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**U. S. DEPARTMENT OF COMMERCE**  
Roy D. Chapin, Secretary  
**BUREAU OF THE CENSUS**  
W. M. Stewart, Director

**FIFTEENTH CENSUS OF THE UNITED STATES**

**CENSUS OF DISTRIBUTION**

**RETAIL DISTRIBUTION**

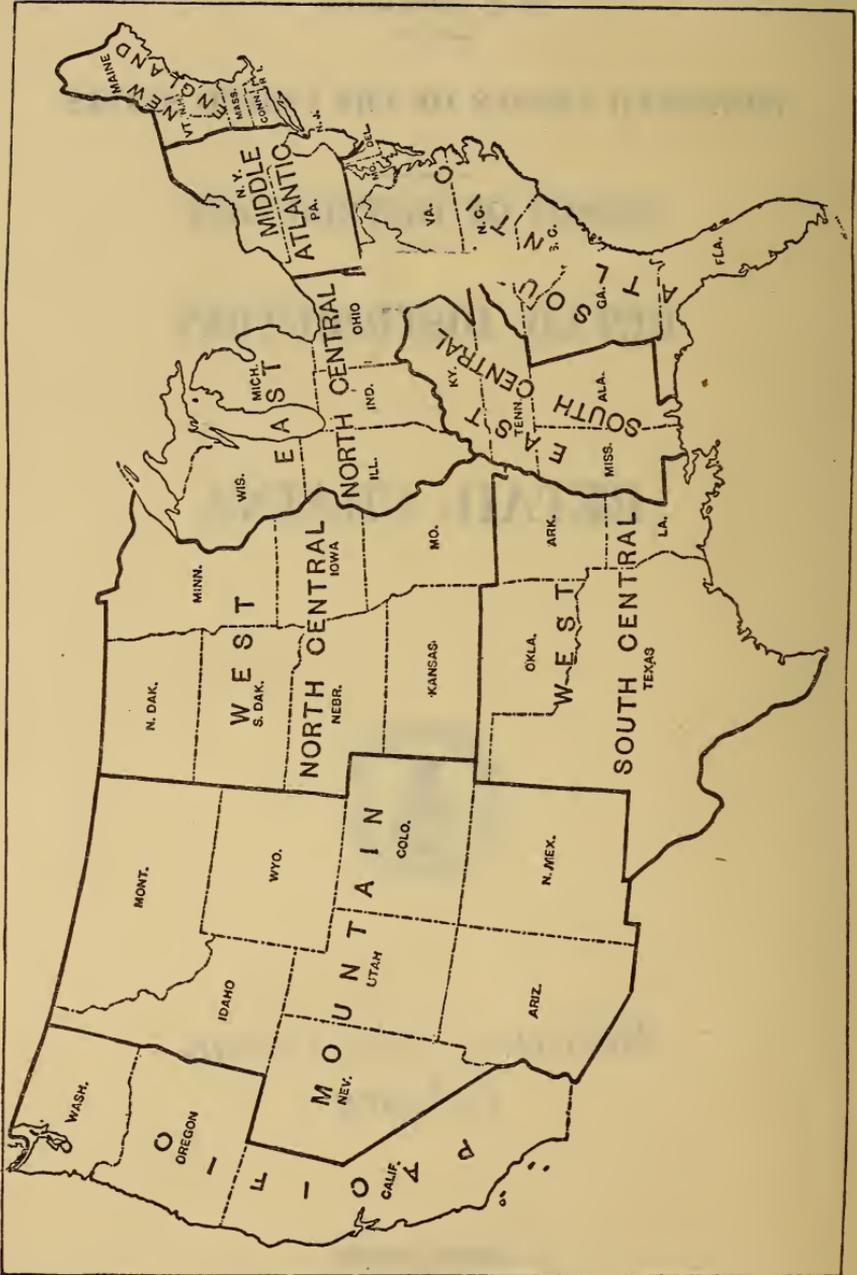
**RETAIL CHAINS**



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MAP OF UNITED STATES SHOWING GEOGRAPHIC DIVISIONS



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## LETTER OF TRANSMITTAL

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DEPARTMENT OF COMMERCE,  
BUREAU OF THE CENSUS,  
*Washington, D. C., December 14, 1932.*

SIR:

I transmit herewith the volume on Retail Chains. Eighteen chapters of this volume were published first as separate booklets, comprising the Merchandise Series of the Retail Distribution reports, issued in connection with the Census of Distribution. This report contains statistics on the retail operations of chain organizations. The data were obtained by mail and personal canvass in connection with the Fifteenth Decennial Census.

The Census of Distribution was taken in conformity with the act providing for the Fifteenth Decennial Census, approved June 18, 1929. The results of the Census of Distribution are contained in Volume I (Parts 1, 2, and 3), Retail Distribution by States with statistics for counties and cities and a summary for the United States; and Volume II, Wholesale Distribution by States with statistics for counties and cities, and a summary for the United States.

The collection and compilation of these statistics were under the supervision of R. J. McFall, chief statistician for distribution, and W. A. Ruff, assistant chief statistician. This volume was prepared by John Guernsey, in charge of Retail Distribution and Charles F. Beach, assistant.

W. M. STEUART,  
*Director of the Census.*

Hon. ROY D. CHAPIN,  
*Secretary of Commerce.*

## INTRODUCTION

The multiunit type of operation is not new, nor is it confined to the food field or even to the retail field. There are chains of newspapers, of hotels, of banks, of bond houses, of personal finance companies, of agricultural marketing agencies, of manufacturing plants, of wholesalers and of various service organizations in the business field, in addition to the more than 7,000 retail chains.

In the retail field the Census of Distribution, taken in 1930 as part of the Fifteenth Census of the United States, reported 7,061 chains, representing at least 100 kinds of business, as shown by the summary on page 17. In point of sales, the grocery and meat chains lead with 28 per cent of total chain-store sales. Incidentally, the oldest chains now in existence are grocery chains, five of which had expanded from single stores with a branch or two into chains of four or more stores each as early as 1892.

Other retail fields in which chains have become an important factor are the variety field, in which they do 90 per cent of the total variety-store business, the shoe field in which the chain ratio is 38 per cent, the filling station field in which chains do one-third of the business, and the family clothing field in which chains do 27 per cent of the total business of all family clothing stores. They are more fully described in later paragraphs.

**What constitutes a chain.**—Mere ownership of two or more units, in whatever field of business activity, does not make those units a chain. In addition to (a) common ownership the units must be (b) in the same general kind of business (for instance, one can not be a coal yard and the other a clothing store or a hotel), and they must be (c) centrally operated on generally similar policies (some can not be mail-order houses while others are retail stores).<sup>1</sup> Central operation, in the manner of a chain, implies central control of policies, central planning, central buying and some form of the warehousing function. An actual warehouse is not essential, for there are various means of distributing centrally-purchased goods to the units of a chain, as described below.

**Various types of chains.**—Multiunit organizations classified as chains by the Retail Census are:

**Local chains** are classified as such if substantially all of their stores are located in and around some one city.

**Sectional chains** are those whose stores are located in some one section of the country, such as the New England States or the Pacific Coast States or in the Gulf Southwest or any other geographic division.

**National chains** are those whose interests and operations are broader than those of any one section of the country.

**Mail-order chains.**—The classification "mail-order houses" is limited to catalogue business. It does not include the retail-store business of the companies usually known as mail-order concerns. Such retail-store business is properly classified under the heading of national chains.

**Leased-department chains** are chains of departments or sections of a store managed and merchandised, not by the proprietors or operators of the store itself, but by outside operators.

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<sup>1</sup> The retail stores of a so-called mail-order company are classified by the Retail Census as a chain, separate from the mail-order (catalogue) business.

**Utility-operated chains** are those operated by public-utility companies and are mainly for the sale of electric and gas household appliances.

**Manufacturer-controlled chains** are operated to distribute at retail the products of a manufacturer, or a group of manufacturers who are joint owners of the stores.

**What are not chains.**—*Multiunit organizations* not classified as chains, because they are not chains in conformity with the three essential characteristics described above, are:

(1) So-called *voluntary or cooperative chains*, which are groups of individually-owned stores cooperating in greater or less degree for the purpose of obtaining some of the chain-store advantages of central buying, group supervision, and/or group advertising. The census attempted to classify member stores of the so-called voluntary chains separately from other independent stores but the varying and often wierd answers to the question as to such affiliation made it necessary to abandon the attempt at separate classification, and such stores are shown in all census reports as independents. The reason for the varying answers is apparent from an unofficial analysis of a few such so-called voluntary chains in the food field, quoted in a footnote below.<sup>2</sup>

(2) **Independent stores** with one or two smaller branches, merchandised and supplied from the stocks of the parent store. These are classified as 2-store and 3-store independents. In the United States there are 24,535 2-store independents with 49,070 stores and total sales of \$3,020,443,000, and 5,171 3-store independents with 15,513 stores and total sales of \$1,255,141,000.

(3) **Local branch systems** of three or more smaller neighborhood or suburban stores surrounding a dominant downtown parent store. Such branch systems are found in but a few kinds of business. Like the 2-store and 3-store independents, the branches are largely merchandised and supplied from the stocks of the parent store, and carry limited stocks. Usually the lines of merchandise in branches are limited to a fraction of those carried by the parent store. Such branch systems have none of the operating characteristics of chains. In the United States 231 stores were classified as stores of branch systems, including the parent stores, and their sales aggregate \$64,441,000.

(4) **Ownership groups** of department stores. These are financial mergers of previously existing independently owned stores. The stores of such groups continue to be operated individually, without central merchandising and buying. They lack entirely the chain advantages of uniformity in policy, in operating methods, and in merchandise. The stores buy less than 10 per cent of their merchandise in concert. Financial ownership does not make them a chain, and until they are centrally merchandised and their buying is centralized they continue to be essentially independently operated stores, and they are so classified by the Retail Census. However, for ready comparison with department-store chains (see chapter 3) the 14 ownership groups are reported herein in chapter 4.

**Stores are only a part of activities of chains.**—The term "chain" in retailing most often envisions that form or type of multistore operation typified by the grocery chain, and only that part of the operation visible in the store itself. Yet all the grocery and meat chains together constitute only about one-third of the chain stores of the country, and they do less than 30 per cent of the total chain-store business.

In the grocery field the chain stores, which the public sees and thinks of as the chain, constitute perhaps less than half of the operations of the chain. Fully as

<sup>2</sup> "The American Institute of Food Distribution's study of voluntary chain development shows:

"That of the 688 voluntary grocery chains, with a retail membership of 83,224 as of March this year, 1932, 383 with 54,879 members are sponsored by wholesale grocers; 132 retailer-owned wholesalers accounting for 21,770 additional members. Of the groups of retailers who cooperate either in buying or advertising, but without owning or operating their own warehouses, 173 are shown with a retail membership of 6,575.

"Details of operating methods from 413, or 60 per cent, of the 688 groups operating, establish standards for comparison. Of these 413 groups with 58,085 retailers, or 70 per cent, of the total, 69.2 per cent are tied into their organizations because they have definite financial participation in the cost of operating, 62.2 per cent of the retail members have identified themselves as members of their groups by putting up store signs, by painting their stores in specified colors, or by remodeling in conformity with group standards, and 22.9 per cent more by putting emblems in their windows.

"At least 31 per cent belong to organizations that employ supervisors, especially selected and trained for their work, and 74.1 per cent of these retailers belong to organizations that have made cooperating arrangements to procure at least some perishable items on advantageous terms, and another 10.5 per cent have made such arrangements with one or the other of the leading manufacturers of crackers.

"Nearly 55 per cent belong to groups that have a considerable number of items packed under the group private label. Newspaper advertising is used by groups having 72.1 per cent of the retailers, 81 per cent of the retailers have membership in groups using handbills, 73.3 per cent of them belong to groups employing window posters, and 9.2 per cent to groups taking advantage of radio broadcasting to tell consumers about their advantages."—*The Progressive Grocer*.

important are the preliminary operations including buying, warehousing, and distribution of merchandise to the stores, in the varying grades and quantities required by the several stores or units of the chain.

Chains combine in the one organization the functions of wholesale and retail distribution. In some kinds of business, chains are able to buy centrally and have the merchandise shipped directly to their stores from the manufacturer. In others they buy centrally but distribute the merchandise to their stores through wholesalers. In still others they buy centrally and take delivery in large quantities, often out of season when manufacturers otherwise would be unable to operate, warehousing the deliveries in their own warehouses and distributing them later, in season, to their several stores. Most chains, however, combine two or more of these methods depending upon the nature of the merchandise and the location of the units in relation to sources of supply.

**Advantages.**—Principal chain advantages are centralized, large-scale buying, cooperation with manufacturers in the elimination of unnecessary expenses in manufacture, selling, packing and delivery, and in the reduction of avoidable seasonal peaks and valleys in plant production, the use of specialists in all administrative and supervisory activities, quicker action in enlarging successful practices and commodity sales and in restricting unsuccessful ones, more effective use of local advertising, and frequently the restriction of customer services (such as charge accounts and deliveries).

**Disadvantages.**—Principal chain disadvantages are lack of personal incentive or any effective substitute therefor on the part of store managers, substitution of cumbersome systems and rules for initiative, difficulty of adapting centrally purchased merchandise to the varying requirements of the different cities and neighborhoods in which it must be sold, local tax discriminations and sometimes local resentment toward chains as a type. In some kinds of business, central operation has yet to prove that it can displace or reduce any of the store operating expenses of its units, and it yet remains an added overhead expense, offset only by minor savings that can be realized from the central control of finances. In most kinds of business, however, the central organization is definitely a factor in the complete cycle of buying, distribution and sale, and its operations are not duplicated or capable of duplication in the chain units.

**Central office expense.**—Chains which operate warehouses usually charge the expenses of buying, warehousing, and store supervision to the warehousing function rather than to the retail stores, and therefore they do not appear in the store operating expenses described in the several chapters of this volume. Chains which do not operate warehouses usually locate their buyers in the central administrative office, and all of the central office expense is accounted for as a whole, either by prorata distribution to the stores of the chains or by deduction from the aggregate profit shown by the stores. In the absence of any notation to the contrary, it may be assumed that the store operating expenses described in this volume are exclusive of central buying and administrative expense. Comparison of chain-store expenses with independent-store expenses should take central office expense into consideration as an additional factor. In some instances central office salaries have been reported to the Retail Census and are shown herein on a sample basis.

The operations of chain-store warehousing are included in the Wholesale Census. Reports to that census, from a number of representative chains with warehouses show the following average expense ratios covering the functions of

administration, buying, warehousing, deliveries to the stores, and store supervision. (The percentages are based upon total retail sales of the chains, as well as the wholesale value of goods handled through the warehouses.)

#### WAREHOUSING COSTS OF CHAIN SYSTEMS IN CERTAIN KINDS OF BUSINESS <sup>1</sup>

KIND OF BUSINESS	Number of chain-store warehouses in the United States	TOTAL EXPENSES OF CHAIN-STORE WAREHOUSES (per cent of sales)	
		At wholesale values <sup>2</sup>	At retail <sup>3</sup>
Men's clothing and furnishings.....	35	8.8	5.9
Drugs and drug sundries.....	41	6.6	4.6
Furniture.....	7	11.4	7.3
Groceries and food specialties <sup>4</sup> .....	233	3.5	2.8
Meats and meat products.....	23	8.1	6.3
Shoes and other footwear.....	22	6.7	4.4

<sup>1</sup> From Wholesale Census: 1929.

<sup>2</sup> Expense divided by wholesale value of merchandise handled.

<sup>3</sup> Expense divided by retail value of same merchandise (that handled through warehouses only).

<sup>4</sup> Based upon value of goods handled through warehouses, the cost is about 4.3 per cent.

**Chain sales ratio varies by States.**—The census showed that nearly 22 cents of each average dollar spent by the retail consumer went to chain stores (19.2 cents to local, sectional, and national chains and 2.7 cents to other chains). The proportion of retail sales transacted by chains was as high as one dollar in every four in the District of Columbia and as low as one dollar in fourteen in Mississippi. (See table p. 12.) This wide variation is due partly to the fact that the chains developed first in the more concentrated and accessible urban markets offering the highest potential purchasing power. The six States of Rhode Island, Illinois, New York, California, Massachusetts, and Michigan, which show the highest proportion of urban sales, also are the six States showing the highest proportion of sales by chains.

The map on page 6 shows at a glance how chain-store development has been most accentuated in the highly industrial and more populated sections of the northeastern and northcentral regions. The States east of the Mississippi and north of the thirty-sixth parallel account for two-thirds of all chain-store sales. The States which show the lowest proportion of chain sales are those which are largely agricultural and which show low per capita purchases in food stores, the field which has been particularly developed by the chain store.

Idaho and Arizona, which show a high ratio of sales by chains despite the fact that they are not industrial areas, are high because of intensive development of department store chains rather than of food chains.

**Chain sales ratios in 17 kinds of business.**—The table below shows the ratio of chain sales to total chain and independent sales, in each of 17 principal kinds of stores, for the United States. It shows also similar chain sales ratios in three size-of-city groups which correspond to the groups shown in the retail State reports.

## CHAIN SALES RATIO IN 17 KINDS OF BUSINESS

KIND OF BUSINESS	UNITED STATES TOTALS			CITIES OF OVER 30,000 POPULATION			CITIES OF 10,000-30,000 POPULATION			PLACES OF LESS THAN 10,000 POPULATION		
	Number of stores		Sales percentage <sup>2</sup>	Number of stores		Sales percentage <sup>2</sup>	Number of stores		Sales percentage <sup>2</sup>	Number of stores		Sales percentage <sup>2</sup>
	Total	Chain stores <sup>1</sup>		Total	Chain stores		Total	Chain stores		Total	Chain stores	
Totals, all kinds of business.....	1,543,158	159,638	19.2	683,751	86,226	23.3	164,871	18,655	19.0	694,536	39,725	11.6
Department stores.....	4,221	1,964	16.7	1,759	635	11.8	1,228	673	47.2	1,234	656	50.7
Variety stores.....	12,110	5,377	90.1	4,181	2,171	95.7	1,799	1,387	93.9	6,310	1,519	61.0
Men's and boys' clothing and furnishings stores.....	28,197	2,815	21.2	16,593	2,442	27.9	4,005	208	5.7	7,599	165	2.9
Family clothing stores.....	10,551	1,585	27.3	5,411	980	31.9	1,546	394	30.4	3,594	211	7.4
Women's ready-to-wear specialty stores.....	18,253	1,914	22.7	10,869	1,459	25.4	2,926	264	11.5	4,458	191	8.3
Shoe stores.....	24,259	5,092	37.9	15,039	4,019	43.9	3,634	778	23.4	5,586	295	9.1
Furniture stores.....	25,153	1,004	14.1	10,197	660	19.0	3,210	174	8.8	11,746	170	2.4
Radio and music stores.....	16,037	794	19.1	7,717	647	25.3	2,425	88	6.3	5,895	59	2.4
Grocery stores (without meats).....	191,876	35,369	45.7	86,392	21,262	51.3	21,464	4,471	45.8	84,020	9,636	37.0
Combination stores.....	115,549	17,249	32.2	59,493	11,390	37.4	16,533	2,140	29.5	39,423	3,719	24.2
Restaurants, cafeterias.....	96,950	2,153	13.6	47,933	1,885	18.3	9,502	100	2.2	39,515	168	1.7
Cigar stores and cigar stands.....	33,248	2,162	25.1	19,127	2,032	34.3	4,046	88	5.0	10,075	42	2.3
Filling stations.....	121,513	28,617	33.9	32,381	14,740	48.8	11,096	4,032	37.3	78,036	9,845	19.4
Coal and wood yards.....	19,118	1,401	18.3	9,215	1,012	22.4	2,400	105	7.8	7,503	284	8.0
Drug stores.....	58,258	3,526	18.5	28,602	2,974	28.5	5,773	318	10.2	23,833	234	1.9
Hardware stores.....	25,330	352	3.0	11,313	225	5.2	2,267	35	1.1	11,750	91	1.1
Jewelry stores.....	19,998	370	6.4	10,155	305	7.7	2,651	48	3.5	7,192	17	.6

<sup>1</sup> Includes 15,032 stores of chains other than those classified as local, sectional, and national (see list on bottom of p. 19) which are not included in the analysis columns by size of city.

<sup>2</sup> Sales percentage is the ratio or proportion of sales of local, sectional, and national chains (only) to total sales (all types of chains and independents) and excludes the sales of the 15,032 stores of special chain types mentioned above.

NOTE.—Sales percentages shown in this table may differ slightly from the chain sales ratios (p. 17) for the reason that these comparisons are based upon store-by-store classifications, whereas the sales ratios of the chains are based upon chain-wide classifications. It should be realized that many chains operate some stores of a kind different from the kind-of-business classification applicable to the chain itself. Only the local, sectional, and national chains are included above, because they are the only ratios available which permit of comparisons in different sizes of cities.

**Geographic distribution of chain sales.**—The following table shows how the total sales of local, sectional, and national chains are distributed, by States and by the nine geographic divisions. It shows also the ratio of chain sales to total sales in each State.

## CHAIN SALES RATIO BY STATES

DIVISION AND STATE	CHAIN PROPORTION OF UNITED STATES TOTAL SALES		NUMBER OF STORES		Chain sales <sup>1</sup> percent- age
	Chain and independ- ent store sales	Chain- store sales only	Total	Chain stores	
United States, total.....	( <sup>2</sup> )	( <sup>3</sup> )	1,543,158	144,606	19.2
NEW ENGLAND.....	7.71	8.34	108,764	12,672	20.9
Connecticut.....	1.56	1.72	22,202	2,712	21.1
Maine.....	.63	.43	11,091	788	13.1
Massachusetts.....	4.18	4.95	54,183	7,209	22.8
New Hampshire.....	.38	.30	6,557	583	15.7
Rhode Island.....	.65	.78	9,542	1,054	23.2
Vermont.....	.31	.16	5,189	326	10.4
MIDDLE ATLANTIC.....	25.90	29.36	385,302	36,999	21.6
New Jersey.....	3.75	4.17	60,010	6,634	21.4
New York.....	14.40	17.06	190,017	19,091	22.6
Pennsylvania.....	7.75	8.13	125,275	11,274	20.1
EAST NORTH-CENTRAL.....	22.93	25.09	317,667	35,981	21.0
Illinois.....	7.56	8.89	96,900	10,815	22.4
Indiana.....	2.49	2.37	41,618	4,426	18.6
Michigan.....	4.53	5.32	55,958	7,319	22.4
Ohio.....	5.83	6.41	83,717	10,278	21.2
Wisconsin.....	2.52	2.10	39,474	3,143	16.0
WEST NORTH-CENTRAL.....	10.73	8.26	170,644	15,698	14.8
Iowa.....	1.98	1.50	32,716	3,190	14.6
Kansas.....	1.52	1.19	25,605	2,551	15.5
Minnesota.....	2.14	1.48	30,725	2,926	13.1
Missouri.....	2.95	2.67	47,039	4,354	17.2
Nebraska.....	1.14	.75	17,637	1,255	12.5
North Dakota.....	.48	.31	8,077	674	12.8
South Dakota.....	.52	.36	8,845	748	13.8
SOUTH ATLANTIC.....	8.55	7.56	169,068	12,055	17.0
Delaware.....	.21	.17	3,688	291	15.7
District of Columbia.....	.69	.91	5,931	955	25.0
Florida.....	1.03	.90	22,449	1,681	17.1
Georgia.....	1.29	1.12	28,687	1,961	16.3
Maryland.....	1.26	1.19	21,082	1,650	18.1
North Carolina.....	1.33	1.07	28,831	1,794	15.7
South Carolina.....	.61	.40	15,036	763	12.7
Virginia.....	1.22	1.01	26,120	1,701	16.0
West Virginia.....	.91	.79	17,244	1,259	17.1
EAST SOUTH-CENTRAL.....	4.42	3.01	89,199	5,467	13.0
Alabama.....	1.07	.78	21,442	1,450	13.9
Kentucky.....	1.20	.92	27,117	1,672	14.8
Mississippi.....	.84	.31	17,256	823	7.4
Tennessee.....	1.31	1.00	23,384	1,522	14.1

<sup>1</sup> This ratio is the ratio or percentage of sales of local, sectional, and national chains, to total sales of all stores (chain and independent).

<sup>2</sup> Each \$100 of total sales.

<sup>3</sup> Each \$100 of chain-store sales.

<sup>4</sup> Includes only local, sectional, and national chains.

## CHAIN SALES RATIO BY STATES—Continued

DIVISION AND STATE	CHAIN PROPORTION OF UNITED STATES TOTAL SALES		NUMBER OF STORES		Chain sales percentage
	Chain and independent store sales	Chain-store sales only	Total	Chain stores	
WEST SOUTH-CENTRAL.....	7.59	6.03	135,482	10,708	15.3
Arkansas.....	.84	.48	17,937	1,155	11.1
Louisiana.....	.97	.66	23,288	1,224	12.7
Oklahoma.....	1.62	1.48	27,339	2,864	17.7
Texas.....	4.16	3.41	66,918	5,465	15.8
MOUNTAIN.....	3.15	2.61	44,661	3,609	16.3
Arizona.....	.41	.44	5,068	390	21.2
Colorado.....	.65	.75	13,993	1,177	15.4
Idaho.....	.34	.36	4,916	517	20.5
Montana.....	.50	.37	6,951	565	14.8
Nevada.....	.10	.05	1,310	54	10.3
New Mexico.....	.24	.16	4,191	243	13.4
Utah.....	.40	.35	5,249	471	16.9
Wyoming.....	.21	.13	2,983	192	12.2
PACIFIC.....	9.02	9.74	122,371	11,417	21.0
California.....	6.54	7.54	85,691	8,657	22.5
Oregon.....	.93	.77	14,570	997	15.9
Washington.....	1.55	1.41	22,110	1,763	17.7

# CHAPTER I

## SUMMARY OF ALL CHAINS

Retail chains did 21.9 per cent of the total retail business in the United States as reported in the census. Local, sectional, and national chains accounted for 19.2 per cent and other types of chains for 2.7 per cent as shown on page 12.

In all, 7,061 chain-store organizations were reported, operating 159,638 stores or units, or about 10 per cent of all the stores in the country. Sales of these chains aggregated \$10,740,385,208, or 21.9 per cent of total sales in all retail stores, both chain and otherwise, for the year 1929.

**Local, sectional, and national chains.**—Classified by types, local chains operated 52,465 stores with total sales of \$3,293,890,000; sectional chains operated 41,083 stores with sales of \$2,191,250,000; and national chains operated 51,058 stores with sales of \$3,960,087,000. Mail-order chains operated 25 units or catalogue houses, with total sales of \$395,275,000, exclusive of any retail-store business which may be done by the same companies. Leased department chains operated 3,675 leased sections or departments in various stores, and in these leased departments they do a total business of \$129,702,000.

Chains operated by the public utility companies, for the sale principally of electric and gas household appliances, had 4,053 units with total sales of \$163,371,000; manufacturer-controlled chains operated a total of 3,431 stores with sales of \$389,618,000.

**Food chains.**—The stores of all types (chains and independents), classified in the census as food stores, numbered 481,891 and reported aggregate sales amounting to \$10,837,421,585. In addition, there were 104,089 country general stores which also sell food and whose total sales of \$2,570,744,006 included \$1,300,000,-000 (estimated) of food sales.

In comparison with this total of \$12,137,000,000 and included in the total food group, there were 1,461 food chains, operating 61,416 stores with sales of \$3,514,390,664, a ratio of 29 per cent. A summary below analyzes these 1,461 food chains in 11 kind-of-business classifications, showing separately the candy and confectionery chains, dairy-products chains, fruit and vegetable chains, grocery chains, combination grocery chains, meat-market chains, caterer and bakery chains, and other food chains.

**General merchandise chains.**—In the general merchandise group, consisting principally of department stores and variety stores, 54,636 stores of all types were reported with aggregate sales amounting to \$6,444,100,907. This includes 665 chains, operating 12,029 stores with sales of \$2,162,547,176, representing 33.5 per cent of the aggregate sales in this group. Of the 665 chains, 148 were variety chains, 312 were general-merchandise-store chains, 169 were dry-goods chains, 3 were chains of mail-order distributing houses (catalogue business only), and 33 were department-store chains. Ownership groups of department stores, consisting of dissimilar stores which have been merged financially but are separately merchandised, are not operated as chains and are not included in these figures. Their sales total \$1,003,602,600 in department stores and \$15,857,556 in other stores owned by the same groups.

**Apparel chains.**—In the apparel field chains did 28.2 per cent of the total business. The 114,296 apparel stores of all kinds, with aggregate sales of \$4,240,892,577, included 17,218 chain stores operated by 1,243 chains, and doing business to the amount of \$1,197,036,412. There are 19 business classifications within the apparel group, which consists principally of men's wear, women's apparel, and shoe stores.

**Automotive chains.**—The automotive group (motor-car dealers and filling stations primarily) included 1,186 chains operating 33,554 units, with aggregate sales of \$1,378,969,750, a ratio of 14.3 per cent. However, this ratio did not fully represent the influence of chains in the automotive field.

Although all but 1,290 of the 40,797 retail motor-vehicle dealers come within the classification of independents, many such dealers confine their sales to some one make of vehicles and in many respects resemble chain units. They are not included in the 1,290 chain units operated by 167 chains which did an aggregate business of \$616,594,816, a ratio of about 10 per cent. There were 128 accessory, tire, and battery chains, with 2,049 units and sales of \$122,031,641.

Of the 121,513 filling stations reported in the census, 30,038 were operated directly by 864 chains, with aggregate sales of \$629,024,296. A large proportion of the balance of the stations rated as independents are in fact agency stations of the larger oil companies, confining their oil and gasoline sales to the products of some one company. Sometimes the oil company owns the station and leases it on a gallonage basis to the independent operator. At other times the land is owned by the operator, the oil company advances the investment required for the station, and the operator repays it on a gallonage basis. A third relationship commonly existing is that the station is owned entirely by the operator, who contracts to handle one company's products exclusively in consideration of an additional margin of profit. In all three cases, however, the operator falls within the classification of an independent.

**Furniture—Household appliance—Radio chains.**—In the furniture and household group, with 58,941 stores and an aggregate business of \$2,754,720,507, the 505 chains operated 6,814 stores with sales of \$560,073,714, a ratio of 20.3 per cent. This includes 125 furniture chains, 29 home-furnishings chains, 262 household-appliance chains, and 85 radio chains. A large proportion of the household-appliance chains are operated by public utility companies, and are primarily designed to sell electric and gas appliances. Of the 8,931 household-appliance stores, 4,472 were chain units with sales of \$191,547,403, a ratio of 50.5 per cent. However, this does not represent the chain proportion of the total household-appliance business, as many kinds of stores in the general merchandise group also sell household appliances.

Radio and music stores, numbering 16,037, did an aggregate business of \$561,772,000. In this field there were 85 chains with 864 units, and sales of \$112,801,656, a ratio of 20 per cent. Radios, however, are sold in many kinds of stores other than radio stores, including particularly hardware, furniture, and department stores. The ratio shown above is the chain proportion of radio-store business.

**Restaurant chains.**—In the restaurant field 288 chains operated 3,392 units, compared with a total of 134,293 eating places in the country. The chains did an aggregate business of \$298,969,460, equivalent to 14.1 per cent of the total restaurant sales. In addition there were 7 restaurant-newsdealer chains with total sales of \$36,433,958.

**Other kinds of chains.**—In the lumber and building group, the 52,814 yards and stores, with aggregate sales of \$2,621,063,720, included 8,457 chain units of 647 chains, with sales of \$488,491,290, representing 18.6 per cent of the aggregate sales. Included in this total are 561 chains selling lumber and building materials, 20 heating and plumbing chains, and 55 paint, glass, and wallpaper chains.

In the hardware field 75 chains operated 458 stores, with total sales of \$31,595,632.

Other retail classifications in which chains are a factor of considerable importance include cigar stores; coal, wood, and ice dealers; drug stores; jewelry stores; news dealers, including those who also operate eating places, and office-appliance dealers.

Drug stores in the United States totaled 58,258, with sales of \$1,690,398,682. Of these, 3,513 were operated by 249 chains, with sales of \$312,301,721, a ratio of 18.5 per cent. There were 65 jewelry chains operating 438 chain jewelry stores with aggregate sales of \$35,687,555, a ratio of 6.7 per cent. Most of these are installment jewelers, in which field the chain ratio was 31.2 per cent.

**Multiunit independents.**—In addition to the sales of local chains included in the figures given above, there is even more business done by independents operating two or three local stores in the manner of single-store independents without chain characteristics. Except for a few local branch systems with aggregate sales of \$64,440,998, located in territory immediately surrounding old-established parent stores and merchandised from the parent stores, all multiunit local organizations with four or more stores were classified by the census as local chains, because of limited data as to their method of merchandising.

The distinguishing characteristic of multiunit independents is that the proprietor is operating the same general kind of business in two or more separate locations instead of one, in the manner of a single-store independent and not in the manner of a chain—the latter implying some form of central merchandising facilities such as a warehouse and a central buying office. The multiunit independent merchandises each store separately or he buys for his principal store and interchanges merchandise between it and his other store or stores. As he increases the number of his stores, soon he is unable longer to operate them successfully as independent stores or to merchandise them from the stocks of his parent store, and he adopts central merchandising and becomes in fact a local chain. The operator is aware of the change but it is not always apparent to the public. The line between multiunit independent operation and local chain operation is extremely variable. Where unable to obtain the facts in each case, the Census Bureau has adopted the arbitrary measure of four or more stores as constituting a local chain.

Multiunit independents operated 64,814 stores with total sales of \$4,340,025,921.

**Chains summarized by kinds of business.**—Each chain is classified in the following summary table in accordance with the kind of business which constitutes its principal activity. The classifications analyzed in the retail series of merchandising reports (which follow the summary) are indicated by report numbers. The page number of the various reports are given in an index at the end of this volume.

## CHAIN STORE SUMMARY

[Numbers opposite many classifications refer to report numbers of the merchandising series analyzing these chains in detail]

BY KINDS OF BUSINESS	Number of chains	Number of chain stores	Total net sales of chains	Chain ratio <sup>1</sup>
UNITED STATES, totals.....	7, 061	159, 638	\$10, 740, 385, 208	21. 9
Food group, total.....	1, 461	61, 416	3, 514, 390, 664	<sup>2</sup> 29. 0
Candy, nut, and confectionery chains.....	123	1, 461	53, 893, 969	
Dairy products chains.....	85	1, 201	335, 561, 369	
Fruit-and-vegetable chains.....	51	383	15, 426, 330	
Grocery-and-meat chains, total.....	1, 053	56, 501	3, 028, 594, 826	44. 0
Grocery chains (R-70).....	313	12, 330	490, 946, 311	
Combination-store chains (R-70).....	475	41, 136	2, 381, 827, 445	
Meat-market chains (R-70).....	234	2, 753	139, 577, 081	
Fish-market chains (R-70).....	12	51	1, 540, 415	
Grocery-and-dry goods store chains (R-70).....	10	187	11, 331, 102	
Grocery-and-feed store chains (R-70).....	9	44	3, 372, 472	
Caterer-and-bakery chains.....	110	1, 216	40, 572, 053	
All other food chains.....	39	654	40, 342, 117	
General merchandise group, total <sup>3</sup> .....	665	12, 029	2, 162, 547, 176	33. 5
Department store chains (R-74).....	33	2, 560	665, 172, 168	
Mail-order chains (catalog business only).....	3	25	395, 274, 978	
Dry-goods store chains.....	169	1, 336	66, 592, 876	
General-merchandise store chains.....	312	2, 661	225, 749, 036	
Variety-store chains (5-and-10, and to-a-dollar) (R-73).....	148	5, 447	809, 758, 118	89. 5
Apparel group, total.....	1, 243	17, 218	1, 197, 036, 412	28. 2
Men's wear chains, total.....	286	3, 054	270, 959, 214	
Clothing chains (R-60).....	84	893	88, 432, 317	
Clothing-and-furnishings chains (R-60).....	87	701	110, 571, 557	
Custom-tailoring chains (R-60).....	29	288	19, 073, 534	
Men's-furnishings chains (R-60).....	49	480	23, 588, 439	
Men's-hat chains (R-60).....	37	692	29, 293, 367	
Women's-apparel chains (R-8).....	221	2, 132	292, 228, 825	
Family-clothing chains.....	137	1, 769	142, 633, 156	
Millinery chains.....	167	3, 062	74, 389, 008	
Shoe chains, total.....	320	6, 099	369, 149, 760	45. 8
Men's-shoe chains (R-67).....	24	505	25, 510, 704	
Women's-shoe chains (R-67).....	62	850	78, 294, 199	
Family-shoe chains (R-67).....	234	4, 744	265, 344, 857	
All other apparel chains, total.....	112	1, 102	47, 676, 449	
Furrier chains.....	7	47	3, 871, 811	
Glove chains.....	3	27	1, 444, 393	
Hosiery chains.....	66	718	32, 160, 243	
Infants'-wear chains.....	5	27	1, 555, 983	
Knit-goods chains.....	5	57	2, 611, 968	
Lingerie-and-corset chains.....	20	158	4, 848, 373	
Umbrella chains.....	2	46		
Other apparel and accessories chains.....	4	22	1, 183, 678	

<sup>1</sup> The ratio (per cent) of sales by chains to sales by all stores can be shown only by groups. In comparing this summary with Table 6 it should be realized that many chains operate some stores of a kind different from the kind-of-business classification applicable to the chain itself. General merchandise chains operate some department stores, some dry goods stores, and some men's stores. Combination-store chains do about 50 per cent of straight grocery business, operate a few meat markets and only about one-half of their total business is combination-store volume. If any of the kinds of stores shown in Table 6, the chain ratios shown in that table are the true proportions of total sales done by all kinds of chains operating such stores, regardless of the business classification that may apply to the chains themselves.

<sup>2</sup> Relates to total sales of food group plus food sales of country general stores.

<sup>3</sup> A report entitled "Retail Distribution by Ownership Groups of Department Stores" (R-69) describes the operations of 14 groups with total sales of \$1,019,460,156. The stores are independently operated and are not included in chain totals.

## CHAIN STORE SUMMARY—Continued

BY KINDS OF BUSINESS	Number of chains	Number of chain stores	Total net sales of chains	Chain ratio
Automotive group, total.....	1, 186	33, 554	\$1, 378, 969, 750	14. 3
Motor-vehicle dealer chains (R-71).....	167	1, 290	616, 594, 816	10. 0
Used-car dealer chains (R-71).....	6	33	5, 116, 484	
Accessory, tire and battery chains, total (R-72).....	128	2, 049	122, 031, 641	
Tire chains (R-72).....	67	1, 137	58, 381, 233	
Automobile accessory chains (R-72).....	52	855	59, 486, 300	
Battery chains (R-72).....	9	57	4, 164, 108	
Filling-station chains (R-63).....	864	30, 038	629, 024, 296	85. 2
Garage chains (R-63).....	15	91	4, 051, 340	
Bicycle-dealer chains.....	3	12	148, 172	
Aircraft-dealer chains (R-71).....	3	41	2, 003, 001	
Furniture and household group, total.....	505	6, 814	560, 073, 714	20. 3
Furniture chains (R-64).....	125	992	207, 849, 904	
Home-furnishing chains (other than furniture and electrical appliances) (R-64).....	29	468	46, 571, 748	
Household-appliance chains, total.....	262	4, 472	191, 547, 403	50. 5
Electrical-appliance chains (R-61).....	154	3, 045	115, 697, 787	
Gas-appliance chains (R-61).....	49	505	20, 098, 352	
Electric and gas appliance chains (R-61).....	59	922	55, 751, 264	
Tent and awning dealer chains.....	4	18	1, 303, 003	
Radio chains, total.....	85	864	112, 801, 656	20. 0
Radio (only).....	6	48	5, 312, 626	
Radio and accessories.....	23	261	31, 275, 510	
Radio and musical instruments.....	56	555	76, 213, 520	
Restaurants and eating group, total.....	288	3, 392	298, 969, 460	14. 1
Restaurant chains (R-77).....	58	523	91, 043, 276	
Cafeteria chains (R-77).....	36	646	99, 994, 258	
Lunch-room chains (R-77).....	82	714	39, 770, 293	
Lunch-counter chains (R-77).....	52	652	27, 244, 642	
Fountain-and-lunch chains (R-77).....	14	297	32, 460, 153	
Refreshment-stand chains (R-77).....	31	406	6, 228, 969	
Soft-drink stand chains (R-77).....	15	154	2, 227, 869	
Lumber and building group, total.....	647	8, 457	488, 491, 290	18. 6
Lumber and building material chains.....	561	6, 937	418, 285, 542	
Other lumber and building chains.....	8	105	8, 685, 600	
Heating and plumbing chains (R-68).....	20	831	35, 535, 858	
Paint, wallpaper, and glass chains (R-68).....	55	565	25, 365, 336	
Electrical supply chains (R-68).....	3	19	618, 954	
Other chains, total.....	1, 066	16, 758	1, 139, 906, 742	14. 4
Hardware chains (R-68).....	75	458	31, 595, 632	
Art and gift chains.....	13	106	3, 270, 279	
Blue prints and printers (chains).....	5	35	2, 364, 013	
Book-store chains.....	30	349	35, 482, 077	
Cigar-store and cigar-stand chains.....	90	2, 218	102, 733, 330	25. 0
Coal, wood, and ice dealer chains.....	116	1, 415	184, 143, 677	
Farm-machinery dealer chains.....	11	86	5, 692, 520	
Farmers-supply-store chains.....	7	54	3, 103, 040	
Feed-store chains.....	100	1, 019	71, 142, 705	
Drug-store chains, total.....	249	3, 513	312, 301, 721	18. 5
Drug stores with fountain (R-66).....	169	3, 031	288, 680, 797	
Drug stores without fountain (R-66).....	80	482	23, 620, 924	
Florist chains.....	22	124	5, 790, 189	
Hatcheries (chains).....	12	87	1, 500, 970	
Jewelry chains, total.....	65	438	35, 687, 555	6. 7
Installment jewelry chains (R-65).....	41	283	29, 135, 314	31. 2
Jewelry chains (R-65).....	24	155	6, 552, 241	1. 5
Luggage chains.....	6	51	935, 070	
Music-store chains (without radio).....	10	108	5, 519, 435	
Monument-dealer chains.....	4	17	1, 624, 165	

## CHAIN STORE SUMMARY—Continued

BY KINDS OF BUSINESS	Number of chains	Number of chain stores	Total net sales of chains	Chain ratio
Other chains—Continued.				
Newsdealer, including restaurant newsdealers, total.	68	2,684	\$60,741,224	
Newsdealer chains (R-76).....	61	882	24,307,266	
Restaurant-newsdealer chains (R-76).....	7	1,802	36,433,958	
Novelty store chains.....	7	39	811,537	
Office-appliance chains (equipment, furniture, and supplies) (R-75).....	45	1,639	164,535,060	
Scientific-and-medical supply chains (R-75).....	10	68	5,171,967	
Optical-goods chains.....	20	148	6,878,233	
Patent-medicine chains (house-to-house).....	6	55	574,997	
Photo-supply chains.....	3	44	12,018,895	
Rubber-goods store chains.....	2	17	1,732,316	
Sanitary-supply chains.....	3	30		
Seed-store chains.....	5	28	2,987,460	
Sewing-machine chains.....	5	1,145	50,134,564	
Sporting-goods chains.....	4	40	3,568,125	
Beauty-shop chains (only those which sell merchandise).....	20	396	15,212,019	
Stationery chains.....	5	29	3,750,616	
Undertaker chains (only those which sell supplies).....	11	53	2,198,925	
All other chains.....	9	64	3,565,135	
Secondhand-store chains.....	28	201	3,139,291	

## SUMMARY BY TYPES OF OPERATION

BY TYPES OF OPERATION	Number of units	Total net sales of chains	Per cent of total chain sales
Total, all types of chains.....	159,638	\$10,740,385,208	100.0
Local chains.....	52,465	3,293,890,233	30.7
Sectional chains.....	41,083	2,191,250,396	20.4
National chains.....	51,058	3,960,086,992	36.9
Mail-order chains.....	25	395,274,978	3.7
Leased-department chains.....	3,675	129,702,438	1.2
Utility-operated chains.....	4,053	163,370,589	1.5
Manufacturer-controlled chains.....	3,431	389,618,089	3.6
Miscellaneous minor types of chains.....	3,848	217,191,493	2.0

# CHAPTER 2.—FOOD CHAINS

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# RETAIL DISTRIBUTION BY FOOD CHAINS

## GROCERY-STORE CHAINS

## MEAT-MARKET CHAINS

## COMBINATION-STORE (GROCERY AND MEAT) CHAINS

## OTHER FOOD CHAINS

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### INTRODUCTION

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Grocery chains and those in related fields, with total sales of \$3,028,594,826, are analyzed in this report. There are 313 grocery-store chains, 234 meat-market chains, 475 combination-store chains (those selling both groceries and meats), 12 fish-market chains, 10 chains selling groceries and dry goods, and 9 chains selling groceries and feed. The combined sales exceed one-third of all meat and grocery store business, chain and independent, in the United States.

The 313 grocery-store chains operate 12,330 stores with aggregate sales (in 1929) of \$490,946,311. The 475 combination-store chains operate 41,136 stores with aggregate sales of \$2,381,827,445. Many of the stores of the combination-store chains are strictly grocery stores (without fresh meat departments) but a substantial part of the business of chains so classified is the operation of combination stores. In the State and city reports of the Retail Census, each store is classified separately in accordance with the nature of its business, so that a grocery store or meat market is classified as such even though the chain of which it is a unit may be a combination-store chain. In contrast, each chain must be classified in its entirety. The total sales of combination-store chains can not be compared directly with the total sales of all combination stores to show chain ratio. However, Table 20 in this report contains the basis for an approximate comparison and shows that 53 per cent of the total sales of such chains are in combination stores. Table 6 in the United States Summary of Retail Distribution shows a further classification of food stores by types of operation.

The 234 meat-market chains operate 2,753 stores with aggregate sales of \$139,577,081. The 12 fish-market chains operate 51 stores with total sales of \$1,540,415.

In addition to the more usual kinds of food chains enumerated above, there are 10 chains which operate 187 stores which are a combination of a grocery store and a dry-goods store. Their total sales are \$11,331,102. There are also 9 chains which operate 44 stores which are a combination of a grocery store and a feed store. The 44 stores report total sales of \$3,372,472. Because the nature of such business is unusual, and is not comparable with that of other kinds of grocery chains, these 19 special chains have not been included with other chains in this report, but are separately reported in Tables 21 and 22.

### OPERATING EXPENSES

The ratio of store operating expenses to sales of the 12,330 chain grocery stores is 13.84 per cent, of which pay roll is 7.77 per cent. Rental cost in stores occupying leased premises is 2.88 per cent to total sales in such leased premises.

The ratio of store operating expenses to sales of the 2,753 chain meat markets is 18.34 per cent, of which pay roll is 10.15 per cent. Rental cost to sales in leased premises is 3.35 per cent.

The ratio of store operating expenses to sales of the 41,136 stores of chains which sell both groceries and meats is 14.31 per cent, of which pay roll is 7.55 per cent. Rental cost in leased premises is 2.56 per cent of sales in such premises.

An interesting comparison of expenses based upon the cost of rent is shown in Table 7.

Although most chains pro-rate central office expenses to their stores, in this industry it is not the usual practice. Partial data as to central office administrative salaries (executives, merchandisers, buyers, and office employees), based upon returns from 120 chains with aggregate sales of \$424,826,205, which is about 28 per cent of the total after eliminating the three largest chains, indicates this additional operating expense in grocery chains is 1.59 per cent to sales, in meat market chains it is 2.27 per cent, and in combination-store chains it is 1.03 per cent.

In many tables in this report, the three largest chains are separately reported so that they will not dominate the totals, inasmuch as nearly 50 per cent of the total business of all the chains is done by these three largest organizations. As an example of the effect of such domination of aggregate figures, the ratio of store operating expenses of all combination-store chains except the three largest is 15.46 per cent, while that of the three largest chains is 13.60 per cent, making the average ratio to sales for all the chains appear as 14.31 per cent. Table 6 presents some new comparisons, which indicate how inadequate has been much of the information heretofore available, based upon averages which included one or more of the three dominating chains, and why conclusions drawn from such general averages are misleading.

### GROWTH OF CHAINS

Of approximately 50,000 chain stores which could be classified as to age, 12.3 per cent were established in 1929, 43.7 per cent were established in the four years 1925 to 1928 and 44 per cent were established prior to 1925. The relatively small number of stores established in 1929 marks this branch of chain retailing as conservative in that chains in many fields registered substantial increases during that year.

### GEOGRAPHIC DISTRIBUTION

Of the 56,219 chain units analyzed, the Middle Atlantic States contain 33.05 per cent. The East-North-Central States, surrounding Chicago, contain 24.37 per cent, while the New England States contain 12.57 per cent. Next in order are the South Atlantic States, with 8.77 per cent, and the Pacific coast with 7.53 per cent. Table 4 shows the distribution of stores in other geographic divisions, and further divides the data by size of chains.

Of the total sales of all chains in this field, 46.3 per cent is in cities of more than 100,000 population, 17.7 per cent is in cities with population between 100,000 and 25,000, 11.7 per cent is in cities with population between 25,000 and 10,000, and 24.3 per cent is in cities and places of less than 10,000 population. This is further analyzed in Table 3 according to size of chains.

