	17,967	8	357	---	---	1,092	28	25,129
Buffalo.....	1,208	16,429	11	387	2	11,082	1,221	22	12,813
District of Columbia.....	223	2,656	1	27	---	---	224	14	6,841
New Orleans.....	1,560	13,149	5	55	---	---	1,565	24	15,494
Seattle.....	795	15,284	17	438	---	---	812	23	26,844
Denver.....	284	2,438	2	46	---	---	286	11	18,936
Atlanta.....	244	1,443	4	74	2	16,486	250	17	6,583
Dallas.....	178	1,224	---	---	---	---	178	10	11,843
Bridgeport, Conn.....	298	2,237	4	74	3	0,327	305	---	---
Somerville, Mass.....	81	676	---	---	2	104,103	83	---	---
Springfield, Mass.....	128	1,082	---	---	3	4,667	131	---	---
Jersey City, N. J.....	471	5,929	3	22	2	35,551	476	---	---
Schenectady, N. Y.....	237	2,820	---	---	2	6,428	239	---	---
Akron, Ohio.....	178	3,423	2	45	1	5,045	181	---	---
Birmingham, Ala.....	116	660	1	27	1	11,929	118	---	---
Chattanooga, Tenn.....	164	1,880	---	---	3	16,852	167	---	---
Houston, Tex.....	222	2,031	1	17	3	2,677	226	---	---
San Antonio.....	455	3,911	5	139	1	3,078	461	---	---

The various State reports of the retail census contain data (table 4 in each report) showing the number of each kind of retail store of each given size (annual sales), by means of which it is possible to eliminate from the table on the preceding page all stores of less than \$10,000 of annual volume, or \$20,000 or any of 10 size limits.

**Meat markets.**—There are 47,061 independent markets and 246 chain contacts, as well as 3,446 wholesale meat dealers. It is improbable that any producer or advertiser would seek to contact all of these meat buyers directly, since wholesalers and the many branches of packing houses supply most meat markets with their fresh meats and many of them with all of the other commodities sold. The following table is merely a summary by geographic divisions, which may be supplemented by much detailed data in the various State reports of the retail census to which reference should be made.

## MEAT MARKETS (INCLUDING FISH MARKETS)

[Sales in thousands]

DIVISION	INDEPENDENTS		CHAIN STORES (BUYING OFFICES)		Total buyers' contacts (except wholesale contacts)	WHOLESALE MERCHANTS (MEATS)	
	Stores	Sales	Contacts	Sales		Contacts	Sales
United States total.....	47,061	\$1,195,841	246	\$141,118	47,307	3,446	\$862,342
New England.....	2,648	60,686	8	5,090	2,656	452	145,770
Middle Atlantic.....	18,874	479,681	68	49,172	18,942	884	312,320
East North Central.....	9,628	286,068	88	57,798	9,716	590	174,575
West North Central.....	3,303	89,098	9	1,919	3,402	140	32,579
South Atlantic.....	3,576	63,051	10	1,148	3,586	619	61,969
East South Central.....	1,197	21,756	3	798	1,200	101	19,582
West South Central.....	2,607	40,796	2	171	2,609	242	25,784
Mountain.....	747	26,248	4	1,405	751	78	13,666
Pacific.....	4,391	128,407	54	23,619	4,445	340	85,097

<sup>1</sup> Of this number, 234 are strictly meat-market chains with sales of \$139,577,000.

COMBINATION STORES—GROCERIES AND MEATS

[Sales in thousands]