### COMBINATION-STORE CHAINS

The largest group of chains in the food field is that of organizations operating both grocery and meat stores, or combination grocery-meat stores. There are 475 such chains, operating 41,136 stores, with total annual sales of \$2,381,827,445. Although not all of the stores sell both groceries and meats, all of the chains included in this classification operate a substantial proportion of such combination grocery-meat stores. Grocery chains which were still experimenting in 1929 with combination stores, by adding meat departments in a few selected units of their grocery stores, were not classified as combination-store chains.

The average unit of combination-store chains shows annual sales of \$57,901 at a ratio of store-operating expenses to sales of 14.31 per cent. Pay roll is 7.55 per cent. Of the 41,136 stores, 37,661 are in leased premises for which the cost of rent averages 2.56 per cent to sales in such leased premises. Slightly more than 10 per cent of the units operating at the end of the census year 1929 were established in that year. The largest percentage of growth that year, as shown in Table 16, is in local chains in cities of less than 25,000 population, doing an annual volume of between \$500,000 and \$1,000,000 per chain. Based on the number of units in the chain, the largest percentage of growth in 1929 is shown to be in chains operating more than 100 and less than 1,000 units, with the small chains of less than 26 units a close second.

As is true in the case of every kind of chain except motor vehicle dealers, those chains operating in the smaller cities show the lowest ratio of expenses to sales. Local chains in small cities show a ratio of expense to sales of 12.61 per cent. All types of chains operating in cities of less than 25,000 population show a ratio of expense to sales of 12.78 per cent. These ratios compare with 14.31 per cent for all chains, and 13.60 per cent for the three largest chains in the country which operate in large and small cities. The latter figure is exclusive of central organization expenses.

### CREDIT SALES OF COMBINATION-STORE CHAINS

Only 148 chains report that they extend credit, and they do less than 6 per cent of the total sales of all combination-store chains. They operate 2,237 stores, with aggregate sales of \$140,495,144, of which 24.48 per cent, or \$34,398,817, is credit business. These chains operate at an expense ratio to sales of 19.74 per cent, of which 10.30 per cent is pay roll and 2.66 per cent is rent. The sales per store are somewhat higher than the average of chain stores which do not give credit, averaging \$62,805.

### COMMODITIES SOLD BY COMBINATION-STORE CHAINS

Groceries constitute about 57 per cent of total sales of all chains in the combination-store classification. Meats and fish add about 15 per cent, while fruits and vegetables average 12.11 per cent. A list of the commodities is given in Table 19.

In this table, the breakdown of sales is shown separately for the three largest national chains as one group and all other combination-store chains as another group. This comparison shows there was considerable difference in practice in 1929 between the two groups, as to the proportionate sale of the several commodities which they reported. In the three largest chains, meats constitute only 12.22 per cent of sales, fish is a negligible item, all other related commodities are materially under the proportions sold by other chains, and groceries constitute more than 56 per cent of their total sales. The other chains did less than 59 per cent of their business in groceries, nearly 20 per cent in meats, nearly 4 per cent in bakery products and only 9.17 per cent in fruits and vegetables. The latter compares to 13.91 per cent by the three largest chains.

### GROCERY-STORE CHAINS

Operating expenses of grocery-store chains are analyzed in some detail in Table 9, and show a ratio to sales of 13.84 per cent. Chains are classified first according to volume of sales, then according to the number of units operated, then by type of operation, and finally by size of city. The latter comparison shows that in cities of less than 25,000 population the pay roll expense is 6.24 per cent and rent

is 1.79 per cent. These expenses increase to 6.48 per cent and 2.27 per cent respectively, in cities of 25,000 to 100,000 population. They increase further to 7.27 per cent and 2.71 per cent respectively, in cities of more than 100,000 population. Sixty-two local chains operating entirely in small cities and towns show an expense ratio of 11.44 per cent, which is the lowest expense of any of the type-classifications.

Credit is extended to their customers by 60 grocery chains, operating 714 units. Credit sales aggregate 29.41 per cent of total sales of such chains, while their ratio of expenses is 16.28 per cent in comparison with a ratio for all grocery chains of 13.84 per cent.

### COMMODITIES SOLD BY GROCERY-STORE CHAINS

About 70 per cent of the sales of these chains is of groceries. Fruits and vegetables account for 12.11 per cent. Other commodities of lesser importance, shown in more detail in Table 11, are bakery products, bottled beverages, confectionery and nuts, milk and cream, cigarettes, household supplies of minor importance, and a small amount of meats, fish and other sea foods.

### MEAT-MARKET CHAINS

With an operating expense ratio of 18.34 per cent, the 234 meat-market chains show aggregate sales in 2,753 units of \$139,577,081. The sales per store average \$50,700. Of the average expense ratio of 18.34 per cent, 10.15 per cent is pay roll. About 44 per cent of the markets are in leased premises, for which the rent ratio is 3.35 per cent to sales in such leased premises.

Three of the chains operate more than 100 units each, 21 operate between 26 and 100 units each, and 210 are chains of less than 26 units. Cash-carry chains total 161, with 1,899 units, whereas 73 chains report that they extend credit. The information available would seem to indicate that markets which extend credit can operate at no greater expense, and less pay-roll expense, than those whose terms are strictly cash-carry. (See Table 14.) About 38 per cent of the total sales of all the chains is in such credit-extending markets. However, a more detailed comparison of 28 chains which extend credit, with 28 chains doing about the same aggregate business on the cash-carry basis (Table 13), shows a slight difference in favor of the cash-carry chains, although even in this comparison the pay-roll expense is lower in the credit chains. In grouping the 56 chains used in this comparison, 28 credit chains were picked at random from among those operating in medium-size cities, and 28 cash-carry chains were then matched against them with regard to size of city and total sales. No other points of comparison were used, and no selection whatever was employed.

The commodity table (Table 15) shows that meats, including poultry, make up 88 per cent of the total sales of the meat-market chains analyzed. Fish constitutes 5 per cent, groceries are a negligible quantity at 6 per cent, and there are small amounts of bakery products, fruits, vegetables, and delicatessen foods. The breakdown is based upon a commodity coverage of about 50 per cent.

### FISH-MARKET CHAINS

The report includes a table (Table 20) summarizing the operations of 12 fish market chains, with 51 markets and total sales of \$1,540,415. The ratio of operating expenses of these chains is 36.62 per cent, of which pay roll is 21.26 per cent and rent is 4.39 per cent.

The commodities sold by these chains, based upon a commodity coverage of 38 per cent, are:

	Per cent
Fish and sea foods.....	95. 25
Fruits, vegetables, groceries.....	4. 75

## OTHER GROCERY CHAINS

In addition to the more usual kinds of chains described in the preceding paragraphs, there are 10 chains which operate 187 stores, which are a combination of a grocery store and a dry-goods store. Their total sales are \$11,331,102.

There are also 9 chains which operate 44 stores, which are a combination of a grocery store and a feed store. The 44 stores report total sales of \$3,372,472.

Because of the small number of chains in these two classifications, no detailed analyses can be shown without the danger of disclosing individual operations. This report confines itself to a brief summary, contained in Tables 21 and 22.

## OTHER FOOD CHAINS

There are classifications outside of the grocery and meat fields, but within the food group, which should be considered in connection with grocery chains.

There are 123 chains operating a total of 1,461 candy, nut, or confectionery stores, with total annual sales (in 1929) of \$53,893,969.

There are 85 chains operating 1,201 dairy products stores, selling milk, cream, cheese, butter, and eggs, with aggregate sales (in 1929) of \$335,561,369.

There are 51 chains operating 383 fruit and vegetable markets, with total sales (in 1929) of \$15,426,330.

There are 110 chains operating 1,216 stores selling bakery goods or acting as caterers, with total sales (in 1929) of \$40,572,053.

There are 39 other miscellaneous food chains operating 654 stores, with total sales (in 1929) of \$40,342,117.

None of these chains is further described in this report.

TABLE 1.—SUMMARY OF FOOD CHAINS

	Number of chains	Number of stores	Total net sales (1929)
Totals.....	1, 461	61, 416	\$3, 514, 390, 064
Analyzed in detail.....	1, 022	56, 219	3, 012, 350, 837
Grocery-store chains (see Tables 9 to 11).....	313	12, 330	490, 946, 311
Meat-market chains (see Tables 12 to 15).....	234	2, 753	139, 577, 081
Combination-store (grocery and meat) chains (see Tables 16 to 19).....	475	41, 136	2, 381, 827, 445
Analyzed briefly:			
Fish-market chains (see Table 20).....	12	51	1, 540, 415
Grocery and dry goods store chains (see Table 21).....	10	187	11, 331, 102
Grocery and feed store chains (see Table 22).....	9	44	3, 372, 472
Not analyzed:			
Dairy products chains.....	85	1, 201	335, 561, 369
Candy, nut, or confectionery chains.....	123	1, 461	53, 893, 969
Fruit and vegetable market chains.....	51	383	15, 426, 330
Caterer and bakery chains.....	110	1, 216	40, 572, 053
All other food chains.....	39	654	40, 342, 117

TABLE 2.—CHAIN UNITS CLASSIFIED BY KIND OF BUSINESS AND SIZE OF CITY—GROCERY, MEAT, AND COMBINATION CHAINS

	Total units all cities	Per cent of total units	UNITS LOCATED IN—					Units unclassified
			Cities of more than 100,000 population	Cities of 25,000 to 100,000 population	Cities of 10,000 to 25,000 population	Cities and places less than 10,000 population		
Totals, all units.....	56,219	100.00	25,678	9,010	5,769	13,509	2,253	
Grocery-store chain units.....	12,330	21.94	5,391	1,735	1,120	2,417	1,667	
Meat-market chain units.....	2,753	4.90	1,606	481	293	312	61	
Combination-store chain units.....	41,136	73.16	18,681	6,794	4,356	10,780	525	
Units of 3 national combination-store chains each operating more than 2,500 units (3 chains).....	23,925	42.55	11,123	3,882	2,416	6,420	84	
Units of all other combination grocery and meat market chains (376 chains).....	16,278	28.95	7,041	2,706	1,825	4,282	424	
Units of combination meat market and grocery chains (95 chains, total sales \$85,286,456).....	933	1.66	517	206	115	78	17	

TABLE 3.—CHAIN UNITS CLASSIFIED BY DATE OF ESTABLISHMENT AND SIZE OF CHAIN—GROCERY, MEAT, AND COMBINATION CHAINS

	Total units all chains	Per cent of total units	UNITS IN CHAINS OF—					Less than 26 units
			3 national chains of more than 2,500 units	All others with more than 1,000 units	501 to 1,000 units	101 to 500 units	26 to 100 units	
Total.....	56,219	-----	23,925	9,085	4,072	8,543	3,864	6,730
Less units which can not be classified.....	6,252	-----	234	1,667	919	2,070	459	303
Units classified as to age.....	49,967	100.00	23,691	7,418	3,153	5,873	3,405	6,427
Established in 1929.....	6,152	12.3	1,817	744	223	511	451	2,406
Established 1925 to 1928.....	21,819	43.7	10,909	3,367	1,449	2,055	1,535	2,504
Established prior to 1925.....	21,996	44.0	10,965	3,307	1,481	3,307	1,419	1,517

TABLE 4.—CHAIN UNITS CLASSIFIED BY GEOGRAPHIC LOCATION AND SIZE OF CHAIN—GROCERY, MEAT, AND COMBINATION CHAINS

DIVISION	Total units all chains	Per cent of total units	UNITS IN CHAINS OF—					Less than 26 units
			3 national chains of more than 2,500 units	All others with more than 1,000 units	501 to 1,000 units	101 to 500 units	26 to 100 units	
United States, total.....	56,219	100.00	23,925	9,085	4,072	8,543	3,864	6,730
New England.....	7,069	12.57	2,330	2,514	39	1,284	558	344
Middle Atlantic.....	18,581	33.05	6,358	3,402	3,368	3,231	964	1,258
East North Central.....	13,700	24.37	7,976	1,300	653	1,010	960	1,801
West North Central.....	2,839	5.05	1,460	318	1	189	273	598
South Atlantic.....	4,929	8.77	2,465	241	11	1,206	228	778
East South Central.....	2,113	3.76	943	-----	-----	602	246	322
West South Central.....	1,871	3.33	839	14	-----	354	130	534
Mountain.....	885	1.57	294	108	-----	119	108	256
Pacific coast.....	4,232	7.53	1,260	1,188	-----	548	397	839

TABLE 5.—SALES CLASSIFIED BY SIZE OF CHAIN AND SIZE OF CITY—GROCERY, MEAT, AND COMBINATION CHAINS

	Cities of all sizes, total net sales	NET SALES, CITIES WITH POPULATION OF—			
		More than 100,000	25,000 to 100,000	10,000 to 25,000	Less than 10,000
Total, all chains.....	\$3, 012, 350, 837	\$1, 395, 745, 475	\$532, 292, 098	\$352, 171, 719	\$732, 141, 545
Per cent.....	100.00	46.3	17.7	11.7	24.3
3 national chains of—					
More than 2,500 units each.....	\$1, 474, 475, 398	\$649, 403, 272	\$241, 811, 103	\$176, 957, 988	\$406, 303, 035
Chains of—					
More than 1,000 units each (exclusive of 3 above).....	436, 609, 504	209, 657, 549	72, 384, 459	49, 053, 763	105, 513, 733
501 to 1,000 units.....	149, 742, 909	88, 102, 820	16, 514, 572	19, 096, 405	26, 029, 112
101 to 500 units.....	353, 390, 331	183, 278, 143	46, 737, 046	41, 193, 277	82, 181, 865
26 to 100 units.....	188, 410, 507	83, 224, 612	50, 723, 853	19, 674, 383	34, 787, 659
Less than 26 units.....	409, 722, 188	182, 079, 079	104, 121, 065	46, 195, 903	77, 326, 141

TABLE 6.—SUMMARY OF EXPENSE DATA—GROCERY, MEAT, AND COMBINATION CHAINS

	Grocery-store chains	Meat-market chains	COMBINATION-STORE CHAINS	
			3 largest national chains	All other chains
Number of chains.....	313	234	3	472
Number of units.....	12, 330	2, 753	23, 925	17, 211
Net sales (1929).....	\$490, 946, 311	\$139, 577, 081	\$1, 474, 475, 398	\$907, 352, 047
Total store operating expenses, per \$100 of sales.....	13.84	18.34	13.60	15.46
Pay roll, per \$100 of sales.....	7.77	10.15	7.17	8.17
Other store operating expenses, per \$100 of sales (including rent).....	6.07	8.19	6.43	7.29
Rent in leased premises per \$100 of sales in such leased premises (included above).....	2.88	3.35	2.11	2.56
Additional expenses: Central office administrative, buying, and clerical salaries (based on 120 chains, see Table 8).....	1.59	2.27	(1)	1.03

<sup>1</sup> Not reported.

TABLE 7.—CHAINS ANALYZED ACCORDING TO COST OF RENT—GROCERY, MEAT, AND COMBINATION CHAINS

	GROCERY—STORE CHAINS			MEAT—MARKET CHAINS			COMBINATION—STORE CHAINS		
	Chains paying rent in excess of 6 per cent of net sales	Chains paying rent less than 3 per cent of net sales	Chains paying rent in excess of 6 per cent of net sales	Chains paying rent less than 3 per cent of net sales	Chains paying rent to 6 per cent of net sales	Chains paying rent in excess of 6 per cent of net sales	Chains paying rent to 6 per cent of net sales	Chains paying rent less than 3 per cent of net sales	
Chains.....	10	83	14	113	107	8	89	378	
Units.....	144	4,369	231	1,481	1,041	45	2,970	38,121	
Net sales (1929).....	\$4,992,046	\$166,828,305	\$10,842,785	\$57,988,445	\$70,745,851	\$3,805,244	\$121,916,065	\$2,256,106,136	
Average sales per unit.....	34,667	38,185	46,938	39,155	67,960	34,561	41,049	59,183	
Total operating expenses.....	\$884,571	\$24,080,194	\$2,460,511	\$12,069,874	\$11,063,480	\$1,244,368	\$22,810,972	\$316,845,814	
Per \$100 of sales.....	17.72	14.43	22.69	20.81	15.64	32.70	18.71	14.04	
Total pay roll cost.....	\$469,329	\$13,536,179	\$1,337,631	\$6,470,396	\$16,357,704	\$595,757	\$12,157,705	\$167,157,739	
Per \$100 of sales.....	9.40	8.11	12.34	11.16	8.99	15.66	9.97	7.41	
Other store operating expenses, including rent.....	\$415,242	\$10,544,015	\$1,122,880	\$5,599,478	\$4,705,776	\$648,611	\$10,653,267	\$149,688,075	
Per \$100 of sales.....	8.32	6.32	10.35	9.65	6.65	17.04	8.74	6.63	
Rent in leased premises, per \$100 of sales in such leased premises (included in above figures).....	16.50	3.66	6.79	3.89	2.22	7.88	3.85	2.18	

<sup>1</sup> Rent in 11,586 leased premises.

<sup>2</sup> Rent in 2,596 leased premises.

<sup>3</sup> Rent in 37,661 leased premises.

TABLE 8.—CENTRAL OFFICE ADMINISTRATIVE SALARIES—GROCERY, MEAT, AND COMBINATION CHAINS

[Executives, merchandisers, buyers, and clericals]

	All chains reporting central office administrative expense	Grocery-store chains	Meat-market chains	Combination-store chains
Number of chains reporting central office administrative expense.....	120	28	42	50
Net sales (1929) of these chains.....	\$424, 826, 205	\$109, 594, 813	\$57, 171, 442	\$258, 059, 950
Total salaries and wages paid officers and other employees.....	\$5, 683, 956	\$1, 739, 065	\$1, 298, 718	\$2, 646, 173
Per \$100 of sales.....	1.34	1.59	2.27	1.03
Number of salaried officers and merchandise executives.....	349	62	94	193
Salaries.....	\$2, 767, 789	\$806, 445	\$666, 053	\$1, 295, 291
Per \$100 of sales.....	.65	.74	1.16	.50
Number of central office employees.....	1, 773	510	342	921
Salaries.....	\$2, 916, 167	\$932, 620	\$632, 665	\$1, 350, 882
Per \$100 of sales.....	.69	.85	1.11	.53

TABLE 9.—STORE OPERATING EXPENSES—GROCERY STORE CHAINS  
A—CHAINS CLASSIFIED ACCORDING TO VOLUME OF SALES

	Num-ber of chains	Num-ber of units	Net sales (1929)	Average sales per unit	Per cent of units estab-lished in 1929	STORE OPERATING EXPENSES					Rent in leased prem-ises per \$100 of sales in such leased prem-ises 1	
						Total	Per \$100 of sales	Pay roll	Per \$100 of sales	Other operating expenses (including rent)		Per \$100 of sales
Totals, all chains.....	313	12, 330	\$490, 946, 311	\$39, 817	10. 18	\$67, 968, 827	13. 84	\$38, 157, 277	7. 77	\$29, 811, 550	6. 07	2. 88
Chains whose sales are—												
More than \$10,000,000.....	11	6, 946	287, 680, 326	41, 417	6. 46	39, 181, 992	13. 62	23, 043, 838	8. 01	16, 138, 154	5. 61	2. 79
\$5,000,000 to \$10,000,000.....	4	926	29, 213, 018	31, 548	5. 08	3, 919, 886	13. 42	1, 552, 351	5. 31	2, 367, 535	8. 11	2. 90
\$2,500,000 to \$5,000,000.....	13	1, 170	45, 031, 182	38, 488	4. 19	6, 675, 835	14. 82	3, 563, 159	7. 91	3, 112, 676	6. 91	3. 26
\$1,000,000 to \$2,500,000.....	30	953	41, 962, 617	44, 052	11. 75	6, 305, 090	15. 03	3, 694, 527	8. 74	2, 640, 563	6. 29	2. 08
\$500,000 to \$1,000,000.....	61	1, 072	43, 124, 725	40, 228	18. 10	5, 777, 641	13. 40	3, 006, 451	6. 97	2, 771, 190	6. 43	2. 49
\$250,000 to \$500,000.....	70	556	25, 400, 855	45, 685	31. 29	3, 380, 377	13. 34	1, 847, 672	7. 27	1, 541, 705	6. 07	2. 31
\$100,000 to \$250,000.....	83	508	15, 534, 061	30, 579	24. 61	2, 217, 998	14. 28	1, 201, 987	7. 75	1, 016, 011	6. 53	2. 70
Less than \$100,000.....	41	199	2, 999, 527	15, 073	52. 76	501, 008	16. 70	277, 292	9. 24	223, 716	7. 46	3. 42

B—CHAINS CLASSIFIED ACCORDING TO NUMBER OF UNITS OPERATED

	Num-ber of chains	Num-ber of units	Net sales (1929)	Average sales per unit	Per cent of units estab-lished in 1929	STORE OPERATING EXPENSES					Rent in leased prem-ises per \$100 of sales in such leased prem-ises 1	
						Total	Per \$100 of sales	Pay roll	Per \$100 of sales	Other operating expenses (including rent)		Per \$100 of sales
Totals, all chains.....	313	12, 330	\$490, 946, 311	\$39, 817	10. 18	\$67, 968, 827	13. 84	\$38, 157, 277	7. 77	\$29, 811, 550	6. 07	2. 88
Chains of—												
More than 500 units.....	5	5, 320	210, 147, 721	39, 501	7. 03	28, 618, 380	13. 62	17, 443, 290	8. 30	11, 175, 090	5. 32	2. 76
100 to 500 units.....	15	3, 252	125, 196, 344	38, 498	4. 06	17, 323, 086	13. 84	8, 793, 911	7. 00	8, 559, 175	6. 84	3. 32
26 to 100 units.....	39	1, 654	61, 601, 737	37, 244	10. 34	8, 707, 050	14. 13	4, 642, 234	7. 53	4, 004, 826	6. 60	2. 99
Less than 26 units.....	254	2, 104	94, 000, 509	44, 677	27. 47	13, 320, 311	14. 10	7, 307, 862	7. 76	6, 012, 459	6. 39	2. 41

C—CHAINS CLASSIFIED ACCORDING TO TYPES OF OPERATION

Totals, all chains.....	313	12,330	\$490,946,311	\$30,817	10.18	\$67,968,827	13.84	\$38,157,277	7.77	\$29,811,550	6.07	2.88
Local chains.....	293	8,080	309,845,747	38,347	10.69	41,311,686	13.33	24,059,020	7.76	17,252,666	5.57	2.72
Large city locals.....	66	516	21,694,795	42,044	23.06	2,780,928	12.82	1,578,063	7.27	1,202,865	5.55	2.71
Smaller city and town locals.....	62	387	15,803,468	40,836	37.98	1,808,041	11.44	998,484	6.32	809,557	5.12	1.72
Sectional chains.....	19	1,771	181,100,564	42,612	9.22	26,657,141	14.72	14,098,257	7.79	12,588,884	6.93	3.19
National chains.....	1	2,479										

D—CHAINS CLASSIFIED BY SIZE OF CITY

(Includes only chains which operate all of their units in cities of the same size-class)

Chains used for this table.....	209	2,782	\$134,596,709	\$48,381	17.03	\$18,836,015	13.99	\$10,106,414	7.51	\$8,729,601	6.48	2.64
Chains operating all their units in cities and places of—												
More than 100,000 population.....	66	516	21,694,795	42,044	23.06	2,780,928	12.82	1,578,063	7.27	1,202,865	5.55	2.71
25,000 to 100,000 population.....	10	113	6,124,304	54,107	8.83	4,804,568	13.14	306,636	0.48	407,932	6.66	2.27
Less than 25,000 population.....	116	968	41,570,016	42,944	23.76	4,662,915	11.22	2,592,753	6.24	2,070,162	4.98	1.79
Chains operating in all sizes of cities in two or more geographic divisions.....	8	1,185	65,207,594	55,028	9.70	10,587,604	16.24	5,588,962	8.50	5,048,642	7.74	3.03

1 This is the per cent of rent in 11,586 leased premises to net sales in such leased premises.

2 This is the per cent of rent in wholly leased premises to net sales in such leased premises.

TABLE 10.—CREDIT SALES—GROCERY-STORE CHAINS

	Chains report- ing credit
Number of chains.....	60
Number of units.....	714
Units located in cities or places of—	
More than 100,000.....	266
25,000 to 100,000.....	74
10,000 to 25,000.....	76
Less than 10,000.....	298
Net sales (1929).....	\$39,093,043
Credit sales.....	\$11,495,441
Per cent.....	29.41
Average sales per unit.....	\$54,752
Total store operating expenses.....	\$6,363,445
Per \$100 of sales.....	16.28
Pay roll.....	\$3,624,331
Per \$100 of sales.....	9.27
Other store operating expense (including rent).....	\$2,739,114
Per \$100 of sales.....	7.01
Rent, per \$100 of sales, included in previous item.....	2.92

TABLE 11.—SALES BY COMMODITIES—GROCERY-STORE CHAINS

	All grocery store chains	Grocery- store chains of less than 500 units	5 Grocery- store chains of more than 500 units
Total sales, all chains.....	\$490,946,311	\$280,798,590	\$210,147,721
Less—amount which cannot be broken down into commodities.....	134,237,076	134,237,076	-----
Sales further analyzed.....	356,709,235	146,561,514	210,147,721
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Commodity.....	100.00	100.00	100.00
Bakery products.....	3.37	2.64	3.88
Beverages, bottled.....	1.16	.97	1.30
Confectionery and nuts.....	1.08	.84	1.24
Delicatessen and ready-to-serve foods.....	.18	.43	-----
Fish and other sea foods.....	.61	.11	.95
Fresh fruits and vegetables.....	12.11	8.98	14.29
Groceries, general line, total.....	69.75	74.22	66.64
Meats.....	4.14	4.19	4.10
Milk and cream.....	2.23	1.83	2.60
Restaurant operations.....	.26	.64	-----
Sales of nonfood products.....	5.06	5.15	5.00
A further partial breakdown of two of the above classifications, based upon a coverage of about 38 per cent in the case of groceries and 77 per cent in the case of nonfood products, is shown below:			
Groceries (general line).....	69.75	74.22	66.64
Butter and cheese.....	11.27	10.34	11.36
Eggs.....	7.62	4.12	8.68
Lard, cooking fats, etc.....	1.33	2.34	.94
Flour.....	1.90	2.92	1.50
Sugar.....	5.45	6.54	4.94
Canned goods and other groceries.....	42.18	47.96	39.22
Nonfood commodities.....	5.06	5.15	5.00
Cigars, cigarettes, and tobacco.....	2.21	1.71	2.28
Hardware, household supplies, stationery, and school supplies.....	2.10	2.18	2.07
All other nonfood products.....	.75	1.26	.65

TABLE 12.—STORE OPERATING EXPENSES—MEAT MARKET CHAINS  
A—CHAINS CLASSIFIED ACCORDING TO VOLUME OF SALES

	Number of chains	Number of units	Net sales (1929)	Average sales per unit	Per cent of units established in 1929	STORE OPERATING EXPENSES					Rent in leased premises per \$100 of sales in such leased premises <sup>1</sup>	
						Total	Per \$100 of sales	Pay roll	Per \$100 of sales	Other operating expenses (including rent)		Per \$100 of sales
Totals, all chains.....	234	2,753	\$139,577,081	\$50,700	17.62	\$25,593,865	18.34	\$14,165,731	10.15	\$11,428,134	8.19	3.35
Chains whose sales are—												
More than \$5,000,000.....	3	326	19,571,668	60,036	18.71	3,359,182	17.16	1,922,006	9.82	1,437,176	7.34	4.45
\$2,500,000 to \$5,000,000.....	9	360	30,511,312	84,754	14.17	5,097,670	16.51	2,581,844	8.46	2,455,826	8.05	2.82
\$1,000,000 to \$2,500,000.....	16	455	24,398,153	53,622	11.65	4,728,684	19.38	2,631,356	10.78	2,097,328	8.60	3.00
\$500,000 to \$1,000,000.....	37	565	26,446,791	46,726	14.66	5,177,608	19.58	2,823,601	10.68	2,354,007	8.90	3.45
\$250,000 to \$500,000.....	68	538	23,868,831	44,366	23.05	4,449,515	18.64	2,576,587	10.79	1,872,964	7.85	3.32
\$100,000 to \$250,000.....	76	403	12,957,013	32,151	21.10	2,432,315	18.77	1,392,251	10.74	1,040,064	8.03	3.43
Less than \$100,000.....	25	103	1,823,313	17,365	20.95	408,855	22.42	238,086	13.06	170,769	9.36	4.30

B—CHAINS CLASSIFIED ACCORDING TO NUMBER OF UNITS OPERATED

Chains of—	Number of units	Net sales (1929)	Average sales per unit	Per cent of units established in 1929	STORE OPERATING EXPENSES					Rent in leased premises per \$100 of sales in such leased premises <sup>1</sup>		
					Total	Per \$100 of sales	Pay roll	Per \$100 of sales	Other operating expenses (including rent)		Per \$100 of sales	
Totals, all chains.....	234	2,753	\$139,577,081	\$50,700	17.62	\$25,593,865	18.34	\$14,165,731	10.15	\$11,428,134	8.19	3.35
More than 100 units.....	3	380	13,923,259	36,640	16.84	3,041,406	21.84	1,661,423	11.93	1,379,983	9.91	5.27
26 to 100 units.....	21	867	51,203,705	59,038	14.65	8,709,394	17.01	4,770,648	9.33	3,932,746	7.68	3.01
Less than 26 units.....	210	1,506	74,450,117	49,436	19.52	13,843,065	18.59	7,727,660	10.38	6,115,405	8.21	3.19

<sup>1</sup> This is the per cent of rent in 1,215 leased premises to net sales in such leased premises.

TABLE 12.—STORE OPERATING EXPENSES—MEAT MARKET CHAINS—Continued  
C—CHAINS CLASSIFIED ACCORDING TO TYPES OF OPERATION

	Num-ber of chains	Num-ber of units	Net sales (1929)	Average sales per unit	Per cent of units estab-lished in 1929	STORE OPERATING EXPENSES					Rent in leased pre-mises per \$100 of sales in such leased pre-mises	
						Total	Per \$100 of sales	Pay roll	Per \$100 of sales	Other oper-ating ex-penses (including rent)		Per \$100 of sales
Totals, all chains.....	234	2,753	\$139,577,081	\$50,700	17.62	\$25,593,865	18.34	\$14,465,731	10.15	\$11,428,134	8.19	3.35
Local chains.....	224	2,354	107,460,826	45,650	19.67	20,683,744	19.25	11,507,187	10.71	9,176,557	8.54	3.51
Large city locals.....	99	782	40,541,805	51,844	22.80	7,737,174	19.08	4,393,144	10.83	3,344,030	8.25	3.53
Smaller city and town locals.....	15	74	3,031,422	40,965	18.82	544,940	17.98	293,170	9.61	253,770	8.37	2.40
Sectional chains.....	10	399	32,116,253	80,482	5.51	4,910,121	15.29	2,655,544	8.28	2,251,577	7.01	2.80
D—CHAINS CLASSIFIED BY SIZE OF CITY												
(Includes only chains which operate all of their units in cities of the same size-class)												
All chains used in this table.....	147	1,303	\$70,063,065	\$53,794	8.75	\$12,893,889	18.40	\$7,149,126	10.20	\$5,744,763	8.20	3.29
Chains operating all their units in cities and places of—												
More than 100,000 population.....	99	782	40,541,805	51,844	22.89	7,737,174	19.08	4,393,144	10.83	3,344,030	8.25	3.53
25,000 to 100,000 population.....	15	91	3,581,500	39,357	23.08	582,348	16.26	351,294	9.81	231,084	6.45	2.63
Less than 25,000 population.....	28	152	6,087,791	40,051	13.16	1,052,637	17.29	570,680	9.37	481,957	7.92	2.74
Chains with large volume of sales operating in all sizes of cities in two or more geographic divisions.....	5	278	19,881,999	71,518	7.55	3,521,730	17.71	1,834,038	9.22	1,687,692	8.49	3.07

TABLE 13.—COMPARISON OF OPERATING EXPENSES—MEAT-MARKET CHAINS

[Cash-carry chains compared with credit chains]

	Cash-carry chains	Credit-service chains
Number of chains used for this comparison.....	28	28
Number of units.....	445	287
Net sales (1929).....	\$19,847,410	\$16,334,315
Average sales per unit.....	\$44,601	\$56,914
Total store operating expenses.....	\$3,849,259	\$3,359,376
Per \$100 of sales.....	19.39	20.57
Pay roll.....	\$2,286,849	\$1,825,045
Per \$100 of sales.....	11.52	11.17
Other store-operating expenses (including rent).....	\$1,562,410	\$1,534,331
Per \$100 of sales.....	7.87	9.40
Rent in leased premises, per \$100 of sales in such leased premises (included in previous item).....	3.15	3.11
Full-time employees.....	1,305	898
Full-time salaries and wages.....	\$2,217,576	\$1,766,815
Part-time employees.....	169	128
Part-time salaries and wages.....	\$69,273	\$58,230
Average full-time salary.....	\$1,699	\$1,968
Sales per full-time employee.....	\$15,209	\$18,190

TABLE 14.—CREDIT SALES—MEAT-MARKET CHAINS

	All chains reporting credit	Chains reporting credit less than 10 per cent of sales	Chains reporting credit in excess of 10 per cent of sales
Number of chains.....	73	26	47
Number of units.....	854	331	523
Units located in cities of more than 100,000.....	435	169	266
Units located in cities between 25,000 and 100,000.....	168	83	85
Units located in cities between 10,000 and 25,000.....	115	35	80
Units located in cities and places of less than 10,000.....	136	44	92
Net sales, 1929.....	\$53,461,277	\$19,357,579	\$34,103,698
Credit sales.....	11,201,865	1,080,156	10,121,709
Average sales per unit.....	62,601	58,482	65,208
Total store operating expense.....	9,529,060	3,409,357	6,119,703
Per \$100 of sales.....	17.82	17.61	17.94
Pay roll.....	\$5,367,360	\$1,966,677	\$3,400,683
Per \$100 of sales.....	10.04	10.16	9.97
Other store expense (including rent).....	\$4,161,700	\$1,442,680	\$2,719,020
Per \$100 of sales.....	7.78	7.45	7.97
Rent in leased premises per \$100 of sales in such leased premises (included also in previous item).....	3.41	2.82	3.80

TABLE 15.—SALES BY COMMODITIES—MEAT-MARKET CHAINS

Net sales (1929).....	\$139,577,081
Less amount which can not be broken down into commodities.....	70,173,501
Sales further analyzed.....	69,403,580
Total.....	Per cent 100.00
Meats, including poultry.....	88.13
Bakery products, bottled beverages, confectionery, and nuts.....	.11
Delicatessen and ready-to-serve foods.....	.24
Fish and other sea foods.....	5.09
Fruits and vegetables, fresh.....	.41
Groceries, general line.....	6.02

TABLE 16.—STORE-OPERATING EXPENSES—COMBINATION-STORE (GROCERY AND MEAT) CHAINS  
A.—CHAINS CLASSIFIED ACCORDING TO VOLUME OF SALES

	Num-ber of chains	Number of units	Net sales 1929	Average sales per unit	Per cent of units estab-lished in (1929)	STORE-OPERATING EXPENSES				Rent in leased premises per \$100 of sales in such leased premises <sup>1</sup>		
						Total	Per \$100 of sales	Pay roll	Per \$100 of sales		Other oper-ating expen-ses (includ-ing rent)	Per \$100 of sales
Totals, all combination store chains.....	475	41,136	\$2,381,827,445	\$57,901	10.72	\$340,901,154	14.31	\$179,911,201	7.55	\$160,989,953	6.76	2.56
Three national chains whose net sales exceed \$1,000,000.....	3	23,925	1,474,475,398	61,629	7.59	200,596,442	13.60	105,741,360	7.17	94,855,082	6.43	2.11
Chains whose net sales are—												
More than \$10,000,000 exclusive of above 3 chains.....	13	9,398	484,833,160	51,589	12.48	73,064,425	15.07	37,625,175	7.76	36,439,250	7.31	2.61
\$5,000,000 to \$10,000,000.....	17	2,393	124,121,547	51,869	5.56	20,366,424	16.41	10,584,750	8.53	9,781,674	7.88	2.49
\$2,500,000 to \$5,000,000.....	15	1,491	75,347,121	50,535	15.02	12,911,743	17.14	7,219,708	9.58	5,692,035	7.56	2.64
\$1,000,000 to \$2,500,000.....	57	1,267	87,063,373	68,716	13.58	13,459,635	15.46	6,249,933	8.33	6,209,702	7.13	2.93
\$500,000 to \$1,000,000.....	88	1,059	62,832,016	59,331	47.03	9,186,706	14.62	5,160,804	8.21	4,025,902	6.41	2.29
\$250,000 to \$500,000.....	144	917	51,138,577	55,767	22.03	7,859,363	15.37	4,344,985	8.50	3,514,378	6.87	2.13
\$100,000 to \$250,000.....	110	570	20,167,453	35,382	24.21	3,144,297	15.59	1,815,101	9.00	1,329,196	6.59	2.65
Less than \$100,000.....	28	116	1,848,770	15,938	46.55	312,119	16.88	169,385	9.16	142,734	7.72	3.06

B.—CHAINS CLASSIFIED ACCORDING TO NUMBER OF UNITS OPERATED

Totals, all chains.....	475	41,136	\$2,381,827,445	\$57,901	10.72	\$340,901,154	14.31	\$179,911,201	7.55	\$160,989,953	6.76	2.56
Three national combination store chains having more than 1,000 units.....	3	23,925	1,474,475,398	61,629	7.59	200,596,442	13.60	105,741,360	7.17	94,855,082	6.43	2.11
Combination store chains of more than 1,000 units (exclusive of 3 national chains shown above).....	4	6,607	333,155,328	50,425	6.93	48,951,864	14.69	25,398,007	7.62	23,553,857	7.02	2.72
Chains of 101 to 1,000 units.....	25	6,142	257,320,082	41,895	21.64	38,571,821	14.99	20,000,289	7.77	18,571,532	7.27	2.47
Chains of 26 to 100 units.....	28	1,341	75,606,065	56,380	11.41	13,159,054	17.40	7,119,804	9.41	6,039,160	7.99	2.66
Chains of less than 26 units.....	415	3,121	241,271,562	77,306	20.95	39,621,973	16.42	21,651,641	8.97	17,970,332	7.45	2.40

C—CHAINS CLASSIFIED ACCORDING TO TYPES OF OPERATION

	475	41, 136	\$2, 381, 827, 445	\$57, 901	10.72	\$340, 901, 154	14.31	\$179, 911, 201	7.55	\$160, 989, 953	6.76	2.56
Totals, all chains.....	444	8, 487	485, 858, 013	51, 356	22.63	68, 597, 068	15.74	37, 661, 272	8.64	30, 935, 786	7.10	2.60
Local chains.....	66	712	43, 447, 900	51, 022	18.82	7, 595, 401	17.48	4, 379, 262	10.08	3, 216, 139	7.40	2.63
Large—city locals.....	66	363	13, 278, 479	50, 354	26.72	2, 504, 497	12.61	1, 315, 202	7.20	98, 989, 236	3.41	1.78
Smaller—city and town locals.....	5	24, 843	1, 523, 437, 962	61, 323	.41	208, 562, 244	13.69	109, 623, 004	7.20	98, 989, 240	6.49	2.60
National chains.....	26	7, 806	422, 631, 470	54, 129	7.44	63, 741, 852	15.09	32, 626, 926	7.72	31, 114, 927	7.37	2.52
Sectional chains.....												
Three national chains operating more than 2,500 units (included above).....	3	23, 925	1, 474, 475, 398	61, 629	7.59	200, 596, 442	13.60	105, 741, 360	7.17	94, 855, 082	6.43	2.11

D—CHAINS CLASSIFIED BY SIZE OF CITY

[Includes only chains which operate all of their units in cities of same size class]

	294	34, 776	\$2, 047, 068, 465	\$58, 864	8.08	\$286, 887, 396	14.01	\$151, 059, 297	7.38	\$135, 828, 099	6.63	2.46
Chains used for this table.....	96	712	43, 447, 900	61, 022	18.82	7, 595, 401	17.48	4, 379, 262	10.08	3, 216, 139	7.40	2.63
Chains operating all their units in cities and places of—	73	461	29, 230, 868	63, 408	18.44	4, 033, 338	13.80	2, 247, 685	7.69	1, 785, 653	6.11	2.03
More than 100,000.....	107	695	38, 876, 807	55, 938	22.16	4, 968, 571	12.78	2, 174, 666	7.19	2, 174, 666	5.59	1.8
25,000 to 100,000.....												
Less than 25,000.....	5	24, 843	1, 523, 437, 962	61, 323	.41	208, 562, 244	13.69	109, 623, 004	7.20	98, 989, 240	6.49	2.40
Large national chains operating in all size cities.....	13	8, 065	412, 075, 928	51, 094	6.44	61, 727, 842	14.98	32, 014, 841	7.77	29, 713, 001	7.21	2.49
Chains operating in all sizes of cities, in two or more divisions.....												

1 This is the cost of rent in 37,661 leased premises in per cent to sales in such leased premises.  
 2 This is the cost of rent in wholly leased premises in per cent to sales in such leased premises.

TABLE 17.—COMPARISON OF OPERATING EXPENSES—COMBINATION-STORE CHAINS

[Cash-carry chains compared with credit chains]

	Cash-carry chains (no service)	Credit chains (full service)
Number of chains.....	38	38
Number of units.....	725	544
Net sales (1929).....	\$35,606,601	\$35,606,196
Average sales per unit.....	49,113	65,453
Total store-operating expenses.....	\$4,773,656	\$7,062,519
Per \$100 of sales.....	13.4	19.8
Pay roll.....	\$2,739,833	\$3,792,690
Per \$100 of sales.....	7.7	10.6
Other store operating expenses (including rent).....	\$2,033,823	\$3,269,829
Per \$100 of sales.....	5.7	9.2
Rent in leased premises per \$100 of sales in such leased premises (included in figures on above line).....	2.45	2.48
Full-time employees.....	2,049	2,842
Full-time salaries and wages.....	\$2,613,758	\$3,678,888
Part-time employees.....	390	444
Part-time salaries and wages.....	\$126,075	\$113,802
Average full-time salary.....	\$1,276	\$1,294
Sales per full-time employee.....	\$17,378	\$12,520

NOTE.—This comparison is made between 38 chains operating strictly self-serve, cash-carry stores (also called self-help or serviceless stores) and 38 comparable chains which provide full clerical and delivery service and charge accounts.

The difference in expense reflects the cost of the service of sales people, telephone service, deliveries, and credit; expense does not reflect the higher merchandise cost in self-serve stores, caused by a higher proportion of breakage, spoilage, and stock shortage.

TABLE 18.—CREDIT SALES—COMBINATION-STORE (GROCERY AND MEAT) CHAINS

	All chains reporting credit
Number of chains.....	148
Number of units.....	2,237
Units located in cities or places of more than 100,000.....	753
Units located in cities or places between 25,000 and 100,000.....	503
Units located in cities or places between 10,000 and 25,000.....	342
Units located in cities or places of less than 10,000.....	639
Net sales (1929).....	\$140,495,144
Average sales per unit.....	\$62,805
Credit sales.....	\$34,398,817
Per cent of credit to total sales.....	24.48
Total store-operating expenses.....	\$27,730,175
Per \$100 of sales.....	19.74
Pay roll.....	\$14,475,976
Per \$100 of sales.....	10.30
Other store-operating expenses (including rent).....	\$13,254,199
Per \$100 of sales.....	9.44
Rent, per \$100 of sales in such leased premises.....	2.66

TABLE 19.—SALES BY COMMODITIES—COMBINATION-STORE (GROCERY AND MEAT) CHAINS

	All combina- tion store chains	Three national chains having more than 2,500 units each	All other combina- tion store chains
Net sales (1929).....	\$2,381,827,445	\$1,474,475,398	\$907,352,047
Less amount which can not be broken down into com- modities.....	346,069,870	3,816,999	342,252,871
Sales further analyzed.....	2,035,757,575	1,470,658,399	565,099,176
Commodity.....	<i>Per cent</i> 100.00	<i>Per cent</i> 100.00	<i>Per cent</i> 100.00
Bakery products, fresh.....	4.25	4.49	3.86
Beverages, bottled.....	.74	.84	.58
Confectionery and nuts.....	1.38	1.67	.91
Delicatessen and ready-to-serve foods.....	.24	.10	.46
Fish and other sea foods, fresh.....	.57	.55	.61
Fruits and vegetables, fresh.....	12.11	13.91	9.17
Groceries (general line).....	57.11	56.11	58.76
Meats (including poultry).....	14.91	12.22	19.28
Milk and cream, fluid.....	1.56	1.52	1.63
Soda fountain sales and ice cream.....	.18	.06	.38
Sales of nonfood products.....	6.95	8.53	4.36
A further partial breakdown of two of the above classifications, based upon a coverage of about 10 per cent in the case of groceries, and 45 per cent in the case of nonfood products, is shown below:			
Groceries (general line).....	57.11	56.11	58.76
Butter and cheese.....	9.35	7.87	11.76
Eggs.....	4.92	4.39	5.78
Lard, cooking fats, etc.....	1.99	2.29	1.50
Flour.....	2.44	2.69	2.01
Sugar.....	6.23	5.88	6.78
Canned goods and other groceries.....	32.18	32.99	30.93
Nonfood commodities.....	6.95	8.53	4.36
Cigars, cigarettes, and tobacco.....	3.12	3.94	1.77
Household supplies, general line.....	3.09	4.07	1.52
All other sales of nonfood products.....	.74	.52	1.07

TABLE 20.—KINDS OF STORES OPERATED BY COMBINATION-STORE CHAINS

[Food chains are classified as combination-store chains when a substantial part (more than one-third) of their business is done in combination grocery-meat stores, even though they also may operate many straight grocery stores and separate meat markets. Analysis of the sales of chains classified as combination-store chains discloses the following proportions of each kind of store, with the corresponding sales]

	COMBINATION-STORE CHAINS				
	Totals, all such chains	Of less than 26 units	Of 26 to 100 units	Of 100 to 1,000 units	Of more than 1,000 units
Total number of units of all kinds.....	41,136	3,121	1,341	6,142	30,532
Straight grocery stores.....	21,625	199	178	2,482	18,766
<i>Per cent of total.....</i>	<i>52</i>	<i>7</i>	<i>13</i>	<i>40</i>	<i>61</i>
Separate meat markets.....	370	77	75	171	47
<i>Per cent of total.....</i>	<i>1</i>	<i>2</i>	<i>6</i>	<i>3</i>	<i>1</i>
Combination stores.....	19,141	2,845	1,088	3,489	11,719
<i>Per cent of total.....</i>	<i>47</i>	<i>91</i>	<i>81</i>	<i>57</i>	<i>38</i>
(THE SALES FIGURES BELOW ARE IN THOUSANDS OF DOLLARS)					
Total sales, all units.....	\$2,381,827	\$241,271	\$75,605	\$257,320	\$1,807,631
Straight grocery stores.....	\$1,098,319	\$13,646	\$7,729	\$83,847	\$993,097
<i>Per cent of total.....</i>	<i>46.1</i>	<i>5.6</i>	<i>10.2</i>	<i>32.6</i>	<i>54.9</i>
Separate meat markets.....	\$13,987	\$4,439	\$3,400	\$5,093	\$1,055
<i>Per cent of total.....</i>	<i>0.6</i>	<i>1.8</i>	<i>4.5</i>	<i>1.9</i>	<i>0.1</i>
Combination stores.....	\$1,269,521	\$223,186	\$64,476	\$168,380	\$813,479
<i>Per cent of total.....</i>	<i>53.3</i>	<i>92.6</i>	<i>85.3</i>	<i>65.5</i>	<i>45.0</i>

## CENSUS OF DISTRIBUTION

TABLE 21.—FISH-MARKET CHAINS

## A. SUMMARY

ITEM	Amount
Number of chains.....	12
Number of units.....	51
Net sales (1929).....	\$1,540,415
Average sales per unit.....	\$30,204
Total store operating expenses.....	\$564,102
Per \$100 of sales.....	36.62
Pay roll.....	\$327,417
Per \$100 of sales.....	21.26
Other store operating expenses, including rent.....	\$236,685
Rent, per \$100 of sales.....	4.39
Operating expense, per \$100 of sales.....	10.97
Full-time employees.....	183
Full-time salaries and wages.....	\$307,254
Part-time employees.....	42
Part-time salaries and wages.....	\$20,163
Distribution of sales by commodities: <i>(Coverage 33.28 per cent)</i>	<i>Per cent</i>
Total.....	100.00
Fish and sea foods.....	95.25
Fresh fruits, vegetables and groceries.....	4.75

## B.—SALES CLASSIFIED BY SIZE OF CITY

	Number of units	Net sales (1929)	Per cent of total sales
Total.....	51	\$1,540,415	100.00
Cities with population of—			
More than 100,000.....	39	1,317,237	85.5
25,000 to 100,000.....	10	193,427	12.6
10,000 to 25,000.....	1	24,951	1.6
Less than 10,000.....	1	4,800	.3

## C.—SALES CLASSIFIED BY GEOGRAPHIC DIVISION

DIVISION	Per cent to total net sales
Total.....	100.00
New England.....	45.00
Middle Atlantic.....	15.00
East North Central.....	10.00
South Atlantic.....	30.00

## D.—SALES CLASSIFIED BY DATE OF ESTABLISHMENT

	Number of units	Per cent to total units
Total.....	51	100.00
All units established in—		
1929.....	8	15.68
1925 to 1928.....	14	27.45
Previous to 1925.....	29	56.87

TABLE 22.—GROCERY-AND-DRY GOODS CHAINS

Number of chains.....	10
Number of units.....	187
Net sales (1929).....	\$11,331,102
Average sales per unit.....	\$60,594
Total store operating expenses.....	\$1,692,097
Per \$100 of sales.....	14.93
Pay roll.....	\$897,684
Per \$100 of sales.....	7.92
Other store operating expenses, including rent.....	\$794,413
Per \$100 of sales.....	7.01
Rent in 144 leased premises per \$100 of sales in such leased premises (included in previous item).....	2.32
Full-time employees.....	852
Full-time salaries and wages.....	\$879,205
Part-time employees.....	100
Part-time salaries and wages.....	\$18,479
Distribution of sales by commodities:	
Total.....	<i>(Coverage 33.80 per cent)</i>
	<i>Per cent</i>
	100.00
Groceries.....	59.68
Meat.....	4.41
Delicatessen and ready-to-serve foods.....	1.38
Fruits and vegetables.....	.21
Bottled beverages.....	.27
Confectionery and nuts.....	.11
Dry goods.....	32.16
Men's and women's clothing.....	1.43
Shoes.....	.35

NOTE.—Ninety-four per cent of the units with 92 per cent of the sales are in places of less than 10,000 population.

TABLE 23.—GROCERY-AND-FEED CHAINS

Number of chains.....	9
Number of units.....	44
Net sales (1929).....	\$3,372,472
Average sales per unit.....	\$76,647
Total store operating expenses.....	\$330,436
Per \$100 of sales.....	9.8
Pay roll.....	\$192,636
Per \$100 of sales.....	5.7
Other store operating expenses, including rent.....	\$137,800
Per \$100 of sales.....	4.1
Rent in 26 leased premises per \$100 of sales in such leased premises (included in previous item).....	1.55
Full-time employees.....	146
Full-time salaries and wages.....	\$184,577
Part-time employees.....	38
Part-time salaries and wages.....	\$8,059
Distribution of sales by commodities:	
Total.....	<i>(Coverage 27.54 per cent)</i>
	<i>Per cent</i>
	100.00
Groceries.....	64.62
Meats.....	5.74
Fruits and vegetables.....	3.82
Bakery products.....	.35
Nonfood products.....	.48
Hay, grain, and feed.....	24.99

NOTE.—Eighty-two per cent of the units with 85 per cent of the sales are in places of less than 10,000 population.

## CHAPTER 3.—DEPARTMENT STORE CHAINS

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# DEPARTMENT STORE CHAINS

## INTRODUCTION

There are 33 chains which are classified as department store chains, of which 20 are local and 13 are sectional and national chains. They operate 2,560 stores with aggregate sales of \$665,172,168, and include the retail stores of two large mail-order houses which also operate a number of department stores. However, they also include a number of general merchandise stores too small to be classified as department stores, so that the total sales of \$665,172,169 are not directly comparable with the total sales of all department stores.

Of even greater importance in the department store field than the chains are 14 ownership groups which own 121 department stores with total sales of \$1,003,602,600, but as these stores are independently operated and separately merchandised they are not chain stores and are not included in this report.<sup>1</sup>

## OPERATING EXPENSES

The 33 department store chains report average operating expenses equal to 24.35 per cent of sales. Because more than three-fourths of the total business of all these chains is done by the three largest chains, which operate mainly for cash and with limited customer services, average expense figures and average commodity sales figures would not be representative, either of these three largest chains or of the others. For that reason, the expense and commodity tables in this report are further analyzed to show the two classes separately.

The average expense ratio of the three largest chains is 23.05 per cent, compared with 28.58 per cent for the other chains.

Pay roll cost for the three largest chains averages 9.32 per cent of sales, whereas the same expense for the other chains averages 13.11 per cent.

The three largest chains pay an average rent of 2.47 per cent of sales, compared with an average of 3.28 per cent of sales for the stores of the other chains.

## SALES BY SIZE OF CITY

Sales in places of less than 10,000 population constitute 19.3 per cent of total sales; in cities of 10,000 to 30,000, 23.1 per cent; in cities of 30,000 to 100,000, 18.1 per cent; and in cities of more than 100,000, 39.5 per cent.

Table 7 of this report shows a further analysis of these figures for each of the nine geographic divisions of the country, of which the above are national averages.

## SALES BY GEOGRAPHIC DIVISIONS

Chain sales are greatest in the East North Central Division, consisting of the States of Ohio, Indiana, Illinois, Michigan, and Wisconsin. Next are the West North Central States, followed closely by the Middle Atlantic States. Sales by these chains are out of all proportion to population or to total retail sales in the several geographic divisions, as shown by Table 2-B herein.

<sup>1</sup> A separate report "Retail Distribution by Ownership Groups of Department Stores" is included as Chapter 4 herein.

### EMPLOYMENT

Chains normally employ 54,652 full-time employees, of which about 55 per cent are women, and 16,469 part-timers, of which two-thirds are women. The total pay roll reported is \$67,860,870, of which \$64,553,442 is the amount paid to full-time employees. Of the total, \$47,473,771 is the pay roll of the three largest chains.

### CREDIT SALES

Of the 33 chains, 21 report that they extend credit to their customers, although 83.25 per cent of their sales are for cash. Of the remaining 16.75 per cent which is credit business, open charge accounts represent 8.96 per cent of total sales and installment accounts represent 7.79 per cent.

### GROWTH OF CHAINS

More than one-third of the stores in operation at the end of 1929 were established in that year. Of the 885 newly acquired stores, less than 100 were former units of other chains which had been taken over and the balance were newly established. About 38 per cent of all the units operating at the end of 1929 were established in the four years between 1925 and 1928 and 27 per cent were established prior to 1925. Thus only about one-fourth of the units reported by these chains had been in operation by them for as long as five years.

There is no evidence in the department store field bearing out the statement sometimes made that chains grow largely by acquisition of smaller chains. In exceptional cases only has a department store chain acquired the units of another chain, most of the growth having come from the opening of new stores. This is not true of ownership groups, which are composed entirely of acquired stores. But ownership groups either buy or merge existing independent stores, continue to operate them as independent stores, and are not chains.

### SALES BY COMMODITIES

The commodity table (Table 6 herein) analyzes the sales of the three largest chains by commodities and compares the ratios with those of a similar analysis of the sales of the other chains. In the case of the three largest chains a detailed breakdown was possible, but the commodity data available for the remaining chains is limited to commodity groups because most of the chains were unable to report any further detail. Some significant comparisons result.

One of the most obvious is the complete absence of groceries and meat in the sales of the three largest chains. This group of commodities accounts for 6.40 per cent of the sales of the other chains. Fountain sales, lunches, and meals are also completely lacking in the largest chains, and amount to nearly 1 per cent of the sales of the other chains. Confectionery and nuts are equally neglected by the largest chains.

The largest chains also do far less apparel business, about the same proportion of men's business, and not anywhere near the business in drugs and toiletries that is done by the smaller chains, in relation to total sales.

On the other hand, the larger chains go in for household appliances, automobile accessories, hardware, paints, radios, sporting goods, stoves, and shoes in much greater proportion than do the smaller chains.

In such lines as men's wear, furniture, and home furnishings the proportions between the two groups of chains are about equal.

Reference is made to Table 6 of this report for more data on this subject, and for comparisons and conclusions which may not be discussed in this text.

TABLE 1.—SUMMARY

Total number of department store chains ( <i>Table 2</i> ).....	33
Number of local chains.....	20
Number of sectional and national chains.....	13
Total units.....	2,560
Local.....	103
Sectional and national.....	2,457
Total sales.....	\$665,172,163
Local chains.....	75,202,330
Sectional and national chains.....	589,969,833
	<i>Per cent</i>
Store operating expenses (ratio to sales) ( <i>Table 3</i> ).....	24.35
The 3 largest chains.....	23.05
All but the 3 largest chains.....	28.58
Pay roll cost, 71,121 employees (ratio to sales).....	10.21
The 3 largest chains (50,965 employees).....	9.32
All but the 3 largest chains (20,156 employees).....	13.11
Other store operating expenses, including rent (ratio to sales).....	14.14
The 3 largest chains.....	13.73
All but the 3 largest chains.....	15.47
Rent—2,483 leased stores (ratio to sales).....	2.66
The 3 largest chains (2,196 stores).....	2.47
All but the 3 largest chains (287 stores).....	3.28
Credit sales (per cent of total sales) ( <i>Table 4</i> ).....	16.75
Open-account credit.....	8.96
Installment credit.....	7.79
Commodity coverage ( <i>Table 6</i> ).....	99.99
The 3 largest chains.....	100.00
All but the 3 largest chains.....	99.11

TABLE 2.—SALES CLASSIFIED ACCORDING TO SIZE OF CHAIN—DEPARTMENT STORE CHAINS

## A. BY SIZE OF CITY

[Similar size-of-city data by geographic divisions is shown in TABLE 7]

SIZE OF CITY (population)	TOTAL SALES, ALL CHAINS	SALES OF STORES IN CHAINS OF—				
		More than 50 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
		33 chains 2,560 units	3 chains	4 chains	2 chains	10 chains
UNITED STATES, total..	\$665, 172, 168	\$509, 091, 673	\$44, 715, 664	\$13, 469, 742	\$34, 410, 187	\$63, 484, 902
All cities having population of—						
More than 100,000.....	262, 273, 300	172, 703, 993	19, 074, 232	601, 171	22, 469, 376	47, 424, 528
30,000 to 100,000.....	120, 458, 287	84, 613, 508	17, 178, 965	3, 011, 040	5, 268, 440	10, 386, 334
10,000 to 30,000.....	153, 837, 912	131, 571, 604	6, 335, 769	8, 306, 637	3, 375, 516	4, 248, 386
Less than 10,000.....	128, 602, 669	120, 202, 568	2, 126, 698	1, 550, 894	3, 296, 855	1, 425, 654

## B. SALES BY GEOGRAPHIC DIVISIONS

UNITED STATES, total..	\$665, 172, 168	\$509, 091, 673	\$44, 715, 664	\$13, 469, 742	\$34, 410, 187	\$63, 484, 902
DIVISION						
New England.....	20, 827, 542	14, 234, 333	1, 816, 828	-----	4, 003, 428	772, 953
Middle Atlantic.....	78, 410, 536	51, 045, 591	4, 164, 975	3, 597, 374	7, 987, 589	11, 615, 007
East North Central.....	213, 129, 115	128, 584, 666	24, 815, 746	5, 731, 148	12, 757, 756	41, 239, 799
West North Central.....	96, 436, 170	89, 947, 957	1, 918, 995	1, 368, 195	1, 277, 659	1, 923, 364
South Atlantic.....	62, 094, 676	47, 916, 199	8, 805, 999	1, 717, 812	3, 122, 505	532, 161
East South Central.....	21, 627, 285	17, 378, 951	3, 193, 121	1, 055, 213	-----	-----
West South Central.....	49, 211, 445	43, 988, 598	-----	-----	3, 791, 623	1, 431, 224
Mountain.....	48, 414, 905	46, 847, 806	-----	-----	36, 587	1, 530, 512
Pacific coast.....	75, 020, 494	69, 147, 572	-----	-----	1, 433, 040	4, 439, 882

## C. SALES BY TYPES OF OPERATION

All types:						
Number of chains.....	33	3	4	2	10	14
Number of units.....	2, 560	2, 259	139	31	71	60
Net sales (1929).....	\$665, 172, 168	\$509, 091, 673	\$44, 715, 664	\$13, 469, 742	\$34, 410, 187	\$63, 484, 902
Per cent of net sales.....	100.00	76.54	6.72	2.03	5.17	9.54
Average sales per unit.....	\$259, 833	\$225, 362	\$321, 695	\$434, 508	\$484, 651	\$1, 058, 082
Local chains:						
Number of chains.....	20	-----	-----	-----	7	13
Number of units.....	103	-----	-----	-----	48	55
Net sales (1929).....	\$75, 202, 330	-----	-----	-----	\$14, 188, 725	\$61, 013, 605
Sectional chains:						
Number of chains.....	8	-----	2	2	3	1
Number of units.....	119	-----	60	31	23	5
Net sales (1929).....	\$45, 817, 847	-----	\$9, 655, 346	\$13, 469, 742	\$20, 221, 462	\$2, 471, 297
National chains:						
Number of chains.....	5	3	2	-----	-----	-----
Number of units.....	2, 338	2, 259	79	-----	-----	-----
Net sales (1929).....	\$544, 151, 991	\$509, 091, 673	\$35, 060, 318	-----	-----	-----



TABLE 3.—OPERATING EXPENSES<sup>1</sup>—DEPARTMENT STORE CHAINS

[This table excludes sales and direct expenses of leased departments]

	EXPENSES OF STORES IN—						
	TOTAL, ALL CHAINS	3 largest chains—Totals	All other chains—Totals	Chains of—			
				26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
Net sales (1929).....	\$664,598,005	\$509,091,673	\$155,506,332	\$44,715,664	\$13,469,742	\$34,304,460	\$63,016,466
Number of chains.....	33	3	30	4	2	10	14
Units operated by local chains.....	103	3	103	4	2	48	55
Units operated by sectional chains.....	119	1	119	1	1	23	5
Units operated by national chains.....	2,338	2,259	79	60	31	23	
Operating expenses—total.....	\$161,804,600	\$117,353,107	\$44,451,493	\$11,493,636	\$4,004,655	\$9,212,568	\$19,740,634
Per \$100 of sales.....	24.35	23.05	28.58	25.70	29.73	26.86	31.33
Pay roll—total.....	\$67,860,870	\$47,473,771	\$20,387,099	\$4,708,847	\$1,804,539	\$4,431,206	\$9,442,907
Per \$100 of sales.....	10.21	9.32	13.11	10.53	13.40	12.92	14.99
Other store operating expenses, including rent.....	\$83,943,730	\$69,879,336	\$24,064,394	\$6,784,789	\$2,200,116	\$4,781,362	\$10,298,127
Per \$100 of sales.....	14.14	13.73	15.47	15.17	16.33	13.94	16.34
Rent in 2,483 leased premises, per \$100 of sales in such leased premises (included above).....	2.66	2.47	3.28	4.23	2.36	3.78	2.50
Stocks on hand, end of year (at cost).....	\$122,850,044	\$92,083,733	\$30,775,311	\$10,714,392	\$2,809,731	\$5,662,590	\$11,588,598
EMPLOYMENT DATA							
Full-time employees, total.....	54,652	37,226	17,426	5,145	1,665	3,432	7,184
Men.....	24,940	19,150	5,700	1,170	724	1,312	2,884
Women.....	29,712	18,076	11,636	3,975	941	2,120	4,300
Total pay roll.....	\$64,553,442	\$44,804,087	\$19,749,355	\$4,517,514	\$1,790,538	\$4,208,089	\$9,233,214
Part-time employees, total.....	16,469	13,739	2,730	653	96	1,147	834
Men.....	5,732	5,243	2,489	58	20	206	205
Women.....	10,737	8,496	2,241	595	76	941	629
Total pay roll.....	\$3,307,428	\$2,669,684	\$637,744	\$191,333	\$14,001	\$223,117	\$209,293

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not, of course, include the cost of merchandise sold, nor profit.

TABLE 4.—CREDIT EXTENDED BY CHAINS—DEPARTMENT STORE CHAINS

SIZE CLASS	CHAINS WHICH EXTEND CREDIT		OPEN-ACCOUNT		INSTALLMENT		"CASH" SALES BY SAME CHAINS	
	Number of chains reporting credit extension	Total net sales of chains reporting credit extension	Amount	Per cent of sales	Amount	Per cent of sales	Amount	Per cent of sales
Total.....	21	\$396, 892, 770	\$35, 559, 804	8. 96	\$30, 911, 092	7. 79	\$330, 421, 874	83. 25
Chains of—								
More than 50 units.....	2	299, 626, 115	10, 886, 170	3. 63	24, 646, 773	8. 23	264, 093, 172	88. 14
11 to 25 units <sup>1</sup> .....	2	13, 469, 742	6, 073, 157	45. 09	-----	-----	7, 396, 585	54. 91
6 to 10 units.....	7	28, 892, 530	6, 352, 433	21. 99	1, 710, 305	5. 92	20, 829, 792	72. 09
Less than 6 units.....	10	54, 904, 383	12, 248, 044	22. 31	4, 554, 014	8. 29	38, 102, 325	69. 40

<sup>1</sup> No chains with 25 to 50 units.

TABLE 5.—GROWTH OF CHAINS—DEPARTMENT STORE CHAINS

CHAIN UNITS CLASSIFIED BY SIZE OF CHAIN, DATE OF ESTABLISHMENT, AND GEOGRAPHIC DIVISIONS

## A. BY DATE OF ESTABLISHMENT

DATE OF ESTABLISHMENT	Percent of total units	Total units, all chains	UNITS IN CHAINS OF—				
			More than 50 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
UNITED STATES, total.....	100. 00	2, 560	2, 259	139	31	71	60
All units established:							
In 1929.....	34. 57	885	797	62	14	6	6
1925 to 1928.....	38. 44	984	868	60	15	22	19
Previous to 1925.....	26. 99	691	594	17	2	43	35

## B. CHAIN UNITS CLASSIFIED BY GEOGRAPHIC DIVISIONS

UNITED STATES, total.....	100. 00	2, 560	2, 259	139	31	71	60
DIVISION							
New England.....	3. 32	85	62	2	-----	17	4
Middle Atlantic.....	8. 32	213	170	8	7	16	12
East North Central.....	21. 84	559	447	65	16	6	25
West North Central.....	20. 27	519	496	12	2	5	4
South Atlantic.....	8. 28	212	156	37	4	14	1
East South Central.....	4. 61	118	101	15	2	-----	-----
West South Central.....	10. 04	257	244	-----	-----	7	6
Mountain.....	10. 55	270	265	-----	-----	1	4
Pacific coast.....	12. 77	327	318	-----	-----	5	4

TABLE 6.—SALES BY COMMODITIES

	The 3 largest chains	All chains except the 3 largest (see note)
Net sales (1929).....	\$509,091,673	\$156,080,495
Less—amount which can not be broken down into commodities.....		1,391,271
Sales further analyzed.....	\$509,091,673	\$154,689,224
	<i>Per cent</i> 100.00	<i>Per cent</i> 100.00
Commodities.....		
Antiques, art goods, gifts.....		.23
Apparel and accessories (women's, misses', and children's).....	19.59	28.82
Millinery.....	1.07	
Hosiery.....	4.81	
Coats, suits, and dresses.....	7.08	
Underwear, negligees, corsets, etc.....	2.92	
Other apparel, except furs.....	3.71	
Appliances and supplies (electric).....	2.77	1.03
Household appliances, motor-driven.....	1.41	
Household heating appliances, portable.....	.12	
Lighting equipment.....	.38	
Incandescent lamps.....	.001	
Construction materials.....	.52	
Other appliances.....	.339	
Appliances, gas.....	.11	.17
Automotive parts and accessories.....	12.45	.13
Tires, tubes, and tire accessories.....	8.68	
Other accessories and parts.....	3.62	
Batteries.....	.15	
Bakery products, fresh.....	.31	.34
Bottled beverages.....	.02	.01
Building materials.....	.36	
Cameras and photographic supplies.....		.05
Cigars, cigarettes, tobacco, and smoker's supplies.....	.10	.59
Clothing and furnishings (men's and boys').....	16.40	14.95
Suits.....	4.52	
Overcoats.....	.56	
Hats and caps.....	1.47	
Furnishings.....	3.97	
Work clothing.....	4.69	
Other clothing.....	1.19	
Confectionery and nuts.....	.03	.50
Delicatessen, ready-to-serve foods.....		.06
Drugs and drugs sundries.....	.48	2.25
Dry goods and notions.....	7.09	12.98
Cotton piece goods.....	2.08	
Linen goods.....	.11	
Wool and wool-mixed goods.....	.89	
Silk and velvet piece goods.....	2.13	
Notions and small wares.....	1.21	
Other dry goods.....	.67	
Farm and garden equipment and supplies.....	.98	
Farm machinery.....	.44	
Farm wagons.....	.08	
Wire fencing, gates, and posts.....	.24	
Other farm and garden equipment and supplies.....	.22	
Flowers, wreaths, etc.....		.06
Fresh fish and other sea foods.....		.11
Fruits and vegetables.....		.75
Furniture.....	3.75	3.81
Bedroom.....	1.47	
Living room, library, and hall.....	.73	
Dining room.....	.73	
Kitchen.....	.36	
Other household.....	.36	
Office and store furniture.....	.10	
Furs and fur goods.....		.45
Groceries.....		4.18

TABLE 6.—SALES BY COMMODITIES—Continued

	The 3 largest chains	All chains except the 3 largest (see note)
	<i>Per cent</i>	<i>Per cent</i>
Hardware.....	2.65	0.33
Heating and plumbing equipment and supplies.....	1.19	.01
Home furnishings.....	7.11	9.19
	7.11	
Draperies, curtains, and upholstery.....	1.24	
Floor coverings.....	1.14	
Bedding, mattresses, springs.....	.36	
China, glassware, and crockery.....	.14	
Other home furnishings.....	4.23	
Infants' wear.....	.74	2.56
Jewelry, silverware, and clocks.....	.88	.94
	.88	
Clocks.....	.09	
Watches.....	.26	
Diamond jewelry.....	.09	
Rings, other than diamond.....	.09	
Sterling silverware.....	.09	
Other jewelry.....	.26	
Leather goods, billfolds, gloves, and hand bags.....	.28	.57
Luggage.....	.39	.31
Meats.....		1.30
Miscellaneous.....	.06	1.20
Motor cycles, bicycles, and accessories.....	.27	
Musical instruments and accessories.....	.28	.17
	.28	
Pianos and accessories.....	.003	
Phonographs and records.....	.14	
Stringed and band instruments.....	.057	
Sheet music, music books, etc.....	.01	
Other musical instruments and accessories.....	.07	
Optical goods.....		.08
Paints, varnishes, and painters supplies.....	1.64	.20
	1.64	
Paints, varnishes, lacquers.....	1.48	
Painters' supplies.....	.16	
Radios and equipment.....	2.52	1.11
	2.52	
Radios.....	1.01	
Radio parts and accessories.....	1.51	
Receipts from sale of meals.....		.44
Secondhand merchandise.....		.07
Seeds, bulbs, plants, and nursery stock.....	.05	.30
Service.....		.04
Shoes and other footwear.....	9.80	5.49
	9.80	
Men's.....	3.23	
Boys' and youths'.....	1.03	
Women's.....	2.48	
Misses' and children's.....	3.06	
Soda-fountain sales and ice cream.....		.44
Sporting goods, gymnasium, and playground equipment.....	2.25	.15
Stationery, books, and magazines.....	.40	.51
	.40	
Books.....	.05	
Paper and paper goods.....	.02	
Other stationery.....	.33	
Stoves, ranges, heaters, etc. (other than electric or gas).....	2.20	.02
Toilet articles and preparations.....	.49	2.07
	.49	
Toiletries and cosmetics.....	.37	
Toilet articles.....	.12	
Toys and games.....	2.03	.98
Wall paper.....	.33	.05

NOTE.—Commodities with percentages shown in short constitute a further breakdown (with full coverage) of the sales of the 3 largest chains. No comparable detail could be reported by the other chains.

TABLE 7.—SALES CLASSIFIED ACCORDING TO SIZE OF CHAIN, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS—DEPARTMENT STORE CHAINS

[Supplementing TABLE 2-A, to show more detail by geographic divisions]

DIVISION AND CLASSIFICATION	Per cent of total sales	Total sales, all chains	SALES OF STORES IN CHAINS OF—				
			More than 50 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
		<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>
UNITED STATES, total..	100.00	665,172,168	509,091,673	44,715,664	13,469,742	34,410,187	63,494,902
All cities having population of—							
More than 100,000.....	39.43	262,273,300	172,703,993	19,074,232	601,171	22,469,376	47,424,528
30,000 to 100,000.....	18.11	120,458,287	84,613,508	17,178,965	3,011,040	5,268,440	10,386,334
10,000 to 30,000.....	23.13	153,837,912	131,571,604	6,335,769	8,306,637	3,375,516	4,248,386
Less than 10,000.....	19.33	128,602,669	120,202,568	2,126,698	1,550,894	3,296,855	1,425,654
NEW ENGLAND.....	100.00	20,827,542	14,234,333	1,816,828	-----	4,003,428	772,953
Cities having population of—							
More than 100,000....	53.77	11,199,532	7,267,596	1,816,828	-----	1,341,795	772,953
30,000 to 100,000....	19.61	4,083,306	2,277,224	-----	-----	1,806,082	-----
10,000 to 30,000....	23.21	4,834,748	3,979,197	-----	-----	855,551	-----
Less than 10,000....	3.41	709,956	709,956	-----	-----	-----	-----
MIDDLE ATLANTIC.....	100.00	78,410,536	51,045,591	4,164,975	3,597,374	7,987,589	11,615,007
Cities having population of—							
More than 100,000....	44.03	34,522,587	21,507,647	2,807,685	-----	4,799,756	5,407,499
30,000 to 100,000....	25.38	19,902,494	13,045,197	1,233,198	-----	429,364	5,194,735
10,000 to 30,000....	24.65	19,331,654	13,853,040	124,092	2,791,866	1,550,184	1,012,735
Less than 10,000....	5.94	4,653,801	2,639,707	-----	805,809	1,208,285	-----
EAST NORTH CENTRAL.....	100.00	213,129,115	128,584,666	24,815,746	5,731,148	12,757,756	41,239,799
Cities having population of—							
More than 100,000....	53.58	114,204,665	54,587,004	10,233,373	601,171	11,411,900	37,371,217
30,000 to 100,000....	20.69	44,094,067	29,850,144	10,067,855	505,427	1,345,856	2,324,785
10,000 to 30,000....	16.50	35,161,028	27,279,113	3,373,516	4,010,206	-----	498,193
Less than 10,000....	9.23	19,669,355	16,868,405	1,141,002	614,344	-----	1,045,604
WEST NORTH CENTRAL.....	100.00	96,436,170	89,947,957	1,918,995	1,368,195	1,277,659	1,923,364
Cities having population of—							
More than 100,000....	20.78	20,040,559	19,307,273	-----	-----	733,286	-----
30,000 to 100,000....	14.05	13,549,720	9,200,586	777,467	1,259,664	544,373	1,767,630
10,000 to 30,000....	30.23	29,147,888	27,831,063	1,052,560	108,531	-----	155,734
Less than 10,000....	34.94	33,698,003	33,609,035	88,968	-----	-----	-----
SOUTH ATLANTIC.....	100.00	62,094,676	47,916,199	8,805,999	1,717,812	3,122,505	532,161
Cities having population of—							
More than 100,000....	46.19	28,682,804	26,025,810	2,656,994	-----	-----	-----
30,000 to 100,000....	23.09	14,337,231	8,393,242	4,061,307	321,477	1,029,044	532,161
10,000 to 30,000....	20.88	12,965,790	9,475,164	1,442,617	1,396,335	651,677	-----
Less than 10,000....	9.84	6,108,851	4,021,983	645,084	-----	1,441,784	-----
EAST SOUTH CENTRAL.....	100.00	21,627,285	17,378,951	3,193,121	1,055,213	-----	-----
Cities having population of—							
More than 100,000....	33.28	7,197,630	5,638,278	1,559,352	-----	-----	-----
30,000 to 100,000....	22.40	4,844,682	2,881,072	1,039,138	924,472	-----	-----
10,000 to 30,000....	29.28	6,332,599	5,989,612	342,987	-----	-----	-----
Less than 10,000....	15.04	3,252,374	2,869,989	251,644	130,741	-----	-----
WEST SOUTH CENTRAL.....	100.00	49,211,445	43,988,598	-----	-----	3,791,623	1,431,224
Cities having population of—							
More than 100,000....	22.47	11,058,878	7,939,336	-----	-----	3,119,542	-----
30,000 to 100,000....	13.89	6,833,250	6,719,529	-----	-----	113,721	-----
10,000 to 30,000....	37.28	18,346,941	17,295,767	-----	-----	-----	1,051,174
Less than 10,000....	26.36	12,972,376	12,033,966	-----	-----	558,360	380,050

TABLE 7.—SALES CLASSIFIED ACCORDING TO SIZE OF CHAIN, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS—DEPARTMENT STORE CHAINS—Continued

DIVISION AND CLASSIFICATION	Per cent of total sales	Total sales, all chains	SALES OF STORES IN CHAINS OF—				
			More than 50 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
MOUNTAIN.....	100.00	<i>Dollars</i> 48,414,905	<i>Dollars</i> 46,847,806	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i> 36,587	<i>Dollars</i> 1,530,512
Cities having population of—							
More than 100,000....	13.68	6,623,194	6,623,194				
30,000 to 100,000....	9.93	4,809,114	4,809,114				
10,000 to 30,000....	26.01	12,590,689	11,060,177				1,530,512
Less than 10,000....	50.38	24,391,908	24,355,321			36,587	
PACIFIC COAST.....	100.00	75,020,494	69,147,572			1,433,040	4,439,882
Cities having population of—							
More than 100,000....	38.32	28,743,451	23,807,495			1,063,097	3,872,859
30,000 to 100,000....	10.67	8,004,423	7,437,400				567,023
10,000 to 30,000....	20.16	15,126,575	14,808,471			318,104	
Less than 10,000....	30.85	23,146,045	23,094,206			51,839	

## CHAPTER 4.—OWNERSHIP GROUPS OF DEPARTMENT STORES

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# OWNERSHIP GROUPS OF DEPARTMENT STORES

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## INTRODUCTION

Ownership groups in the department store field are financial mergers of old-established department stores, without the central merchandising and standardization of operations typical of chain-store organization. The stores of the ownership groups are managed individually. They have neither the complete independence of operation characteristic of independent stores nor the complete central domination of price policies, lines of merchandise, and methods of operation characteristic of the chains.

Most of the ownership groups have established what amounts to central resident buying offices for their stores, in New York and sometimes in other market cities, but this does not constitute central buying. It is merely the consolidation of buying-office activities, which formerly were conducted by the several established resident buying-office firms, or by New York buying offices maintained separately by the several stores which later were merged in the ownership group. Equally effective resident buying offices have been maintained for many years by voluntary groups of department stores and by voluntary groups of women's apparel or specialty stores. Typically, these group-buying offices purchase from 5 to 10 per cent of the merchandise required by the member stores, the balance being purchased by the department buyers of the individual stores.

In addition to seasonal group purchases, another activity of the group buying offices is that of following up the orders placed in the local market by store buyers, with particular regard to terms, dates of delivery, and possible cancellations. They also handle adjustments and complaints that may arise between the stores and market sources or manufacturers. However, their activities constitute in no sense central merchandising as practiced by chain-store organizations. Economy and convenience are cited as the chief reasons for centralizing the resident buying activities of the member stores of ownership groups. Some groups have abandoned central buying offices on the ground that no economy is realized and that separate resident buying office firms can meet better the particular merchandising requirements of each store.

## OWNERSHIP GROUPS ARE NOT CHAINS

The ownership groups are not included in the census count of chain-store organizations, because they are not chains. Except that they are owned by the same financial interests, the stores constituting an ownership group undergo no material change in status because of the financial merger, and are rated by the Census Bureau as independently operated stores. Each store maintains its own buying staff and its own merchandising, selling and operating management; each store determines its own local problems of store arrangement, rates of salary, and personnel policies. A certain amount of merchandise which lends itself to group buying is selected and bought by the small staff or resident buyers in the market—usually New York and sometimes Chicago—but group buying is co-

operative rather than central, and the promotion and sale of centrally bought merchandise is dependent upon the ability and willingness of the individual store buyers.

### DEPARTMENT STORE CHAINS VERSUS OWNERSHIP GROUPS

In the department store field there are 33 chains, operating 2,560 stores, with total sales of \$665,172,168. These 33 organizations are true chains in the sense that they merchandise and operate their store centrally, with all of the advantages and disadvantages of selection and large-scale buying by central buyers, uniformity in lines of merchandise, uniformity in store arrangement and stock keeping, uniformity in methods of display and advertising, and substantial conformity to fixed policies originated by the central organization.

In comparison, there are 14 ownership groups which are financial mergers of 121 department stores with total sales of \$1,003,602,600, and which also own 16 other stores of various kinds with additional sales of \$15,857,556. All of these stores are classified as independently operated stores in the city and State reports of the retail census, for the reasons previously cited. For the purpose of this analysis, the individual store reports have been brought together and consolidated into the 14 groups as if they had been reported to the census originally in groups.

### TOTAL SALES OF THE OWNERSHIP GROUPS

Sales of the 137 stores owned by the 14 groups analyzed in this report aggregate \$1,019,460,156, of which 6.28 per cent represents installment credit sales, 37.1 per cent represents sales on open charge account, and 56.62 per cent is sold for cash. In these 137 stores there are 737 departments which are leased to operators other than the store managements. Sales of these 737 leased departments aggregate \$38,015,330, or 3.73 per cent of the total sales of all the stores. However, they constitute 5.75 per cent of the total sales of the stores in which they operate, for not all the stores include leased departments.

### OPERATING EXPENSES

The stores of these 14 ownership groups employ 119,116 full-time employees and 9,122 part-timers. One-third of the employees are men. Full-time employees are paid a total of \$157,060,609 and total pay roll is \$161,441,465, or \$15.84 per \$100 of sales. Other operating expenses, including rent, aggregate \$148,682,887, making a total operating expense of \$310,124,352, or \$30.42 per \$100 of sales. This does not include interest return on capital invested in merchandise, fixtures, and accounts. Of the 137 stores, 109 department stores and 4 other stores are in leased premises for which the rent, included in the expenses summarized above, average \$3.37 per \$100 of sales in such stores. Table 3 analyzes expenses of the department stores exclusively, which are somewhat higher than the averages shown above because leased-department sales have been eliminated.

The stores of ownership groups are usually among the leading department stores of their respective cities, and 96 per cent of the business is in cities of 100,000 and greater population, which has a direct bearing upon the rate of expense in comparison with chains. Only 12 are newly established stores, 5 having been opened in 1929 and 7 in the preceding 4 years, and all of these are suburban and neighborhood branches of long-established downtown stores.

## COMPARISON WITH CHAINS

In contrast, 1,869 new units were added to department stores chains in the same five years, constituting 74 per cent of all the chain units operating at the end of the census year. About half of the new chain units are located in places of less than 10,000 population, and most of the balance in cities of less than 100,000 population. Of the \$665,172,168 of total sales by the 33 department store chains, 39.3 per cent is in cities of 100,000 and over, 18 per cent in cities of 30,000 to 100,000, 23.3 per cent in cities of 10,000 to 30,000 and 19.4 per cent in places of less than 10,000 population.

Expenses of the 33 chains (not ownership groups) average \$24.35 per \$100 of sales, of which pay roll is 10.21 per cent and rent is 2.66 per cent. This average rate of expense is influenced by certain chains with large aggregate sales, which operate almost entirely in small cities and towns, at low expense, and is neither typical nor comparable. However, a fair comparison between ownership groups and chains has been obtained by analyzing 24 large stores of typical chains which operate, for the most part, in the larger cities.

These 24 chain department stores, with aggregate sales of \$45,789,166, report average operating expenses of 28.1 per cent, of which 12.8 per cent is pay roll and 2.3 per cent is rent. More data regarding these typical chain stores are included in the report on Retail Distribution by Department Store Chains. (Ch. 3.)

## OWNERSHIP GROUPS ANALYZED BY SIZE OF STORES

Of the 121 stores in the ownership groups, 2 sell more than \$40,000,000 yearly; 7 report sales between \$30,000,000 and \$40,000,000; 6 report sales between \$20,000,000 and \$30,000,000; 9 do \$10,000,000 to \$20,000,000 each; 31 do \$5,000,000 to \$10,000,000 each; 17 sell \$2,500,000 to \$5,000,000 each; 31 do an annual business of \$1,000,000 to \$2,500,000 each; 7 sell from \$500,000 to \$1,000,000 each; and 11 sell less than \$500,000 each, annually.

Geographically, 42.1 per cent of total sales is in the Middle Atlantic States; 22.3 per cent in the East North-Central States around Chicago; 8.7 per cent in the New England States; 8.4 per cent on the Pacific coast; 7.3 per cent in the West North-Central States; 4.7 per cent in the South Atlantic States; 2.5 per cent in the East South-Central States; 3.3 per cent in the West South-Central States, and the remaining 0.7 per cent in the Mountain States.

## IMPORTANCE OF LEASED DEPARTMENTS

A leased department is a section or department of the store which is operated by an outside individual or chain on the basis of a flat monthly rent or an agreed percentage of sales. Departments most often leased are those which require a high degree of specialization in their merchandising, such as millinery, or where skilled service is essential, such as beauty shops, watch repairing, optical goods, and portrait studios. Other departments sometimes leased because the store believes that it is unable to operate them as advantageously are ready-to-wear, shoes, furniture, toiletries, and electrical appliances. The lessee buys and owns the merchandise and controls its pricing. The store provides supplies, delivery, heat, light, power, and protection. It handles the daily receipts, both cash and charge, exactly as if it owned the department. It pays the lessee's salespeople through its regular pay roll. At the end of the month it pays the lessee the amount received in sales, less pay roll, supplies, sometimes delivery, and the agreed rental.

Because the lessee thereby absorbs his own direct expenses, the store is relieved of more than one-half of the total expenses, which otherwise would be charged to the department. The remainder, however, must be absorbed by the store in one form or another. The rental received from leased departments is not offset against operating expenses. Table 5 herein shows that 25 stores without leased departments have an average operating expense ratio of \$28.43 per \$100 of sales, whereas 96 stores which contain some leased departments show an average of \$33.30 per \$100 of their sales (after deducting leased-department sales and direct expenses). Expenses in the latter stores are higher in the items of indirect pay roll (salaries exclusive of sales people), heat, light, supplies (except wrapping supplies), depreciation, and rent. The latter is higher in per cent because the full amount of rent paid by the store for its premises is unrelieved by the proportion applicable to the floor space occupied by leased departments. The amount received from lessees as "rent" is in fact a composite payment including rent and many other occupancy expenses as well as a provision for profit, and is treated as other income rather than offset against any specific items of expense. It would appear that leased departments exert a considerable effect upon the expense rate of stores in which they are operated, in spite of the fact that they are supposed to absorb their own direct expenses.

#### SALES BY COMMODITIES

Table 7 presents an analysis of sales by commodities, showing the relative importance of each in relation to the total sales of the ownership groups.

TABLE 1.—SUMMARY

[An (x) indicates that the amount must be withheld to avoid disclosure of individual operations, but it is included in the total]

	Number	Net sales (1929)
Ownership groups.....	14	\$1,019,460,156
Stores owned.....	137	1,019,460,156
Department stores.....	121	<sup>1</sup> 1,003,602,600
Other stores—		
Family clothing store.....	1	(x)
Women's apparel specialty stores.....	3	5,203,260
Men's clothing and furnishing store.....	1	(x)
Children's specialty store.....	1	(x)
Dry goods stores.....	7	8,242,720
Furniture stores.....	2	666,601
Radio and musical-instrument store.....	1	(x)
Leased departments <sup>2</sup> .....	737	38,015,330
In department stores.....	723	37,487,500
In specialty stores.....	14	527,830
	<i>Per cent</i>	
Sales for cash, all stores.....	56.62	577,218,235
Sales on open account.....	37.10	378,208,301
Sales on installments.....	6.28	64,033,620
Returned goods (deducted from gross sales).....		117,542,500
Number of employees, all stores.....		128,248
Full-time employees.....		119,126
Part-time employees.....		9,122
Pay roll, all stores.....		161,441,465
Full-time salaries.....		157,060,609
Part-time salaries.....		4,380,856
Total pay roll, per \$100 of sales.....		15.84
Rent, per \$100 of sales in leased premises.....		3.37
Total operating expenses, in per cent to sales.....		30.42
Stocks on hand, end of year, at cost.....		133,007,918

<sup>1</sup> Includes leased-department sales. Tables 3 to 6, inclusive, use figures for owned departments only.

<sup>2</sup> The 723 leased departments are operated in 96 stores with total sales of \$660,954,860, of which leased department sales constitute 5.75 per cent.

TABLE 2.—NUMBER OF STORES AND NET SALES BY GEOGRAPHIC DIVISIONS

[An (x) indicates that the amount must be withheld to avoid disclosure of individual operations, but it is included in the total]

## A. NET SALES BY SIZE OF CITY.

[Fourteen ownership groups of 137 stores]

GEOGRAPHIC DIVISION	Net sales (all cities)	Per cent of total	CITIES HAVING A POPULATION OF—			
			100,000 and over	30,000 to 100,000	10,000 to 30,000	Less than 10,000
All divisions, total.....	\$1,019,460,156	100.00	\$985,990,505	\$29,567,712	\$3,320,276	\$581,663
New England.....	88,509,089	8.7	87,443,692	1,065,397	—	—
Middle Atlantic.....	424,658,586	41.7	419,861,976	2,419,090	2,061,807	315,713
East North Central.....	227,661,008	22.3	222,237,549	4,702,093	455,416	265,950
West North Central.....	77,454,292	7.6	72,398,730	5,055,562	—	—
South Atlantic.....	48,846,940	4.8	45,047,603	3,799,337	—	—
East South Central.....	24,945,671	2.5	23,682,604	1,263,067	—	—
West South Central.....	33,029,754	3.2	27,413,444	4,813,257	(x)	—
Mountain.....	9,585,737	.9	8,117,120	1,468,617	—	—
Pacific coast.....	84,769,079	8.3	79,787,787	4,981,292	—	—

TABLE 2.—NUMBER OF STORES AND NET SALES BY GEOGRAPHIC DIVISION—Con.

## B. NUMBER OF STORES BY AGE AND SIZE OF CITY

[Stores established since 1925 are suburban branches]

GEOGRAPHIC DIVISION AND AGE OF STORE	Total all stores	Per cent of total	CITIES HAVING A POPULATION OF—			
			100,000 and over	30,000 to 100,000	10,000 to 30,000	Less than 10,000
<b>UNITED STATES</b>						
Total.....	137	100.00	105	20	8	4
All stores established:						
In 1929.....	5	3.65	3	2	—	—
1925 to 1928.....	7	5.11	4	2	—	1
Previous to 1925.....	125	91.24	98	16	8	3
<b>GEOGRAPHIC DIVISIONS</b>						
<b>NEW ENGLAND DIVISION</b> .....						
Established—	6	100.00	5	1	—	—
In 1929.....	1	16.67	1	—	—	—
1925 to 1928.....	5	83.33	4	1	—	—
Previous to 1925.....	—	—	—	—	—	—
<b>MIDDLE ATLANTIC DIVISION</b> .....						
Established—	37	100.00	27	3	5	2
In 1929.....	1	2.70	—	1	—	—
1925 to 1928.....	3	8.11	2	—	—	1
Previous to 1925.....	33	89.19	25	2	5	1
<b>EAST NORTH CENTRAL DIVISION</b> .....						
Established—	26	100.00	18	4	2	2
In 1929.....	2	7.69	1	1	—	—
1925 to 1928.....	1	3.85	—	1	—	—
Previous to 1925.....	23	88.46	17	2	2	2
<b>WEST NORTH CENTRAL DIVISION</b> .....						
Established—	13	100.00	10	3	—	—
In 1929.....	1	7.69	1	—	—	—
1925 to 1928.....	1	7.69	—	1	—	—
Previous to 1925.....	11	84.62	9	2	—	—
<b>SOUTH ATLANTIC DIVISION</b> .....						
Established—	19	100.00	16	3	—	—
In 1929.....	1	5.26	1	—	—	—
1925 to 1928.....	1	5.26	1	—	—	—
Previous to 1925.....	17	89.48	14	3	—	—
<b>EAST SOUTH CENTRAL DIVISION</b> <sup>1</sup> .....						
Established—	8	100.00	7	1	—	—
<b>WEST SOUTH CENTRAL DIVISION</b> <sup>1</sup> .....						
Established—	10	100.00	7	2	1	—
<b>MOUNTAIN DIVISION</b> <sup>1</sup> .....						
Established—	3	100.00	2	1	—	—
<b>PACIFIC DIVISION</b> <sup>1</sup> .....						
Established—	15	100.00	13	2	—	—

<sup>1</sup> All stores in this division were established prior to 1925.

TABLE 3.—OPERATING EXPENSES

A. ANALYZED ACCORDING TO GEOGRAPHIC DIVISIONS

[Department stores only. This table excludes sales and direct expenses of leased departments]

DIVISION	Num-ber of stores	Net sales (1929), owned depart-ments	OPERATING EXPENSES						Rent in leased prem-ises per \$100 of sales in such leased prem-ises	
			Total expenses		Number of employees	Pay roll		Other store-operating expenses including rent		
			Amount	Per \$100 of sales		Amount	Per \$100 of sales	Amount		Per \$100 of sales
					\$305,039,037					
All divisions, total.....	121	\$966,115,100			126,160				3.37	
New England.....	5	86,008,868	27,485,317	31.96	14,362,601	16.70	13,122,716	15.26	3.06	
Middle Atlantic.....	33	412,524,657	132,687,926	32.16	70,185,194	17.01	62,502,732	15.15	3.64	
East North Central.....	22	218,344,116	64,002,291	29.31	33,650,480	15.41	30,351,811	13.90	3.26	
West North Central.....	11	71,368,279	20,673,477	28.97	7,911,493	13.56	10,996,029	15.41	3.18	
South Atlantic.....	16	45,231,812	16,499,661	36.48	7,240,170	17.49	8,588,168	18.69	3.55	
West Atlantic.....	8	19,554,179	8,325,324	42.58	3,328,609	18.76	4,085,164	20.90	3.94	
East South Central.....	10	28,404,164	9,906,450	34.88	1,116,119	16.59	4,576,841	16.12	3.32	
West South Central.....	2	6,729,328	2,052,790	30.51	12,481,500	16.01	10,924,291	14.02	3.05	
Mountain.....	14	77,949,687	23,405,791	30.03						
Pacific coast.....										

B. ANALYZED ACCORDING TO SIZE OF CITY

All cities, total.....	121	\$966,115,100	\$305,039,037	31.57	\$158,954,614	16.45	\$146,084,423	15.12	3.37
Cities with population of:									
500,000 and over.....	44	696,514,469	214,369,527	30.78	110,968,376	15.93	103,401,151	14.85	3.16
100,000 to 500,000.....	50	239,503,019	81,441,741	34.00	42,934,810	17.92	38,506,931	16.08	3.98
50,000 to 100,000.....	16	22,736,954	7,055,630	31.03	3,770,975	16.58	3,284,655	14.45	2.83
30,000 to 50,000.....	3	4,063,091	1,256,095	30.91	1,752,081	18.51	504,014	12.40	2.46
Less than 30,000.....	8	3,297,567	916,044	27.78	528,372	16.02	387,672	11.76	2.56

TABLE 3.—OPERATING EXPENSES—Continued  
 C. ANALYZED ACCORDING TO VOLUME OF SALES  
 [Department stores only. This table excludes sales and direct expenses of leased departments]

VOLUME OF SALES	Num-ber of stores	Net sales (1928)	OPERATING EXPENSES						Rent in leased premises per \$100 of sales in such leased premises	
			Total expenses		Number of employees	Pay roll		Other store-operating expenses including rent		
			Amount	Per \$100 of sales		Amount	Per \$100 of sales	Amount		Per \$100 of sales
					Amount					
All cities, total.....	121	\$966,115,100	\$305,039,037	31.57	126,160	\$158,954,614	16.45	\$146,084,423	15.12	3.37
Cities of more than 30,000 population.....	113	962,817,533	304,122,993	31.59	125,611	158,426,242	16.45	145,696,751	15.14	3.37
Stores with annual sales of—										
\$25,000,000 and over.....	12	484,692,360	139,000,820	28.08	57,783	74,047,424	15.28	64,953,396	13.40	3.17
\$10,000,000 to \$25,000,000.....	12	175,635,333	56,422,230	32.12	22,101	30,080,965	17.13	26,341,265	14.99	3.37
\$5,000,000 to \$10,000,000.....	25	167,634,679	60,007,438	35.80	23,085	29,106,064	17.36	30,901,374	18.44	3.83
\$1,000,000 to \$5,000,000.....	53	128,831,922	46,786,205	36.32	20,946	24,154,069	18.75	22,632,136	17.57	3.35
Less than \$1,000,000.....	11	6,023,239	1,906,300	31.65	1,696	1,037,720	17.23	868,580	14.42	3.47
Cities of less than 30,000 population.....	8	3,297,567	916,044	27.78	549	528,372	16.02	387,672	11.76	2.56
Stores with annual sales of less than \$1,000,000.....	8	3,297,567	916,044	27.78	549	528,372	16.02	387,672	11.76	2.56

TABLE 4.—ANALYSIS OF RENT IN COMPARISON WITH OTHER EXPENSES  
 [Department stores only]

COST OF RENT IN PER CENT TO SALES	Number of stores in leased premises	Amount of rent in leased premises	Net sales (1929) in leased premises	PAY ROLL		TOTAL OPERATING EXPENSES	
				Amount	Per \$100 of sales	Amount	Per \$100 of sales
Total (average rent 3.37 per cent)	109	\$26,781,489	\$795,703,594	\$134,229,691	16.87	\$258,711,834	32.51
5½ per cent and over	9	4,362,491	67,744,285	12,300,728	18.16	23,506,927	34.70
5 per cent to 5½ per cent	5	2,350,688	44,668,251	7,175,468	16.06	17,341,596	38.82
4½ per cent to 5 per cent	3	459,401	9,694,583	1,640,061	16.92	3,606,155	37.20
4 per cent to 4½ per cent	12	2,681,964	63,311,654	11,838,109	18.70	23,844,604	37.66
3½ per cent to 4 per cent	16	6,472,328	172,417,742	29,409,948	17.06	53,833,288	31.22
3 per cent to 3½ per cent	20	4,850,226	153,422,240	27,213,139	17.74	51,078,434	33.29
2½ per cent to 3 per cent	17	1,507,183	56,286,115	10,379,423	18.44	18,645,433	33.13
Less than 2½ per cent	27	4,097,208	228,158,724	34,272,815	15.02	66,855,397	29.30

NOTE.—This table excludes sales and direct expenses of leased departments. The rent shown is the full amount of rent paid by the 109 stores. See text, p. 57.