DIVISION AND CITY	SINGLE-STORE INDEPENDENTS		2- AND 3-STORE INDEPENDENTS		CHAIN STORES (BUYING OFFICES)		Total buyers' contacts (except wholesale contacts) <sup>1</sup>
	Stores	Sales	Contacts	Sales	Contacts	Sales	
United States total.....	94,620	\$2,421,599	1,672	\$101,671	475	\$2,381,827	96,767
NEW ENGLAND.....	9,585	284,274	195	12,850	68	471,560	9,848
MIDDLE ATLANTIC.....	15,355	373,237	236	14,480	27	42,487	15,618
EAST NORTH CENTRAL.....	23,038	635,632	382	22,653	123	54,397	24,138
WEST NORTH CENTRAL.....	11,223	325,430	210	12,180	55	37,402	11,488
SOUTH ATLANTIC.....	13,680	257,433	225	8,965	59	41,770	13,904
EAST SOUTH CENTRAL.....	6,497	124,242	86	3,864	31	19,013	6,614
WEST SOUTH CENTRAL.....	8,403	203,498	188	15,275	53	295,456	8,644
MOUNTAIN.....	2,544	87,146	72	4,928	21	37,792	2,637
PACIFIC.....	3,700	126,397	78	6,776	38	1,381,944	3,816
New York.....	586	24,601	17	3,073	10	1,124,000	613
Chicago.....	1,973	54,560	20	3,265	14	101,047	2,013
Philadelphia.....	1,335	22,654	14	352	9	156,301	1,358
Detroit.....	1,589	36,783	21	1,302	9	5,503	1,619
Los Angeles.....	683	18,235	15	1,264	8	21,431	706
Cleveland.....	843	15,466	8	938	5	22,844	860
St. Louis.....	1,493	38,706	35	1,633	7	3,030	1,535
Baltimore.....	1,593	29,119	17	557	3	6,386	1,613
Boston.....	470	14,034	10	2,365	3	12,077	483
Pittsburgh.....	505	17,801	17	1,539	8	34,880	530
San Francisco.....	106	6,762	3	134	2	3,815	111
Milwaukee.....	420	11,647	10	515	4	1,875	434
Buffalo.....	406	9,140	2	47	4	15,332	412
District of Columbia.....	773	19,561	5	334			778
New Orleans.....	263	3,252	2	13			265
Seattle.....	135	5,001	4	172	4	5,560	143
Denver.....	398	11,216	12	1,111	6	11,021	416
Atlanta.....	501	9,378	4	52	3	1,065	503
Dallas.....	452	8,419	8	457	6	4,761	466
Lynn.....	123	3,445	1	19	1	6,334	125
Providence.....	305	9,400	7	182	3	8,886	405
Newark.....	144	3,591	2	75	1	12,599	147
Cincinnati.....	452	14,231	0	233	4	286,908	402
Indianapolis.....	707	16,024	13	422	4	8,751	724
Kansas City, Mo.....	817	20,418	21	1,003	11	7,615	849
Minneapolis.....	125	4,701	5	1,254	1	10,909	131
Norfolk, Va.....	299	3,691	4	45	1	15,102	304
Miami.....	181	5,799	9	561	3	8,356	193
Tampa.....	143	3,328	2	51	4	4,215	149
Memphis.....	477	10,633	7	269	4	23,832	483
Houston.....	515	9,373	8	3,401	3	6,844	526
Tulsa.....	191	6,021	7	449	4	7,090	232
Salt Lake City.....	92	3,835	1	88	4	3,241	97
Oakland.....	61	2,418			1	172,775	62
Portland, Oreg.....	104	7,633	3	152	5	76,400	202

<sup>1</sup> For number of wholesalers see separate tables for grocery stores and for meat markets, pp. 33 and 34, respectively.

**Combination stores.**—There are 96,767 possible buyer contacts with combination stores (groceries and meats) of which 94,620 are with single-store independents, 1,672 with multi-unit independents and 475 with chains. No wholesaler contacts are shown, as they can be found listed either under grocery wholesalers or meat wholesalers. As in the case of grocery stores and meat markets, it is improbable that many, if any, producers of food products or advertisers would seek to reach all of these potential buyers direct, and it should be realized that many of the independents buy through cooperative groups or one of the several forms of so-called voluntary chains. The following table provides a summary of the available contacts with a general idea of the proportion of the business to be found in each of the geographic divisions of the country. For details, reference should be made to the several State reports of the retail census, which also show in table 4 of each such report an analysis of the stores by size of business.