TABLE 6.—STOCK—SALES RATIO <sup>1</sup>  
 [Ratio of closing stock, at cost, to annual sales at retail]

DIVISION	Number of stores	Total net sales (1929) (owned departments)	STOCK ON HAND END OF YEAR (at cost)	
			Amount	Per \$100 of sales
Total, all divisions.....	121	\$966, 115, 100	\$131, 086, 087	13. 57
New England.....	5	86, 008, 868	9, 758, 513	11. 35
Middle Atlantic.....	33	412, 524, 657	49, 140, 503	11. 91
East North Central.....	22	218, 344, 116	31, 187, 499	14. 28
West North Central.....	11	71, 368, 279	9, 386, 167	13. 15
South Atlantic.....	16	45, 231, 812	6, 495, 619	14. 36
East South Central.....	8	19, 554, 179	4, 075, 865	20. 84
West South Central.....	10	28, 404, 164	6, 112, 632	21. 52
Mountain.....	2	6, 729, 328	1, 396, 434	20. 75
Pacific coast.....	14	77, 949, 697	13, 532, 855	17. 36

<sup>1</sup> Stock-sales ratio indicates, for comparison purposes only, the relation of closing stock (at cost) to annual sales (at retail). It does not indicate the rate of stock turn, to determine which both factors must be valued at retail and the stock figure must be a monthly average, not merely the closing stock.

TABLE 7.—SALES BY COMMODITIES

[Includes all stores owned by ownership groups]

Net sales (1929), all stores.....		\$1, 019, 460, 156
Less amount which can not be broken down into commodities.....		27, 834, 822
Sale further analyzed.....		991, 625, 334
		<i>Per cent</i> 100. 00
COMMODITY	<i>Per cent</i>	
Antiques, art goods, and gifts.....		0. 76
Apparel and accessories, women's, misses', and children's.....	31. 58	31. 58
Custom tailoring.....	. 36	
Children's wear.....	2. 09	
Millinery.....	2. 60	
Women's and children's hosiery.....	4. 29	
Women's and misses' cloaks, suits, and dresses.....	13. 32	
Women's and misses' underwear, negligees, corsets, etc.....	5. 78	
All other women's, misses', and children's wearing apparel (not including furs).....	3. 14	
Appliances and supplies:		
Electrical.....		1. 39
Gas.....		. 19
Automotive parts and accessories:		
Automotive parts and accessories (except tires and tubes).....		. 11
Tires, tubes, and tire accessories.....		. 03
Bakery products, fresh.....		. 11
Cameras and photographic supplies.....		. 15
Cigars, cigarettes, and tobacco.....		. 18
Clothing and furnishings, men's and boys'.....	11. 30	11. 30
Custom tailoring.....	. 03	
Men's and boys' suits.....	2. 54	
Men's and boys' overcoats.....	1. 31	
Men's and boys' hats and caps.....	. 32	
Men's and boys' furnishings.....	6. 23	
Work clothing.....	. 12	
All other men's clothing.....	. 75	
Confectionery and nuts.....		. 43
Delicatessen and ready-to-serve foods (except bakery products).....		. 09
Drugs and drug sundries (exclusive of toiletries).....		. 55

TABLE 7.—SALES BY COMMODITIES—Continued

	<i>Per cent</i>	<i>Per cent</i>
Dry goods and notions.....	10.10	10.10
Piece goods:		
Cotton piece goods.....	1.64	
Linen goods.....	.91	
Wool and wool-mixed goods.....	.44	
Rayons.....	.26	
Silk and velvets.....	2.74	
Notions, ribbons, laces, embroideries, handkerchiefs, parasols, umbrellas, etc.....	3.59	
Miscellaneous.....	.52	
Farm and garden equipment and supplies.....		.05
Fertilizers.....		.03
Fish and other sea food.....		.01
Flowers, wreaths, etc. (exclusive of growing plants).....		.08
Fountain sales, ice cream, and bottled beverages.....		.52
Fruits and vegetables.....		.04
Furniture:		
Household.....		4.94
Office and store furniture.....		.03
Furs and fur goods.....		1.44
Groceries.....		.45
Hardware.....		.17
Heating and plumbing equipment and supplies.....		.04
Home furnishings.....	14.28	14.28
Draperies, upholstery, cretonnes, and curtains.....	3.45	
Floor coverings.....	3.44	
Beddings, mattresses, springs, pillows, etc.....	.64	
China, glassware, and crockery.....	1.34	
Kitchen utensils.....	1.17	
Refrigerators (electric and gas).....	.18	
Other home furnishings (including awnings, mirrors, pictures, window shades, bedspreads, blankets, comfortables, pillowcases, sheets, table linens, towels, etc.).....	4.06	
Infants' wear.....		1.94
Jewelry, silverware, and clocks.....		2.10
Leather goods (billfolds, purses, gloves, and handbags).....		1.47
Luggage.....		.53
Meats, including poultry.....		.10
Miscellaneous merchandise.....		.47
Motor cycles, bicycles, and accessories.....		.02
Musical instruments and accessories.....		.28
Office and store equipment.....		.07
Optical goods.....		.09
Paints, varnishes, glass, and painters' supplies.....		.06
Radios and equipment.....		1.40
Receipts from sales of meals.....		.94
Secondhand merchandise.....		.01
Seeds, bulbs, plants, and nursery stock (exclusive of cut flowers).....		.01
Service.....		.90
Shoes and other footwear.....		4.78
Sporting goods, gymnasium, and playground equipment.....		.48
Stationery, books, and magazines.....		1.67
Stoves, ranges, heaters, etc. (other than electric or gas).....		.07
Surgical, dental, and hospital supplies.....		.04
Toilet articles and preparations (exclusive of drugs).....		2.12
Toys and games.....		1.35
Wall paper.....		.05

NOTE.—Indented items constitute a further breakdown of the classification under which they are shown, and indicate that, although the commodity coverage, upon which they are based, is less than that applying to the main classification, it is believed to be sufficient to provide a reliable estimate.

## CHAPTER 5.—VARIETY-STORE CHAINS

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# VARIETY-STORE CHAINS

## VARIETY, 5-AND-10, AND TO-A-DOLLAR STORES

### INTRODUCTION

The typical variety store of to-day is a chain development. It is characterized by a great variety of merchandise of low unit cost, alluring display, minimum quantity and quality of sales service, cash and carry and practically self-help, rapid turnover of stock, high rent for good retail locations, and comparatively little independent competition. Of the total sales in all variety stores of \$904,147,495, the total sales of the chains are \$809,758,118.

A development of outstanding importance, which will lead to a different situation with regard to competition, is the steady incursion of variety chains into higher price fields. The first variety chains limited themselves strictly to the 5-and-10 cent field. Gradually the 10-cent limit was raised to 25 cents, then to 50 cents, then to a dollar. Some chains added apparel with a \$5 limit, which in 1928 and 1929 was often exceeded. The largest chain in the field, which maintained its 10-cent limit consistently throughout all of this period of change by other chains, recently adopted a 20-cent limit, thereby bringing it into direct competition with department stores and some general merchandise stores.

There are 148 variety store chains, of which 105 are local and 43 are sectional or national. The local chains operate 772 stores or units, and the sectional and national chains operate 4,675 a total of 5,447 chain units in all parts of the United States. Of these, 1,355 are in cities of more than 100,000 population; 1,037 are in cities of 25,000 to 100,000 population; 1,230 are in cities of 10,000 to 25,000 population; and 1,825 are in the smaller cities and towns. Thus nearly two-thirds are in places of less than 25,000 population and in many places they do a substantial proportion of the total business in the classes of merchandise which they carry.

### WHAT THE CHAINS SELL

In order of sales importance the more important commodities sold by variety chains are the following:

	Per cent
Apparel and accessories (see p. 12).....	13.43
Notions and smallwares.....	10.10
Home furnishings (principally china, glassware, and crockery).....	9.99
Confectionery and nuts.....	7.85
Drugs and toiletries.....	7.80
Hardware.....	7.71
Stationery, books (principally paper and fancy paper goods).....	6.44
Dry goods.....	5.41
Toys and games.....	5.39
Soda fountain sales and lunches.....	3.87
Clothing and furnishings (men's and boys').....	3.84
Jewelry (principally costume).....	3.04
Electrical supplies and materials.....	2.82

### OPERATING EXPENSES

The average operating expense ratio of all the chains is \$25.15 per \$100 of sales, but this varies somewhat when classified according to the number of units operated. The eight large national chains operating more than 100 units each report an average expense ratio of 24.82. The most economically operated group is that

consisting of 44 small chains operating 6 to 10 units each, whose average expense ratio is 22.19. Most of these chains operate in the small cities and towns where operating expenses are lowest.

A comparison of expenses by geographic divisions is possible in the case of 104 small chains with total sales of \$26,522,127. Comparisons by geographic divisions necessarily must be limited to those chains which operate entirely within some one division, which means the local and sectional chains. The average expense ratio of these smaller chains is 25.09, and 23 chains operating entirely within the west south central division show the lowest operating expenses in any geographic division, averaging 23 per cent. The Mountain division is second, the Pacific coast third, and the west North Central States fourth. The Southern States show the highest expense ratio, averaging about 26.8 per cent of sales.

### RENT

Variety-store chains pay an average rent of 6.28 per cent, although the chains operating exclusively in the smaller cities and towns average only 5.23 per cent. The eight largest national chains, with stores in large and small cities, find that their average rent is 6.22 per cent of sales. Practically all premises occupied by stores of the variety chains are leased, a situation not often found in any kind of business. During all the years of successful occupancy of their premises these chains have continued to lease rather than to own their store buildings, despite the fact that a good variety store is considered a desirable addition to most retail districts and it enhances the value of its own as well as adjoining property. An offsetting advantage is the opportunity to move with a shifting retail district.

### EMPLOYMENT

The 148 chains employ 126,429 full-time employees and 28,865 part-timers. Most of the part-timers are women, but 28,359 of the full-time employees are men. The total annual pay roll is \$87,982,323, most of which goes to full-time employees as shown by the employment table contained herein. Variety chains pay a lower wage scale and are content with a lower quality of sales people than are employed in almost any other kind of store, the annual wage per full-time employee being \$666. There is nothing in the reports to indicate whether such a policy results in lower distribution cost, considering its effect on other expenses and on sales effort and customer reaction, than would result from the employment of a higher grade of sales personnel.

### GROWTH OF THE CHAINS

Of the 5,447 units, about 12 per cent were established in 1929 and 30 per cent were established in the preceding three years. Only 6 out of 10 of the present stores were in existence prior to 1925 and most of these were owned by the few large national chains. The rapidity of growth of variety-store chains is one reason for the impression that their sales increased amazingly during the three or four years preceding the end of 1929. It also explains some of the difficulties which are facing variety store chains now, and which have forced a few large chains out of business or into receivership since 1929. It also throws some light on the underlying reason for the steady increase in maximum price limits, which has occurred in almost every chain in the field. One of the chief attractions of a large proportion of the variety chain stores is supposed to be the low, fixed-limit prices. Another is accessibility, or convenience of location in the heart of downtown or suburban retail districts, often involving competition for desired locations with resulting high rents. It is apparent from Table 5A that activity in the opening of new stores was intense on the part of chains of all sizes during the period from 1925 to 1929.

TABLE 1.—SUMMARY—VARIETY-STORE CHAINS

Variety-store chains— total number of chains.....	148
Number of local chains.....	105
Number of sectional and national chains.....	43
Total units.....	5,447
Local chains.....	772
Sectional and national chains.....	4,675
Store operating expense (per \$100 of sales).....	25.15
Pay roll cost, 155, 294 employees (per \$100 of sales).....	10.86
Other store operating expenses including rent (per \$100 of sales).....	14.29
Rent—5,371 leased stores (per \$100 of sales).....	6.28
Total sales, all chains.....	\$809,758,118

TABLE 2.—SALES CLASSIFIED ACCORDING TO SIZE OF CHAINS—VARIETY-STORE CHAINS

A. BY SIZE OF CITY

[For similar size data for each geographic division, see TABLE 6]

SIZE OF CITY	TOTAL SALES ALL CHAINS	SALES OF STORES IN CHAINS OF—				
		More than 50 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
148 chains		15 chains	9 chains	21 chains	44 chains	59 chains
UNITED STATES, total.....	\$809,758,118	\$743,176,311	\$20,386,383	\$21,846,012	\$15,610,201	\$8,739,211
All cities having population of:						
More than 100,000.....	399,748,876	379,767,443	3,627,129	7,488,903	5,725,886	3,139,515
25,000 to 100,000.....	203,079,677	190,215,768	4,832,644	5,289,728	2,255,623	485,914
10,000 to 25,000.....	123,116,713	115,032,635	2,419,468	3,544,285	1,708,060	412,265
Less than 10,000.....	83,812,852	58,160,465	9,507,142	5,523,096	5,920,632	4,701,517

B. BY GEOGRAPHIC DIVISIONS

[For number of units, see TABLE 5-B]

UNITED STATES, total.....	\$809,758,118	\$743,176,311	\$20,386,383	\$21,846,012	\$15,610,201	\$8,739,211
DIVISION						
New England.....	85,280,416	81,705,119	48,557	3,351,307	175,433	-----
Middle Atlantic.....	217,847,025	207,047,844	2,242,533	6,947,419	436,709	1,172,520
East North Central.....	194,223,593	185,130,991	1,989,503	2,742,046	2,640,675	1,720,378
West North Central.....	69,135,507	62,577,946	4,111,750	1,571,453	237,284	637,074
South Atlantic.....	77,621,763	69,933,842	4,031,034	1,200,115	1,062,153	1,394,619
East South Central.....	30,884,306	26,616,584	2,390,329	572,070	917,830	387,493
West South Central.....	57,715,304	46,672,658	5,506,606	668,704	3,645,713	1,221,623
Mountain.....	16,351,196	14,904,743	66,071	207,258	425,451	747,673
Pacific coast.....	60,699,008	48,586,584	-----	4,585,640	6,068,953	1,457,831

C. BY TYPES OF OPERATION

All types:						
Number of chains.....	148	15	9	21	44	59
Number of units.....	5,447	4,189	347	322	328	261
Net sales (1929).....	\$809,758,118	\$743,176,311	\$20,386,383	\$21,846,012	\$15,610,201	\$8,739,211
Per cent of net sales.....	100.00	91.78	2.52	2.70	1.92	1.08
Average sales per unit.....	\$148,661	\$177,411	\$58,750	\$67,845	\$47,592	\$33,484
Local chains:						
Number of chains.....	105	-----	2	14	33	56
Number of units.....	772	-----	81	202	240	249
Net sales (1929).....	\$25,699,415	-----	\$3,847,575	\$6,956,705	\$8,178,876	\$6,716,259
Sectional chains:						
Number of chains.....	30	4	5	7	11	3
Number of units.....	735	335	180	120	88	12
Net sales (1929).....	\$51,748,845	\$20,595,493	\$6,809,768	\$14,889,307	\$7,431,325	\$2,022,952
National chains:						
Number of chains.....	13	11	2	-----	-----	-----
Number of units.....	3,940	3,854	86	-----	-----	-----
Net sales (1929).....	\$732,309,858	\$722,580,818	\$9,729,040	-----	-----	-----

TABLE 2.—SALES CLASSIFIED ACCORDING TO SIZE OF CHAINS—VARIETY-STORE CHAINS—Continued  
D.—BY VOLUME OF SALES

VOLUME OF SALES	SALES OF STORES IN CHAINS OF—												
	TOTAL SALES ALL CHAINS		Per cent of total sales	More than 50 units		26 to 50 units		11 to 25 units		6 to 10 units		Less than 6 units	
	Num-ber of chains	Net sales (1929)		Num-ber of chains	Net sales (1929)	Num-ber of chains	Net sales (1929)	Num-ber of chains	Net sales (1929)	Num-ber of chains	Net sales (1929)	Num-ber of chains	Net sales (1929)
UNITED STATES, total.....	148	\$809,768,118	100.00	15	\$743,176,311	9	\$20,386,383	21	\$21,846,012	44	\$15,610,201	59	\$8,739,211
Chains with sales of:													
\$20,000,000 to \$40,000,000.....	5	613,565,374	22.10	5	613,565,374								
\$10,000,000 to \$20,000,000.....	3	73,197,168	9.04	3	73,197,168								
\$2,500,000 to \$10,000,000.....	4	51,544,927	6.36	4	51,544,927								
\$1,000,000 to \$2,500,000.....	4	22,020,100	2.72			1	8,404,575	2	8,677,746	1	4,937,779		
\$500,000 to \$1,000,000.....	16	25,744,828	3.18	3	4,868,842	6	10,411,749	5	7,504,261	1	1,168,859	1	1,711,147
\$250,000 to \$500,000.....	7	5,453,628	.67			2	1,570,069	4	1,678,697	1	4,415,737	2	614,002
\$100,000 to \$250,000.....	21	6,708,436	.83					5	900,620	14	3,757,725	32	4,777,225
Less than \$100,000.....	89	9,525,570	1.18					5		22	361,220	24	1,636,837
	29	1,998,057	.25							5			

TABLE 3.—OPERATING EXPENSES 1—VARIETY-STORE CHAINS

VARIETY-STORE CHAINS

	EXPENSES OF STORES IN CHAINS OF—						Less than 6 units
	Total, all chains	More than 100 units	51 to 100 units	26 to 50 units	11 to 25 units	6 to 10 units	
Net sales (1929).....	\$809,758,118	\$680,861,626	\$62,314,685	\$20,386,383	\$21,846,012	\$15,610,201	\$8,739,211
Number of chains.....	148	8	7	9	21	44	59
Units operated by local chains.....	772	24,82	27,70	30,37	202	240	249
Units operated by sectional chains.....	735	155	180	180	120	120	12
Units operated by national chains.....	3,940	3,551	303	86		88	
Operating expenses.....	\$203,688,665	\$168,994,064	\$17,259,126	\$6,191,528	\$5,756,128	\$3,463,425	\$2,024,404
Per \$100 of sales.....	25.15	24.82	27.70	26.35	26.35	22.19	23.16
Pay roll—total.....	\$87,982,323	\$74,030,027	\$6,434,577	\$2,451,705	\$2,546,245	\$1,576,922	\$942,847
Per \$100 of sales.....	10.86	10.87	10.33	12.03	11.66	10.10	10.79
Other store operating expenses including rent.....	\$115,706,342	\$94,964,027	\$10,824,549	\$3,739,823	\$3,209,883	\$1,886,503	\$1,081,557
Per \$100 of sales.....	14.29	13.95	17.37	18.34	14.69	12.09	12.37
Rent in 5,371 leased premises, per \$100 of sales in such leased premises (included in figures above).....	6.28	6.22	7.51	6.66	5.86	4.45	5.52
Stocks on hand, end of year, at cost.....	\$106,700,000	\$81,753,498	\$11,124,776	\$3,845,879	\$4,494,523	\$3,230,480	\$2,250,844
EMPLOYMENT DATA							
Full-time employees—total.....	126,429	108,723	9,839	3,045	2,263	1,640	919
Men.....	28,359	24,272	1,879	718	642	484	364
Women.....	98,070	84,451	7,960	2,327	1,621	1,156	555
Total full-time pay roll.....	\$84,156,982	\$71,358,067	\$5,848,228	\$2,280,504	\$2,369,549	\$1,450,843	\$849,791
Part-time employees—total.....	28,865	19,858	4,901	1,489	1,137	904	576
Men.....	3,481	3,052	104	48	84	99	94
Women.....	25,384	16,806	4,797	1,441	1,053	805	482
Total part-time pay roll.....	\$3,825,341	\$2,671,960	\$586,349	\$171,201	\$176,696	\$126,079	\$93,056

1 This computation of expenses includes no return on capital invested in merchandise, fixtures or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

TABLE 4.—EXPENSES BY GEOGRAPHIC DIVISIONS—VARIETY-STORE CHAINS  
 [Local and sectional chains only]

DIVISION	Num-ber of chains <sup>1</sup> units	Num-ber of units (1929)	Net sales (1929)	TOTAL REPORTED EXPENSES <sup>2</sup>		Num-ber of employes	PAY ROLL		OTHER STORE OPERATING EXPENSES INCLUDING RENT		Rent in \$10 leased premises, per \$100 of sales in such leased premises included in figures in preceding column)	STOCKS ON HAND END OF YEAR, AT COST	
				Amount	Per \$100 of sales		Amount	Per \$100 of sales	Amount	Per \$100 of sales		Amount	Stock-sales ratio <sup>3</sup>
Total, all divisions.....	104	831	\$26,522,127	\$6,653,973	25.09	5,619	\$3,234,992	\$3,418,681	12.89	5.23	\$6,391,407	24.10	
Middle Atlantic.....	11	89	3,284,246	860,507	26.20	570	378,936	481,571	14.66	6.78	916,263	27.90	
East North Central.....	25	197	7,113,689	1,871,712	26.31	1,454	884,846	986,866	13.87	5.08	1,495,447	21.02	
West North Central.....	9	68	2,364,415	565,086	23.90	518	287,583	277,453	11.74	4.21	627,839	26.55	
South Atlantic.....	18	113	2,643,069	708,944	26.73	708	341,881	364,663	13.80	5.76	861,261	32.59	
East South Central.....	7	76	1,743,503	468,777	26.89	638	255,808	212,969	12.22	5.49	383,552	22.00	
West South Central.....	23	226	6,262,344	1,440,558	23.00	1,307	733,744	706,814	11.22	4.80	1,339,440	21.39	
Mountain.....	3	15	376,415	89,229	23.70	62	42,065	47,224	12.54	4.57	1,78,027	20.73	
Pacific coast.....	8	47	2,734,456	651,310	23.82	364	310,189	341,121	12.48	4.98	689,569	25.22	

<sup>1</sup> Only those chains located wholly in one geographic division were used in this table.

<sup>2</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

<sup>3</sup> Stock-sales ratio is the per cent or ratio of stock at the end of the year, at cost, to net sales for the year at retail. It is not equivalent to turnover, to compute which requires a monthly stock figure at retail, averaged throughout the year.

TABLE 5.—CHAIN UNITS CLASSIFIED ACCORDING TO SIZE OF CHAINS—VARIETY-STORE CHAINS

A. BY DATE OF ESTABLISHMENT

DATE OF ESTABLISHMENT	Percent of total units	UNITS IN CHAINS OF—						Less than 6 units
		Total units all chains	More than 100 units	51 to 100 units	26 to 50 units	11 to 25 units	6 to 10 units	
Total.....	100.00	5, 447	3, 706	483	347	322	328	261
All units established:								
In 1929.....	12.19	664	270	154	89	55	44	52
1925 to 1928.....	30.00	1, 634	969	179	114	100	167	105
Previous to 1925.....	57.81	3, 149	2, 467	150	144	167	117	104

B. BY GEOGRAPHIC DIVISIONS

[For dollars of sales, see TABLE 2 -B]

DIVISION	100.00	5, 447	3, 706	483	347	322	328	261
UNITED STATES, total.....	100.00	5, 447	3, 706	483	347	322	328	261
New England.....	9.73	530	470	23	2	32	3	---
Middle Atlantic.....	21.75	1, 185	953	90	14	79	14	35
East North Central.....	22.21	1, 210	855	112	52	53	83	55
West North Central.....	9.60	523	350	19	82	43	8	21
South Atlantic.....	11.97	652	419	66	21	53	37	56
East South Central.....	4.83	263	142	10	41	17	36	17
West South Central.....	11.00	599	228	68	134	31	90	48
Mountain.....	2.15	117	87	7	1	1	10	11
Pacific.....	6.76	368	202	88	---	13	47	18

TABLE 6.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS—VARIETY-STORE CHAINS  
This table elaborates Table 2-A)

DIVISION AND SIZE OF CITY	Per cent of total sales	Total sales, all chains	SALES OF STORES IN CHAINS OF—						Less than 6 units
			More than 100 units	51 to 100 units	26 to 50 units	11 to 25 units	6 to 10 units		
UNITED STATES, total.....	100.00	\$809,758,118	\$680,861,626	\$62,314,685	\$20,386,383	\$21,846,012	\$15,610,201	\$8,739,211	
All cities having population of:									
More than 100,000.....	49.37	399,748,876	343,577,441	36,190,002	3,627,129	7,488,903	5,725,886	3,139,515	
25,000 to 100,000.....	25.08	263,079,677	172,879,078	17,336,690	4,832,644	5,289,728	2,255,623	485,914	
10,000 to 25,000.....	15.20	123,116,713	110,989,924	4,042,711	2,419,648	3,544,285	1,708,060	412,265	
Less than 10,000.....	10.35	83,812,852	53,415,183	4,745,282	5,507,142	5,523,096	5,920,632	4,701,517	
NEW ENGLAND DIVISION.....	100.00	85,280,416	76,797,122	4,907,997	48,557	3,351,307	175,433	---	
Cities having population of:									
More than 100,000.....	44.88	38,270,814	33,815,749	3,396,651	---	1,058,414	46,454	---	
25,000 to 100,000.....	29.64	25,275,575	23,290,606	1,078,206	---	1,860,309	128,979	---	
10,000 to 25,000.....	17.27	14,731,240	13,228,156	259,647	28,583	1,085,875	---	---	
Less than 10,000.....	8.21	7,002,787	6,462,611	173,493	19,974	346,709	---	---	
MIDDLE ATLANTIC DIVISION.....	100.00	217,847,025	186,340,497	20,707,347	2,242,533	6,947,419	436,709	1,172,520	
Cities having population of:									
More than 100,000.....	55.29	120,449,497	103,518,840	12,645,337	965,969	2,454,653	85,092	779,606	
25,000 to 100,000.....	21.26	46,307,412	37,044,730	5,870,053	1,252,694	2,041,365	28,151	70,419	
10,000 to 25,000.....	15.88	34,596,025	31,390,655	1,673,286	---	1,285,598	100,137	146,349	
Less than 10,000.....	7.57	16,494,091	14,386,272	518,671	23,870	1,165,803	223,329	176,146	
EAST NORTH CENTRAL DIVISION.....	100.00	194,223,593	167,336,551	17,794,440	1,989,503	2,742,046	2,640,675	1,720,378	
Cities having population of:									
More than 100,000.....	54.19	105,244,963	91,947,254	11,249,130	109,022	1,239,854	423,684	276,049	
25,000 to 100,000.....	28.08	54,547,310	48,187,624	5,673,575	105,225	300,160	76,598	204,228	
10,000 to 25,000.....	11.29	21,926,617	20,194,658	640,753	493,749	222,294	373,163	---	
Less than 10,000.....	6.44	12,504,673	7,007,115	230,982	1,279,507	979,738	1,767,230	1,240,101	
WEST NORTH CENTRAL DIVISION.....	100.00	69,135,507	59,110,385	3,461,561	4,111,750	1,571,453	237,284	637,074	
Cities having population of:									
More than 100,000.....	43.72	30,223,787	27,435,349	2,612,452	170,639	5,347	58,285	93,606	
25,000 to 100,000.....	21.81	15,078,580	14,382,334	486,916	57,439	---	---	---	
10,000 to 25,000.....	20.80	14,378,557	12,718,127	313,877	967,288	327,628	---	51,637	
Less than 10,000.....	13.67	9,454,583	4,580,575	48,316	2,916,384	1,238,478	178,999	491,831	

VARIETY-STORE CHAINS

SOUTH ATLANTIC DIVISION.....		100.00	77,621,763	64,888,489	5,045,353	4,031,034	1,200,115	1,062,153	1,394,619
Cities having population of:									
More than 100,000.....		35.10	27,246,827	23,479,666	2,024,947	1,373,660	222,515	-----	146,089
25,000 to 100,000.....		33.36	25,896,861	21,738,730	1,446,341	2,440,458	187,943	-----	83,389
10,000 to 25,000.....		15.11	11,725,248	11,168,463	1,193,492	216,916	15,431	46,737	94,209
Less than 10,000.....		16.43	12,752,827	8,511,630	1,386,573	-----	774,226	1,015,416	1,070,982
EAST SOUTH CENTRAL DIVISION.....		100.00	30,884,306	25,722,181	894,403	2,390,329	572,070	917,890	387,493
Cities having population of:									
More than 100,000.....		44.21	13,654,976	12,257,849	365,769	989,510	-----	34,905	41,848
25,000 to 100,000.....		20.99	6,484,022	5,638,960	377,439	432,718	-----	144,898	-----
10,000 to 25,000.....		20.50	6,330,388	5,801,906	32,603	273,154	77,827	738,027	-----
Less than 10,000.....		14.30	4,414,920	2,023,466	118,592	694,947	494,243	-----	345,645
WEST SOUTH CENTRAL DIVISION.....		100.00	57,715,304	42,840,457	3,832,201	5,506,606	668,704	3,645,713	1,221,623
Cities having population of:									
More than 100,000.....		41.31	23,842,338	20,999,530	804,993	18,329	-----	1,848,681	170,805
25,000 to 100,000.....		20.64	11,913,028	10,024,440	1,310,206	544,110	-----	-----	34,272
10,000 to 25,000.....		15.52	8,955,111	7,567,189	571,964	437,778	201,792	176,388	-----
Less than 10,000.....		22.53	13,004,827	4,249,298	1,145,088	4,506,389	466,912	1,620,644	1,016,546
MOUNTAIN DIVISION.....		100.00	16,351,196	14,489,357	415,386	66,071	207,258	425,451	747,673
Cities having population of:									
More than 100,000.....		31.59	5,165,054	4,441,225	175,000	-----	-----	-----	548,829
25,000 to 100,000.....		29.14	4,765,236	4,233,631	119,444	-----	207,258	204,903	-----
10,000 to 25,000.....		17.61	2,879,847	2,795,732	84,115	-----	-----	-----	-----
Less than 10,000.....		21.66	3,541,059	3,018,769	36,827	66,071	-----	220,548	198,844
PACIFIC COAST DIVISION.....		100.00	60,699,008	43,330,587	5,255,997	-----	4,585,640	6,068,953	1,457,831
Cities having population of:									
More than 100,000.....		58.73	35,650,590	25,681,979	2,915,723	-----	2,508,120	3,368,429	1,176,339
25,000 to 100,000.....		21.11	12,811,653	8,338,123	974,510	-----	1,692,693	1,806,327	-----
10,000 to 25,000.....		12.51	7,593,680	6,135,088	272,974	-----	327,840	737,758	120,070
Less than 10,000.....		7.65	4,643,085	3,175,447	1,092,790	-----	56,987	156,439	161,422

TABLE 7.—SALES BY COMMODITIES—VARIETY-STORE CHAINS

	Net sales (1929)	
		Per cent
		100.00
Net sales (1929).....	\$809,758,118	
Less amount which cannot be broken down into commodities.....	40,360,125	
Sales further analyzed.....	769,397,993	
Commodities:		
Apparel, and accessories (women's, misses', and children's).....		13.43
Children's wear.....	0.95	
Millinery.....	1.25	
Hosiery.....	5.67	
Coats, suits, and dresses.....	.95	
Underwear, negligees, corsets, etc.....	2.04	
Other apparel, except furs.....	2.57	
Appliances and supplies (electric).....		2.82
Household heating appliances—portable.....	.02	
Lighting equipment.....	.83	
Incandescent lamps.....	.47	
Construction materials.....	1.13	
Other appliances.....	.37	
Art goods and gifts.....		.31
Automotive parts and accessories.....		.02
Bakery products, fresh.....		.37
Batteries.....		.06
Bottled beverages.....		.47
Cameras and photographic supplies.....		.01
Clothing and furnishings (men's and boys').....		3.84
Hats and caps.....	0.02	
Furnishings.....	2.65	
Work clothing.....	.21	
Other clothing.....	.96	
Confectionery and nuts.....		7.85
Delicatessen, ready-to-serve foods.....		.62
Drugs and drug sundries.....		1.13
Drugs, patent medicines, etc.....	0.01	
Rubber goods.....	.38	
Drug sundries.....	.74	
Dry goods and notions.....		15.51
Dry goods.....	5.41	
Notions and small wares.....	10.10	
Flowers, wreaths, etc.....		.17
Fruits and vegetables.....		.10
Groceries.....		.51
Hardware.....		7.71
Builders' and shelf hardware.....	1.67	
Carpenters' and mechanics' tools.....	.61	
Other hardware.....	5.43	
Home furnishings.....		9.99
Draperies, curtains, and upholstery.....	0.97	
Floor coverings.....	.19	
China, glassware, and crockery.....	4.02	
Kitchen utensils.....	1.63	
Other home furnishings.....	3.18	
Infants' wear.....		1.38
Jewelry, silverware, and clocks.....		3.04
Clocks and watches.....	0.01	
Rings, other than diamond.....	.02	
Gold and gold-filled jewelry.....	.01	
Plated silverware.....	.03	
Other jewelry (costume).....	2.97	
Leather goods, billfolds, purses (may include gloves and handbags).....		.95
Luggage.....		.03
Miscellaneous.....		2.53
Musical instruments and accessories.....		1.31
Phonographs and records.....	0.82	
Sheet music, music books, etc.....	.40	
Other musical instruments and accessories.....	.09	
Optical goods.....		.04
Paints, varnishes, and painters' supplies.....		.97
Radio parts and equipment.....		.72
Receipts from sale of meals.....		1.08
Seeds, bulbs, plants and nursery stock.....		.57
Shoes and other footwear.....		1.17
Soda fountain sales and ice cream.....		2.79
Stationery, books and magazines.....		6.44
Books.....	0.49	
Magazines.....	.35	
Paper and paper goods.....	4.29	
Other stationery.....	1.31	
Toilet articles and preparations.....		6.67
Toiletries and cosmetics.....	5.05	
Toilet articles.....	1.62	
Toys and games.....		5.39

## CHAPTER 6.—MOTOR-VEHICLE DEALER CHAINS

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# MOTOR-VEHICLE DEALER CHAINS

## INCLUDING USED-CAR AND AIRCRAFT DEALER CHAINS

### INTRODUCTION

Chains selling motor vehicles and aircraft at retail are analyzed in this report, which is based upon data received in 1930 in connection with the first national census of distribution, which is a part of the Fifteenth Decennial Census of the United States.

Of the 176 chains included, operating 1,364 units or sales places, 167 are chains selling new passenger and commercial vehicles, 6 are chains selling used cars primarily but also a certain proportion of new vehicles, and 3 chains sell aircraft and conduct flying schools at 41 airports or other places of business.

Although the three aircraft chains report a combined business of only about \$2,000,000, of which two-thirds is the sale of airplanes, gliders, and parts, the industry is of such potential importance that it is included herein for comparison in future years.

### MOTOR-VEHICLE DEALERS

The 167 motor-vehicle chains report total net sales of \$616,594,816 in 1,290 sales rooms or units, at an expense ratio of \$19.29 per \$100 of sales. Of this amount, \$10.38 represents pay roll. Of the total number of units, 1,009 are in leased premises for which the aggregate rent is \$2.11 per \$100 of sales in such leased premises.

Nearly 85 per cent of the business of these chains is in cities of 100,000 or greater population; another 8 per cent is in cities of 30,000 to 100,000 population; the remaining 7 per cent is almost equally divided between cities of 10,000 to 30,000 and places of less than 10,000 population. As to size of chains, the business is almost equally divided between the 147 chains of 10 or less units and the 20 chains of more than 10 units.

New York and the Middle Atlantic States show the largest total of sales, with the Pacific coast second and the Chicago district third. The chain sales in the New England States are approximately equal to the combined chain sales of the five remaining geographic divisions of the country other than those cited above. Table 2 in this report analyzes the sales in considerable detail, and is supplemented in further detail by Table 9, showing the sales in each geographic division classified by size of city and size of chains.

### TYPES OF CHAINS

Classified according to type of operation, there are 138 local chains with 737 units, 17 sectional chains with 216 units, and 12 national chains with 337 units. About 47 per cent of the total business is done by the local chains, with the remainder equally divided between sectional and national chains.

Local chains are those operating all of their units in one city and its environs; sectional chains operate in several cities in the same section of the country, and national chains operate in more than one section of the country. The type of operation is not influenced by the number of units operated, as shown in Table 3.

## OPERATING EXPENSES

The aggregate operating expense of \$19.29 per \$100 of sales differs little from the average of each size group, as is shown in Table 4. There is no material difference in expenses between the smaller chains with less than six units and the three other size classifications shown, which is a condition not often found in other kinds of business. Table 5 shows that the highest ratio of expenses to sales is found in sections of the country in which the lowest expense ratio is encountered by most other kinds of chains—the great central belt on both sides of the Mississippi and the Southern States. The lowest ratio is found in the Pacific coast section, with New York City and the Middle Atlantic section second lowest.

## CREDIT EXTENDED BY THE CHAINS

Because of the widespread custom in the automobile business of using finance companies for the purpose of financing deferred payments undertaken by customers in the purchase of vehicles on the installment plan, the amount of credit extended by dealers is considerably less in proportion to the amount of credit sales by such dealers than is true in any other kind of business. In effect, many automobile dealers act as agents of the finance companies, and customers' notes are made payable directly to the finance companies, or indorsed to them, in return for which the companies discount the notes for cash. The cash proceeds of the notes, plus the down payment in cash by the customer, provide the dealer with payment in full, and the dealer often reports the sale as a cash transaction.

As a result, many dealers who do not finance their own installment sales report that they do no credit business whatever, when in fact practically all of their sales are credit sales. This trade custom must be taken into account in a study of Table 6. Of the 167 chains, 94 reported that they extended no credit whatever, meaning that all of their installment sales were financed in the manner outlined above. Only 73 chains reported that they extended credit. These 73 chains do about one-third of the total business of all the chains, and it is apparent from a study of their figures that even they use the finance companies to a certain extent, for they show more than 57 per cent of their business as "cash." Only the proportion reported as sold on open account, which is 26 per cent, can be regarded as approximately correct, and some of this is repair income. The remaining 74 per cent includes a large proportion of installment selling, although only about 17 per cent is financed by the chains themselves. When paper is discounted by the finance companies, it is not regarded in many parts of the country as dealer credit. This situation is thoroughly understood within the industry, but in making comparisons with other kinds of business and in any study of retail credit as a whole, the credit sales reported by motor-vehicle dealers must be adjusted accordingly. The compensating factor which must be reduced correspondingly is the reported proportion of "cash" sales.

## SALES BY COMMODITIES

With almost 94 per cent of the total sales reported in such detail that it can be broken down into commodities, Table 7 reveals that 44.43 per cent of the total sales of the chains consists of new passenger vehicles, 26.96 per cent consists of commercial vehicles and 12.50 per cent consists of used cars which were traded in on the sale of new vehicles and subsequently sold. Parts and various accessories, such as tires, tubes, and batteries, make up a total of 9.62 per cent of total sales, with repairs and service adding another 5.61 per cent. Gasoline and oil appear as a small factor in total sales (less than one-half of 1 per cent). A detailed breakdown of sales by commodities is shown in this report.

### AGE OF CHAINS

Contrary to the showing of most other kinds of chains, only 9 per cent of the total number of motor-vehicle chain units operating at the end of 1929 were established during that year. Two-thirds of them had been in existence five years or more. Most of the new units were in small chains.

### WHOLESALE DISTRIBUTORS EXCLUDED

In the trade there is a distinction between dealers and distributors, the latter being considered wholesalers. In the distribution of passenger vehicles, this distinction is often indefinite, due to the practice of combining in one establishment the functions of wholesale distribution to branch agencies and retail sale. In all such cases, if more than 50 per cent of the business reported by the dealer is retail the entire establishment is classified as retail, whereas if more than 50 per cent is reported as wholesale (the sale of vehicles to other retailers) the entire establishment is classified as wholesale and included in the Wholesale Census.

### MOTOR TRUCK DEALERS

Motor truck distributors were similarly classified between wholesale and retail in accordance with whether their business was predominantly wholesale or predominantly retail. Retail truck dealers are included with retail passenger car dealers as motor vehicle dealers. Of the 167 chains reported herein, including both kinds of dealers, there are 16 chains which sell trucks (and other commercial vehicles) exclusively or primarily.

These 16 chains operate 403 units, with total sales of \$178,863,759. Their operating expenses average \$20.66 per \$100 of sales, in comparison with the average for all retail chains described in this report of \$19.29.

### USED-CAR DEALER CHAINS

Six chains of used-car dealers, with 33 units and total sales of \$5,116,484, are reported briefly in Tables 10 and 11. The expense ratio of these chains is substantially the same as that of motor-vehicle chains, aggregating \$20.74 per \$100 of sales.

Used cars and trucks constitute 80 per cent of total sales, whereas repairs and service account for 9 per cent. Parts and accessories amount to 10 per cent of total sales.

### AIRCRAFT DEALER CHAINS

Three chains of aircraft dealers operated 41 salesrooms and other retail sales places, with combined sales of only \$2,003,001. There were 511 employees, an aggregate pay roll of \$664,671 and total operating expenses of \$905,923, or \$45.23 per \$100 of sales. Of the 41 premises occupied, 26 were owned and 15 were leased. Rental cost in the 15 leased premises was \$3.34 per \$100 of sales in such leased premises.

Airplanes and gliders constituted 60 per cent of total sales, with parts and accessories accounting for an additional 6.6 per cent. The sale of gasoline and oil totaled 3.12 per cent, repairs 12.63 per cent, and service 18.04 per cent of the total business.

Service income was not reported in further detail by all the chains, but a partial and substantial breakdown indicates that commercial flying brought in an income of \$3.87, flying-school and passenger-carrying income was \$14.11, and hangar rental brought in \$0.06, of each \$100 of total income from sales and service. The total income from these three classes of service was about \$361,340. This is only the incidental service income of the three chains of aircraft dealers,

and includes no part of the income for similar service by air-transport lines, independent commercial flyers, flying schools, independent airports, and independent aircraft dealers.

All the figures included herein apply to the year 1929, which is the latest normal business year and the year which is used as the base in all Distribution Census reports.

TABLE 1.—SUMMARY

NEW PASSENGER AND COMMERCIAL VEHICLE DEALERS (Tables 2 to 9):	
Number of motor-vehicle retail chains.....	167
Local chains.....	138
Sectional and national chains.....	29
Number of units operated.....	1,290
Local.....	737
Sectional and national.....	553
Total net sales (1929).....	\$616,594,816
Total operating expenses (per \$100 of sales).....	19.29
Pay roll (31,244 employees) (per \$100 of sales).....	10.38
Other operating expenses, including rent (per \$100 of sales).....	8.91
Rent 1,009 leased premises (per \$100 of sales in such leased premises).....	2.11
USED-CAR DEALERS (Tables 10 and 11):	
Number of used-car retail chains (all local).....	6
Number of units operated.....	33
Total net sales (1929).....	\$5,116,484
AIRCRAFT DEALERS (Tables 12 and 13):	
Number of aircraft retail chains.....	3
Number of units operated.....	41
Sectional chains.....	14
National chains.....	27
Total net sales (1929).....	\$2,003,001

TABLE 2.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, GEOGRAPHIC DIVISIONS, AND VOLUME OF SALES—MOTOR-VEHICLE DEALER CHAINS

[Includes only chains whose business is predominately retail]

[An (x) indicates that the detail must be withheld to avoid disclosure of individual operations]

## A.—SALES BY SIZE OF CITY, WITH CHAINS CLASSIFIED ACCORDING TO NUMBER OF UNITS

[For similar data by size of city for each geographic division, see Table 9]

SIZE OF CITY (population)	Total sales all chains (167 chains, 1,290 units)	CHAINS CLASSIFIED ACCORDING TO NUMBER OF UNITS			
		More than 25 units (8 chains)	11 to 25 units (12 chains)	6 to 10 units (38 chains)	Less than 6 units (109 chains)
UNITED STATES, total.....	\$616,594,816	\$176,220,822	\$125,427,913	\$116,414,370	\$198,531,711
All units in cities of—					
More than 100,000 (820 units).....	522,151,992	157,348,887	111,146,890	95,581,577	158,074,638
30,000 to 100,000 (169 units).....	50,963,049	14,368,514	10,077,927	8,611,340	17,905,268
10,000 to 30,000 (116 units).....	22,689,091	2,774,345	2,204,468	4,818,317	12,891,961
Less than 10,000 (185 units).....	20,790,684	1,729,076	1,998,628	7,403,136	9,659,844

TABLE 2.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, GEOGRAPHIC DIVISIONS, AND VOLUME OF SALES—MOTOR-VEHICLE DEALER CHAINS—CON.

[An (x) indicates that the detail must be withheld to avoid disclosure of individual operations]

B.—SALES BY GEOGRAPHIC DIVISIONS, WITH CHAINS CLASSIFIED ACCORDING TO NUMBER OF UNITS

[For number of units see Table 8B]

SIZE OF CITY (population)	Total sales all chains (167 chains, 1,290 units)	CHAINS CLASSIFIED ACCORDING TO NUMBER OF UNITS			
		More than 25 units (8 chains)	11 to 25 units (12 chains)	6 to 10 units (38 chains)	Less than 6 units (109 chains)
UNITED STATES, total.....	\$616,594,816	\$176,220,822	\$125,427,913	\$116,414,370	\$198,531,711
DIVISION					
All units located in—					
New England.....	72,711,137	28,523,310	9,222,391	4,667,872	30,297,564
Middle Atlantic.....	215,075,688	58,831,470	59,992,819	23,275,605	72,975,794
East North Central.....	120,884,928	20,996,371	42,068,688	22,572,908	35,246,961
West North Central.....	21,403,319	8,370,556	1,793,607	4,506,131	6,733,025
South Atlantic.....	17,670,799	9,347,901	1,861,519	2,890,397	3,570,982
East South Central.....	13,213,148	3,630,804	(x)	3,108,890	6,065,874
West South Central.....	21,195,366	6,214,127	1,459,759	4,657,529	8,863,951
Mountain.....	3,823,250	1,545,079	(x)	1,661,820	386,222
Pacific coast.....	130,617,181	38,761,204	8,391,421	49,073,218	34,391,338

C.—SALES BY VOLUME OF SALES, WITH CHAINS CLASSIFIED ACCORDING TO NUMBER OF UNITS

VOLUME OF SALES	TOTAL SALES ALL CHAINS			CHAINS CLASSIFIED ACCORDING TO NUMBER OF UNITS	
	Per cent of total sales	Number of chains	Net sales (1929)	More than 25 units	
				Number of chains	Net sales (1929)
UNITED STATES, total.....	100.00	167	\$616,594,816	8	\$176,220,822
Chains with sales of—					
More than \$20,000,000.....	29.29	5	180,631,324	3	(x)
\$10,000,000 to \$20,000,000.....	25.74	12	158,706,212	4	46,282,025
\$5,000,000 to \$10,000,000.....	10.97	10	67,621,102	1	(x)
\$2,500,000 to \$5,000,000.....	13.23	24	81,598,537		
\$1,000,000 to \$2,500,000.....	15.46	59	95,293,977		
Less than \$1,000,000.....	5.31	57	32,743,664		

VOLUME OF SALES	CHAINS CLASSIFIED ACCORDING TO NUMBER OF UNITS					
	11 to 25 units		6 to 10 units		Less than 6 units	
	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)
UNITED STATES, total.....	12	\$125,427,913	38	\$116,414,370	109	\$198,531,711
Chains with sales of—						
More than \$20,000,000.....	2	(x)				
\$10,000,000 to \$20,000,000.....	2	(x)	3	43,287,498	3	39,257,241
\$5,000,000 to \$10,000,000.....	2	(x)	4	26,383,019	3	18,119,939
\$2,500,000 to \$5,000,000.....	4	17,002,291	5	15,276,748	15	49,319,498
\$1,000,000 to \$2,500,000.....	2	(x)	17	25,895,804	40	64,662,670
Less than \$1,000,000.....			9	5,571,301	48	27,172,363

TABLE 3.—SALES CLASSIFIED BY TYPES OF OPERATION AND SIZE OF CHAINS—  
MOTOR-VEHICLE DEALER CHAINS

	Total, all chains	CHAINS OF—			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
<b>ALL TYPES</b>					
Number of chains.....	167	8	12	38	109
Number of units.....	1,290	362	187	276	465
Net sales (1929).....	\$616,594,816	\$176,220,822	\$125,427,913	\$116,414,370	\$198,531,711
Per cent of net sales.....	100.00	28.58	20.34	18.88	32.20
Average sales per unit.....	\$477,980	\$486,798	\$670,738	\$421,791	\$426,930
<b>LOCAL CHAINS</b>					
Number of chains.....	138		14	33	101
Number of units.....	737		76	233	428
Net sales (1929).....	\$290,582,369		\$25,460,653	\$89,315,326	\$175,806,390
<b>SECTIONAL CHAINS</b>					
Number of chains.....	17	3	4	4	6
Number of units.....	216	100	54	33	29
Net sales (1929).....	\$164,397,526	\$50,400,130	\$78,507,841	\$16,361,720	\$19,127,835
<b>NATIONAL CHAINS</b>					
Number of chains.....	12	4	2		2
Number of units.....	337	236	93		8
Net sales (1929).....	\$161,614,921	\$114,003,917	\$44,013,518		\$3,597,486

<sup>1</sup> Includes 1 chain of 26 units.<sup>2</sup> Includes 1 chain of 10 units.TABLE 4.—OPERATING EXPENSES <sup>1</sup>—MOTOR-VEHICLE DEALER CHAINS

	Total all chains	EXPENSES OF STORES IN CHAINS OF—			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
Net sales (1929).....	\$616,594,816	\$176,220,822	\$125,427,913	\$116,414,370	\$198,531,711
Number of chains.....	167	8	12	38	109
Units operated by local chains.....	737	26	50	233	428
Units operated by sectional chains.....	216	100	54	33	29
Units operated by national chains.....	337	236	83	10	8
Operating expenses, total.....	\$118,967,371	\$32,999,143	\$25,859,273	\$22,499,228	\$37,609,727
Per \$100 of sales.....	19.29	18.73	20.62	19.33	18.94
Pay roll—total.....	\$64,005,720	\$19,832,019	\$13,548,203	\$11,786,898	\$18,838,600
Per \$100 of sales.....	10.38	11.26	10.80	10.13	9.49
Other operating expenses, including rent.....	\$54,961,651	\$13,167,124	\$12,311,070	\$10,712,330	\$18,771,127
Per \$100 of sales.....	8.91	7.47	9.82	9.20	9.45
Rent in 1,009 leased premises, per \$100 of sales in such leased premises (included above).....	2.11	2.08	2.09	2.32	2.05
Stocks on hand, end of year at cost.....	\$73,329,806	\$23,234,990	\$16,859,764	\$12,806,993	\$20,428,059
<b>EMPLOYMENT DATA</b>					
Full-time employees, total.....	30,978	8,801	6,280	5,970	9,927
Men.....	27,574	7,669	5,561	5,441	8,903
Women.....	3,404	1,132	719	529	1,024
Total pay roll.....	\$63,800,089	\$19,831,429	\$13,447,366	\$11,732,209	\$18,739,085
Part-time employees, total.....	266	4	71	87	104
Men.....	236	4	56	83	93
Women.....	30		15	4	11
Total pay roll.....	\$205,631	\$590	\$100,837	\$54,689	\$49,515

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

TABLE 5.—EXPENSES BY GEOGRAPHIC DIVISIONS 1—MOTOR-VEHICLE DEALER CHAINS

DIVISION	Num-ber of chains	Num-ber of units	Net sales (1929)	OPERATING EXPENSES						STOCKS ON HAND, END OF YEAR (at cost)			
				Total reported expenses <sup>2</sup>		Num-ber of employ-ees	Pay roll		Other operating expenses, including rent		Rent in 564 leased premises, per \$100 of sales in such leased premises (included in figures in preceding column)		
				Amount	Per \$100 of sales		Amount	Per \$100 of sales	Amount			Per \$100 of sales	
UNITED STATES, total.....	138	762	\$329,855,265	\$59,212,273	17.95	15,864	\$30,346,234	9.20	\$28,866,039	8.75	2.13	\$32,716,737	9.91
New England.....	17	120	48,484,402	9,065,519	18.70	2,640	4,436,769	9.15	4,628,750	9.55	1.77	4,549,937	9.38
Middle Atlantic.....	31	163	89,245,304	16,059,988	18.00	3,974	8,054,679	9.03	8,003,309	8.97	2.52	7,994,603	8.99
East North Central.....	30	145	49,312,481	10,713,909	21.73	2,729	5,262,013	10.67	5,451,896	11.06	2.33	5,914,768	7.94
West North Central.....	8	34	5,769,251	1,136,067	19.69	336	587,164	10.18	548,808	9.51	2.02	562,066	9.74
South Atlantic.....	4	20	4,012,688	1,077,686	21.94	324	654,664	11.29	523,022	10.65	2.78	701,619	14.28
East South Central.....	5	24	8,428,381	1,736,738	20.60	565	1,062,941	12.61	673,797	7.99	1.76	873,022	10.36
West South Central.....	11	53	10,021,097	1,998,551	19.94	627	1,021,634	10.19	976,917	9.75	1.61	1,346,169	13.43
Pacific coast.....	32	203	113,681,091	17,423,845	15.33	4,669	9,366,370	8.24	8,057,445	7.09	1.74	12,774,523	11.24

<sup>1</sup> Only those chains located wholly in one geographic division were used in this table.

<sup>2</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

<sup>3</sup> Stock-sales ratio is the per cent or ratio of stock at the end of the year, at cost, to net sales for the year at retail. It is not equivalent to turnover, to compute which requires a monthly stock figure at retail, averaged throughout the year.

TABLE 6.—CREDIT EXTENDED BY CHAINS—MOTOR-VEHICLE DEALER CHAINS  
OPEN-ACCOUNT AND INSTALLMENT CREDIT

[Exclusive of financing through finance companies not requiring the extension of credit by the retailers]

SIZE CLASS	CHAINS WHICH EXTEND CREDIT		SALES FINANCED BY THE CHAINS				"CASH" SALES BY SAME CHAINS <sup>1</sup>	
	Number of chains reporting credit extension	Total net sales of chains reporting credit extension	Open-account		Installment		Amount	Per cent of sales
			Amount	Per cent of sales	Amount	Per cent of sales		
All chains which extend credit, total.....	73	\$199,253,871	\$51,891,841	26.04	\$33,556,412	16.84	\$113,805,618	57.12
Chains having—								
26 to 50 units.....	4	62,155,712	15,492,474	24.93	7,679,069	12.35	38,984,169	62.72
11 to 25 units.....	3	9,836,820	2,914,430	29.63	1,071,954	10.90	5,850,436	59.47
6 to 10 units.....	14	25,094,433	5,984,600	23.85	7,199,642	28.69	11,910,191	47.46
Less than 6 units.....	52	102,166,906	27,500,337	26.92	17,605,747	17.23	57,060,822	55.85

<sup>1</sup> So-called "cash" sales by motor-vehicle dealers often include, in addition to actual cash sales, all installment sales in which the purchaser's notes or other evidences of indebtedness are taken over by finance companies and from which the dealers receive the proceeds immediately in cash.

TABLE 7.—SALES BY COMMODITIES—MOTOR-VEHICLE DEALER CHAINS

Item	Net sales (1929)
Net sales (1929), all chains.....	\$616,594,816
Less amount which can not be broken down into commodities.....	37,920,338
Sales further analyzed.....	578,674,478
Commodities.....	<i>Per cent</i> 100.00
Automobiles, busses, tractors, trucks, and accessories.....	93.61
Passenger automobiles, new.....	34.67
Used passenger cars.....	12.43
Busses.....	2.42
Commercial cars and trucks, new.....	21.06
Used commercial cars and trucks.....	2.96
Tractors.....	.12
Special-purpose vehicles.....	.06
Automotive parts and accessories (except tires, tubes, and batteries).....	8.42
Tires, tubes, and tire accessories.....	.54
Automobiles, new, sold to dealers.....	9.76
Used automobiles sold to dealers.....	.08
Commercial cars and trucks, new, sold to dealers.....	.44
Used commercial cars and trucks sold to dealers.....	.02
Parts and accessories sold to dealers.....	.63
Batteries.....	.03
Farm and garden equipment.....	.08
Gasoline.....	.24
Hardware.....	.02
Miscellaneous merchandise.....	.15
Oils and greases.....	.18
Radios and radio equipment.....	.01
Repairs and service.....	5.61
Secondhand merchandise.....	.05
Storage.....	.02

<sup>1</sup> The breakdown for these indented items is based upon a coverage of about 50 per cent.

TABLE 8.—CHAIN UNITS CLASSIFIED BY DATE OF ESTABLISHMENT, SIZE OF CHAIN, AND GEOGRAPHIC DIVISIONS

A.—CHAIN UNITS CLASSIFIED ACCORDING TO DATE OF ESTABLISHMENT AND SIZE OF CHAIN

DATE OF ESTABLISHMENT	TOTAL UNITS		UNITS IN CHAINS OF—				
	Number of units	Per cent of total	More than 50 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
Total, all units.....	1,290	100.00	158	204	187	276	465
All units established:							
In 1929.....	114	8.84	-----	10	15	31	58
1925 to 1928.....	304	23.56	-----	26	61	77	140
Prior to 1925.....	872	67.60	158	168	111	168	267

B.—CHAIN UNITS CLASSIFIED BY GEOGRAPHIC DIVISIONS

[For dollars of sales, see Table 2A]

UNITED STATES, total.....	1,290	100.00	158	204	187	276	465
DIVISION							
New England.....	184	14.26	21	47	27	36	53
Middle Atlantic.....	319	24.73	41	61	56	47	114
East North Central.....	243	18.84	18	25	45	63	92
West North Central.....	80	6.20	13	6	6	16	39
South Atlantic.....	65	5.04	19	13	9	10	14
East South Central.....	44	3.41	12	2	2	14	14
West South Central.....	86	6.67	16	2	9	21	38
Mountain.....	20	1.55	5	-----	2	9	4
Pacific coast.....	249	19.30	13	48	31	60	97

TABLE 9.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, AND GEOGRAPHIC DIVISION—MOTOR-VEHICLE DEALER CHAINS

[Containing detailed data supplementing Table 2]

GEOGRAPHIC DIVISION AND SIZE OF CITY	Per cent of total sales	Total sales, all chains	SALES OF STORES IN CHAINS OF—			
			More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
UNITED STATES, total.....	100.00	\$616,594,816	\$176,220,822	\$125,427,913	\$116,414,370	\$198,531,711
All cities having population of—						
More than 100,000.....	84.68	522,151,992	157,348,887	111,146,890	95,581,577	158,074,638
30,000 to 100,000.....	8.27	50,963,049	14,368,514	10,077,927	8,611,340	17,905,268
10,000 to 30,000.....	3.68	22,689,091	2,774,345	2,204,468	4,818,317	12,891,961
Less than 10,000.....	3.37	20,790,684	1,729,076	1,998,628	7,403,136	9,659,844
NEW ENGLAND, total.....	100.00	72,711,137	28,523,310	9,222,391	4,667,872	30,297,664
Cities having population of—						
More than 100,000.....	71.40	51,916,590	20,943,101	7,398,805	691,188	22,883,496
30,000 to 100,000.....	17.86	12,987,413	4,580,275	996,024	1,948,990	5,462,124
10,000 to 30,000.....	6.24	4,534,217	1,843,404	324,855	907,561	1,458,397
Less than 10,000.....	4.50	3,272,917	1,156,530	502,707	1,120,133	493,547
MIDDLE ATLANTIC, total.....	100.00	215,075,688	58,831,470	59,992,819	23,275,605	72,975,794
Cities having population of—						
More than 100,000.....	91.20	196,156,273	52,851,287	55,818,729	19,967,654	67,518,603
30,000 to 100,000.....	5.98	12,849,536	5,143,469	2,711,967	2,800,705	2,193,395
10,000 to 30,000.....	1.83	3,931,268	395,304	789,119	-----	2,746,845
Less than 10,000.....	.99	2,138,611	441,410	673,004	507,246	516,951
EAST NORTH CENTRAL, total.....	100.00	120,884,928	20,996,371	42,068,688	22,572,908	35,246,961
Cities having population of—						
More than 100,000.....	85.88	103,821,035	20,349,645	36,721,799	19,670,337	27,079,254
30,000 to 100,000.....	10.05	12,147,104	515,590	4,442,201	1,697,085	5,492,228
10,000 to 30,000.....	1.19	1,434,404	-----	81,771	77,738	1,274,895
Less than 10,000.....	2.88	3,482,385	131,136	822,917	1,127,748	1,400,584

**TABLE 9.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, AND GEOGRAPHIC DIVISION—MOTOR-VEHICLE DEALER CHAINS—Continued**

[Containing detailed data supplementing Table 2]

GEOGRAPHIC DIVISION AND SIZE OF CITY	Per cent of total sales	Total sales, all chains	SALES OF STORES IN CHAINS OF—			
			More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
WEST NORTH CENTRAL, total.....	100.00	\$21,403,319	\$8,370,556	\$1,793,607	\$4,506,131	\$6,733,025
Cities having population of—						
More than 100,000.....	68.45	14,650,474	7,103,889	1,625,082	3,619,496	2,302,007
30,000 to 100,000.....	10.90	2,333,020	1,266,667	-----	335,151	731,202
10,000 to 30,000.....	16.02	3,428,312	-----	168,525	392,106	2,867,681
Less than 10,000.....	4.63	991,513	-----	-----	159,378	832,135
SOUTH ATLANTIC, total.....	100.00	17,670,799	9,347,901	1,861,519	2,890,397	3,570,982
Cities having population of—						
More than 100,000.....	74.11	13,095,994	8,202,144	1,626,049	1,107,371	2,160,430
30,000 to 100,000.....	11.64	2,056,227	1,145,757	235,470	-----	675,000
10,000 to 30,000.....	4.90	865,904	-----	-----	778,349	87,555
Less than 10,000.....	9.35	1,652,674	-----	-----	1,004,677	647,997
EAST SOUTH CENTRAL, total.....	100.00	13,213,148	3,630,804	407,580	3,108,890	6,065,874
Cities having population of—						
More than 100,000.....	79.03	10,442,125	3,378,548	407,580	1,581,898	5,074,099
30,000 to 100,000.....	1.91	252,256	252,256	-----	-----	-----
10,000 to 30,000.....	8.61	1,137,745	-----	-----	688,670	449,075
Less than 10,000.....	10.45	1,381,022	-----	-----	838,322	542,700
WEST SOUTH CENTRAL, total.....	100.00	21,195,366	6,214,127	1,459,759	4,657,529	8,863,951
Cities having population of—						
More than 100,000.....	72.06	15,273,874	5,429,531	1,459,759	4,116,524	4,268,060
30,000 to 100,000.....	8.74	1,852,911	784,596	-----	-----	1,068,315
10,000 to 30,000.....	7.52	1,594,088	-----	-----	322,912	1,271,176
Less than 10,000.....	11.68	2,474,493	-----	-----	218,093	2,256,400
MOUNTAIN, total.....	100.00	3,823,250	1,545,079	230,129	1,661,820	386,222
Cities having population of—						
More than 100,000.....	61.20	2,339,975	1,453,771	230,129	656,075	-----
30,000 to 100,000.....	2.39	91,308	91,308	-----	-----	-----
10,000 to 30,000.....	-----	-----	-----	-----	-----	-----
Less than 10,000.....	36.41	1,391,967	-----	-----	1,005,745	386,222
PACIFIC COAST, total.....	100.00	130,617,181	38,761,204	8,391,421	49,073,218	34,391,338
Cities having population of—						
More than 100,000.....	87.63	114,455,652	37,636,971	5,858,958	44,171,034	26,788,689
30,000 to 100,000.....	4.89	6,393,274	588,596	1,692,265	1,829,409	2,283,004
10,000 to 30,000.....	4.41	5,763,153	535,637	840,198	1,650,981	2,736,337
Less than 10,000.....	3.07	4,005,102	-----	-----	1,421,794	2,583,308

**TABLE 10.—SUMMARY OF UNITS, SALES AND OPERATING EXPENSES—USED-CAR DEALER CHAINS**

	Number and sales (1929)
Number of chains (all local).....	6
Number of units operated.....	33
Total net sales (1929).....	\$5,116,484
Stocks on hand, end of year, at cost.....	\$1,045,225
Expenses: <sup>1</sup>	
Total operating expenses (per \$100 of sales).....	20.74
(Rent in 20 leased premises, included above, amounts to \$2.75 per \$100 of sales in such leased premises.)	
Total number of employees (9 part-timers included).....	346
Total pay roll (part-time proportion, \$4,805).....	\$528,325
Total operating expenses, except pay roll.....	\$532,619

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

TABLE 11.—SALES BY COMMODITIES—USED-CAR DEALER CHAINS

	Number and sales (1929)
Net sales (1929).....	\$5, 116, 484
Less amount which can not be broke down into commodities.....	1, 607, 170
Sales further analyzed.....	3, 509, 314
	<i>Per cent</i>
	100. 00
Commodities:	
Automobiles, trucks, and accessories.....	90. 15
	190. 15
Passenger automobiles, used.....	79. 35
Commercial cars and trucks, used.....	. 99
Automotive parts and accessories (except tires, tubes, and batteries).....	8. 16
Tires and tubes.....	1. 65
Batteries.....	. 38
Gasoline.....	. 35
Oil.....	. 31
Repairs and service.....	8. 81

<sup>1</sup> The breakdown shown for these indented items is based upon a coverage of about 50 per cent.

TABLE 12.—SUMMARY OF UNITS, SALES AND OPERATING EXPENSES—AIRCRAFT DEALER CHAINS

	Number and sales (1929)
Number of chains.....	3
Number of units operated:	
By sectional chains.....	14
By national chains.....	27
Total net sales (1929).....	\$2, 003, 001
Stocks on hand, end of year, at cost.....	\$1, 175, 774
Expenses: <sup>1</sup>	
Total operating expenses (per \$100 of sales).....	45. 23
(Rent in 15 leased premises, included above, amount to 3.34 per cent of total sales in such leased premises.)	
Total number of employees (1 part-timer included).....	511
Total pay roll (part-time proportion, \$900).....	\$664, 671
Total operating expenses, except pay roll.....	\$241, 252

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

TABLE 13.—SALES BY COMMODITIES—AIRCRAFT DEALER CHAINS

	Number and sales (1929)
Net sales (1929) (100 per cent commodity coverage).....	\$2, 003, 001
	<i>Per cent</i>
	100. 00
Commodities:	
Airplanes and gliders.....	59. 62
Airplane parts and accessories.....	6. 59
Gasoline and oil.....	3. 12
Repairs.....	12. 63
Service.....	<sup>1</sup> 18. 04

<sup>1</sup> A further breakdown of service income, based upon a coverage of about 50 per cent, is as follows:

	18. 04
Commercial flying.....	3. 87
Flying school and passenger business.....	14. 11
Hangar rental.....	. 06

# CHAPTER 7.—AUTOMOBILE ACCESSORY CHAINS

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# AUTOMOBILE ACCESSORY CHAINS

## INCLUDING TIRE CHAINS AND BATTERY CHAINS

### INTRODUCTION

This report summarizes the operations of 67 tire chains, 9 battery chains, and 52 accessory chains which also sell tires and batteries. The report is based upon data received in 1930 in connection with the first national census of distribution.

The 128 chains reported herein operate 2,049 stores, with total sales (in 1929) of \$122,031,641, as follows:

	Number of chains	Number of units	Net sales (1929)
Automobile accessory chains.....	52	855	\$59,486,300
Tire chains.....	67	1,137	58,381,233
Battery chains.....	9	57	4,164,108
<b>Total.....</b>	<b>128</b>	<b>2,049</b>	<b>122,031,641</b>

### AUTOMOBILE ACCESSORY CHAINS

Of the 52 accessory chains showing aggregate sales in 855 units of \$59,486,300, there are 34 local chains operating 189 units with sales of \$9,511,965 and 18 sectional and national chains operating 666 units with sales of \$49,974,335. Cities of more than 100,000 population have 353 units; 174 are in cities of 25,000 to 100,000, 138 are in cities of 10,000 to 25,000, and 190 are in places of less than 10,000 population.

The average unit of accessory chains shows annual sales of \$69,575 at an average operating expense of \$27.34 per \$100 of sales, of which pay roll is \$10.77. Of the 855 stores, 821 are in leased premises for which the cost of rent averages \$4 per \$100 of sales in such leased premises.

**Growth of chains.**—Classified as to age, 23.62 per cent of the units were established in 1929, 29.71 per cent were established in the four years of 1925 to 1928, inclusive, and nearly one-half were established prior to 1925.

**Geographic distribution.**—Of the 855 chain units, the East North-Central States, surrounding Chicago, contain 24.80 per cent. The Middle Atlantic States contain 19.42 per cent, while the West North-Central States contain 17.54 per cent. Next in order are the Pacific Coast States with 16.14 per cent and the West South-Central States with 6.08 per cent. Table 5B shows the distribution of units in other geographic divisions and further analyzes the data by size of chain.

In Table 2 a geographic analysis of the total sales of \$59,486,300 shows that those chains in the Chicago area which represent the greatest number of units also lead with sales of \$15,406,258. The Middle Atlantic States with sales of \$8,991,473, and the West North-Central States with sales of \$9,551,333, although surpassing the Pacific Coast States in respect to total number of units, fall

behind the Pacific coast sales of \$11,056,086. The fact that all but three of the stores in the latter are more than five years old, while between 40 and 50 of the stores in each of the other divisions were established in 1929, may explain in some measure the inconsistency between sales and units. The table also shows the distribution of sales in the other geographic divisions and further analyzes the data by size of chain. Table 7 shows similar information in more detail by size of city.

**Credit operations.**—Although only 15 chains report that they extend credit, they operate 55.32 per cent of the total number of units, and they do 64.36 per cent of the total business of all the accessory chains. They operate 473 stores, with aggregate sales of \$38,283,228, of which 6.53 per cent, or \$2,500,305, is credit business. These chains operate at an average expense of \$28.29 per \$100 of sales, of which \$10.76 is pay roll and \$3.96 is rent. The sales per store are somewhat higher than the average of chain stores, which do not give credit, averaging \$80,937.

**Commodities sold by accessory chains.**—Automotive parts and accessories (except tires, tubes, and batteries) constitute nearly 56 per cent of total sales of all chains in the accessory store classification. Tires, tubes, and tire accessories represent the substantial total of 21½ per cent and batteries constitute about 5 per cent. A list of the commodities is shown in Table 6.

### TIRE CHAINS

Of the 67 tire chains showing aggregate sales in 1,137 units of \$58,381,233, 50 are local chains operating 329 units with sales of \$18,009,685 and 17 are sectional and national chains operating 808 units with sales of \$40,371,548. Many of the latter are manufacturer-controlled chains, each selling the product of some one manufacturer.

Cities of more than 100,000 population contain 519 units; 285 are in cities of 25,000 to 100,000, 214 are in cities of 10,000 to 25,000, and 119 are in places of less than 10,000 population. The average unit of tire chains shows annual sales of \$51,347.

**Operating expenses.**—The average store operating expense of the 1,137 chain units is \$30.68 per \$100 of sales, of which payroll is \$14.94. Rental cost in stores occupying leased premises is \$3.90 per \$100 of sales in such leased premises.

An expense comparison table herein indicates that the chains which extend credit operate at an average expense 3.22 per cent higher than do those selling entirely for cash. However, the difference is not a measure of the cost of credit so much as it is a segregation of the chains into two distinct classes according to the character of their business.

The chain offering credit could not drop 3.22 per cent from its expense ratio by withdrawing this service. If it did it would change the character of its business, would lose a large proportion of its present trade, and to maintain its volume it must succeed in attracting new trade of another type to replace it. As a rule the cash chain serves a different clientele than does the credit chain, and the two are not directly comparable.

A much greater difference in operating expense is caused by the size of city and the section of the country in which the chains operate. Of 42 chains which could be used for such an analysis (see Table 12) to show expenses by geographic divisions, the sharpest contrast is shown between 5 chains operating in the West North-Central Division at an average expense ratio of 26.37 per cent and 13 chains operating in the Middle Atlantic Division at an average expense ratio of

only 22 per cent. However, this comparison table should be used with reservations, because of the relatively few chains included, as only those operating entirely in one division could be used.

**Growth of chains.**—Of the 1,137 chain units classified as to age, 38.96 per cent were established in 1929, 24.45 per cent were established in the four years of 1925 to 1928, inclusive, and 36.59 per cent of all the units operating at the end of 1929 were established prior to 1925. These figures reflect the state of disorganization which existed in the tire business toward the end of 1928 and in 1929, with the great increase in tire sales by other kinds of retailers than tire shops, and the ill-planned effort of several tire manufacturers to establish chains of manufacturer-controlled retail stores to meet the new form of competition.

The successful operation of retail stores requires much more than expensive locations and large stocks of tires, as these manufacturers soon found out. Their costly lesson is reflected in the abnormally high expense ratios shown in those sections of the country in which their activities were concentrated, and in the expenses shown in Table 11 for chains of more than 25 units. The high rental ratios shown herein are above normal because of the high-pressure competition at that time for supposedly desirable locations, some of the new manufacturer-controlled chains showing a rental cost as high as 25 per cent of sales.

**Geographic distribution.**—Of the 1,137 chain units analyzed, the East North-Central States, surrounding Chicago, contain 18.91 per cent. The Middle Atlantic States contain 17.94 per cent, while the Pacific Coast States contain 16.80 per cent. Next in order are the West North-Central States with 13.81 per cent and the South Atlantic States with 11.08 per cent. Table 15 shows the distribution of stores in other geographic divisions and further divides the data by size of chain.

In Table 9 a geographic analysis of the total sales of \$58,381,233 shows that those chains in the Chicago area which represent the greatest number of units also lead in sales with a total of \$12,798,679. The Pacific Coast States, though ranking third in number of units, rank second in sales with \$10,463,019, while the Middle Atlantic States are a close third with \$10,374,008. The table also shows the distribution of sales in the other geographic divisions and further divides this data by size of chain. Table 15 shows this same information in more detail by size of city.

**Credit operations.**—Credit is extended by 38 chains operating 63.94 per cent of the total number of units, and they do 80.88 per cent of the total business of all the tire chains. They operate 727 stores with aggregate sales of \$47,217,844, of which 17.54 per cent, or \$8,282,795, is credit business. These chains operate at an average expense of \$31.30 per \$100 of sales, of which \$15.29 is pay roll and \$3.84 is rent. The sales per store are considerably higher than the average of chains which do not give credit, averaging about \$65,000.

**Commodities sold by tire chains.**—Tires and tubes constitute about two-thirds of total sales of all tire chains. Gasoline adds 12 per cent, while automotive parts and accessories add about 5 per cent. A list of the other commodities is shown in Table 14.

### BATTERY CHAINS

There are 9 battery chains operating 57 units with sales of \$4,164,108. Of this number 7 are local chains operating 38 units with sales of \$1,046,662, and 2 are sectional and national chains with 19 units doing \$3,117,446. With the exception of the East South-Central and Mountain States, all of the geographic divisions of the country are represented.

The average operating expense of battery chains is \$35.78 per \$100 of sales, of which pay roll is \$18.38. Of the 57 units all but one are in leased premises for which the cost of rent averages \$4.15 per \$100 of sales.

Only four chains report that they extend credit, and they do less than 15 per cent of the total sales of all battery shop chains. They operate 21 stores, with aggregate sales of \$588,509, of which 36.84 per cent, or \$126,377, is credit business.

Batteries constitute more than 80 per cent of total sales of all battery chains. Repairs and service add 14.64 per cent and parts 3.6 per cent. A list of commodities is shown in Table 17.

TABLE 1.—SUMMARY—ACCESSORY CHAINS

Total, accessory chains.....	52
Number of local chains.....	34
Number of sectional and national chains.....	18
Total units.....	855
Local.....	189
Sectional and national.....	666
Total net sales (1929).....	\$50,486,300
Credit sales.....	2,500,305
Store-operating expenses (per \$100 of sales).....	27.34
Pay-roll cost, 4,353 employees (per \$100 of sales).....	10.77
Other store-operating expenses, including rent (per \$100 of sales).....	16.57
Rent, 821 leased stores (per \$100 of sales).....	4.00

TABLE 2.—SALES CLASSIFIED BY SIZE OF CHAIN—ACCESSORY CHAINS

[An (x) indicates that the amount must be withheld to avoid disclosure of individual operations]

## A. SALES BY SIZE OF CITY

SIZE OF CITY	Total sales all chains	SALES OF STORES IN CHAINS OF—			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
UNITED STATES, total.....	52 chains \$59,486,300	5 chains \$39,283,564	9 chains \$9,476,297	11 chains \$3,809,768	27 chains \$6,916,671
All cities having population of—					
More than 100,000.....	35,149,297	22,343,692	5,447,925	2,433,603	4,923,877
25,000 to 100,000.....	10,134,893	6,207,136	2,121,605	1,036,632	769,520
10,000 to 25,000.....	6,901,326	5,123,146	1,025,912	180,331	591,937
Less than 10,000.....	7,300,784	5,609,390	880,855	179,202	631,337

## B. SALES BY GEOGRAPHIC DIVISIONS

[For number of units, see Table 5 B]

UNITED STATES, total.....	\$59,486,300	\$39,283,564	\$9,476,297	\$3,809,768	\$6,916,671
New England.....	1,595,361	1,039,601	(x)	—	497,615
Middle Atlantic.....	8,991,473	3,074,572	2,633,328	1,239,683	2,043,890
East North Central.....	15,406,258	7,578,902	3,755,605	1,445,222	2,626,529
West North Central.....	9,551,333	7,535,268	946,442	231,854	837,769
South Atlantic.....	3,152,628	2,427,359	201,554	261,945	261,770
East South Central.....	2,016,663	1,121,835	285,000	587,331	22,497
West South Central.....	5,296,112	3,331,344	1,596,223	—	368,545
Mountain.....	2,420,386	2,420,386	—	—	—
Pacific.....	11,056,086	10,754,297	—	(x)	258,056

TABLE 2.—SALES CLASSIFIED BY SIZE OF CHAIN—ACCESSORY CHAINS—Contd.

[An (x) indicates that the sales must be withheld to avoid disclosure of individual operations]

C. SALES BY TYPES OF OPERATION

	Total, all chains	CHAINS OF—			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
<b>ALL TYPES</b>					
Number of chains.....	52	5	9	11	27
Number of units.....	855	515	139	80	121
Net sales (1929).....	\$59,486,300	\$39,283,564	\$9,476,297	\$3,809,768	\$6,916,671
Per cent of net sales.....	100.00	66.04	15.93	6.40	11.63
Average sales per unit.....	\$69,575	\$76,279	\$68,175	\$47,622	\$57,163
<b>LOCAL CHAINS</b>					
Number of chains.....	34		2	9	23
Number of units.....	189		22	64	103
Net sales (1929).....	\$9,511,965		(x)	\$2,441,484	\$5,210,065
<b>SECTIONAL CHAINS</b>					
Number of chains.....	15	4	6	1	4
Number of units.....	378	252	101	7	18
Net sales (1929).....	\$18,794,603	\$10,419,178	\$6,022,773	(x)	\$1,706,606
<b>NATIONAL CHAINS</b>					
Number of chains.....	3	1	1	1	
Number of units.....	288	263	16	9	
Net sales (1929).....	\$31,179,732	(x)	(x)	(x)	

D. SALES BY VOLUME

VOLUME OF SALES	Per cent of total sales	TOTAL SALES, ALL CHAINS				SALES OF STORES IN CHAINS OF—	
				More than 25 units			
		Number of chains	Net sales (1929)	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)
UNITED STATES, total.....	100.00	52	\$59,486,300	5	\$39,283,564		
Chains with sales of—							
More than \$2,500,000.....	61.53	3	36,600,762	3	36,600,762		
\$1,000,000 to \$2,500,000.....	15.60	6	9,279,796	1	(x)		
\$500,000 to \$1,000,000.....	12.07	10	7,179,149	1	(x)		
\$250,000 to \$500,000.....	5.05	9	3,007,057				
\$100,000 to \$250,000.....	5.04	18	2,995,851				
Less than \$100,000.....	.71	6	423,685				
VOLUME OF SALES	SALES OF STORES IN CHAINS OF—						
	11 to 25 units		6 to 10 units		Less than 6 units		
	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)	
UNITED STATES, total.....	9	\$9,476,297	11	\$3,809,768	27	\$6,916,671	
Chains with sales of—							
More than \$2,500,000.....							
\$1,000,000 to \$2,500,000.....	4	6,118,776			1	(x)	
\$500,000 to \$1,000,000.....	4	3,196,049	2	(x)	3	1,923,519	
\$250,000 to \$500,000.....			5	1,820,087	4	1,186,970	
\$100,000 to \$250,000.....	1	(x)	3	565,836	14	2,268,543	
Less than \$100,000.....			1	(x)	5	363,124	

TABLE 3.—CREDIT AND INSTALLMENT SALES—ACCESSORY CHAINS

SIZE CLASS	Number of chains reporting credit sales	Total net sales in chains reporting credit	CREDIT SALES				CASH SALES	
			Open account		Installment		Amount	Per cent of sales
			Amount	Per cent of sales	Amount	Per cent of sales		
All chains which extend credit, total.....	15	\$38, 283, 228	\$2, 269, 959	5. 93	\$230, 346	0. 60	\$35, 782, 923	93. 47
Chains having—								
More than 50 units.....	3	33, 660, 697	1, 495, 380	4. 44	30, 812	. 09	32, 134, 505	95. 47
6 to 50 units.....	4	2, 875, 886	154, 293	5. 36	199, 534	6. 94	2, 522, 059	87. 70
Less than 6 units.....	8	1, 746, 645	620, 286	35. 51	-----	-----	1, 126, 359	64. 49

TABLE 4.—OPERATING EXPENSES—ACCESSORY CHAINS

	TOTAL, ALL CHAINS	EXPENSES OF STORES IN CHAINS OF—			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
Net sales (1929).....	\$59, 486, 300	\$39, 283, 564	\$9, 476, 297	\$3, 809, 768	\$6, 916, 671
Number of chains.....	52	5	9	11	27
Units operated by local chains.....	189	-----	22	64	103
Sectional chains.....	378	252	101	7	18
National chains.....	288	263	16	9	-----
Operating expenses—total.....	\$16, 262, 525	\$10, 579, 448	\$2, 349, 889	\$1, 033, 454	\$2, 294, 734
Per \$100 of sales.....	27. 34	26. 93	24. 80	27. 26	33. 18
Pay roll, total.....	\$6, 405, 287	\$3, 852, 152	\$888, 104	\$440, 031	\$1, 225, 000
Per \$100 of sales.....	10. 77	9. 81	9. 37	11. 55	17. 71
Other store operating expenses, including rent.....	\$9, 857, 238	\$6, 727, 296	\$1, 461, 785	\$598, 423	\$1, 069, 734
Per \$100 of sales.....	16. 57	17. 12	15. 43	15. 71	15. 47
Rent in 821 leased premises, per \$100 of sales in such leased premises (included in figures on above line).....	4. 00	3. 78	3. 95	5. 19	4. 78
Stocks on hand, end of year, at cost.....	\$10, 595, 720	\$6, 526, 107	\$1, 251, 731	\$772, 398	\$2, 045, 484
EMPLOYMENT DATA					
Full-time employees—total.....	4, 247	2, 648	590	297	712
Men.....	3, 882	2, 444	539	276	623
Women.....	365	204	51	21	89
Total pay roll.....	\$6, 380, 817	\$3, 841, 569	\$886, 976	\$433, 954	\$1, 218, 318
Part-time employees—total.....	106	54	5	29	18
Men.....	88	54	5	11	18
Women.....	18	-----	-----	18	-----
Total pay roll.....	\$24, 470	\$10, 583	\$1, 128	\$6, 077	\$6, 682

NOTE.—This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

TABLE 5.—CHAIN UNITS CLASSIFIED BY DATE OF ESTABLISHMENT, SIZE OF CHAINS, AND GEOGRAPHIC DIVISIONS—ACCESSORY CHAINS

A. BY DATE OF ESTABLISHMENT

DATE OF ESTABLISHMENT	Per cent of total units	Total units, all chains	UNITS IN CHAINS OF—			
			More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
Total, all units.....	100.00	855	515	139	80	121
All units established:						
In 1929.....	23.62	202	135	24	19	24
1925 to 1928.....	29.71	254	122	60	34	38
Previous to 1925.....	46.67	399	258	55	27	59

B. UNITS BY GEOGRAPHIC DIVISIONS

[For dollar figures, see Table 2B]

UNITED STATES, total.....	100.00	855	515	139	80	121
DIVISION						
New England.....	4.09	35	21	1		13
Middle Atlantic.....	19.42	166	65	32	32	37
East North Central.....	24.80	212	116	48	25	23
West North Central.....	17.54	150	99	21	2	28
South Atlantic.....	4.91	42	28	4	8	2
East South Central.....	3.04	26	5	7	12	2
West South Central.....	6.08	52	14	26		12
Mountain.....	3.98	34	34			
Pacific.....	16.14	138	133		1	4

TABLE 6.—SALES BY COMMODITIES—ACCESSORY CHAINS

Total net sales, all chains (1929).....	\$59,486,300
Less amount which can not be broken down into commodities.....	12,405,524
Sales further analyzed:.....	47,080,776
	<i>Per cent</i>
Commodities.....	100.00
Automotive parts and accessories (except tires, tubes, and batteries).....	55.94
Batteries.....	4.78
Electrical appliances.....	.02
Gasoline.....	.76
Hardware.....	.10
Motor cycles, bicycles, and accessories.....	.03
Oils and greases.....	2.13
Radios and radio equipment.....	5.84
Repairs and service.....	.84
Sales to other dealers.....	.54
Sporting goods.....	.07
Tires, tubes, and tire accessories.....	21.53
Trailers.....	3.38
Used automotive parts and accessories.....	.27
Used cars and trucks.....	.30
Miscellaneous commodities.....	3.47

TABLE 7.—SALES CLASSIFIED BY SIZE OF CHAINS AND SIZE OF CITY, IN EACH GEOGRAPHIC DIVISION—ACCESSORY CHAINS

DIVISION AND SIZE OF CITY	Per cent of total sales	Total sales, all chains	SALES OF STORES IN CHAINS OF—			
			More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
UNITED STATES, total.....	100.00	\$59,486,300	\$39,283,564	\$9,476,297	\$3,809,768	\$6,916,671
All cities having population of—						
More than 100,000.....	59.09	35,149,297	22,343,892	5,447,925	2,433,603	4,923,877
25,000 to 100,000.....	17.04	10,134,893	6,207,136	2,121,605	1,036,632	769,520
10,000 to 25,000.....	11.60	6,901,326	5,123,146	1,025,912	160,331	591,937
Less than 10,000.....	12.27	7,300,784	5,609,390	880,855	179,202	631,337
NEW ENGLAND.....	100.00	1,595,361	1,039,601	58,145	-----	497,615
Cities having population of—						
More than 100,000.....	73.52	1,172,880	753,580	58,145	-----	361,155
25,000 to 100,000.....	26.08	416,117	286,021	-----	-----	130,096
10,000 to 25,000.....	.40	6,364	-----	-----	-----	6,364
Less than 10,000.....	-----	-----	-----	-----	-----	-----
MIDDLE ATLANTIC.....	100.00	8,991,473	3,074,572	2,633,328	1,239,683	2,043,890
Cities having population of—						
More than 100,000.....	76.00	6,833,004	2,623,532	1,855,267	711,317	1,642,888
25,000 to 100,000.....	15.48	1,391,948	316,823	415,748	456,877	202,500
10,000 to 25,000.....	7.06	635,130	113,285	316,735	53,811	151,299
Less than 10,000.....	1.46	131,391	20,932	45,578	17,678	47,203
EAST NORTH CENTRAL.....	100.00	15,406,258	7,578,902	3,755,605	1,445,222	2,626,529
Cities having population of—						
More than 100,000.....	65.23	10,050,093	4,775,365	2,094,629	977,281	2,202,813
25,000 to 100,000.....	17.47	2,690,700	1,238,983	804,497	345,817	301,403
10,000 to 25,000.....	9.31	1,434,640	773,210	504,099	100,416	56,915
Less than 10,000.....	7.99	1,230,825	791,344	352,380	21,708	65,393
WEST NORTH CENTRAL.....	100.00	9,551,333	7,535,268	946,442	231,854	837,769
Cities having population of—						
More than 100,000.....	44.95	4,293,000	3,333,690	430,844	231,854	296,612
25,000 to 100,000.....	12.75	1,217,640	803,900	377,895	-----	35,845
10,000 to 25,000.....	15.42	1,473,097	1,261,234	17,199	-----	194,664
Less than 10,000.....	26.88	2,567,596	2,136,444	120,504	-----	310,643
SOUTH ATLANTIC.....	100.00	3,152,628	2,427,359	201,554	261,945	261,770
Cities having population of—						
More than 100,000.....	90.57	2,855,473	2,289,083	184,620	120,000	261,770
25,000 to 100,000.....	4.71	148,413	104,479	16,934	27,000	-----
10,000 to 25,000.....	1.27	39,901	33,797	-----	6,104	-----
Less than 10,000.....	3.45	108,841	-----	-----	108,841	-----
EAST SOUTH CENTRAL.....	100.00	2,016,663	1,121,835	285,000	587,331	22,497
Cities having population of—						
More than 100,000.....	78.41	1,581,253	1,121,835	110,000	349,418	-----
25,000 to 100,000.....	16.46	331,938	-----	125,000	206,938	-----
10,000 to 25,000.....	1.24	25,000	-----	25,000	-----	-----
Less than 10,000.....	3.89	78,472	-----	25,000	30,975	22,497
WEST SOUTH CENTRAL.....	100.00	5,296,112	3,331,344	1,596,223	-----	368,545
Cities having population of—						
More than 100,000.....	64.41	3,411,013	2,696,593	714,420	-----	-----
25,000 to 100,000.....	19.19	1,016,536	634,751	381,531	-----	254
10,000 to 25,000.....	6.53	345,574	-----	162,879	-----	182,695
Less than 10,000.....	9.87	522,989	-----	337,393	-----	185,596
MOUNTAIN.....	100.00	2,420,386	2,420,386	-----	-----	-----
Cities having population of—						
More than 100,000.....	14.89	360,370	360,370	-----	-----	-----
25,000 to 100,000.....	33.03	799,400	799,400	-----	-----	-----
10,000 to 25,000.....	28.41	687,705	687,705	-----	-----	-----
Less than 10,000.....	23.67	572,911	572,911	-----	-----	-----
PACIFIC.....	100.00	11,056,086	10,754,297	-----	43,733	258,056
Cities having population of—						
More than 100,000.....	41.54	4,592,211	4,389,844	-----	43,733	158,634
25,000 to 100,000.....	19.19	2,122,201	2,022,779	-----	-----	99,422
10,000 to 25,000.....	20.39	2,253,915	2,253,915	-----	-----	-----
Less than 10,000.....	18.88	2,087,759	2,087,759	-----	-----	-----

TABLE 8.—SUMMARY—TIRE CHAINS

Total number of tire chains.....	67
Number of local chains.....	50
Number of sectional and national chains.....	17
Total units.....	1, 137
Local.....	329
Sectional and national.....	808
Total net sales (1929).....	\$58, 381, 233
Credit sales.....	8, 282, 795
Store operating expenses (per \$100 of sales).....	30. 68
All cash chains (per \$100 of sales).....	28. 08
Credit-granting chains (per \$100 of sales).....	31. 30
Pay-roll cost, 6,993 employees (per \$100 of sales).....	14. 94
All cash chains, 5,833 employees (per \$100 of sales).....	13. 45
Credit-granting chains, 1,160 employees (per \$100 of sales).....	15. 29
Other store operating expenses, including rent (per \$100 of sales).....	15. 74
All cash chains (per \$100 of sales).....	14. 63
Credit-granting chains (per \$100 of sales).....	16. 01
Rent, 1,062 leased premises (per \$100 of sales in such premises).....	3. 90
All cash chains, 391 leased premises (per \$100 of sales in such leased premises).....	4. 15
Credit-granting chains, 671 leased premises (per \$100 of sales in such leased premises).....	3. 84

TABLE 9.—SALES CLASSIFIED BY SIZE OF CHAINS—TIRE CHAINS

A. SALES BY SIZE OF CITY

	Total sales, all chains	SALES OF STORES IN CHAINS OF—			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
UNITED STATES, total.....	67 chains \$58, 381, 233	7 chains \$36, 936, 525	12 chains \$8, 169, 440	14 chains \$4, 970, 639	54 chains \$8, 304, 629
All cities with population of—					
More than 100,000.....	35, 786, 430	21, 181, 646	5, 812, 059	3, 606, 984	5, 185, 741
25,000 to 100,000.....	13, 484, 923	9, 974, 856	908, 321	597, 457	2, 004, 289
10,000 to 25,000.....	5, 853, 332	4, 021, 175	753, 982	544, 224	533, 951
Less than 10,000.....	3, 256, 548	1, 758, 848	695, 078	221, 974	580, 648

B. SALES BY GEOGRAPHIC DIVISIONS

[For number of units, see Table 13B]

UNITED STATES, total.....	\$58, 381, 233	\$36, 936, 525	\$8, 169, 440	\$4, 970, 639	\$8, 304, 629
DIVISION					
New England.....	2, 893, 302	1, 942, 091	754, 738		196, 473
Middle Atlantic.....	10, 374, 008	5, 509, 621	1, 209, 573	634, 820	3, 019, 994
East North Central.....	12, 798, 679	9, 529, 483	631, 383	1, 026, 450	1, 611, 363
West North Central.....	5, 130, 350	3, 203, 257	961, 002	391, 509	574, 582
South Atlantic.....	7, 046, 334	6, 121, 850	47, 502	234, 527	642, 455
East South Central.....	4, 108, 623	3, 208, 594	490, 050		409, 979
West South Central.....	4, 663, 936	2, 285, 275	852, 360	236, 782	1, 289, 519
Mountain.....	902, 982	852, 283	50, 699		
Pacific.....	10, 463, 019	4, 284, 071	3, 172, 133	2, 446, 551	560, 264

TABLE 9.—SALES CLASSIFIED BY SIZE OF CHAINS—TIRE CHAINS—Continued

## C. SALES BY TYPES OF OPERATION

	Total, all chains	CHAINS OF—			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
<b>ALL TYPES</b>					
Number of chains.....	67	7	12	14	34
Number of units.....	1,137	699	191	104	143
Net sales (1929).....	\$58,381,233	\$36,936,525	\$8,169,440	\$4,970,639	\$8,304,629
Per cent of net sales.....	100.00	63.27	13.99	8.51	14.23
Average sales per unit.....	\$51,347	\$52,842	\$42,772	\$47,795	\$58,074
<b>LOCAL CHAINS</b>					
Number of chains.....	50		8	12	30
Number of units.....	329		119	85	125
Net sales (1929).....	\$18,009,685		\$6,034,931	\$4,658,377	\$7,316,377
<b>SECTIONAL CHAINS</b>					
Number of chains.....	8		2	2	4
Number of units.....	76		39	19	18
Net sales (1929).....	\$3,039,771		\$1,739,257	\$312,262	\$988,252
<b>NATIONAL CHAINS</b>					
Number of chains.....	9	7	2		
Number of units.....	732	699	33		
Net sales (1929).....	\$37,331,777	\$36,936,525	\$395,252		

## D. SALES BY VOLUME

	TOTAL			SALES OF STORES IN CHAINS OF—	
	Per cent of total sales	Number of chains	Net sales (1929)	More than 25 units	
				Number of chains	Net sales (1929)
UNITED STATES, total.....	100.00	67	\$58,381,233	7	\$36,936,525
Chains with sales of—					
More than \$5,000,000.....	58.19	3	33,972,742	3	33,972,742
\$1,000,000 to \$2,500,000.....	11.07	5	6,459,676	1	(x)
\$500,000 to \$1,000,000.....	11.95	9	6,975,625	2	(x)
\$250,000 to \$500,000.....	9.30	14	5,430,959		
\$100,000 to \$250,000.....	8.75	29	5,108,500	1	(x)
Less than \$100,000.....	.74	7	433,731		

	SALES OF STORES IN CHAINS OF—					
	11 to 25 units		6 to 10 units		Less than 6 units	
	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)
UNITED STATES, total.....	12	\$8,169,440	14	\$4,970,639	34	\$8,304,629
Chains with sales of—						
More than \$5,000,000.....						
\$1,000,000 to \$2,500,000.....	2	(x)	1	(x)	1	(x)
\$500,000 to \$1,000,000.....	5	\$3,999,121			2	(x)
\$250,000 to \$500,000.....	3	1,240,162	5	1,981,088	6	2,209,709
\$100,000 to \$250,000.....	2	(x)	8	1,483,186	18	3,182,415
Less than \$100,000.....					7	433,731

An (x) indicates the amount must be withheld to avoid disclosure of individual operations.

TABLE 10.—CREDIT AND INSTALLMENT SALES—TIRE CHAINS

SIZE CLASS	Number of chains reporting credit sales	Total net sales in chains reporting credit	CREDIT SALES				CASH SALES	
			Open account		Installment		Amount	Per cent of sales
			Amount	Per cent of sales	Amount	Per cent of sales		
All chains which extend credit, total.....	38	\$47,217,844	\$7,704,956	16.32	\$577,839	1.22	\$38,935,049	82.46
Chains having—								
More than 25 units.....	4	34,862,398	2,594,706	7.44			32,267,692	92.56
11 to 25 units.....	9	6,647,927	2,163,562	32.54	290,379	4.37	4,193,986	63.09
6 to 10 units.....	9	2,241,663	1,337,787	59.68	246,460	10.99	657,416	29.33
Less than 6 units.....	16	3,465,856	1,608,901	46.42	41,000	1.18	1,815,955	52.40

TABLE 11.—OPERATING EXPENSES—TIRE CHAINS

	Total, all chains	EXPENSES OF STORES IN CHAINS OF—			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
Net sales (1929).....	\$58,381,233	\$36,936,525	\$8,169,440	\$4,970,639	\$8,304,629
Number of chains.....	67	7	12	14	34
Units operated by local chains.....	329		119	85	125
Units operated by sectional chains.....	76		39	19	18
Units operated by national chains.....	732	699	33		
Operating expenses <sup>1</sup> .....	\$17,913,585	\$12,425,492	\$2,213,466	\$1,271,689	\$2,002,938
Per \$100 of sales.....	30.68	33.64	27.09	25.58	24.12
Pay roll.....	\$8,722,554	\$6,333,513	\$904,353	\$634,773	\$849,915
Per \$100 of sales.....	14.94	17.15	11.07	12.77	10.24
Other store operating expenses, including rent.....	\$9,191,031	\$6,091,979	\$1,309,113	\$636,916	\$1,153,023
Per \$100 of sales.....	15.74	16.49	16.02	12.81	13.88
Rent in 1,062 leased premises, per \$100 of sales in such leased premises (Included in figures on above line).....	3.90	3.89	4.46	3.55	3.66
Stock on hand, end of year, at cost.....	\$9,012,178	\$6,003,837	\$1,155,698	\$840,382	\$1,012,261
EMPLOYMENT DATA					
Full-time employees.....	6,906	5,350	565	407	584
Men.....	6,526	5,073	542	383	528
Women.....	380	277	23	24	56
Total pay roll.....	\$8,698,388	\$6,323,779	\$897,643	\$632,135	\$844,831
Part-time employees.....	87	32	25	9	21
Men.....	78	31	20	7	20
Women.....	9	1	5	2	1
Total pay roll.....	\$24,166	\$9,734	\$6,710	\$2,638	\$5,084

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

TABLE 11B.—COMPARISON OF EXPENSES—TIRE CHAINS—CREDIT CHAINS VERSUS CASH CHAINS

	All tire chains	Credit-granting chains	All-cash chains
Number of chains.....	67	38	29
Number of units.....	1,137	727	410
Total sales.....	\$58,381,233	\$47,217,844	\$11,163,389
Total expense ratio.....	30.68	31.30	28.08
Pay roll expense ratio.....	14.94	15.29	13.45
Rental expense ratio.....	3.90	3.84	4.15

TABLE 12.—EXPENSES BY GEOGRAPHIC DIVISIONS—TIRE CHAINS<sup>1</sup>

[Sectional and local chains only]

DIVISION	Num-ber of chains	Num-ber of units	Net sales (1929)	OPERATING EXPENSES						STOCKS ON HAND, END OF YEAR, AT COST			
				Total reported ex-penses <sup>1</sup>		Num-ber of employ-ees	Pay roll		Other store operat-ing expenses (in-cluding rent)		Rent in 247 pre-mi-ised premises per \$100 of sales in such leased premises (in-cluded in fig-ures in prece-ding col-umn)		
				Amount	Per \$100 of sales		Amount	Per \$100 of sales	Amount			Per \$100 of sales	
Total <sup>2</sup> .....	3 42	270	1 \$16, 178, 700	\$3, 957, 056	24. 21	1, 081	\$1, 682, 420	10. 48	\$2, 274, 636	13. 73	3. 37	\$2, 192, 883	13. 35
Middle Atlantic.....	13	79	4, 286, 826	943, 089	22. 00	235	350, 707	8. 18	592, 382	13. 82	3. 59	698, 424	16. 29
East North Central.....	8	49	2, 818, 253	696, 774	24. 72	180	353, 576	12. 54	343, 198	12. 18	4. 23	306, 209	10. 87
West North Central.....	5	33	1, 564, 230	412, 465	26. 37	141	196, 316	12. 55	216, 149	13. 82	3. 09	293, 487	18. 76
West South Central.....	5	23	1, 479, 636	353, 398	23. 86	145	131, 497	8. 89	221, 901	14. 99	3. 86	135, 690	9. 17
Pacific.....	11	86	6, 029, 755	1, 551, 330	25. 73	380	650, 324	10. 79	901, 006	14. 94	2. 86	759, 073	12. 59

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

<sup>2</sup> To avoid disclosure of individual operations, no information is shown for divisions with less than 3 chains.

<sup>3</sup> Only those chains located wholly in 1 geographic division were used in this table.

TABLE 13.—CHAIN UNITS CLASSIFIED BY DATE OF ESTABLISHMENT, SIZE OF CHAINS, AND GEOGRAPHIC DIVISIONS—TIRE CHAINS

A. BY DATE OF ESTABLISHMENT

DATE OF ESTABLISHMENT	Per cent of total units	Total units, all chains	UNITS IN CHAINS OF—			
			More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
Total, all units.....	100.00	1,137	699	191	104	143
All units established—						
In 1929.....	38.96	443	325	46	27	45
1925 to 1928.....	24.45	278	114	66	45	53
Previous to 1925.....	36.59	416	260	79	32	45

B. UNITS BY GEOGRAPHIC DIVISIONS

[For dollars of sales, see Table 9B]

UNITED STATES, total.....	100.00	1,137	699	191	104	143
DIVISION						
New England.....	5.10	58	31	23	-----	4
Middle Atlantic.....	17.94	204	110	31	21	42
East North Central.....	18.91	215	148	18	23	26
West North Central.....	13.81	157	107	25	6	19
South Atlantic.....	11.08	126	100	3	9	14
East South Central.....	6.24	71	54	13	-----	4
West South Central.....	8.71	99	46	26	10	17
Mountain.....	1.41	16	12	4	-----	-----
Pacific.....	16.80	191	91	48	35	17

TABLE 14.—SALES BY COMMODITIES—TIRE CHAINS

Total net sales (1929).....	\$58,381,233
Less amount which can not be broken down into commodities.....	10,105,273
Sales further analyzed.....	48,275,955

Commodities.....	Per cent
	100.00
Tires and tubes.....	66.98
Automotive parts and accessories.....	4.96
Batteries.....	3.12
Gasoline.....	12.00
Oils and greases.....	2.37
Radio sets.....	1.00
Radio parts and accessories.....	.13
Sales to other dealers.....	.35
Service.....	7.62
Miscellaneous commodities.....	1.47

TABLE 15.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS—TIRE CHAINS

DIVISION AND SIZE OF CITY	Per cent of total sales	Total sales, all chains	SALES OF STORES IN CHAINS OF—			
			More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
UNITED STATES, total.....	100.00	\$58,381,233	\$36,936,525	\$8,169,440	\$4,970,639	\$8,304,629
All cities having population of—						
More than 100,000.....	61.30	35,786,430	21,181,646	5,812,059	3,606,984	5,185,741
25,000 to 100,000.....	23.10	13,484,923	9,974,856	908,321	597,457	2,004,289
10,000 to 25,000.....	10.02	5,853,332	4,021,175	753,982	544,224	533,951
Less than 10,000.....	5.58	3,256,548	1,758,848	695,078	221,974	580,648
NEW ENGLAND.....	100.00	2,893,302	1,942,091	754,738	-----	196,473
Cities having population of—						
More than 100,000.....	83.81	2,424,811	1,714,219	557,811	-----	152,781
25,000 to 100,000.....	14.81	428,499	187,880	196,927	-----	43,692
10,000 to 25,000.....	1.38	39,992	39,992	-----	-----	-----
Less than 10,000.....	-----	-----	-----	-----	-----	-----
MIDDLE ATLANTIC.....	100.00	10,374,008	5,509,621	1,209,573	634,820	3,019,994
Cities having population of—						
More than 100,000.....	70.19	7,281,300	4,206,571	792,587	316,545	1,965,597
25,000 to 100,000.....	15.79	1,638,253	745,651	275,329	76,802	540,471
10,000 to 25,000.....	9.08	941,489	461,056	51,304	209,397	219,732
Less than 10,000.....	4.94	512,966	96,343	90,353	32,076	294,194
EAST NORTH CENTRAL.....	100.00	12,798,679	9,529,483	631,383	1,026,450	1,611,363
Cities having population of—						
More than 100,000.....	66.78	8,546,600	5,556,800	631,383	947,334	1,411,083
25,000 to 100,000.....	22.02	2,818,454	2,683,058	-----	12,116	123,280
10,000 to 25,000.....	6.74	862,942	795,942	-----	67,000	-----
Less than 10,000.....	4.46	570,683	493,683	-----	-----	77,000
WEST NORTH CENTRAL.....	100.00	5,130,350	3,203,257	961,002	391,509	574,582
Cities having population of—						
More than 100,000.....	41.84	2,146,601	1,059,005	921,067	-----	166,529
25,000 to 100,000.....	35.25	1,808,293	1,313,848	-----	298,713	195,732
10,000 to 25,000.....	18.55	951,506	643,135	12,500	92,796	203,075
Less than 10,000.....	4.36	223,950	187,269	27,435	-----	9,246
SOUTH ATLANTIC.....	100.00	7,046,334	6,121,850	47,502	234,527	642,455
Cities having population of—						
More than 100,000.....	42.46	2,991,902	2,364,777	47,502	100,780	478,843
25,000 to 100,000.....	44.38	3,126,905	2,895,366	-----	107,427	124,112
10,000 to 25,000.....	8.31	585,344	568,174	-----	17,170	-----
Less than 10,000.....	4.85	342,183	293,533	-----	9,150	39,500
EAST SOUTH CENTRAL.....	100.00	4,108,623	3,208,594	490,050	-----	409,979
Cities having population of—						
More than 100,000.....	71.93	2,955,295	2,300,020	245,296	-----	409,979
25,000 to 100,000.....	5.98	245,614	245,614	-----	-----	-----
10,000 to 25,000.....	12.69	521,591	397,992	123,599	-----	-----
Less than 10,000.....	9.40	386,123	264,968	121,155	-----	-----
WEST SOUTH CENTRAL.....	100.00	4,663,936	2,285,275	852,360	236,782	1,289,519
Cities having population of—						
More than 100,000.....	26.59	1,240,222	1,014,616	-----	29,617	195,989
25,000 to 100,000.....	41.03	1,913,384	832,380	173,931	-----	907,073
10,000 to 25,000.....	17.90	834,813	322,320	412,074	26,417	74,002
Less than 10,000.....	14.48	675,517	115,959	266,355	180,748	112,455
MOUNTAIN.....	100.00	902,982	852,283	50,699	-----	-----
Cities having population of—						
More than 100,000.....	22.97	207,464	206,060	1,404	-----	-----
25,000 to 100,000.....	16.41	148,143	148,143	-----	-----	-----
10,000 to 25,000.....	43.49	392,670	373,375	19,295	-----	-----
Less than 10,000.....	17.13	154,705	124,705	30,000	-----	-----
PACIFIC.....	100.00	10,463,019	4,284,071	3,172,133	2,446,551	560,264
Cities having population of—						
More than 100,000.....	76.39	7,992,235	2,759,578	2,615,009	2,212,708	404,940
25,000 to 100,000.....	12.97	1,357,378	922,916	262,134	102,399	69,929
10,000 to 25,000.....	6.91	722,985	419,189	135,210	131,444	37,142
Less than 10,000.....	3.73	390,421	182,388	159,780	-----	48,263

TABLE 16.—SUMMARY—BATTERY CHAINS

Number of chains (local, sectional, and national).....	9
Units operated by local chains.....	38
Units operated by sectional chains.....	4
Units operated by national chains.....	15
Net sales (1929).....	\$4, 164, 108
Stocks on hand, end of year, at cost.....	\$315, 306
Expenses (total).....	\$1, 319, 672
Total operating expenses per \$100 of sales.....	35. 78
Pay roll.....	\$765, 180
Other operating expenses.....	\$554, 492
Rent, 56 leased units, per \$100 of sales.....	4. 15

## EMPLOYMENT DATA

Full-time employees.....	495
Salaries and wages of full-time employees.....	\$764, 790
Part-time employees.....	2
Salaries and wages of part-time employees.....	\$390

TABLE 17.—SALES BY COMMODITIES—BATTERY CHAINS

Net sales (1929).....	\$4, 164, 108
Less amount which can not be broken down into commodities.....	589, 397
Sales further analyzed.....	3, 574, 711
	Per cent
Commodities.....	100. 00
Batteries.....	80. 64
Automotive parts and accessories.....	3. 60
Gasoline.....	. 65
Oils and greases.....	. 47
Repairs and service.....	14. 64

## CHAPTER 8.—FILLING STATION CHAINS

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# RETAIL DISTRIBUTION BY FILLING-STATION CHAINS

## INTRODUCTION

This report of the retail merchandising series presents facts derived from the first nation-wide Census of Distribution, which is a part of the Fifteenth Decennial Census of the United States. It deals with retail distribution through filling-station chains, variously known as oil chains, gasoline chains, and service-station chains.

The 864 filling-station chains operate 30,038 units out of a total of 124,000 filling stations in the United States, and do a total business of more than \$629,000,000.

There were 26,500,000 registered motor cars and trucks in 1929,<sup>1</sup> the year of the census, and sales of \$1,883,842,465 in filling stations averaged \$71 per vehicle. Of this average, \$24 was sold through the 30,038 filling stations of the chains, and \$47 was sold through the remaining 94,000 independently operated stations. The latter classification includes a large proportion of agency stations handling the products of some one oil company exclusively, but now owned or operated by the oil company.

The average annual sales of chain stations is reported to be \$20,933 while that of independent stations is approximately \$14,000. The chain stations employ 60,761 full-time employees at an annual salary cost of \$79,630,419, and 4,189 part-time employees, at an additional pay-roll cost of \$1,608,966, a total pay roll of more than \$81,239,000 per year. Corresponding figures for independent stations are not yet known, as such a large part of their personnel consists of proprietors drawing no fixed salary and part-time employees for which the census count is not yet complete.

## LARGE CHAINS PREDOMINATE IN SALES

Large chains, each operating over an extensive area, dominate the filling-station chain field. Where other kinds of chains show from 50 to 75 per cent of sales from chains of less than 50 units located in more or less restricted trade areas, this report reveals that chains of this type constitute only 25 per cent of filling-station sales.

More than 49 per cent of the total sales of all the chains is shown to go to 14 chains of 500 units or more, and these 14 largest chains operate 15,886 stations, or more than half of all the chain stations in the country. The next largest classification is made up of 25 chains with 100 to 500 stations each, operating a total of 6,144 stations with aggregate sales of \$108,400,000, or 17 per cent. There are 18 chains operating between 50 and 100 stations, 36 chains operating 26 to 50 units each, 132 chains with 11 to 25 units each, 264 chains with 6 to 10 units each, and 375 small chains with less than 6 units each. The latter classification includes 1,587 stations doing an aggregate business of \$49,956,000, or 7.46 per cent of the total of all chains. These very small chains also show the largest average

<sup>1</sup> U. S. Department of Agriculture, Bureau of Public Roads.

sales per station, \$29,588, in comparison with an average for the largest chains of \$19,432 and for all chains of \$20,933.

### TYPES OF CHAINS

Local chains, which are those with substantially all of their stations located in and around some one city, number 770 organizations with 6,953 stations, and account for 29.8 per cent of the total chain business; 83 sectional chains operate 15,585 stations with sales exceeding \$310,214,000, or 49.3 per cent of the total; and 11 national chains, which account for the remaining 20.9 per cent of the total chain business of the country, operate 7,500 stations with aggregate sales of \$131,300,000. In the case of the filling-station chains, it is impossible to disclose without revelation of individual operations the proportion of business done by the so-called major oil companies or producers, as compared with the merchant or distributing companies and the smaller producers. In Pennsylvania, in the Southwest, and particularly in parts of California, there are small wells and refineries which sell a substantial proportion of their products in their own chains of filling stations, and there are local and sectional chains in these territories which depend entirely upon small refineries as their sources of supply. Only by consideration of the type classification and the number of units is it possible to identify approximately the operations of the major oil companies as a group, and the stations of the small producers can not be distinguished from those of strictly distributing organizations.

Tank or bulk stations, the majority of whose sales are made to retail filling stations and to fleet operators, are classified as wholesale establishments and are not included in the Retail Census even though operated by the same companies that operate the filling stations.

### OPERATING EXPENSES

The Census for the first time throws light in an authoritative way upon the matter of operating expenses of filling stations. The first intimation of such cost was given in the Washington, D. C., report of all retail operations in that city, which was published April 9, 1931, and which showed operating expenses for all chain and independent filling stations there of 24.7 per cent. The bureau now shows that for the entire United States, the 864 chains which do one-third of all the filling station business operate on an average station expense of 23.77 per cent of sales. This is exclusive, of course, of the cost of gasoline, oil, and merchandise sold, and includes no allowance for profit or any interest return on working capital required. It is strictly the operating expenses of the stations, and does not include tank-truck transportation to the stations nor central office administrative expenses, which are not regarded by the industry as retailing costs. The report shows that stocks of merchandise on hand at the end of the year totaled \$17,447,694 at cost prices which, at retail, would indicate a turnover of more than twenty-seven times. There is nothing in the report to indicate the amount of working capital invested in accounts receivable and other current assets. About 56 per cent of total sales are made in leased premises for which more than \$19,000,000 of rent is paid, at a rental cost to sales of 6.23 per cent. This same rental rate could be applied to the remaining 44 per cent of sales to establish the estimated rental value of owned premises. Table 4 shows expenses separately for seven different size classes of chains, and although the smaller chains appear to operate at a somewhat lower expense, the variations are surprisingly small.

Forty-nine chains, which have reported administrative salaries of executives and central office employees, show that this expense averages 4.81 per cent of

net sales, 1.07 per cent being designated as executives' salaries and 3.76 per cent as employees' salaries. Chains having less than 50 units report this expense as high as 11 per cent of net sales, but it decreases perceptibly as the size of the chain increases and the sales expand.

### CHAINS CLASSIFIED BY SIZE

Classified according to annual sales, Table 8 shows that 4 chains exceed \$25,000,000 each in the amount of business done each year, another 4 exceed \$13,500,000 each, another 20 exceed \$3,500,000 each, and 19 more exceed \$1,500,000 each. The four largest chains in this classification report aggregate sales of \$179,593,140 or 29 per cent of all chain sales. This volume is equal to the aggregate sales of all of the 817 chains whose annual business is less than \$1,500,000 each.

### SALES CLASSIFIED BY SIZE OF CITY

Classified by size of city, it is shown that 43 per cent of the sales of chain stations is in cities of 100,000 or more inhabitants, 19 per cent in cities between 25,000 and 100,000, 12 per cent in cities between 10,000 and 25,000, and 26 per cent in places of less than 10,000 population. In all sizes of cities the larger chains do from 65 per cent to 75 per cent of the total of all chain-station business except in the Mountain States, where the business goes largely to the smaller chains. The five States of Ohio, Indiana, Illinois, Wisconsin, and Michigan account for 31 per cent of the sales of all filling station chains, and 19 per cent is sold in New York, New Jersey, and Pennsylvania.

### CREDIT BUSINESS

Of the 864 chains, 285 report that they sell partly for credit. These chains appear to be typical, as they constitute about one-third of all the chains, and their sales of \$206,520,368 constitute about one-third of the aggregate sales of all the chains. These 285 chains report that 21 per cent of their business is on the open credit or monthly account basis, and the remaining 79 per cent is sold for cash. Only 17 chains or more than 50 units are included among those which extend credit privileges, but they have average sales of nearly \$10,000,000 each, of which 16.6 per cent is sold on credit. The highest proportion of credit is granted by 90 chains of 6 to 10 units each, which report that they do 49.7 per cent of their business on credit.

### GROWTH OF CHAINS

Of the 30,038 stations operating at the end of 1929, 6,390 were established or acquired in that year. These constitute 23.8 per cent of the total. Forty-three new chains were organized in 1929, accounting for 292 of these new units. The balance were added to previously existing chains. Another 12,000, or 45.0 per cent, were established between 1925 and 1928, and only about one-third of all the stations operating at the end of 1929 had been in business for five years or more. The percentage of stations newly established or acquired in 1929 varies greatly in the different divisions of the country. The Pacific Coast States lead, with 69 per cent of all of their stations established or acquired in 1929; the Mountain States follow with 40 per cent; the West South Central States of Arkansas, Louisiana, Oklahoma, and Texas opened 34 per cent of their stations in 1929, and the New England States follow closely with 30 per cent.

## SALES BY COMMODITIES

Gasoline constitutes 85.02 per cent of the total sales of all filling station chains; lubricating oil averages 11.64 per cent. Only 3.34 per cent of sales consist of other than gasoline and oil. Of this, 1 per cent is for service charges of various kinds and 2.35 per cent is made up of the sale of fuel oil, kerosene, radiator alcohol, tires, batteries, confectionery, soft drinks, smokes, and miscellaneous merchandise. In this connection it should be considered that many of the chains which in 1929 limited their products strictly to gasoline and oil have since added tires and batteries, some have added other merchandise, and a few have experimented with the service of receiving telegrams for transmission by the Western Union and the Postal Telegraph systems. For that reason, the commodity breakdown of sales which is shown to apply to 1929 might not apply to-day, nor will this breakdown of chain stations apply to the sales of independent stations, whose sales are known to include a greater proportion of other merchandise and service than is shown for these chains.

This report covers about 24 per cent of the filling stations of the country and about one-third of the filling station business. It does not cover bulk stations. It does not cover any part of the 54,000 garages and 742 parking stations which sell gasoline and oil in addition to rendering other service, except the stations of 15 chains mentioned in the following paragraph. There are numerous additional outlets through which gasoline and oil are distributed at retail, in the form of "gasoline pumps" operated by grocers, restaurants, general stores, and many other kinds of business, but such stores can not be classified as filling stations. Commodity tables in the final series of State reports will provide data by means of which sales through these subsidiary outlets may be measured, within the limits of the commodity information obtainable from such retailers.

## GARAGE CHAINS

Appended to this report as Tables 9-A and 9-B are data applying to 15 chains which operate storage, service, and repair garages, doing a business in excess of \$4,000,000, of which nearly 40 per cent represents repair operations and 10 per cent represents storage, the balance being the sale of gasoline, oil, parts, and accessories.

These garage chains are not included in the number of filling-station chains analyzed in this report, nor are their sales included in any of the tables except Tables 9-A and 9-B.

TABLE 1.—SALES CLASSIFIED BY SIZE OF CHAINS, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS

DIVISION AND CLASSIFICATION	All chains	CHAINS CLASSIFIED BY SIZE				
		More than 50 units (57 chains)	26 to 50 units (36 chains)	11 to 25 units (132 chains)	6 to 10 units (264 chains)	Less than 6 units (375 chains)
<b>UNITED STATES</b>						
Total net sales.....	\$629, 024, 296	\$450, 746, 803	\$29, 240, 717	\$49, 768, 054	\$52, 312, 715	\$46, 956, 007
Cities and places of—						
More than 100,000.....	268, 119, 358	199, 717, 243	12, 947, 960	19, 311, 443	21, 915, 170	14, 227, 542
Between 25,000 and 100,000..	121, 502, 559	79, 317, 703	4, 558, 259	11, 203, 494	13, 282, 279	13, 140, 824
Between 10,000 and 25,000..	74, 369, 645	53, 557, 915	2, 443, 385	4, 222, 137	7, 174, 677	6, 971, 531
Less than 10,000.....	165, 032, 734	118, 153, 942	9, 291, 113	15, 030, 980	9, 940, 589	12, 616, 110
<b>NEW ENGLAND DIV.</b>						
Total.....	41, 604, 047	33, 052, 863	-----	1, 553, 794	3, 726, 513	3, 270, 877
Cities and places of—						
More than 100,000.....	18, 534, 871	14, 883, 144	-----	338, 577	2, 237, 816	1, 075, 334
Between 25,000 and 100,000..	11, 424, 245	8, 758, 106	-----	180, 431	856, 457	1, 629, 251
Between 10,000 and 25,000..	5, 107, 080	4, 468, 397	-----	132, 093	262, 006	244, 584
Less than 10,000.....	6, 537, 851	4, 943, 216	-----	902, 693	370, 234	321, 708
<b>MIDDLE ATLANTIC DIV.</b>						
Total.....	118, 158, 295	80, 060, 060	2, 960, 875	11, 723, 689	14, 163, 142	9, 250, 529
Cities and place of—						
More than 100,000.....	60, 127, 261	42, 396, 497	1, 273, 840	6, 622, 261	5, 963, 129	3, 871, 534
Between 25,000 and 100,000..	22, 262, 217	14, 296, 042	548, 993	1, 951, 197	3, 107, 051	2, 358, 934
Between 10,000 and 25,000..	14, 264, 687	8, 977, 057	213, 451	1, 170, 552	2, 600, 121	1, 303, 506
Less than 10,000.....	21, 504, 130	14, 390, 464	924, 591	1, 979, 679	2, 492, 841	1, 716, 555
<b>EAST NORTH CENTRAL DIV.</b>						
Total.....	197, 539, 820	137, 683, 311	14, 344, 779	18, 266, 611	14, 665, 153	12, 579, 966
Cities and places of—						
More than 100,000.....	91, 204, 978	67, 495, 468	8, 371, 028	5, 629, 072	5, 779, 604	3, 929, 806
Between 25,000 and 100,000..	41, 857, 822	25, 758, 832	2, 538, 245	4, 773, 159	4, 807, 860	3, 979, 726
Between 10,000 and 25,000..	20, 280, 833	15, 093, 289	529, 655	1, 183, 458	1, 701, 149	1, 773, 282
Less than 10,000.....	44, 196, 187	29, 335, 722	2, 905, 851	6, 680, 922	2, 376, 540	2, 897, 152
<b>WEST NORTH CENTRAL DIV.</b>						
Total.....	91, 732, 540	63, 992, 744	4, 917, 291	6, 764, 018	8, 426, 640	7, 631, 847
Cities and places of—						
More than 100,000.....	28, 220, 916	22, 077, 730	261, 209	2, 137, 300	2, 033, 723	1, 710, 954
Between 25,000 and 100,000..	11, 563, 835	7, 226, 759	519, 111	1, 326, 408	1, 716, 822	774, 735
Between 10,000 and 25,000..	12, 877, 640	7, 908, 782	835, 948	873, 185	1, 612, 993	1, 646, 732
Less than 10,000.....	39, 070, 149	26, 779, 473	3, 301, 023	2, 427, 125	3, 063, 102	3, 499, 426
<b>SOUTH ATLANTIC DIV.</b>						
Total.....	59, 681, 847	44, 259, 149	1, 652, 131	4, 911, 924	3, 243, 235	5, 615, 408
Cities and places of—						
More than 100,000.....	22, 028, 909	17, 959, 239	518, 032	1, 494, 324	932, 410	1, 124, 904
Between 25,000 and 100,000..	16, 052, 510	10, 224, 925	249, 385	1, 419, 677	1, 424, 636	2, 733, 887
Between 10,000 and 25,000..	7, 145, 559	5, 031, 365	606, 316	271, 233	563, 051	673, 594
Less than 10,000.....	14, 454, 869	11, 043, 620	278, 398	1, 726, 690	323, 138	1, 083, 023
<b>EAST SOUTH CENTRAL DIV.</b>						
Total.....	21, 121, 343	17, 137, 032	593, 902	963, 176	1, 717, 609	709, 624
Cities and places of—						
More than 100,000.....	9, 281, 390	6, 729, 264	523, 981	469, 950	1, 306, 721	251, 474
Between 25,000 and 100,000..	4, 495, 774	3, 609, 646	22, 288	434, 275	213, 543	216, 022
Between 10,000 and 25,000..	3, 082, 590	2, 931, 483	27, 075	30, 735	2, 757	90, 540
Less than 10,000.....	4, 261, 589	3, 866, 639	20, 558	28, 216	194, 588	151, 588

TABLE 1.—SALES CLASSIFIED BY SIZE OF CHAINS, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS—Continued

DIVISION AND CLASSIFICATION.	All chains	CHAINS CLASSIFIED BY SIZE				
		More than 50 units (57 chains)	26 to 50 units (36 chains)	11 to 25 units (132 chains)	6 to 10 units (264 chains)	Less than 6 units (375 chains)
<b>WEST SOUTH CENTRAL DIV.</b>						
Total.....	\$54,536,516	\$42,660,950	\$3,424,785	\$1,947,978	\$2,554,029	\$3,948,774
Cities and places of—						
More than 100,000.....	16,532,983	11,799,302	1,999,870	1,005,177	1,061,710	666,924
Between 25,000 and 100,000..	7,537,175	4,777,956	585,221	451,688	710,268	1,012,042
Between 10,000 and 25,000..	7,087,323	5,778,851	157,407	201,336	299,855	649,874
Less than 10,000.....	23,379,035	20,304,841	682,287	289,777	482,196	1,619,934
<b>MOUNTAIN DIV.</b>						
Total.....	13,001,900	5,883,686	1,346,954	2,733,890	1,239,866	1,797,504
Cities and places of—						
More than 100,000.....	4,498,494	1,796,290	-----	1,204,203	847,183	650,818
Between 25,000 and 100,000..	1,845,543	760,026	95,016	462,714	146,077	381,710
Between 10,000 and 25,000..	1,588,191	781,279	73,533	332,361	-----	401,018
Less than 10,000.....	5,069,672	2,546,091	1,178,405	734,612	246,606	363,958
<b>PACIFIC DIV.</b>						
Total.....	31,647,988	26,017,008	-----	902,974	2,576,528	2,151,478
Cities and places of—						
More than 100,000.....	17,689,556	14,580,309	-----	410,579	1,752,874	945,794
Between 25,000 and 100,000..	4,463,438	3,905,411	-----	203,945	299,565	54,517
Between 10,000 and 25,000..	2,935,742	2,587,412	-----	27,184	132,745	188,401
Less than 10,000.....	6,559,252	4,943,876	-----	261,266	391,344	962,766

TABLE 2.—SALES CLASSIFIED BY TYPES OF OPERATION AND SIZE OF CHAINS

SIZE-CLASS	ALL TYPES OF CHAINS					LOCAL CHAINS			SECTIONAL CHAINS			NATIONAL CHAINS			
	Num-ber of chains	Num-ber of units	Net sales (1929)	Per cent of total sales	Average sales per unit	Num-ber of chains	Num-ber of units	Net sales (1929)	Num-ber of chains	Num-ber of units	Net sales (1929)	Num-ber of chains	Num-ber of units	Net sales (1929)	Num-ber of units
Total, all chains.....	864	30,038	\$629,024,296	100.00	\$20,933	770	6,953	\$187,485,282	83	15,585	\$310,214,550	11	7,500	\$131,324,464	
Chains of more than 500 units.....	14	15,874	308,696,666	49.08	19,432	3	382	10,654,005	9	10,275	217,083,224	5	5,599	91,663,442	
Chains of 101 to 500 units.....	25	6,114	108,300,929	17.23	17,643	10	691	20,783,103	16	3,851	58,084,902	6	1,901	39,661,022	
Chains of 51 to 100 units.....	18	1,252	83,650,208	5.35	26,877	24	776	21,384,667	8	561	12,867,105	7	856	1,856,050	
Chains of 26 to 50 units.....	36	1,210	28,240,717	4.65	24,166	114	1,700	40,266,891	12	434	7,856,050	18	322	4,534	
Chains of 11 to 25 units.....	132	2,022	49,768,054	7.91	24,613	369	1,559	46,229,813	14	114	9,501,163	28	726	194	
Chains of 6 to 10 units.....	264	1,949	52,312,715	8.32	26,841	369	1,559	46,229,813	14	114	9,501,163	28	726	194	
Chains of less than 6 units.....	375	1,587	46,956,007	7.46	29,588	369	1,559	46,229,813	6	28	726,194	28	726	194	

TABLE 3.—EMPLOYMENT, WAGE, AND EXPENSE DATA

SIZE-CLASS	Num-ber of chains	NUMBER OF UNITS OPERATED BY—			NUMBER OF EMPLOYEES AND PAY ROLL				OTHER OPER-ATING EX-PENSES OF STATIONS OF YEAR (INCLUDING RENT) <sup>1</sup>	STOCKS ON HAND, END OF YEAR (at cost)	NET SALES (1929) <sup>1</sup>
		Local chains	Sectional chains	National chains	Full time		Part time				
					Number	Salaries and wages	Number	Salaries and wages			
Total, all chains.....	864	6,953	15,585	7,500	60,761	\$79,630,419	4,189	\$1,608,966	\$68,258,916	\$17,447,694	\$629,024,296
Chains of more than 500 units.....	14	10,275	5,599	5,599	30,288	40,754,041	2,017	747,017	26,420,679	6,320,680	308,696,666
Chains of 101 to 500 units.....	25	3,851	1,901	1,901	12,008	14,943,260	791	256,801	17,862,555	2,278,121	108,399,929
Chains of 51 to 100 units.....	18	691	561	561	2,747	4,073,209	137	80,456	4,368,132	817,113	33,650,208
Chains of 26 to 50 units.....	36	1,776	434	434	2,618	3,372,482	134	66,438	3,747,301	1,385,762	29,240,717
Chains of 11 to 25 units.....	132	1,700	322	322	4,225	5,305,230	301	127,511	5,180,182	1,650,327	49,768,054
Chains of 6 to 10 units.....	264	1,835	114	114	4,797	6,160,462	436	178,144	5,659,200	2,547,172	52,312,715
Chains of less than 6 units.....	375	1,559	28	28	4,098	5,021,735	373	152,599	5,020,867	2,448,519	46,956,007

<sup>1</sup> Of the total number of stations 16,002 are in leased premises for which the annual rent aggregates \$19,690,280 or 6.23 per cent of sales in such leased premises.

TABLE 4.—OPERATING EXPENSES <sup>1</sup>

(Retail expenses only)

	ALL CHAINS (864 chains)		Chains with more than 500 units (14 chains)	Chains with 101 to 500 units (25 chains)
	Total	Per cent of sales		
Total net sales (1929) .....	\$629, 024, 296	-----	\$308, 696, 666	\$108, 399, 929
Reported expenses—Total.....	149, 498, 301	23. 77	67, 921, 737	33, 062, 616
Total wage cost.....	81, 239, 385	12. 92	41, 501, 058	15, 200, 061
Salaries and wages paid 60,761 full-time employees.....	79, 630, 419	12. 66	40, 754, 041	14, 943, 260
Salaries and wages paid 4,189 part-time employees.....	1, 608, 966	. 26	747, 017	256, 801
Other operating expenses, including rent <sup>2</sup> ..	68, 258, 916	10. 85	26, 420, 679	17, 862, 555
Expenses, per cent to sales.....	23. 77	-----	22. 00	30. 50

	Chains with 51 to 100 units (18 chains)	Chains with 26 to 50 units (36 chains)	Chains with 11 to 25 units (132 chains)	Chains with 6 to 10 units (264 chains)	Chains with less than 6 units (375 chains)
Total net sales (1929) .....	\$33, 650, 208	\$29, 240, 717	\$49, 768, 054	\$52, 312, 715	\$46, 956, 007
Reported expenses—Total.....	8, 521, 797	7, 186, 221	10, 612, 923	11, 997, 806	10, 195, 201
Total wage cost.....	4, 153, 665	3, 438, 920	5, 432, 741	6, 338, 606	5, 174, 334
Salaries and wages paid 60,761 full-time employees.....	4, 073, 209	3, 372, 482	5, 305, 230	6, 160, 462	5, 021, 735
Salaries and wages paid 4,189 part-time employees.....	80, 456	66, 438	127, 511	178, 144	152, 599
Other operating expenses, includ- ing rent <sup>2</sup> .....	4, 368, 132	3, 747, 301	5, 180, 182	5, 659, 200	5, 020, 867
Expenses, per cent to sales.....	25. 32	24. 58	21. 32	22. 93	21. 71

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts.

<sup>2</sup> Of the total number of stations 16,002 are in leased premises for which the annual rent aggregates \$19,690,280 or 6.23 per cent of sales in such leased premises.

TABLE 5.—CHAINS REPORTING CREDIT SALES

SIZE-CLASS	Num- ber of chains report- ing credit sales	Total net sales in chains report- ing credit	Credit sales	Per cent of sales	Cash sales	Per cent of sales
All chains which extend credit— Total.....	285	\$203, 520, 368	\$43, 039, 937	20. 8	\$163, 480, 431	79. 2
Chains of more than 50 units.....	17	153, 445, 628	25, 423, 895	16. 6	128, 021, 733	83. 4
Chains of 26 to 50 units.....	10	11, 424, 392	2, 976, 686	26. 1	8, 447, 706	73. 9
Chains of 11 to 25 units.....	43	15, 715, 641	3, 804, 576	24. 2	11, 911, 065	75. 8
Chains of 6 to 10 units.....	90	11, 263, 317	5, 599, 938	49. 7	5, 663, 379	50. 3
Chains of less than 6 units.....	125	14, 671, 390	5, 234, 842	35. 7	9, 436, 548	64. 3

TABLE 6.—CHAIN UNITS CLASSIFIED BY AGE OF UNITS AND GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION AND AGE OF UNITS	Per cent of total units	NUMBER OF UNITS IN CHAINS OF—					
		All chains	More than 50 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
UNITED STATES—Total.....	100.0	30,038	23,270	1,210	2,022	1,949	1,587
All units established in—							
1929.....	23.8	6,390	5,118	215	344	408	305
1925 to 1928.....	45.0	12,066	9,113	356	804	960	833
Previous to 1925.....	31.2	8,401	6,320	544	665	469	403
Units not classified.....		3,181	2,719	95	209	112	46
NEW ENGLAND DIVISION.....	100.0	1,893	1,585		48	163	97
Established—							
1929.....	30.0	567	518		5	27	17
1925 to 1928.....	53.0	1,010	853		25	82	50
Previous to 1925.....	17.0	316	214		18	54	30
MIDDLE ATLANTIC DIVISION.....	100.0	5,044	3,915	85	362	410	272
Established—							
1929.....	19.0	964	732	12	63	110	47
1925 to 1928.....	53.0	2,659	2,091	29	156	222	161
Previous to 1925.....	28.0	1,421	1,092	44	143	78	64
EAST NORTH CENTRAL DIVISION.....	100.0	6,364	4,370	445	618	531	400
Established—							
1929.....	18.0	1,124	821	63	89	73	78
1925 to 1928.....	39.0	2,465	1,602	69	261	312	221
Previous to 1925.....	43.0	2,775	1,947	313	268	146	101
WEST NORTH CENTRAL DIVISION.....	100.0	5,578	4,485	244	241	313	295
Established—							
1929.....	15.0	853	620	69	52	62	50
1925 to 1928.....	49.0	2,736	2,211	84	115	160	166
Previous to 1925.....	36.0	1,989	1,654	91	74	91	79
SOUTH ATLANTIC DIVISION.....	100.0	2,049	1,551	61	132	125	180
Established—							
1929.....	25.0	521	393	2	34	53	39
1925 to 1928.....	47.0	964	733	44	54	47	86
Previous to 1925.....	28.0	564	425	15	44	25	55
EAST SOUTH CENTRAL DIVISION.....	100.0	1,161	1,008	32	35	50	36
Established—							
1929.....	27.0	308	233	1	6	7	11
1925 to 1928.....	46.0	536	488		12	19	17
Previous to 1925.....	27.0	317	237	31	17	24	8
WEST SOUTH CENTRAL DIVISION.....	100.0	3,066	2,492	193	139	107	135
Established—							
1929.....	34.0	1,052	862	64	36	44	46
1925 to 1928.....	40.0	1,207	937	87	61	54	68
Previous to 1925.....	26.0	807	693	42	42	9	21
MOUNTAIN DIVISION.....	100.0	609	301	55	145	36	72
Established—							
1929.....	40.0	242	198	4	25	3	12
1925 to 1928.....	34.0	210	46	43	75	15	31
Previous to 1925.....	26.0	157	57	8	45	18	29
PACIFIC DIVISION.....	100.0	1,093	844		93	102	54
Established—							
1929.....	69.0	759	691		34	29	5
1925 to 1928.....	26.0	279	152		45	49	33
Previous to 1925.....	5.0	55	1		14	24	16

TABLE 7.—DISTRIBUTION OF SALES BY COMMODITIES

COMMODITY	AS REPORTED		WHEN SALES NOT REPORTED BY COMMODITIES ARE PRORATED <sup>1</sup>	
	Net sales	Per cent of total	Net sales	Per cent of total
Total net sales.....	\$629, 024, 296	100. 00	\$629, 024, 296	100. 00
Gasoline and oil.....	369, 156, 883	58. 69	608, 024, 130	96. 66
Gasoline.....	282, 553, 106	44. 92	534, 813, 262	85. 02
Oil and greases.....	38, 675, 396	6. 15	73, 210, 868	11. 64
Not distributed.....	47, 928, 881	7. 62	( <sup>2</sup> )	( <sup>2</sup> )
Miscellaneous merchandise (including confectionery, soft drinks, cigars, fuel, oil, kerosene, and alcohol).....	8, 956, 977	1. 42	14, 764, 323	2. 35
Service charges.....	3, 789, 344	. 60	6, 235, 843	. 99
Not distributed (applying to all commodities).....	247, 121, 092	39. 29	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> In this column the sales not fully reported by commodities have been distributed or prorated on the basis of proration shown for the sales that were so reported.

<sup>2</sup> Prorated and added to sales of individual commodities on basis of individual commodity sales actually reported.

TABLE 8.—CHAINS CLASSIFIED BY VOLUME OF SALES

	ALL CHAINS			CHAINS OF MORE THAN 50 UNITS	
	Number	Net sales	Per cent of total sales	Number	Net sales
All chains.....	864	\$629, 024, 296	100	57	\$650, 746, 803
Chains with net sales in excess of—					
\$25,000,000.....	4	179, 563, 140	29	4	179, 593, 140
\$13,500,000.....	8	255, 146, 822	41	8	255, 146, 822
\$3,500,000.....	28	399, 685, 473	64	27	394, 633, 330
\$1,500,000.....	47	445, 525, 870	71	46	440, 473, 727
\$750,000.....	88	487, 516, 200	78	53	448, 440, 026
\$350,000.....	190	537, 038, 236	85	56	450, 397, 769
\$150,000.....	445	594, 618, 049	95	57	450, 746, 803
Chains with net sales of less than \$150,000.....	419	34, 406, 247	5		

	CHAINS OF 26 TO 50 UNITS		CHAINS OF 11 TO 25 UNITS		CHAINS OF 6 TO 10 UNITS		CHAINS OF LESS THAN 6 UNITS	
	Number	Net sales	Number	Net sales	Number	Net sales	Number	Net sales
All chains.....	36	\$29, 240, 717	132	\$49, 768, 054	264	\$52, 312, 715	375	\$46, 956, 007
Chains with net sales in excess of—								
\$3,500,000.....	1	5, 052, 143						
\$1,500,000.....	1	5, 052, 143						
\$750,000.....	15	19, 043, 648	14	13, 989, 041	6	6, 043, 485		
\$350,000.....	31	27, 625, 013	54	33, 497, 916	29	16, 632, 564	20	8, 884, 974
\$150,000.....	36	29, 240, 717	114	48, 211, 974	137	40, 154, 363	101	26, 264, 192
Chains with net sales of less than \$150,000.....			18	1, 556, 080	127	12, 158, 352	274	20, 691, 815

**GARAGE CHAINS**

In addition to the filling-station chains, there are 18 chains which operate 113 garages in the United States, and their receipts from service charges and from the sale of gasoline, oil, and incidental accessories are more than \$4,500,000 annually. Of these, 15 chains are included in the following brief analysis.

All of the 15 organizations are local chains. All but one have less than 10 units, and except for two chains, all operate their units in large cities of the East, Middle West, and California.

Employees total 768 of which 760 are on a full-time basis. The annual pay roll aggregates \$1,142,505. Because service is such a large proportion of the business, operating expenses for the 15 chains are almost double those of filling-station chains, or in excess of \$60 for every \$100 of net sales. Of this amount \$28.20 is for pay roll, \$19.31 is paid for rent, and \$12.77 is the cost of all other operating expenses. Expensive downtown location is a characteristic of these garage chains. Service and repair operations produce nearly 40 per cent of total income, storage about 10 per cent, and the remaining 50 per cent represents the sale of gasoline, oil, parts, and accessories.

Credit business of 7 chains, whose net sales aggregate \$2,159,938 amounts to \$825,340, or approximately 41 per cent of the business of those chains which extend credit privileges.

**TABLE 9.—GARAGE CHAINS**  
A—EMPLOYMENT AND WAGE FACTS

	Number and amount
Number of chains (all local).....	15
Number of units.....	91
Employees and wages:	
Full-time employees.....	760
Salaries and wages.....	\$1,139,481
Part-time employees.....	8
Salaries and wages.....	\$3,024
Expenses:	
Rent.....	\$782,440
Other operating expenses.....	\$517,354
Stocks on hand at end of year (at cost).....	\$183,145
Net sales (1929).....	\$4,051,340
Total operating expenses—per cent of sales <sup>1</sup> .....	60.28

B—DISTRIBUTION OF SALES BY COMMODITIES

COMMODITY	AS REPORTED		WHEN SALES NOT REPORTED BY COMMODITIES ARE PRORATED <sup>3</sup>	
	Net sales	Per cent of sales	Net sales	Per cent of sales
Total net sales, 15 garage chains.....	4,051,340	100.00	4,051,340	100.00
Service and repair operations.....	1,073,010	26.48	1,578,300	38.96
Gasoline and oil.....	888,290	21.93	1,306,555	32.25
Miscellaneous merchandise (including parts and accessories, tires, and tubes, batteries, etc.).....	503,798	12.44	741,009	18.29
Storage.....	289,297	7.14	425,476	10.50
Not distributed.....	1,296,945	32.01	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

<sup>2</sup> In this column the sales not fully reported by commodities have been distributed or prorated on the basis of proration shown for sales that were reported.

<sup>3</sup> Prorated and added to sales of individual commodities on basis of relative sales of individual commodity sales actually reported.

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# MEN'S-WEAR CHAINS

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## INTRODUCTION

There are 84 men's clothing chains, 49 men's furnishings chains, 87 men's clothing-and-furnishings chains, 37 men's hat chains, and 29 men's tailoring (made-to-order clothing) chains, a total of 286 chains in the men's-wear field. These 286 chains operated in 1929, as shown by the 1930 Census of Distribution, a total of 3,054 stores or units and did a total business of \$270,959,214.

Of these multiunit organizations, 169 are local chains, 93 are sectional chains, 24 are national chains. Table 3 shows the number of units and sales of each type for each of the 5 kinds of chains described herein.

## DEFINITION OF CHAINS

Not all multiunit organizations are chains. A single-store independent which adds one or two branch stores becomes a local multiunit independent rather than a chain. If a small group of stores is built up around a larger central parent store, and merchandized largely from the stocks of the parent store, it is not a chain, but merely a local branch system. It becomes a chain only when the number of its branches is increased to the point where it is no longer possible to merchandise them from the parent store, and a separate central merchandising organization is necessary.

Local chains, of which there are 169, are those which operate all or substantially all of their units in and around one city. Sectional chains operate all or substantially all of their units in one main section of the country, such as the Pacific coast, the New England States, or the Gulf Southwest. There are 93 such chains. National chains are those whose interests are broader than those of any one section, and whose units are located in two or more sections of the country, and often in a majority of the States. There are 24 national chains in the men's-wear field. They are analyzed in some detail in Table 3.

Leased-department chains operate their units as departments in stores of other names, usually department stores and apparel stores. There are a few leased-department chains in most of the principal business classifications, and although the most numerous are in the millinery field, there are 17 such organizations in the women's-apparel field and 3 in the men's-wear field. The 3 in the men's-wear field are included as clothing-and-furnishings chains, operate 18 units and do an annual business of \$1,726,719. They are included in this report, but are not identified as leased departments in order to avoid disclosure of individual operations, which is a cardinal principle in all reports of the Bureau of the Census. There are also a few manufacturer-controlled chains, particularly among the tailoring chains and hat chains, which can not be separately analyzed herein, but which are included.

The report divides the men's-wear chains into five size-classes according to the number of units operated, and shows for each of these classes the number of chains, the number of units and the annual sales, divided further into local, sectional, and national chains.

### GEOGRAPHIC DISTRIBUTION OF SALES

Table 2, showing the distribution of sales of each of the five kinds of chains, reveals that more than 40 per cent of the business is done in Division 2, which comprises the States of New York, New Jersey, and Pennsylvania. Division 3, made up of the Great Lakes States of Ohio, Indiana, Illinois, Michigan, and Wisconsin, shows the next largest sales. Division 9, composed of the Pacific Coast States of Washington, Oregon, and California, comes third, followed closely by the New England States, known as Division 1.

Not only are the sales shown by geographic divisions, but Table 7 shows the number of stores in each division. This table reveals that 392 new units were opened during 1929, which constitute nearly 13 per cent of all the chain stores in operation at the end of the census year.

About 30 per cent of the present stores were opened during the 5-year period preceding 1929. More than one-half of the stores had been in operation more than five years at the time the census was taken. About 85 per cent of the total business is in cities of more than 100,000 population.

### CENTRAL-OFFICE SALARY EXPENSE

The salary cost of the central-office organizations of 61 chains is 3.5 per cent of sales, which is believed to have been apportioned to the stores of the chains and included in the operating expense described above. This 3.5 per cent is made up of 2.1 per cent for salaries to principal central administrative officers, merchandisers, and buyers, and 1.4 per cent for salaries to central-office employees (clerks, stenographers, bookkeepers, etc.).

Although the average central-office salary expense of the few chains whose figures are available is 3.5 per cent, it varies with the different chains from 1.6 per cent for the low-cost chains to 10.1 per cent for those less efficiently managed. The variation is as follows:

- 1.6 per cent is the average reported by 5 chains.
- 2.5 per cent is the average reported by 11 chains.
- 3.4 per cent is the average reported by 13 chains.
- 4.5 per cent is the average reported by 14 chains.
- 5.3 per cent is the average reported by 6 chains.
- 6.3 per cent is the average reported by 5 chains.
- 7.4 per cent is the average reported by 3 chains.
- 8.4 per cent is the average reported by 2 chains.
- 10.1 per cent is the average reported by 2 chains.

Much of the variation above is due to a great difference in the number and the rate of salary of central-office executives, and whether the chain executives act as buyers or employ others in that capacity. Normally the most successful small chains are those in which the chief executives are also the buyers and merchandise managers.

### SALES VOLUME OF CHAINS

About 30 per cent of the total business was done by 11 chains, each of which exceeded \$5,000,000 in sales. Another 20 per cent was done by 15 chains, each of which exceeded \$2,500,000 in sales. Thus 9 per cent of the chains did more than 50 per cent of the total business. Of these larger chains, 4 operating hat stores show total sales of \$14,000,000. Annual sales of most chains in the hat field, however, average about \$350,000 each; in the men's clothing field about \$370,000 each; and in the furnishings field about \$240,000 each.

### CREDIT BUSINESS

Only 9 of the 84 clothing chains report that they extend credit, and their total sales are \$15,870,346. Of this, 74 per cent is cash business, 10 per cent is on open account, and 15 per cent is on the installment basis.

Of the 87 clothing and furnishings chains, 47 extend credit and they do nearly 80 per cent of the total business. Of their sales, 59 per cent is for cash, 35 per cent on open account, and 5 per cent on installments. The expense ratio of these 47 chains is 32.28 per cent.

Only 4 furnishings chains, 3 hat chains, and 6 tailoring chains report credit sales, with a negligible proportion of such business on credit.

### OPERATING EXPENSES

Hat chains show a higher average expense ratio than that of any other group in the men's-wear field. Their average ratio is 35.67 per cent of sales. Furnishings chains, whether or not they also sell clothing, show the next highest expense ratio. Furnishings chains average 31.46 per cent, while the 87 chains selling both clothing and furnishings show an even higher average of 31.84 per cent. Clothing chains average 26.95 per cent.

The tendency toward specialization among the salesmen in men's-wear stores shows its effect in the comparison of pay-roll cost between the different kinds of chains. Clothing sales, with average pay-roll ratio of 9.93 per cent, and furnishings chains with pay-roll ratio of 10.86 per cent are able to use their sales people more effectively, it is evident, than can the clothing-and-furnishings chains, whose pay-roll ratio averages 13.18 per cent. Even in hat chains the pay-roll ratio averages only 10.86 per cent.

The tailoring chains operate at an average expense ratio of 26.19 per cent, of which pay roll is nearly one-half, or 12.07 per cent of sales.

Rent is an important component of expense in the men's-wear field, second only to pay roll. The men's clothing chains report that rent averages 7.12 per cent of sales, with some chains paying 10 per cent. Rent averages 8.03 per cent of sales of the 87 clothing-and-furnishings chains. The 49 furnishings chains pay an average rent of 13.3 per cent of their sales, and hat chains average 16.23 per cent. The lowest rent ratio in the field is that of the 29 tailoring chains, which often use second-floor locations with a comparatively narrow frontage on the street floor for a wide stairway entrance. These chains report an average rent ratio of 6.8 per cent, although most such chains pay 8 to 9 per cent of their sales for rent.

### EMPLOYEES

Of the 15,504 full-time employees of men's-wear chains, 86 per cent are men. Their compensation, in the form of wages and sales bonus, is well above the usual retail scale, averaging about \$2,000 per employee per year. In addition the chains, especially the hat chains, use part-time sales people to handle sales peaks, the number throughout the year averaging 2,876 men and 312 women.

### COMMODITIES SOLD

About 60 per cent of the sales of men's-wear chains were reported in detail, by commodities.

Clothing chains report that about 75 per cent of their sales is of men's suits and nearly 20 per cent is overcoats. Furnishings chains show that 89 per cent of their total sales represents furnishings, 4 per cent is of hats and caps, and nearly 6 per cent is of clothing.

Chains selling both clothing and furnishings show an average breakdown of sales as follows:

	Per cent
Men's suits.....	42. 24
Overcoats.....	16. 50
Furnishings.....	24. 64
Hats and caps.....	4. 90
Shoes.....	4. 24
Other commodities.....	7. 48

Hat chains reporting their sales by commodities show that 90 per cent is the sale of hats and caps, 8.69 per cent is of furnishings, and about 1 per cent is of miscellaneous merchandise. No breakdown is available for the tailoring chains; whole business is the sale of more or less made-to-order suits and overcoats, in the approximate proportion of 80 per cent suits and 20 per cent overcoats.

TABLE 1.—SUMMARY—ALL MEN'S WEAR CHAINS

	Num-ber of chains	Num-ber of units	Net sales (1929)	Pay-roll ratio	Rent ratio	Total expense ratio	Stock sales ratio <sup>1</sup>
Totals, all chains.....	286	3, 054	\$270, 959, 214	11. 59	9. 02	30. 23	21. 51
Men's clothing chains.....	84	893	88, 432, 317	9. 93	7. 12	26. 95	18. 64
Men's clothing and furnishings chains.....	87	701	110, 571, 557	13. 18	8. 03	31. 84	27. 65
Men's furnishings chains.....	49	480	23, 588, 439	10. 86	13. 30	31. 46	20. 11
Men's hat chains.....	37	692	29, 293, 367	10. 86	16. 23	35. 67	18. 54
Tailoring chains.....	29	288	19, 073, 534	12. 07	6. 80	26. 19	5. 58

<sup>1</sup> Stock-sales ratio is the per cent or ratio of stock at the end of the year, at cost, to net sales for the year at retail. It is not equivalent to turnover, to compute which requires a monthly stock figure at retail, averaged throughout the year.

TABLE 2.—SALES ANALYZED ACCORDING TO SIZE OF CITY, GEOGRAPHIC DIVISIONS, AND VOLUME OF SALES—ALL MEN'S WEAR CHAINS

[An (x) indicates that the amount must be withheld to avoid disclosure of individual operations]

A. BY SIZE OF CITY

[For further analysis by geographic divisions, see Table 8]

SIZE OF CITY	Totals, all men's wear chains	SALES IN—				
		Men's clothing chains	Men's clothing and furnishings chains	Men's furnishings chains	Men's hat chains	Tailoring chains
	286 chains	84 chains	87 chains	49 chains	37 chains	29 chains
United States, Total—Net sales (1929).....	\$270, 959, 214	\$88, 432, 317	\$110, 571, 557	\$23, 588, 439	\$29, 293, 367	\$19, 073, 534
All cities with population of—						
More than 100,000.....	230, 450, 626	75, 630, 963	89, 348, 371	21, 386, 179	27, 045, 924	17, 039, 189
30,000 to 100,000.....	26, 922, 368	10, 260, 374	10, 890, 670	1, 878, 578	2, 170, 175	1, 722, 571
10,000 to 30,000.....	8, 516, 482	1, 673, 173	6, 218, 280	284, 958	36, 147	303, 924
Less than 10,000.....	5, 069, 738	867, 807	4, 114, 236	38, 724	41, 121	7, 850

TABLE 2.—SALES ANALYZED ACCORDING TO SIZE OF CITY, GEOGRAPHIC DIVISIONS, AND VOLUME OF SALES—ALL MEN'S WEAR CHAINS—Continued

B. BY GEOGRAPHIC DIVISIONS

[For number of units, see Table 7]

DIVISION	Totals, all men's wear chains	SALES IN—				
		Men's clothing chains	Men's clothing and furnishings chains	Men's furnishings chains	Men's hat chains	Tailoring chains
		286 chains	84 chains	87 chains	49 chains	37 chains
United States, Total.....	\$270,959,214	\$88,432,317	\$110,571,557	\$23,588,439	\$29,293,367	\$19,073,534
New England.....	18,787,307	4,994,902	9,781,551	763,316	2,280,342	967,196
Middle Atlantic.....	110,071,776	28,958,462	50,700,719	9,903,277	15,953,902	4,555,416
East North Central.....	81,985,929	33,953,740	28,459,308	7,075,021	5,376,668	7,121,192
West North Central.....	16,253,803	6,676,451	5,532,189	1,807,685	1,051,422	1,186,056
South Atlantic.....	7,588,787	3,365,107	1,370,817	695,503	815,371	1,341,989
East South Central.....	3,243,487	1,182,375	388,741	425,719	584,022	662,630
West South Central.....	7,992,871	969,389	4,978,790	537,009	806,202	701,481
Mountain.....	2,214,449	500,670	1,152,171	108,571	189,706	263,331
Pacific coast.....	22,820,805	7,831,221	8,207,271	2,272,338	2,235,732	2,274,243

C. BY VOLUME OF SALES

ANNUAL SALES	Total (All men's wear chains)			Men's clothing chains		Men's clothing and furnishings chains	
	Number of chains	Net sales (1929)	Per cent of total sales	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)
	All chains.....	286	\$270,959,214	100.00	84	\$88,432,317	87
Chains with sales of—							
More than \$5,000,000.....	11	85,832,983	31.68	3	32,245,921	6	43,279,380
\$2,500,000 to \$5,000,000.....	15	53,887,397	19.89	6	20,158,524	5	20,257,669
\$1,000,000 to \$2,500,000.....	44	62,954,133	23.23	11	15,811,319	19	26,432,481
\$500,000 to \$1,000,000.....	37	26,046,559	9.61	12	7,987,076	12	9,501,442
\$250,000 to \$500,000.....	72	27,136,795	10.02	22	8,359,790	16	6,466,661
\$100,000 to \$250,000.....	80	13,330,399	4.92	19	3,225,184	25	4,338,693
Under \$100,000.....	27	1,770,948	.65	11	644,503	4	295,431

ANNUAL SALES	Men's furnishings chains		Men's hat chains		Tailoring chains	
	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)
	All chains.....	49	\$23,588,439	37	\$29,293,367	29
Chains with sales of—						
More than \$5,000,000.....			1	(x)	1	(x)
\$2,500,000 to \$5,000,000.....	1	(x)	3	(x)		
\$1,000,000 to \$2,500,000.....	5	7,427,999	4	6,567,119	5	6,715,215
\$500,000 to \$1,000,000.....	5	3,333,661	4	3,004,915	4	2,219,465
\$250,000 to \$500,000.....	15	5,193,678	10	3,856,978	9	3,259,888
\$100,000 to \$250,000.....	19	2,974,336	9	1,334,101	8	1,458,885
Under \$100,000.....	4	(x)	6	414,255	2	(x)

TABLE 3.—SALES CLASSIFIED BY TYPES OF OPERATION—MEN'S WEAR CHAINS

	Totals, all men's wear chains	Men's clothing chains	Men's clothing and furnishings chains	Men's furnishings chains	Men's hat chains	Tailoring chains
<b>ALL TYPES</b>						
Number of chains.....	286	84	87	49	37	29
Number of units.....	3, 054	893	701	480	692	288
Net sales (1929).....	\$270, 959, 214	\$88, 432, 317	\$110, 571, 557	\$23, 588, 439	\$29, 293, 367	\$19, 073, 534
Per cent of net sales.....	100. 00	32. 64	40. 81	8. 70	10. 81	7. 04
Average sales per unit.....	\$88, 723	\$99, 028	\$157, 734	\$49, 142	\$42, 331	\$66, 228
<b>LOCAL CHAINS</b>						
Number of chains.....	169	40	58	37	20	14
Number of units.....	1, 084	243	376	260	133	72
Net sales (1929).....	\$102, 930, 414	\$19, 369, 541	\$59, 883, 859	\$13, 217, 633	\$5, 566, 018	\$4, 893, 363
<b>SECTIONAL CHAINS</b>						
Number of chains.....	93	35	27	9	11	11
Number of units.....	1, 160	429	290	104	201	136
Net sales (1929).....	\$84, 721, 555	\$25, 313, 144	\$41, 300, 829	\$4, 576, 647	\$7, 655, 825	\$5, 875, 110
<b>NATIONAL CHAINS</b>						
Number of chains.....	24	9	2	3	6	4
Number of units.....	810	221	35	116	358	80
Net sales (1929).....	\$83, 307, 245	\$43, 749, 632	\$9, 386, 869	\$5, 794, 159	\$16, 071, 524	\$8, 305, 061

TABLE 4.—CREDIT AND INSTALLMENT SALES

## A. CLOTHING—TAILORING—HAT CHAINS

	MEN'S CLOTHING CHAINS			Tailoring chains	Men's hat chains
	Totals, all men's clothing chains	More than 6 units	Less than 6 units		
Number of chains reporting credit sales.....	9	5	4	6	3
Net sales of such chains.....	\$15, 870, 346	\$11, 786, 795	\$4, 083, 551	\$2, 608, 899	\$1, 506, 235
Credit sales:					
Open account.....	\$1, 574, 483	\$774, 228	\$800, 255	\$1, 364, 423	\$61, 737
Per cent of sales.....	9. 92	6. 57	19. 60	52. 30	4. 10
Installment sales.....	\$2, 504, 359	\$218, 521	\$285, 838	-----	-----
Per cent of sales.....	15. 78	18. 82	7. 00	-----	-----
Cash sales.....	\$11, 791, 504	\$8, 794, 046	\$2, 997, 458	\$1, 244, 476	\$1, 444, 498
Per cent of sales.....	74. 30	74. 61	73. 40	47. 70	95. 90

## B. FURNISHINGS CHAINS—CLOTHING AND FURNISHINGS CHAINS

	MEN'S CLOTHING AND FURNISHINGS CHAINS				Men's furnishings chains
	Totals, all clothing and furnishings chains	More than 10 units	6 to 10 units	Less than 6 units	
Number of chains reporting credit sales.....	47	12	14	21	4
Net sales of such chains.....	\$86, 006, 144	\$36, 184, 045	\$24, 113, 951	\$25, 708, 148	\$1, 028, 414
Credit sales:					
Open account.....	\$30, 659, 559	\$11, 022, 067	\$8, 124, 206	\$11, 513, 286	\$227, 166
Per cent of sales.....	35. 65	30. 46	33. 69	44. 78	22. 09
Installment sales.....	\$4, 358, 094	\$1, 592, 111	\$625, 823	\$2, 140, 160	-----
Per cent of sales.....	5. 07	4. 40	2. 60	8. 33	-----
Cash sales.....	\$50, 988, 491	\$23, 569, 867	\$15, 363, 922	\$12, 054, 702	\$801, 248
Per cent of sales.....	59. 28	65. 14	63. 71	46. 89	77. 91

TABLE 5A.—OPERATING EXPENSES<sup>1</sup> CLASSIFIED BY SIZE OF CHAIN—MEN'S CLOTHING CHAINS

	Totals, all chains	CHAINS OF			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
Net sales (1929).....	\$88,432,317	\$34,253,676	\$33,347,443	\$9,710,735	\$11,120,463
Number of chains.....	84	7	21	24	32
Units operated by local chains.....	243	-----	64	74	105
Units operated by sectional chains.....	429	112	195	94	28
Units operated by national chains.....	221	173	37	6	5
Operating expenses, total.....	\$23,833,097	\$7,729,755	\$10,112,219	\$2,826,450	\$3,164,673
Per \$100 of sales.....	26.95	22.57	30.32	29.11	28.46
Pay roll, total.....	\$8,778,960	\$2,715,925	\$3,680,255	\$1,054,109	\$1,328,671
Per \$100 of sales.....	9.93	7.93	11.03	10.86	11.95
Other store operating expenses, including rent.....	\$15,054,137	\$5,013,830	\$6,431,964	\$1,772,341	\$1,836,002
Per \$100 of sales.....	17.02	14.64	19.29	18.25	16.51
Rent in 881 leased premises, per \$100 of sales in such leased premises (included in figures on above line).....	7.12	6.43	7.37	9.13	6.66
Stocks on hand, at end of year, at cost.....	\$16,482,467	\$4,034,674	\$8,141,409	\$2,096,019	\$2,210,365
EMPLOYMENT DATA					
Full-time employees, total.....	4,485	1,407	1,837	565	676
Men.....	3,962	1,305	1,543	534	580
Women.....	523	102	294	31	96
Total pay roll.....	\$8,500,058	\$2,607,038	\$3,582,949	\$1,023,454	\$1,286,617
Part-time employees, total.....	972	475	300	114	83
Men.....	790	340	265	108	77
Women.....	182	135	35	6	6
Total pay roll.....	\$278,902	\$108,887	\$97,306	\$30,655	\$42,054

TABLE 5B.—OPERATING EXPENSES<sup>1</sup> CLASSIFIED BY SIZE OF CHAIN—MEN'S CLOTHING AND FURNISHINGS CHAINS

	Totals, all chains	CHAINS OF		
		More than 10 units	6 to 10 units	Less than 6 units
Net sales (1929).....	\$110,571,557	\$47,329,207	\$31,000,929	\$32,241,421
Number of chains.....	87	17	30	40
Units operated by local chains.....	376	94	130	152
Units operated by sectional chains.....	290	181	86	23
Units operated by national chains.....	35	31	-----	4
Operating expenses, total.....	\$35,211,959	\$15,700,508	\$9,823,927	\$9,687,524
Per \$100 of sales.....	31.84	33.17	31.69	30.04
Pay roll, total.....	\$14,577,792	\$6,185,502	\$4,209,637	\$4,182,653
Per \$100 of sales.....	13.18	13.07	13.58	12.97
Other store operating expenses, including rent.....	\$20,634,167	\$9,515,006	\$5,614,290	\$5,504,871
Per \$100 of sales.....	18.66	20.10	18.11	17.807
Rent in 684 leased premises, per \$100 of sales in such leased premises (included in figures on above line).....	8.03	9.85	8.00	5.43
Stocks on hand, end of year, at cost.....	\$30,572,048	\$11,546,424	\$9,349,195	\$9,676,429
EMPLOYMENT DATA				
Full-time employees, total.....	7,146	2,840	2,124	2,182
Men.....	5,746	2,538	1,685	1,523
Women.....	1,400	302	439	659
Total pay roll.....	\$14,295,574	\$6,142,635	\$4,133,619	\$4,019,320
Part-time employees, total.....	838	203	246	389
Men.....	724	166	220	338
Women.....	114	37	26	51
Total pay roll.....	\$282,218	\$42,867	\$76,018	\$163,333

<sup>1</sup> The computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

TABLE 5C.—OPERATING EXPENSES<sup>1</sup> CLASSIFIED BY SIZE OF CHAIN—MEN'S FURNISHINGS CHAINS

	Totals, all chains	CHAINS OF			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
Net sales (1929).....	\$23, 588, 439	\$6, 819, 827	\$7, 693, 587	\$4, 022, 438	\$5, 052, 687
Number of chains.....	49	3	9	11	26
Units operated by local chains.....	260	106	60	94	
Units operated by sectional chains.....	104	35	29	19	21
Units operated by national chains.....	116	93	23		
Operating expenses, total.....	\$7, 420, 394	\$2, 068, 542	\$2, 489, 453	\$1, 244, 110	\$1, 618, 289
Per \$100 of sales.....	31.46	30.33	32.36	30.93	32.03
Pay roll, total.....	\$2, 560, 525	\$659, 244	\$818, 971	\$456, 298	\$626, 012
Per \$100 of sales.....	10.86	9.67	10.65	11.34	12.39
Other store operating expenses, including rent.....	\$4, 859, 869	\$1, 409, 298	\$1, 670, 482	\$787, 812	\$992, 277
Per \$100 of sales.....	20.60	20.66	21.71	19.59	19.64
Rent in 477 leased premises, per \$100 of sales in such leased premises (included in figures on above line).....	13.30	12.33	14.69	12.33	13.26
Stocks on hand, end of year, at cost.....	\$4, 743, 168	\$1, 041, 337	\$1, 624, 087	\$876, 423	\$1, 201, 321
EMPLOYMENT DATA					
Full-time employees, total.....	1, 268	346	406	226	290
Men.....	1, 218	344	396	215	263
Women.....	50	2	10	11	27
Total pay roll.....	\$2, 505, 971	\$656, 793	\$802, 915	\$444, 198	\$602, 065
Part-time employees, total.....	196	9	67	57	63
Men.....	186	9	64	52	61
Women.....	10		3	5	2
Total pay roll.....	\$54, 554	\$2, 451	\$16, 056	\$12, 100	\$23, 947

TABLE 5D.—OPERATING EXPENSES<sup>1</sup> CLASSIFIED BY SIZE OF CHAIN—MEN'S HAT CHAINS

	Totals, all chains	CHAINS OF			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
Net sales (1929).....	\$29, 293, 367	\$20, 213, 582	\$4, 331, 643	\$1, 766, 174	\$2, 981, 968
Number of chains.....	37	8	7	8	14
Units operated by local chains.....	133		42	35	56
Units operated by sectional chains.....	201	88	74	25	14
Units operated by national chains.....	358	358			
Operating expenses, total.....	\$10, 449, 655	\$7, 082, 087	\$1, 595, 402	\$717, 803	\$1, 054, 363
Per \$100 of sales.....	35.67	35.04	36.83	40.64	35.36
Pay roll, total.....	\$3, 182, 444	\$2, 169, 214	\$447, 850	\$227, 088	\$338, 292
Per \$100 of sales.....	10.86	10.73	10.34	12.86	11.35
Other store operating expenses, including rent.....	\$7, 267, 211	\$4, 912, 873	\$1, 147, 552	\$490, 715	\$716, 071
Per \$100 of sales.....	24.81	24.30	26.49	27.78	24.01
Rent in 679 leased premises, per \$100 of sales in such leased premises (included in figures on above line).....	16.23	15.91	16.78	19.09	15.93
Stocks on hand, end of year, at cost.....	\$5, 430, 674	\$3, 722, 900	\$701, 661	\$350, 157	\$655, 956
EMPLOYMENT DATA					
Full-time employees, total.....	1, 460	945	227	116	172
Men.....	1, 416	913	227	116	160
Women.....	44	32			12
Total pay roll.....	\$2, 905, 645	\$1, 990, 400	\$370, 312	\$221, 422	\$323, 511
Part-time employees, total.....	976	697	209	19	51
Men.....	973	696	209	19	49
Women.....	3	1			2
Total pay roll.....	\$276, 799	\$178, 814	\$77, 538	\$5, 666	\$14, 781

<sup>1</sup> The computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

TABLE 5E.—OPERATING EXPENSES<sup>1</sup> CLASSIFIED BY SIZE OF CHAINS—TAILORING CHAINS

	Totals, all chains	CHAINS OF		
		More than 10 units	6 to 10 units	Less than 6 units
Net sales (1929).....	\$19, 073, 534	\$11, 670, 626	\$2, 437, 160	\$4, 965, 748
Number of chains.....	29	7	7	15
Units operated by local chains.....	72	-----	22	50
Units operated by sectional chains.....	136	98	25	13
Units operated by national chains.....	80	64	10	6
Operating expenses, total.....	\$4, 995, 964	\$2, 511, 450	\$633, 128	\$1, 851, 386
Per \$100 of sales.....	26. 19	21. 52	25. 98	37. 28
Pay roll, total.....	\$2, 301, 766	\$1, 244, 630	\$240, 741	\$816, 495
Per \$100 of sales.....	12. 07	10. 66	9. 88	16. 44
Other store operating expenses, including rent.....	\$2, 694, 198	\$1, 266, 920	\$392, 387	\$1, 034, 891
Per \$100 of sales.....	14. 12	10. 86	16. 10	20. 84
Rent in 263 leased premises, per \$100 of sales in such leased premises (included in figures on above line).....	6. 80	5. 10	8. 06	9. 18
Stocks on hand, end of year, at cost.....	\$1, 063, 558	\$171, 912	\$252, 055	\$639, 591
EMPLOYMENT DATA				
Full-time employees, total.....	1, 145	693	121	331
Men.....	990	576	113	301
Women.....	155	117	8	30
Total pay roll.....	\$2, 205, 002	\$1, 209, 757	\$233, 369	\$761, 876
Part-time employees, total.....	206	57	22	127
Men.....	203	57	19	127
Women.....	3	-----	3	-----
Total pay roll.....	\$96, 764	\$34, 773	\$7, 372	\$54, 619

<sup>1</sup>The computation of expenses includes no return on capital invested in merchandise fixtures, of accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

TABLE 6.—SALES BY COMMODITIES—MEN'S WEAR CHAINS

	Men's clothing chains	Men's clothing and furnishings chains	Men's furnishings chains	Men's hat chains
Net sales (1929).....	\$92, 878, 819	\$110, 571, 557	\$23, 588, 439	\$29, 293, 367
Less amount which can not be broken down into commodities.....	1 29, 911, 312	43, 450, 652	14, 747, 119	15, 097, 892
Sales further analyzed.....	62, 967, 507	67, 120, 905	8, 841, 320	14, 195, 475
Commodities.....	Per cent 100. 00	Per cent 100. 00	Per cent 100. 00	Per cent 100. 00
Suits.....	75. 55	42. 24	-----	-----
Overcoats.....	19. 28	16. 50	-----	-----
Hats and caps.....	1. 10	4. 90	3. 91	90. 24
Furnishings.....	-----	24. 64	89. 12	8. 69
All other men's clothing.....	2. 23	4. 79	5. 85	1. 04
Custom tailoring.....	1. 78	. 35	-----	-----
Women's apparel, millinery, and accessories.....	-----	. 22	. 13	-----
Leather goods and luggage.....	. 06	. 42	-----	-----
Shoes and other footwear.....	-----	4. 24	. 24	-----
Sporting goods.....	-----	. 81	. 75	-----
Miscellaneous.....	-----	. 89	-----	. 03

<sup>1</sup> Includes also 3 small wholesale units not further analyzed.

TABLE 7.—CHAIN UNITS CLASSIFIED BY DATE OF ESTABLISHMENT, GEOGRAPHIC DIVISIONS, AND SIZE OF CHAINS—MEN'S WEAR CHAINS

## A. DATE OF ESTABLISHMENT

	Per cent of total units	Total units, all men's wear chains	UNITS IN—				
			Men's clothing chains	Men's clothing and furnishings chains	Men's furnishings chains	Men's hat chains	Tailoring chains
Totals, all units.....	100.00	3,054	893	701	480	692	288
All units established—							
In 1929.....	12.84	392	175	98	86	17	16
1925 to 1928.....	29.37	897	381	194	167	72	83
Previous to 1925.....	57.79	1,765	337	409	227	603	189

## B. UNITS ANALYZED BY GEOGRAPHIC DIVISIONS

[For dollars of sales see Table 2]

GEOGRAPHIC DIVISIONS							
UNITED STATES, totals.....	100.00	3,054	893	701	480	692	288
New England.....	8.81	269	103	66	27	62	11
Middle Atlantic.....	36.84	1,125	331	188	174	364	68
East North Central.....	27.15	829	253	200	149	131	96
West North Central.....	7.50	229	61	76	52	25	15
South Atlantic.....	5.14	157	71	15	17	24	30
East South Central.....	2.75	84	29	8	15	17	15
West South Central.....	3.99	122	14	53	10	19	26
Mountain.....	1.21	37	12	13	2	6	4
Pacific.....	6.61	202	19	82	34	44	23

## C. BY SIZE OF CHAINS

Totals, all men's wear chains.....	100.00	3,054	893	701	480	692	288
Chains having—							
More than 25 units.....	34.12	1,042	285	93	128	446	90
11 to 25 units.....	27.83	850	277	213	158	130	72
6 to 10 units.....	20.24	618	193	216	86	60	63
Less than 6 units.....	17.81	544	138	179	108	56	63

TABLE 8.—SALES CLASSIFIED BY SIZE OF CITY IN EACH GEOGRAPHIC DIVISION—MEN'S WEAR CHAINS

GEOGRAPHIC DIVISION AND SIZE OF CITY	Per cent of total sales	Totals, all men's wear chains	SALES OF—				
			Men's clothing chains	Men's clothing and furnishings chains	Men's furnishings chains	Men's hat chains	Tailoring chains
UNITED STATES, total.....	100.00	\$270,959,214	\$88,432,317	\$110,571,557	\$23,588,439	\$29,293,367	\$19,073,534
All cities with population of—							
More than 100,000.....	85.05	230,450,626	75,630,963	89,348,371	21,386,179	27,045,924	17,039,189
30,000 to 100,000.....	9.94	26,922,368	10,260,374	10,890,670	1,878,578	2,170,175	1,722,571
10,000 to 30,000.....	3.14	8,516,482	1,673,173	6,218,280	284,958	36,147	303,924
Less than 10,000.....	1.87	5,069,738	867,807	4,114,236	38,724	41,121	7,850
NEW ENGLAND.....	100.00	18,787,307	4,994,902	9,781,551	763,316	2,280,342	967,196
Cities having population of—							
More than 100,000.....	74.80	14,052,486	3,677,944	7,219,052	637,391	1,712,195	805,904
30,000 to 100,000.....	21.43	4,026,926	1,068,856	2,109,187	119,444	568,147	161,292
10,000 to 30,000.....	3.16	593,642	221,503	370,658	1,481	-----	-----
Less than 10,000.....	.61	114,253	26,599	82,654	5,000	-----	-----

TABLE 8.—SALES CLASSIFIED BY SIZE OF CITY IN EACH GEOGRAPHIC DIVISION—  
MEN'S WEAR CHAINS—Continued

GEOGRAPHIC DIVISION AND SIZE OF CITY	Per cent of total sales	Totals, all men's wear chains	SALES OF—				
			Men's clothing chains	Men's clothing and furnish- ings chains	Men's furn- ishings chains	Men's hat chains	Tailoring chains
MIDDLE ATLANTIC.....	100.00	\$110,071,776	\$28,958,462	\$50,700,719	\$9,903,277	\$15,953,902	\$4,555,416
Cities having popula- tion of—							
More than 100,000...	89.78	98,824,191	24,619,579	46,829,889	8,553,820	14,795,116	3,995,787
30,000 to 100,000...	7.89	8,687,608	3,743,186	2,172,870	1,122,820	1,119,614	529,118
10,000 to 30,000....	1.81	1,994,449	505,246	1,236,055	222,637	-----	30,511
Less than 10,000....	.52	565,528	60,451	461,905	4,000	39,172	-----
EAST NORTH CENTRAL...	100.00	81,985,929	33,953,740	28,459,308	7,075,021	5,376,668	7,121,192
Cities having popula- tion of—							
More than 100,000...	85.75	70,299,623	30,206,365	21,882,395	6,608,070	5,023,328	6,579,465
30,000 to 100,000...	10.16	8,333,492	3,524,702	3,562,382	423,227	315,244	507,937
10,000 to 30,000....	1.87	1,534,566	181,678	1,255,951	27,000	36,147	33,790
Less than 10,000....	2.22	1,818,248	40,995	1,758,580	16,724	1,949	-----
WEST NORTH CENTRAL...	100.00	16,253,803	6,676,451	5,532,189	1,807,685	1,051,422	1,186,056
Cities having popula- tion of—							
More than 100,000...	76.34	12,407,647	5,825,298	2,632,630	1,765,565	1,024,172	1,159,982
30,000 to 100,000...	6.56	1,065,678	314,943	681,686	15,725	27,250	26,074
10,000 to 30,000....	8.26	1,343,540	181,831	1,135,314	26,395	-----	-----
Less than 10,000....	8.84	1,436,938	354,379	1,082,559	-----	-----	-----
SOUTH ATLANTIC.....	100.00	7,588,787	3,365,107	1,370,817	695,503	815,371	1,341,989
Cities having popula- tion of—							
More than 100,000...	73.38	5,568,710	1,971,718	1,187,306	674,003	786,912	948,771
30,000 to 100,000...	19.99	1,516,804	1,018,250	145,179	8,500	28,459	316,416
10,000 to 30,000....	4.80	364,037	287,235	-----	-----	-----	76,802
Less than 10,000....	1.83	139,236	87,904	38,332	13,000	-----	-----
EAST SOUTH CENTRAL...	100.00	3,243,487	1,182,375	388,741	425,719	584,022	66,630
Cities having popula- tion of—							
More than 100,000...	88.20	2,860,735	1,094,100	270,022	420,764	554,039	521,810
30,000 to 100,000...	6.27	203,305	46,934	60,768	4,955	29,983	60,665
10,000 to 30,000....	4.16	134,964	34,525	28,134	-----	-----	72,305
Less than 10,000....	1.37	44,483	6,816	29,817	-----	-----	7,850
WEST SOUTH CENTRAL...	100.00	7,992,871	969,389	4,978,790	537,009	806,202	701,481
Cities having popula- tion of—							
More than 100,000...	65.32	5,221,055	692,257	2,695,691	537,009	806,202	489,896
30,000 to 100,000...	18.36	1,467,388	277,132	1,069,187	-----	-----	121,069
10,000 to 30,000....	13.54	1,082,452	-----	991,936	-----	-----	90,516
Less than 10,000....	2.78	221,976	-----	221,976	-----	-----	-----
MOUNTAIN.....	100.00	2,214,449	500,670	1,152,171	108,571	189,706	263,331
Cities having popula- tion of—							
More than 100,000...	52.96	1,172,691	92,475	557,898	101,126	157,861	263,331
30,000 to 100,000...	6.09	134,996	-----	103,151	-----	31,845	-----
10,000 to 30,000....	18.71	414,213	151,710	255,058	7,445	-----	-----
Less than 10,000....	22.24	492,549	256,485	236,064	-----	-----	-----
PACIFIC.....	100.00	22,820,805	7,831,221	8,207,271	2,272,338	2,235,732	2,274,243
Cities having popula- tion of—							
More than 100,000...	87.83	20,043,488	7,421,227	6,073,188	2,088,431	2,186,099	2,274,243
30,000 to 100,000...	6.51	1,486,171	266,371	986,260	183,907	49,633	-----
10,000 to 30,000....	4.62	1,054,619	109,445	945,174	-----	-----	-----
Less than 10,000....	1.04	236,527	34,178	202,349	-----	-----	-----

## CHAPTER 10.—WOMEN'S-APPAREL CHAINS

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# RETAIL DISTRIBUTION BY WOMEN'S-APPAREL CHAINS

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## INTRODUCTION

Women's-apparel chains have become increasingly a factor in the ready-to-wear field in the last few years, until at the time of the census there were 221 chains operating 2,132 stores, with total sales of \$292,228,825. Of this number 219 are analyzed in this report. The majority are local chains operating in or around some one city, and 113 such local chains do \$64,886,980 of business annually in 711 stores. Sectional chains, of which there are 73, with 597 units, show sales of \$108,601,346, and 16 national chains report sales of \$87,744,325 in 492 stores. Seventeen of the 219 organizations are leased-department chains, operating units on a leased basis in 292 stores, and do a total business of \$21,245,192. The annual sales in these leased ready-to-wear departments average \$72,757 per store.

## DEFINITION OF CHAINS

Not all multiunit organizations are chains. A single-store independent which adds one or two branch stores becomes a local multiunit independent rather than a chain. If a small group of stores is built up around a larger central parent store, and merchandised largely from the stocks of the parent store, it is still not a chain, but merely a local branch system. It becomes a chain only when the number of its branches is increased to the point where it is no longer possible to merchandise them from the parent store, and a separate central merchandising organization is necessary.

This report covers the chains of women's-apparel shops in which ready-to-wear apparel predominates, although other lesser lines are handled. A breakdown of sales by commodities is included in the report. Chains which specialize in accessories other than ready-to-wear are not included, and will be reported separately whenever there are sufficient chains to justify a trade report. The stores covered by the present report are shown in the city reports under the classification known as women's and children's ready-to-wear specialty shops.

Local chains, of which there are 113, are those which operate all or substantially all of their units in and around one city. Sectional chains operate all or substantially all of their units in one main section of the country, such as the Pacific coast, or the New England States, or the Gulf Southwest. There are 73 such chains. National chains are those whose interests are broader than those of any one section, and whose units are located in two or more sections of the country, and often in a majority of the States. There are 16 national chains in the women's-apparel field. Leased-department chains operate their units as departments in stores of other names, usually department stores and women's specialty stores. Although the most numerous of the leased-department chains are in the millinery field, nevertheless there are 17 separate leased-department chains in the apparel field operating 292 units and doing a business of \$21,245,192 per year.

In addition to the leased-department chains, the census report divides the apparel chains into five size-classes according to the number of units operated, and shows for each of these classes the number of chains, the number of units, and the annual sales, divided further into local, sectional, and national chains.

### DIVISIONS IN WHICH THE CHAINS OPERATE

A special study has been made to show territorial coverage, of the various chains in this field. Of the local chains, 82 operate entirely in one of the nine census divisions, and 16 operate in more than one, caused by the fact that these 16 operate in cities whose surrounding territory is in other States.

Of the sectional chains, 23 operate entirely in one census geographic division and 35 operate in more than one division, but never in more than two, again caused by the location of important cities near division lines.

The national chains all operate, of course, in more than one division. As a matter of fact, 4 operate in all divisions, 5 operate in 5 divisions, 3 operate in 4 divisions, and 1 operates in 3 divisions.

A schedule is included in this report showing the number of chains and the number of units operating in each division, in the case of local and sectional chains; and in the case of national chains, showing the number of divisions in which each class of chain operates.

The schedule shows also the divisions in which the leased department chains operate.

### EXPENSES AND EMPLOYMENT

The computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. It makes no allowance for administrative services of proprietors, except at the wage rate of the average full-time employee. Income taxes may have been included in some cases, although every effort was made to exclude them from reported expenses. Expenses do not include, of course, the cost of merchandise sold, nor profit.

The fact that more than one-fifth of the units were opened in 1929 undoubtedly affects the expense rate that is shown for that year.

Operating expense in the stores, with such proportion of central merchandising expense as may be allocated to the stores, is shown to average, for all chains, 29.87 per cent of total sales. The Census Bureau reports this with the important qualification that it is not believed to include all central office expenses, but that it is the best expense figure which can be compiled in view of the wording of the questionnaires which was inadequate when applied to chains.

The 219 chains which operate the 2,092 stores employ the full-time services of 4,708 men and 24,102 women; employ on part time, 329 men and 4,797 women. The full-time pay roll, including commissions paid, is \$33,857,613, and the part-time pay roll is \$1,593,465. The average salary paid to full-time employees of the apparel chains is shown to be \$1,175 per year. Rent is \$18,887,140. The sales of \$282,477,843 require a stock investment at cost of \$27,994,529. Total store-operating expenses of the group are shown to be \$84,388,020, which expense does not include central-office expenses. Central-office expenses are reported by only 46 chains, which do 26 per cent of the total business, but these 46 chains show that the salary expenses of the central organization are 3.4 per cent of such chains' sales. What part of this has been charged to stores' operating expenses was not reported. This per cent varies in the different size classes from 2.61 to 5.72 per cent.

The table headed "Stores' Operating Expenses" shows, on line 5, only the clerk-value of proprietors' services. This is in line with retail census practice. Although in this report the amount is small and might have been disregarded, it is included in the interest of consistency, because in some kinds of business the substitution of proprietors for paid employees (proprietors are not included in the count of employees, nor is their compensation included in reported pay roll) is a substantial element affecting the comparability of expense as between proprietor-

ships and incorporated companies. Since proprietors own their businesses and their compensation is in fact the earnings derived from their ability to manage profitably, rather than their drawing accounts, there is no sound basis for measuring their services as a class. The expense is included only to the extent of their clerk-services, as measured by the average salary paid to full-time employees. Proprietors' services as executives or administrators are not included in expense.

### CENTRAL-OFFICE ADMINISTRATIVE EXPENSE

The central-office administrative expense shown in this report is not complete, and it is not known what part, if any, has been allocated to and included in the operating expenses of the stores. This expense can not be added to the reported total of stores' operating expenses. The 13 proprietors whose drawing accounts are reported are but a part of the 66 proprietors actively engaged.

### CREDIT BUSINESS

Only 80 of the 219 chains report that they extend credit, either on open account or the installment basis, or both. The sales of these 80 chains for the reporting year are \$163,250,233, or 57.8 per cent of the sales of all the chains of which 59 per cent is for cash, and 41 per cent for credit.

Because the women's-apparel classification does not include family clothing stores, the percentage of installment business is relatively small. The great majority of the business of apparel chains is for cash, and 139 chains report that they sell entirely for cash. The total amount of sales for cash in the all-cash chains and the credit chains is \$215,674,725, or 76.6 per cent of *all* sales. The balance of 23.4 per cent is credit business, of which less than 1 per cent is on the installment basis.

Installment credit is extended in the stores of nine chains, who do an aggregate business of \$20,997,771. In these chains only 7.4 per cent of their business is on the installment basis. They do 53.9 per cent of their business on open charge account, and 38.7 per cent for cash.

The percentage of 7.4 per cent reported as the installment business in chains which employ that method of credit is not to be interpreted as 7.4 per cent of the total business of apparel chains. The amount of installment business reported is only 0.55, or about one-half of 1 per cent, of the total business of apparel chains. Most of the installment business in women's apparel is done by family clothing stores and some department stores, neither of which is included in this report.

### SALES BY COMMODITIES

The commodities into which the sales of these chains have been broken down include apparel, millinery, hosiery, furs, underwear, shoes, and other classifications, and the report shows the proportion of each of these commodities to total sales, in each of the size groups. For the group of chains as a whole, the principal commodities in per cent to net sales are:

	Per cent		Per cent
Apparel (coats, suits, dresses) ..	74. 87	Shoes .....	1. 25
Underwear, negligees, and cor- sets .....	6. 81	Handbags and other leather goods .....	. 73
Hosiery .....	3. 97	Children's and infants' wear ...	. 73
Furs .....	3. 70	Cosmetics and toiletries .....	. 43
Millinery .....	3. 00	Other commodities .....	4. 51

In the table headed "Breakdown of Sales by Commodities" some of the headings may not be clear until it is understood that the percentages, except in the second column, are based on varying sales figures rather than upon one fixed

total of sales. In the case of every commodity except coats, suits, and dresses, the per cent of sales is expressed in relation to the total sales of *those chains which sell that commodity*, rather than in relation to the \$282,477,843 of total sales of *all chains*. Some chains may not carry that commodity at all. Therefore, each commodity is expressed in per cent, first to total sales of all chains which sell that commodity, and then in relation to the *apparel* (only) sales of the same chains. The last column in each size-class, therefore, shows the relative importance of each commodity other than apparel, in contrast with the principal commodity.

The census forms on which the chains reports were received did not provide for a breakdown between coats, suits, and dresses. Only a few chains did report these lines separately, and the breakdown is not sufficiently representative to be published.

## STORES' OPERAT

		TOTALS, ALL CHAINS	
		Amount (219 chains)	Per cent to sales
1	NET SALES.....	\$282,477,843	100.00
EXPENSES			
2	Total wage cost (total of employees and proprietors, 34,002).....	35,528,628	12.57
3	Salaries and wages paid full-time employees (total full-time employees, 28,810).	33,857,613	11.98
4	Salaries and wages paid part-time employees (total part-time employees, 5,126).	1,593,465	.56
5	Services of proprietors (computed at same rate as that paid average employee) (total proprietors, 66).	77,550	.03
6	Total rental cost.....	18,918,849	6.70
7	Rent paid for 2,083 leased premises (6.70 per cent of the sales in such leased premises).	18,887,140	6.69
8	Rental value of 9 owned and partly owned premises (at same per cent to sales as that paid for leased premises).	31,709	.01
9	All other expense.....	29,940,543	10.60
10	Total of above expenses.....	84,388,020	
11	Per cent to sales.....		29.87

## SUMMARY OF SALES BY SIZE—CLASSES

		ALL TYPES				
		Number of chains	Number of units	Sales (1929)	Per cent to total sales	Average sales per unit
1	Total.....	219	2,092	\$282,477,843	100.00	\$135,028
2	Chains of 50 units or more.....	4	282	42,675,862	15.1	151,333
3	Chains of 26 to 50 units.....	3	90	7,215,618	2.5	80,174
4	Chains of 11 to 25 units.....	30	498	84,337,986	29.9	169,353
5	Chains of 6 to 10 units.....	70	516	76,489,275	27.1	148,235
6	Chains of less than 6 units.....	95	414	50,513,910	17.9	122,014
7	Leased-department chains.....	17	292	21,245,192	7.5	72,758

<sup>1</sup> One chain in this size class is combined with next size-classification in order to avoid disclosure of individual operations.

## EMPLOYMENT AND

SIZE—CLASSES	NUMBER OF UNITS				CHAINS	EMPLOYEES			
	Leased-dept. chains	Local chains	Sectional chains	National chains		Number	Full time		
					Males		Females	Salaries, wages, and commissions	
1	Total.....	292	711	597	492	219	4,708	24,102	\$33,857,613
2	Chains of 50 units or more.....					4	449	2,356	3,329,615
3	Chains of 26 to 50 units.....		26	40	90	5	115	751	1,043,742
4	Chains of 11 to 25 units.....		132	209	91	28	1,559	8,300	9,899,479
5	Chains of 6 to 10 units.....		250	237	25	69	1,151	6,489	9,526,567
6	Chains of less than 6 units.....		303	111	4	96	1,138	4,316	7,298,789
7	Leased departments.....	292				17	296	1,890	2,759,421

## ING EXPENSES

Chains with 50 and more units (4 chains)	Chains with 26 to 50 units (5 chains)	Chains with 11 to 25 units (28 chains)	Chains with 6 to 10 units (69 chains)	Chains with less than 6 units (96 chains)	Leased-department chains (17 chains)	
\$42, 675, 862	\$11, 188, 395	\$80, 365, 209	\$76, 419, 128	\$50, 584, 057	\$21, 245, 192	1
3, 536, 087	1, 162, 562	10, 464, 251	9, 950, 455	7, 603, 210	2, 812, 063	2
3, 329, 615	1, 043, 742	9, 899, 479	9, 526, 567	7, 298, 789	2, 759, 421	3
201, 772	118, 820	556, 547	409, 788	257, 421	49, 117	4
4, 700	-----	8, 225	14, 100	47, 000	3, 525	5
3, 881, 348	958, 984	5, 288, 603	4, 019, 059	2, 812, 032	1, 958, 823	6
3, 881, 348	958, 984	5, 288, 603	4, 019, 059	2, 780, 323	1, 958, 823	7
-----	-----	-----	-----	31, 709	-----	8
3, 202, 316	583, 422	10, 668, 561	7, 837, 664	5, 230, 982	2, 417, 598	9
10, 619, 751 24. 88	2, 704, 968 24. 18	26, 421, 415 32. 87	21, 807, 178 28. 54	15, 646, 224 30. 93	7, 188, 484 33. 84	10 11

## AND TYPES OF OPERATION

LOCAL CHAINS			SECTIONAL CHAINS			NATIONAL CHAINS			
Number of chains	Number of units	Sales (1929)	Number of chains	Number of units	Sales (1929)	Number of chains	Number of units	Sales (1929)	
113	711	\$64, 886, 980	73	597	\$108, 601, 346	16	492	\$87, 744, 325	1
1	(1)	-----	1	(1)	-----	4	282	42, 675, 862	2
10	158	19, 428, 146	13	249	28, 692, 021	3	90	7, 215, 618	3
33	250	18, 380, 439	33	237	56, 473, 810	5	91	36, 217, 819	4
69	303	27, 078, 395	26	111	23, 435, 515	4	29	1, 635, 026	5
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-----	-----	-----	-----	-----	-----	-----	-----	-----	7

## WAGE FACTS

EMPLOYEES			EXPENSES		STOCK ON HAND END OF YEAR (at cost)	NET SALES (1929)	
Part time			Rent	All other			
Males	Fe-males	Pay roll					
329	4, 797	\$1, 593, 465	\$18, 887, 140	\$29, 972, 252	\$27, 994, 529	\$282, 477, 843	1
6	1, 147	201, 772	3, 881, 348	3, 202, 316	4, 114, 392	42, 675, 862	2
-----	385	118, 820	958, 984	583, 422	696, 017	11, 188, 395	3
154	1, 444	556, 547	5, 288, 603	10, 668, 561	7, 001, 062	80, 365, 209	4
81	892	409, 788	4, 019, 059	7, 837, 664	7, 613, 768	76, 419, 128	5
86	735	257, 421	2, 780, 323	5, 262, 691	6, 495, 027	50, 584, 057	6
2	194	49, 117	1, 958, 823	2, 417, 598	2, 074, 263	21, 245, 192	7

## BREAKDOWN OF SALES, BY CHAIN STORES, BY COMMODITIES

COMMODITY	TOTALS, ALL CHAINS			CHAINS OF 50 UNITS OR MORE			CHAINS OF 25 TO 50 UNITS		
	Net sales	Per cent of each commodity sold in chain stores which report that they sell such commodity—		Net sales	Per cent of each commodity sold in stores which report that they sell such commodity—		Net sales	Per cent of each commodity sold in stores which report that they sell such commodity—	
		To total sales of all stores	To total sales of chain stores selling such commodity		To total sales of all stores	To total sales of chain stores selling such commodity		To total sales of all stores	To total sales of chain stores selling such commodity
Total sales, all commodities.....	\$282,477,843	100.00	74.87	100.00	\$42,675,862	58.45	100.00	\$11,188,395	88.08
Apparel (coats, suits, and dresses).....	211,477,688	74.87	12.04	100.00	24,941,706	58.45	100.00	9,916,674	88.08
Underwear, negligees, corsets.....	19,249,237	6.81	6.90	19.16	8,800,410	20.62	35.24	173,712	3.72
Hosiery.....	11,212,263	3.97	6.66	10.82	4,932,504	11.56	19.78	466,410	7.85
Furs and fur garments.....	10,444,189	3.70	7.52	9.51	1,153,233	16.42	25.08	209,834	5.99
Millinery.....	8,482,487	3.00	4.71	11.28	3,281,384	9.20	13.16	40,612	.97
Other apparel.....	8,013,871	2.84	2.38	9.79				381,153	9.08
Shoes.....	3,540,163	1.25	2.73	7.22					
Hand bags and other leather goods.....	2,063,329	.73	2.18	3.54					
Children's and infants' wear.....	2,033,418	.73	2.73	3.89	137,513	1.96	2.99		
Cosmetics, toilet articles, and preparations.....	1,223,918	.43	1.86	3.24					
Dry goods and notions.....	1,090,647	.39	1.94	2.93					
Gifts and novelties.....	869,643	.31	1.70	2.93					
Costume jewelry.....	598,588	.21	22.09	51.26					
Custom tailoring.....	548,614	.19	1.56	2.33					
Luggage.....	105,383	.04	3.17	4.36					
Service charged to customers.....	676,561	.24							
Miscellaneous merchandise.....	1,445,131	.51							
Can not classify.....	(619,337)	(.22)			1 (570,888)				

<sup>1</sup> Over-run, due to some breakdowns being reported on basis of gross sales instead of net sales.

BREAKDOWN OF SALES, BY CHAIN STORES, BY COMMODITIES—Continued

COMMODITY	CHAINS OF 11 TO 25 UNITS			CHAINS OF 6 TO 10 UNITS			CHAINS OF LESS THAN 6 UNITS			LEASED DEPARTMENT CHAINS		
	Net sales	Per cent of each commodity sold in stores which report that they sell such commodity—		Net sales	Per cent of each commodity sold in stores which report that they sell such commodity—		Net sales	Per cent of each commodity sold in stores which report that they sell such commodity—		Net sales	Per cent of each commodity sold in stores which report that they sell such commodity—	
		To total sales of chains selling such commodity	To apparel sales of chains selling such commodity		To total sales of chains selling such commodity	To apparel sales of chains selling such commodity		To total sales of chains selling such commodity	To apparel sales of chains selling such commodity		To total sales of chains selling such commodity	To apparel sales of chains selling such commodity
Total sales, all commodities.....	\$80,365,209			\$76,419,128			\$50,584,057			\$21,245,192		
Apparel (coats, suits, and dresses).....	63,644,345	79.19	100.00	55,472,054	72.59	100.00	38,690,093	76.49	100.00	18,812,816	88.55	100.00
Underwear, negligees, corsets.....	3,091,766	7.20	10.55	5,786,591	14.32	24.82	1,368,844	6.14	10.04	27,914	.49	.61
Hosiery.....	1,957,811	4.33	6.25	2,542,694	6.35	10.86	1,305,227	5.27	8.23	7,617	.20	.24
Furs and fur garments.....	3,030,898	4.98	6.42	3,449,111	6.74	10.70	2,157,114	9.00	12.90	1,597,232	13.15	15.79
Millinery.....	3,382,131	7.68	11.06	1,485,415	5.30	9.47	1,993,539	8.49	13.10	427,257	7.19	9.07
Other apparel.....	708,551	3.44	4.96	2,048,731	5.11	8.75	1,461,304	7.90	11.69	132,748	3.41	4.21
Shoes.....	1,798,578	5.54	7.32	1,413,506	4.46	8.00	323,839	3.80	6.38	4,240	.21	.25
Hand bags and other leather goods.....	1,723,942	1.73	2.38	797,190	3.10	5.82	538,974	3.10	4.30	3,223	.16	.19
Children's and infants' wear.....	285,988	.93	1.16	744,549	2.72	4.90	748,262	6.60	11.80	167,106	2.94	3.63
Cosmetics, toilet articles, and preparations.....	387,657	3.62	4.15	575,470	1.99	3.54	262,791	1.80	2.10			
Dry goods and notions.....	344,632	.97	1.15	470,840	2.21	4.27	275,175	14.90	21.50			
Gifts and novelties.....	131,444	.58	.73	626,069	2.94	5.76	112,130	8.20	12.00			
Costume jewelry.....	113,269	.58	.91	175,922	.96	2.02	309,397	1.70	2.20			
Custom tailoring.....							548,614	22.50	51.20			
Luggage.....	71,067	.66	.76	34,316	.68	.83						
Service charged to customers.....				623,552	2.02	3.28	53,009	.43	.53			
Miscellaneous merchandise.....	91,482	.44	.67	933,804	8.93	12.29	355,017	2.85	3.40	64,878	2.78	3.65
Can not classify.....	631,648	.79	.99	1(760,686)			80,428	.16	.21	161		

1 Over-run, due to some breakdowns being reported on basis of gross sales instead of net sales.

## CREDIT—WOMEN'S APPAREL CHAINS

CREDIT SALES—open account and instalment.....	\$66, 803, 118
Net sales of 80 chains reporting open-account and instalment-credit accounts (57.8 per cent of the total sales of all chains)....	163, 250, 233
Per cent (of the 80 reporting chains sales) on credit.....	40. 92
Per cent (of the 80 reporting chains sales) for cash.....	59. 08
INSTALMENT-CREDIT SALES (included also in credit sales above) ...	\$1, 549, 581
Net sales of 9 chains reporting instalment-credit.....	20, 997, 771
Open-account credit in chains reporting instalment-credit.....	11, 290, 589
Sales for cash in chains reporting instalment-credit.....	8, 157, 601
Per cent (of the 9 reporting chains sales) on instalment basis.....	7. 37
Per cent (of the 9 reporting chains sales) on open account.....	53. 90
Per cent (of the 9 reporting chains sales) for cash.....	38. 73

## CENTRAL-OFFICE ADMINISTRATIVE EXPENSE

Central-office administrative expense of 46 chains.....	\$2, 522, 592
Net sales of chains reporting this expense.....	74, 063, 592
Per cent administrative expense to net sales (this per cent varies in the different size-classes from 2.61 to 5.72 per cent) ..	3. 4
Salaries of principal officers of corporations (actively engaged in business).....	\$1, 077, 533
Per cent to sales.....	1. 45
Salaries of central office employees (clerks, stenographers, book-keepers, etc.).....	\$1, 300, 746
Per cent to sales.....	1. 76
Salaries of 13 proprietors engaged in administrative service (less the amount included in stores operating expense).....	\$144, 313
Per cent to sales.....	. 19

## UNIT GROWTH OF WOMEN'S READY-TO-WEAR CHAINS

SIZE-CLASS	Number of units in each size-class (end of 1929)	Number of new units added in 1929 (total)	New units of old chains (added in 1929)	Units of new chains opened in 1929	Per cent of new units in 1929
Totals .....	2,092	473	247	226	22.6
Chains of 50 units or more.....	282	9	9	.....	3.2
Chains of 26 to 50 units.....	156	53	13	40	34.0
Chains of 11 to 25 units.....	432	119	53	66	27.5
Chains of 6 to 10 units.....	512	157	68	89	30.7
Chains of less than 6 units.....	418	98	67	31	23.4
Leased-department chains.....	292	37	37	.....	12.7

## TERRITORY COVERED BY WOMEN'S APPAREL CHAINS

## 1.—CHAINS OPERATING ENTIRELY WITHIN ONE CENSUS DIVISION

DIVISIONS.....	1	2	3	4	5	6	7	8	9
Local chains.....	5	27	25	6	3	0	5	0	11
Units operated.....	30	220	169	27	19	0	42	0	65
15 chains with 41 units unclassified here									
Sectional chains.....	3	3	4	4	2	0	2	1	4
Units operated.....	16	21	34	23	12	0	8	13	16
15 chains with 133 units unclassified here									

## 2.—CHAINS OPERATING IN MORE THAN ONE CENSUS DIVISION

DIVISIONS.....	1	2	3	4	5	6	7	8	9	Chains	Units
Local chains.....	X	X								5	22
		X	X							2	18
		X		X						2	14
			X	X						4	30
			X		X					1	6
				X						1	4
							X			1	4
							X	X		1	4
Sectional chains.....	X	X								7	58
	X		X							1	7
		X	X							10	77
		X			X					3	13
		X				X				1	8
			X	X	X					9	118
			X		X					1	12
					X		X			1	4
					X			X		2	24
National chains.....	X	X	X	X	X	X	X	X	X	4	282
			X	X	X	X	X			1	24
		X	X	X						1	26
	X	X	X	X	X					2	25
		X	X	X	X					1	32
	X	X	X	X	X					1	15
	X	X	X	X					X	1	20
	X	X	X	X	X	X				2	48
3 national chains with 21 units unclassified here											

## 3.—LEASED-DEPARTMENT CHAINS

DIVISIONS.....	2	3	9	1-2	2-3	2-5	3-4	1-2-3-4	2-3-4-5	2-5-6-7	3-4-5-7-8	In all divisions
Number of leased units.....	5	6	7	5	5	4	11	41	16	8	48	136
Number of chains*.....	1	1	1	1	1	1	2	1	3	1	2	2

\* The two chains in the last column operate in all 9 divisions.

## CHAPTER 11.—SHOE CHAINS

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# RETAIL DISTRIBUTION BY SHOE-STORE CHAINS

## INTRODUCTION

This report deals with the operation of shoe stores by chains, of which there are 320 organizations in the United States operating 6,099 stores, with annual sales of \$369,149,760. The chain stores constitute about one-fourth of the total number of shoe stores, and their sales constitute about 46 per cent of total shoe-store sales, but not of total shoe sales, for shoes are also sold in other stores than shoe stores.

There are in the United States 24,259 shoe stores, doing an aggregate annual business of \$806,828,989. This includes the chain stores and independents. Of these, 21,191 are family shoe stores, with sales of \$614,640,960; 1,666 are women's shoe stores with sales of \$130,680,659; and the balance are men's shoe stores. In comparison with these figures, there are 4,744 chain units of family shoe stores, with sales of \$265,344,857, or 43 per cent of total sales; there are 850 chain units of women's shoe stores, with sales of \$78,294,199, or 62.5 per cent of total sales; and there are 505 chain units of men's shoe stores, with sales of \$25,510,704, a ratio of chain store volume to total men's store volume of 43.5 per cent. These ratios differ widely in different sections of the country, as is shown in this report. (Table 4.)

The average annual sales of chain shoe stores is reported to be \$60,526, while that of independent stores is \$23,548. Chains operating in large cities show the highest sales per store, averaging \$103,008, while chains in cities of less than 25,000 population show the smallest sales per chain unit, averaging \$35,545. Chains operating leased shoe departments in apparel and department stores show average sales per unit of \$50,144. Chains of stores operated directly by shoe manufacturers for the sale of their own products, of which there are 9 chains with 375 units, show average sales per store of \$79,838. (Table 8.)

## EMPLOYEES AND PAY ROLL

The chain stores employ 24,099 full-time employees at an annual salary cost of \$38,168,902, and 9,498 part-time employees, the total pay roll for both aggregating \$40,736,273 or \$11.03 per \$100 of sales. The average annual salary of full-time employees is \$1,584. (Table 5.) Comparable figures for independent stores are not yet available.

## OPERATING EXPENSES

In addition to salaries, rent is the next most important item of expense. All but 49 of the 6,099 chain stores are in leased premises, for which the annual rent is \$8.75 per \$100 of sales in these premises. Other operating expenses include advertising, heat and light, supplies, delivery, depreciation and interest, telephone and transportation. Exclusive of any interest return on capital invested in the business, and exclusive of the cost of the merchandise sold, total operating expenses of the 6,099 chain stores aggregate \$113,700,090, or 30.8 per cent of

sales. (Table 5.) Stocks on hand at the end of the year were valued at \$83,077,619 at cost. On the basis of the closing stock only, at retail values, the indicated turnover is approximately 2.8 times. This is a somewhat better rate of stock turn than is obtained by the average shoe store, and below that obtained by well managed independent stores. It should be noted, however, that more than one-sixth of all the chain shoe stores were opened during the reporting year (Table 3), and their sales include less than a full year's business. Adjustment for this factor would make the stock turn about three times, and would also have some bearing upon the indicated expense rate of 30.8 per cent.

Just 60 per cent of all the chain shoe stores are located in the two geographic divisions of which New York and Chicago are the central cities. The Chicago district shows the largest percentage of growth in the number of new units opened, with the Pacific coast lowest in that regard.

### SIZE OF CITY INFLUENCES EXPENSES

In nearly every kind of retail business, the size of the city in which units are operated has a direct effect upon operating expenses, both in dollars and in per cent to sales. In this report will be found a table showing the result of a study of comparable expenses of 17 large national shoe chains, 113 chains operating in and around large cities of more than 100,000 population, 6 chains operating in intermediate cities and 20 chains operating in smaller cities and towns. (See Table 6.) In addition, a comparison was made between 15 strictly local chains in small cities and 62 strictly local chains in large cities. (See Table 7.)

The 15 local chains operate in cities of less than 25,000 population, and in towns. Of these chains, 5 pay an average rent of 2.94 per cent, 7 pay 5.01 per cent, and 3 pay more than 6 per cent. The 12 chains which operate less than 6 units each pay an average rent of 4.78 per cent, whereas 3 chains with 6 to 10 units report an average rent of 4.06 per cent. Pay-roll cost is 10.99 and 10.58 per cent, respectively. Total operating expenses of the 15 smaller-city chains average 23.05 per cent of sales.

In the case of local chains operating in large cities, 42 chains operate on an average rental cost of 7.74 per cent, 16 pay 7.73 per cent, and 4 pay 9.04 per cent of sales. The pay-roll cost for the same chains is 12.51, 12.95, and 9.39 per cent, respectively, an average of 11.81 per cent. Total operating expenses of the 62 large-city local chains average 29.96 per cent of sales.

The comparison of expenses between the large-city local chains and the smaller-city locals is significant of the difference in operating expenses between cities of different size. It is typical that the larger the city, the greater is the cost of rent, taxes, salaries, advertising, and nearly all expenses, and unless the sales volume per store is correspondingly greater the result is bound to be a higher operating cost in relation to sales.

To verify the facts indicated by the study just described, 139 chains were found which could be classified in three groups, namely: 113 chains operating entirely in cities with more than 100,000 population, 6 chains operating entirely in cities between 100,000 and 25,000 in population, and 20 chains operating entirely in cities of less than 25,000 population. The expense rate for the three size-of-city classifications is found to be 31.58, 30.79, and 22.89 per cent, respectively. There is very little difference in the expense rate of chains in the matter of number of units operated, or in volume of sales. The only marked difference in expense is on the one factor of size of city.

Of the 17 large national chains, 7 chains pay an average rent of 7.82 per cent, 5 average 10.46 per cent, and 5 average 14.53 per cent. Total pay-roll cost for the same chains is 9.36, 10.55, and 10.84 per cent, respectively. Total operating expenses of the 17 chains average 32.35 per cent of sales. It is this type of chain,

operating in all sizes of cities but mostly in the larger cities, which added the greatest number of new units in 1929, and necessarily the expense rate is affected by the initial expenses incidental to the opening of new stores.

### NET SALES BY SIZE OF CITY

More than 75 per cent of the total sales of all shoe store chains is in cities of more than 100,000 population. Another 15.6 per cent is in cities of 100,000 to 25,000. Only 7.2 per cent of total sales is in cities of 25,000 to 10,000 and only 2 per cent in places of less than 10,000 population. (Table 2.)

### SALES AND EXPENSES, BY PRICE GROUPS

Since many shoe store chains sell at a single fixed price, or within a close range of prices, a study was made of 34 chains which could be classified definitely as to price lines in an effort to determine whether there is any determinable relation between price and operating expenses. Of these 34 chains, 16 operate family shoe stores, 11 operate women's shoe stores, and 7 operate men's shoe stores. The aggregate sales of the 34 chains is \$212,788,555, or 58 per cent of the total sales of all shoe store chains. (Table 9.)

The study indicates that in all three kinds of stores the chains selling in the lower price groups operate at a lower total expense rate and at a lower pay-roll rate. In the family shoe store classification, 4 chains selling shoes at prices over \$8 show average operating expenses of 38.3 per cent of which pay roll is 15.4 per cent of sales. Chains selling shoes at \$4 to \$8 show average operating expenses of 32.2, and 10 chains selling at \$1 to \$6 show average operating expenses of 29.8 per cent, of which pay roll is 9.3 per cent and rent and other expenses total 20.5 per cent.

Of the 11 chains operating 388 women's shoe stores, 3 selling shoes at \$8.50 and above show an average expense rate of 27.5 per cent, of which pay roll is 11.8 per cent. The expense rate of the chains selling at prices below the \$8.50 limit is 27.1 per cent, of which pay roll is 9.8 per cent.

The 4 chains which operate 230 men's stores selling shoes at \$8 to \$15 show an average expense rate of 37.9 per cent, of which pay roll is 12.1 per cent. The 3 chains which operate 143 men's stores selling shoes at \$4.40 to \$8 show an average expense rate of 27.2 per cent, with pay-roll cost of 7.3 per cent.

### CREDIT SALES

There are 71 chains which report that they extend to their customers the convenience of charge accounts. The total sales of these chains is \$69,152,229 or about 19 per cent of the total sales of all shoe store chains.

The sales of these 71 chains are in the proportion of 73.72 per cent cash and 26.28 per cent credit. The total credit business is \$18,173,263. It would appear that only about 5 per cent of the total sales of all shoe store chains is on credit, and that about 95 per cent is for cash. Included in the report is a table further analyzing this credit business by kinds of stores and size of chains. (Table 10.)

### SALES BY COMMODITIES

The sales of family shoe store chains are 91.47 per cent shoes, 6.27 per cent hosiery, 1.89 per cent other merchandise, and the balance service charges. The proportion of men's shoes sold is almost identical with that of women's shoes. Likewise, the total of boys' and youths' shoes is almost identical with that of misses' and children's shoes. The proportions are as follows:

## FAMILY SHOE STORE CHAINS

	Per cent of total sales		Per cent of total sales
Men's shoes.....	38.08	Women's hosiery.....	5.79
Women's shoes.....	39.03	Men's hose.....	.48
Boys' and youths' shoes.....	4.13	Miscellaneous merchandise.....	1.29
Misses' and children's shoes.....	4.27	Findings.....	.60
Infants' shoes.....	.54	Service charges to customers.....	.37
Other footwear.....	5.42		

In women's shoe store chains, 85.61 per cent of total sales is of shoes and other footwear; 12.41 per cent represents the sale of hosiery and the small balance is made up of service charges, findings, and miscellaneous merchandise. Practically the entire business is in women's shoes, amounting to 81.47 per cent, and hosiery.

In men's shoe store chains, the proportion of hose sold is only 2.44 per cent. There is about 3 per cent of other merchandise and service, and the balance of the business is in shoes, of which men's and boys' shoes account for 93 per cent of total sales.

TABLE 1.—CHAINS ANALYZED ACCORDING TO SIZE-CLASSES AND TYPES OF OPERATION—SHOE CHAINS

	ALL TYPES OF CHAINS					LOCAL CHAINS		
	Number of chains	Number of units	Net sales (1929)	Per cent of total sales	Average sales, per unit	Number of chains	Number of units	Net sales (1929)
Total, all shoe store chains.....	320	6,099	\$369,149,760	100.00	\$60,526	186	1,344	\$90,278,748
Total, family shoe store chains	234	4,744	265,344,857	71.88	55,933	148	1,054	68,115,730
Chains of—								
More than 100 units.....	7	2,002	83,858,277	22.72	41,887			
51 to 100 units.....	5	379	28,402,617	7.69	74,941	1	51	} 22,592,774
26 to 50 units.....	13	469	24,482,944	6.63	52,202	1	43	
11 to 25 units.....	32	498	36,084,241	9.78	72,458	19	291	
6 to 10 units.....	56	419	30,885,050	8.37	73,711	41	295	
Less than 6 units.....	97	423	23,774,012	6.44	56,203	86	374	
Leased-department chains.....	17	204	9,531,009	2.58	46,721			
Manufacturer-controlled chains.....	7	350	28,326,707	7.67	80,933			
Total, women's shoe store chains.....	62	850	78,294,199	21.21	92,111	26	204	15,717,455
Chains of—								
More than 25 units.....	7	291	38,641,583	10.47	132,789	1	27	} 7,449,193
11 to 25 units.....	9	120	8,510,752	2.30	70,923	5	66	
6 to 10 units.....	20	145	11,799,770	3.20	81,378	10	69	
Less than 6 units.....	15	66	6,246,415	1.69	94,643	10	42	
Leased-department chains.....	11	228	13,095,679	3.55	57,438			
Total, men's shoe store chains.....	24	505	25,510,704	6.91	50,516	12	86	6,445,563
Leased-department chains.....	3	42	} 2,754,155	.75	41,107			
Manufacturer-controlled chains.....	2	25						
All other chains (regardless of size).....	19	438	22,756,549	6.16	51,956	12	86	6,445,563

	SECTIONAL CHAINS			NATIONAL CHAINS		
	Number of chains	Number of units	Net sales (1929)	Number of chains	Number of units	Net sales (1929)
Totals, all shoe store chains.....	69	1,072	\$68,992,197	25	2,834	\$156,161,265
Total, family shoe store chains.....	45	760	37,306,189	17	2,376	122,055,222
Chains of—						
More than 100 units.....	1	130	} 12,715,523	6	1,872	81,416,333
51 to 100 units.....				4	328	26,088,717
26 to 50 units.....	8	283		4	143	12,445,540
11 to 25 units.....	12	191		1	16	} 2,104,632
6 to 10 units.....	13	107		2	17	
Less than 6 units.....	11	49	2,210,587			
Leased-department chains.....						
Manufacturer-controlled chains.....						
Total, women's shoe store chains.....	21	283	30,452,479	4	135	19,028,586
Chains of—						
More than 25 units.....	3	134	16,633,018	3	130	} 19,028,586
11 to 25 units.....	4	54	4,333,517			
6 to 10 units.....	10	76	6,813,878			
Less than 6 units.....	4	19	2,672,066	1	5	
Leased-department chains.....						
Total, men's shoe store chains.....	3	29	1,233,529	4	323	15,077,457
Leased-department chains.....						
Manufacturer-controlled chains.....						
All other chains (regardless of size).....	3	29	1,233,529	4	323	15,077,457

TABLE 2.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS—SHOE CHAINS

DIVISION AND CLASSIFICATION	All chains	CHAINS CLASSIFIED BY SIZE				
		More than 100 units	50 to 100 units	26 to 50 units	11 to 25 units	Less than 11 units
UNITED STATES						
Total net sales.....	\$369, 149, 760	\$104, 305, 078	\$53, 320, 901	\$70, 887, 767	\$57, 233, 173	\$83, 402, 841
All cities and places of—						
More than 100,000.....	277, 581, 442	60, 780, 196	47, 193, 607	62, 083, 798	43, 724, 761	63, 844, 080
25,000 to 100,000.....	57, 589, 161	26, 888, 787	5, 307, 021	6, 186, 807	7, 764, 491	11, 442, 055
10,000 to 25,000.....	26, 632, 975	14, 079, 057	657, 889	1, 899, 943	4, 222, 170	5, 773, 376
Less than 10,000.....	7, 346, 182	2, 557, 038	162, 384	762, 219	1, 521, 211	2, 343, 330
NEW ENGLAND (Div. 1).....	27, 397, 067	7, 482, 368	2, 316, 857	4, 789, 699	4, 155, 020	8, 653, 123
All cities and places of—						
More than 100,000.....	17, 737, 297	3, 533, 763	2, 103, 451	3, 310, 336	2, 981, 166	5, 808, 581
25,000 to 100,000.....	6, 345, 093	2, 524, 344	135, 899	1, 252, 237	411, 437	2, 021, 176
10,000 to 25,000.....	2, 635, 190	1, 424, 261	31, 411	227, 126	553, 953	398, 439
Less than 10,000.....	679, 487	-----	46, 096	-----	208, 464	424, 927
MIDDLE ATLANTIC (Div. 2).....	138, 595, 395	43, 445, 654	22, 344, 299	29, 888, 889	20, 239, 518	22, 677, 035
All cities and places of—						
More than 100,000.....	109, 977, 710	28, 562, 337	19, 920, 901	26, 692, 058	15, 548, 598	19, 253, 816
25,000 to 100,000.....	16, 302, 437	8, 392, 412	2, 239, 834	1, 925, 831	1, 599, 597	2, 144, 763
10,000 to 25,000.....	9, 777, 756	5, 726, 838	164, 699	824, 510	2, 104, 438	957, 271
Less than 10,000.....	2, 537, 492	764, 067	18, 865	446, 490	986, 885	321, 185
EAST NORTH CENTRAL (Div. 3).....	92, 963, 391	27, 242, 466	12, 636, 966	15, 684, 958	19, 231, 285	18, 167, 716
All cities and places of—						
More than 100,000.....	67, 835, 732	14, 926, 109	11, 130, 000	13, 730, 221	15, 751, 939	12, 297, 463
25,000 to 100,000.....	16, 611, 156	8, 159, 603	1, 347, 547	1, 391, 132	2, 789, 262	2, 923, 612
10,000 to 25,000.....	6, 115, 395	2, 684, 448	159, 419	429, 492	641, 237	2, 200, 799
Less than 10,000.....	2, 401, 108	1, 472, 306	-----	134, 113	48, 847	745, 842
WEST NORTH CENTRAL (Div. 4).....	22, 450, 213	7, 698, 584	3, 167, 222	3, 868, 231	3, 171, 343	4, 544, 833
All cities and places of—						
More than 100,000.....	15, 025, 132	3, 981, 898	2, 797, 649	3, 617, 964	1, 900, 887	2, 726, 734
25,000 to 100,000.....	3, 838, 580	2, 213, 293	319, 586	234, 525	653, 241	417, 635
10,000 to 25,000.....	3, 032, 998	1, 473, 408	42, 164	15, 442	402, 708	1, 099, 276
Less than 10,000.....	553, 503	29, 985	7, 823	-----	214, 507	301, 188
SOUTH ATLANTIC (Div. 5).....	24, 572, 983	9, 652, 742	1, 441, 695	4, 322, 271	2, 397, 345	6, 758, 930
All cities and places of—						
More than 100,000.....	16, 111, 878	4, 304, 666	1, 331, 686	4, 000, 809	1, 234, 239	5, 240, 478
25,000 to 100,000.....	6, 229, 444	3, 614, 222	110, 009	257, 817	1, 027, 058	1, 220, 338
10,000 to 25,000.....	1, 895, 157	1, 545, 627	-----	56, 571	76, 822	216, 137
Less than 10,000.....	336, 504	188, 227	-----	7, 074	59, 226	81, 977
EAST SOUTH CENTRAL (Div. 6).....	11, 600, 070	3, 649, 867	844, 738	3, 293, 647	1, 751, 976	2, 059, 842
All cities and places of—						
More than 100,000.....	8, 780, 693	2, 189, 990	796, 677	3, 145, 825	1, 094, 669	1, 553, 532
25,000 to 100,000.....	1, 786, 378	724, 949	48, 061	130, 905	477, 672	404, 791
10,000 to 25,000.....	907, 479	632, 475	-----	16, 917	179, 635	78, 452
Less than 10,000.....	125, 520	102, 453	-----	-----	-----	23, 067
WEST SOUTH CENTRAL (Div. 7).....	17, 249, 366	4, 551, 995	2, 164, 624	3, 916, 493	616, 087	6, 000, 167
All cities and places of—						
More than 100,000.....	13, 491, 853	2, 856, 109	1, 999, 390	3, 654, 538	483, 257	4, 498, 559
25,000 to 100,000.....	2, 592, 368	1, 138, 216	106, 521	261, 955	132, 830	952, 846
10,000 to 25,000.....	1, 020, 134	557, 670	58, 713	-----	-----	403, 751
Less than 10,000.....	145, 011	-----	-----	-----	-----	145, 011
MOUNTAIN (Div. 8).....	2, 533, 883	453, 547	1, 114, 834	9, 055	3, 282	953, 165
All cities and places of—						
More than 100,000.....	1, 742, 646	370, 709	956, 873	9, 055	-----	406, 009
25,000 to 100,000.....	593, 532	82, 838	157, 961	-----	-----	352, 733
10,000 to 25,000.....	76, 866	-----	-----	-----	-----	76, 866
Less than 10,000.....	120, 839	-----	-----	-----	3, 282	117, 557
PACIFIC COAST (Div. 9).....	31, 787, 392	127, 855	7, 289, 666	5, 114, 524	5, 667, 317	13, 588, 030
All cities and places of—						
More than 100,000.....	26, 878, 501	54, 615	6, 156, 980	3, 877, 992	4, 730, 006	12, 058, 908
25,000 to 100,000.....	3, 290, 173	38, 910	841, 603	732, 105	673, 394	1, 004, 161
10,000 to 25,000.....	1, 172, 000	34, 330	201, 483	329, 885	263, 917	342, 385
Less than 10,000.....	446, 718	-----	89, 600	174, 542	-----	182, 576

TABLE 3.—GEOGRAPHIC LOCATION OF UNITS CLASSIFIED ACCORDING TO DATE OF ESTABLISHMENT—SHOE CHAINS

GEOGRAPHIC DIVISION	Per cent of total sales	Per cent of total units	Total units	DATE OF ESTABLISHMENT			Units unclassified
				1929	1925 to 1928	Prior to 1925	
United States—total units.....	100.0	100.0	6,099	1,049	2,237	2,548	265
New England.....	7.4	7.8	478	81	193	174	30
Middle Atlantic.....	37.5	31.2	1,912	254	542	1,036	80
East North Central.....	25.2	28.8	1,753	358	690	619	86
West North Central.....	6.1	7.9	479	90	218	153	18
South Atlantic.....	6.7	8.0	487	93	205	182	7
East South Central.....	3.1	3.4	206	46	87	62	11
West South Central.....	4.7	5.2	315	71	137	98	9
Mountain.....	.7	.8	48	7	20	19	2
Pacific coast.....	8.6	6.9	421	49	145	205	22

TABLE 4.—RATIO OF SHOE CHAIN SALES TO TOTAL SHOE STORE SALES, BY GEOGRAPHIC DIVISIONS

DIVISION	ALL SHOE STORES				FAMILY SHOE STORES			
	All shoe stores		Chain stores		All shoe stores		Chain stores	
	Number	Net sales	Number	Net sales	Number	Net sales	Number	Net sales
United States—total.....	24,259	\$806,828,989	6,099	\$369,149,760	21,191	\$614,640,960	4,744	\$265,344,857
Ratio.....				45.75				45.17
New England.....	2,346	66,107,876	478	27,397,065	2,126	56,071,572	439	25,009,866
Ratio.....				41.44				44.60
Middle Atlantic.....	7,709	277,754,724	1,912	138,595,395	6,642	195,178,986	1,527	95,601,879
Ratio.....				49.90				48.98
East North Central.....	6,401	199,390,672	1,753	92,963,391	5,791	162,812,815	1,409	71,761,065
Ratio.....				46.62				44.08
West North Central.....	2,455	61,530,834	479	22,450,173	2,208	50,581,648	337	15,043,325
Ratio.....				36.49				29.74
South Atlantic.....	1,590	56,369,523	487	24,572,983	1,314	41,969,874	373	17,847,502
Ratio.....				43.59				42.22
East South Central.....	631	24,070,521	206	11,600,072	507	15,903,604	134	6,494,263
Ratio.....				48.19				40.84
West South Central.....	992	38,974,454	315	17,249,406	750	25,404,612	183	8,816,849
Ratio.....				44.26				34.71
Mountain.....	370	12,457,622	48	2,533,883	334	11,035,471	38	1,991,962
Ratio.....				20.34				18.05
Pacific.....	1,765	70,172,763	421	31,787,392	1,519	55,682,378	304	22,778,146
Ratio.....				45.30				40.91

DIVISION	WOMEN'S AND CHILDREN'S SHOE STORES				MEN'S SHOE STORES			
	All shoe stores		Chain stores		All shoe stores		Chain stores	
	Number	Net sales	Number	Net sales	Number	Net sales	Number	Net sales
United States—total.....	1,666	\$130,680,659	850	\$78,294,199	1,402	\$61,507,370	505	\$25,510,704
Ratio.....				59.91				41.48
New England.....	70	4,345,404	17	1,777,435	150	5,690,900	22	609,764
Ratio.....				40.90				10.71
Middle Atlantic.....	504	52,039,973	201	31,472,135	563	30,535,765	184	11,521,381
Ratio.....				60.48				37.73
East North Central.....	365	27,210,422	244	16,406,040	245	9,367,435	100	4,796,286
Ratio.....				60.29				51.80
West North Central.....	156	8,281,162	110	6,301,821	91	2,668,024	32	1,105,027
Ratio.....				76.10				41.42
South Atlantic.....	179	10,954,932	73	5,145,641	97	3,444,717	41	1,579,840
Ratio.....				46.97				45.86
East South Central.....	74	6,212,053	50	4,213,248	50	1,954,864	22	892,561
Ratio.....				67.82				45.66
West South Central.....	177	10,913,289	103	7,180,113	65	2,656,553	29	1,252,444
Ratio.....				65.79				47.15
Mountain.....	24	900,838	6	262,262	12	521,313	4	279,659
Ratio.....				29.11				53.65
Pacific.....	117	9,822,586	46	5,535,504	129	4,667,799	71	3,473,742
Ratio.....				56.35				74.42

TABLE 5.—EMPLOYMENT, WAGE, AND EXPENSE DATA

SIZE CLASS	Number of chains	Number of units	NUMBER OF EMPLOYEES AND PAY ROLL			
			Full time		Part time	
			Number	Salaries and wages	Number	Salaries and wages
Totals—all shoe store chains.....	320	1 6, 099	24, 099	\$38, 168, 902	9, 498	\$2, 567, 371
Totals—family shoe store chains.....	234	1 4, 744	18, 060	27, 274, 839	7, 103	1, 848, 292
Chains of—						
More than 100 units.....	8	2, 193	5, 698	7, 509, 105	3, 287	606, 546
51 to 100 units.....	6	442	2, 352	3, 829, 574	651	263, 020
26 to 50 units.....	17	612	2, 824	3, 941, 316	441	95, 024
11 to 25 units.....	37	584	2, 735	4, 479, 370	1, 253	359, 816
6 to 10 units.....	59	445	2, 421	4, 150, 309	913	355, 356
Less than 6 units.....	107	468	2, 030	3, 365, 165	558	168, 530
Totals—women's shoe store chains.....	62	1 850	4, 835	8, 480, 446	1, 931	597, 811
Chains of—						
More than 25 units.....	9	426	2, 731	4, 640, 481	1, 134	344, 575
11 to 25 units.....	13	185	799	1, 160, 636	491	158, 427
6 to 10 units.....	23	164	855	1, 693, 769	211	53, 662
Less than 6 units.....	17	75	450	985, 560	95	41, 147
Totals—men's shoe store chains.....	24	1 505	1, 204	2, 413, 617	464	121, 268

SIZE CLASS	Other store operating expenses including rent (see note)	Total store operating expense (per \$100 of sales)	Stocks on hand end of year (at cost)	Net sales (1929)
Totals—all shoe store chains.....	\$72, 963, 817	\$30. 80	\$83, 077, 619	\$369, 149, 760
Totals—family shoe store chains.....	53, 027, 171	30. 96	63, 444, 537	265, 344, 857
Chains of—				
More than 100 units.....	21, 009, 110	31. 04	19, 823, 324	93, 832, 750
51 to 100 units.....	7, 420, 335	28. 99	8, 257, 690	39, 709, 294
26 to 50 units.....	7, 460, 336	33. 58	8, 671, 833	34, 235, 499
11 to 25 units.....	6, 779, 226	30. 20	9, 112, 000	38, 476, 377
6 to 10 units.....	5, 941, 991	32. 17	8, 831, 176	32, 477, 480
Less than 6 units.....	4, 416, 173	29. 87	8, 748, 514	26, 613, 457
Totals—women's shoe store chains.....	14, 309, 034	29. 87	11, 740, 716	78, 294, 199
Chains of—				
More than 25 units.....	7, 968, 148	28. 37	5, 110, 813	45, 658, 746
11 to 25 units.....	2, 552, 284	30. 97	2, 472, 739	12, 499, 232
6 to 10 units.....	2, 338, 210	31. 68	2, 236, 306	12, 898, 587
Less than 6 units.....	1, 450, 392	34. 23	1, 920, 858	7, 237, 634
Total—men's shoe store chains.....	5, 627, 612	32. 00	7, 892, 366	25, 510, 704

<sup>1</sup> Stores in leased premises and annual rent per \$100 of sales in such leased premises were as follows:

	Number of stores in leased premises	Rent per \$100 of sales		Number of stores in leased premises	Rent per \$100 of sales
All shoe store chains.....	6, 050	\$8. 75	Women's shoe store chains.....	840	\$8. 50
Family shoe store chains.....	4, 707	8. 60	Men's shoe store chains.....	503	11. 18

TABLE 6.—OPERATING EXPENSES BY SIZE OF CITY—SHOE CHAINS

[Includes only chains which operate all their units in cities of the same size-class]

	Total, all chains	Chains used in this table	CHAINS OPERATING ALL THEIR UNITS IN CITIES AND PLACES OF—			
			More than 100,000 population	25,000 to 100,000 population	Less than 25,000 population	Large national chains operating in all sizes of cities
Number of chains.....	320	156	113	6	20	17
Number of units.....	6,099	3,896	1,097	26	116	2,657
Net sales (1929).....	\$369,149,760	\$255,880,122	\$112,999,754	\$1,881,640	\$4,123,201	\$136,875,527
Total operating expenses.....	\$113,700,090	\$81,496,819	\$35,686,916	\$579,435	\$944,010	\$44,286,458
Per \$100 of sales.....	30.80	31.85	31.58	30.79	22.89	32.35
Pay roll.....	\$40,736,273	\$27,664,565	\$13,425,845	\$253,474	\$400,854	\$13,584,392
Per \$100 of sales.....	11.03	10.81	11.88	13.47	9.72	9.92
Other store operating expenses, including rent.....	\$72,963,817	\$53,832,254	\$22,261,071	\$325,961	\$543,156	\$30,702,066
Per \$100 of sales.....	19.77	21.04	19.70	17.32	13.17	22.43
Rent in 3,738 leased premises per \$100 of sales in such leased premises (included in line above).....	8.76	9.25	9.09	6.46	4.86	9.50

TABLE 7.—COMPARATIVE EXPENSES OF TWO GROUPS OF STRICTLY LOCAL CHAINS—SHOE CHAINS

[Comparison between local chains operating entirely in large cities and those operating entirely in smaller cities and towns]

	LARGE-CITY LOCALS (Chains operating in cities with population of 100,000 and over)				
	Total, all classes	Per cent of expenses to net sales	11 to 25 units	6 to 10 units	Less than 6 units
Number of chains.....	62	-----	4	16	42
Number of units.....	357	-----	70	107	180
Net sales.....	\$33,094,818	-----	\$9,144,565	\$12,227,266	\$11,722,987
			PER CENT TO SALES		
Total operating expenses.....	9,915,285	29.96	28.47	30.28	30.79
Full-time employees' salaries.....	3,511,419	10.61	7.66	11.70	11.78
Part-time employees' salaries.....	397,473	1.20	1.73	1.25	.73
Other operating expenses (including rent).....	6,006,393	18.15	19.08	17.33	18.28
Rent in leased premises per \$100 of sales in such premises (included in figures on line above).....		1 8.10	9.04	7.73	7.74

1 352 leased premises.

TABLE 7.—COMPARATIVE EXPENSES OF TWO GROUPS OF STRICTLY LOCAL CHAINS—SHOE CHAINS—Continued

	SMALLER CITY LOCALS (Chains operating in cities with population less than 25,000)			
	Total all classes	Per cent of expenses to net sales	6 to 10 units	Less than 6 units
Number of chains.....	15		3	12
Number of units.....	74		22	52
Net sales.....	\$2, 299, 322		\$657, 233	\$1, 642, 089
		PER CENT TO SALES		
Total operating expenses.....	529, 926	23. 05	23. 11	23. 02
Full-time employees' salaries.....	232, 993	10. 14	9. 44	10. 41
Part-time employees' salaries.....	17, 038	. 74	1. 14	. 68
Other operating expenses (including rent).....	279, 895	12. 17	12. 53	12. 03
Rent in leased premises per \$100 of sales in such premises (included in figures on line above).....		<sup>2</sup> 4. 57	4. 06	4. 78

<sup>2</sup> 73 leased premises.

TABLE 8.—SUMMARY OF OPERATING EXPENSE COMPARISONS—SHOE CHAINS

	Chains	Units	Net sales	Average sales per unit	OPERATING EXPENSES	
					Total	Per \$100 of sales
Kind of shoe stores (Table 5).....	320	6, 099	\$369, 149, 760	\$60, 526	\$113, 700, 090	\$30. 80
Family shoe stores.....	234	4, 744	265, 344, 857	55, 933	82, 150, 302	30. 96
Women's shoe stores.....	62	850	78, 294, 199	92, 111	23, 387, 291	29. 87
Men's shoe stores.....	24	505	25, 510, 704	50, 516	8, 162, 497	32. 00
Type of operation (Table 1).....	320	6, 099	369, 149, 760	60, 526	113, 700, 090	30. 80
Local chains.....	186	1, 344	90, 278, 748	67, 172	26, 915, 234	29. 81
Big-city locals <sup>1</sup> .....	62	357	33, 094, 818	92, 703	9, 915, 285	29. 96
Smaller city locals <sup>1</sup> .....	15	74	2, 299, 322	31, 072	529, 926	23. 05
Sectional chains.....	69	1, 072	68, 992, 197	64, 358	20, 080, 276	29. 11
National chains.....	25	2, 834	156, 171, 265	55, 106	50, 860, 365	32. 57
Leased-department chains.....	31	474	23, 768, 440	50, 144	7, 579, 056	31. 89
Manufacturer-controlled chains.....	9	375	29, 939, 110	79, 838	8, 285, 159	27. 61
Size of chain (Table 2).....	320	6, 099	369, 149, 760	60, 526	113, 700, 090	30. 80
More than 100 units.....	10	2, 408	104, 305, 078	43, 316	31, 792, 083	30. 48
51 to 100 units.....	11	763	53, 320, 901	69, 883	16, 174, 830	30. 33
26 to 50 units.....	23	825	70, 887, 767	85, 925	22, 065, 126	31. 13
11 to 25 units.....	56	875	57, 233, 173	65, 409	17, 486, 655	30. 55
Less than 11 units.....	220	1, 228	83, 402, 841	67, 918	26, 181, 396	31. 39
Volume of sales.....	320	6, 099	369, 149, 760	60, 526	113, 700, 090	30. 80
Chains whose sales are—						
More than \$4,750,000.....	19	2, 789	181, 182, 131	64, 963	56, 489, 005	31. 18
\$2,350,000 to \$4,750,000.....	10	457	33, 713, 148	73, 771	9, 474, 005	28. 10
\$1,150,000 to \$2,350,000.....	43	934	70, 046, 999	74, 997	21, 613, 824	30. 86
\$550,000 to \$1,150,000.....	50	660	39, 411, 880	59, 715	12, 370, 532	31. 39
\$250,000 to \$550,000.....	77	624	28, 030, 245	44, 920	8, 791, 786	31. 39
\$100,000 to \$250,000.....	84	465	14, 084, 751	30, 290	4, 141, 004	29. 40
Less than \$100,000.....	37	170	2, 680, 606	15, 768	819, 934	30. 59
Summary of sales and expense information for limited number of chains:						
Chains operating all their units in cities and places of—						
More than 100,000 population.....	113	1, 097	112, 999, 754	103, 008	35, 686, 916	31. 58
25,000 to 100,000 population.....	6	26	1, 881, 640	72, 371	579, 435	30. 79
Less than 25,000 population.....	20	116	4, 123, 201	35, 545	944, 010	22. 89
Large national chains operating in all sizes of cities.....	17	2, 657	136, 875, 527	51, 515	44, 286, 458	32. 35

<sup>1</sup> Partial information, as comparatively few chains operate all their units in cities of the same size-class

TABLE 9.—OPERATING EXPENSES IN RELATION TO PRICE LINES—SHOE CHAINS

[34 chains—net sales \$212,788,555]

	Chains	Units	Net sales (1929)	OPERATING EXPENSES		PAY ROLL		OTHER OPERATING EXPENSES including rent		Rent, included in preceding column <sup>1</sup>
				Total	Per \$100 of sales	Total	Per \$100 of sales	Amount	Per \$100 of sales	
Chains of family shoe stores:										
Prices over \$8.....	4	155	\$23,406,990	\$8,963,609	\$38.3	\$3,600,584	\$15.4	\$5,363,025	\$22.9	\$10.2
Prices from \$4 to \$8....	2	487	29,090,250	9,357,081	32.2	2,868,356	9.9	6,488,725	22.3	8.5
Prices from \$1 to \$6....	10	1,882	97,279,089	28,947,054	29.8	9,007,066	9.3	19,939,988	20.5	9.2
Chains selling women's and children's shoes:										
Prices \$8.50 and over....	3	128	7,175,192	1,976,521	27.5	848,297	11.8	1,128,224	15.7	10.2
Maximum price \$8.50....	8	260	35,669,050	9,655,632	27.1	3,495,120	9.8	6,160,512	17.3	7.7
Men's shoe chains:										
Prices from \$8 to \$15....	4	230	9,928,297	3,760,596	37.9	1,202,813	12.1	2,557,783	25.8	13.2
Prices from \$4.40 to \$8..	3	143	10,239,687	2,783,918	27.2	749,376	7.3	2,034,542	19.9	10.0

<sup>1</sup> This is the rent in 3,260 leased premises per \$100 of sales in such leased premises.

TABLE 10.—CREDIT SALES—SHOE CHAINS

SIZE CLASS	Number of chains reporting credit sales	Total net sales of chains reporting credit	CREDIT SALES		CASH SALES	
			Total	Per cent of total sales	Total	Per cent of total sales
Total—all shoe store chains reporting credit sales.....	71	\$69,152,229	\$18,173,263	26.28	\$50,978,966	73.72
All family shoe store chains reporting credit..	46	41,364,211	9,689,781	23.43	31,674,430	76.57
Chains of—						
More than 25 units.....	3	6,894,843	366,461	5.32	6,528,382	94.68
11 to 25 units.....	6	9,858,988	1,709,641	17.34	8,149,347	82.66
6 to 10 units.....	20	15,760,135	4,804,576	30.49	10,955,559	69.51
Less than 6 units.....	17	8,850,245	2,809,103	31.74	6,041,142	68.26
All women's shoe store chains reporting credit..	18	22,602,232	7,378,945	32.65	15,223,287	67.35
Chains of—						
More than 10 units.....	4	12,829,936	5,224,783	40.72	7,605,153	59.28
6 to 10 units.....	8	5,934,319	1,186,078	19.99	4,748,241	80.01
Less than 6 units.....	6	3,837,977	968,084	25.22	2,869,893	74.78
All men's shoe store chains reporting credit..	7	5,185,786	1,104,537	21.30	4,081,249	78.70

TABLE 11.—SALES BY COMMODITIES

## A. FAMILY SHOE STORE CHAINS

	Net sales (1929)
Net sales (in chains selling men's, women's, children's shoes).....	\$265, 344, 857
Less amount which can not be broken down into commodities.....	113, 606, 409
Sales further analyzed.....	151, 738, 448
	<i>Per cent</i>
	100.00
Commodities:	
Shoes and other footwear <sup>1</sup> .....	91.47
Women's hosiery.....	5.79
Men's hose.....	.48
Miscellaneous merchandise.....	1.29
Findings.....	.60
Service charges to customers.....	.37

<sup>1</sup> A partial breakdown of "shoes and other footwear" amounting to a coverage of 83.6 shows the following commodity distribution:

	91.47	Women's shoes.....	39.03
Men's shoes.....	38.08	Misses' and children's shoes.....	4.27
Boys' and youths' shoes.....	4.13	Infants' shoes.....	.54
		Other footwear.....	5.42

## B. WOMEN'S SHOE STORE CHAINS

	Net sales (1929)
Net sales (in chains selling women's and children's shoes).....	\$78, 294, 199
Less amount which can not be broken down into commodities.....	11, 889, 005
Sales further analyzed.....	66, 405, 194
	<i>Per cent</i>
	100.00
Commodities:	
Women's shoes.....	81.47
Misses', children's, infants' shoes.....	2.27
Other footwear.....	1.75
Boys' shoes.....	.12
Hosiery.....	12.41
Miscellaneous merchandise unclassified.....	1.41
Findings.....	.40
Service charges to customers.....	.17

## C. MEN'S SHOE STORE CHAINS

	Net sales (1929)
Net sales (in chains selling principally men's shoes).....	\$25, 510, 704
Less amount which can not be broken down into commodities.....	9, 583, 070
Sales further analyzed.....	15, 927, 634
	<i>Per cent</i>
	100.00
Commodities:	
Men's and boys' shoes.....	93.03
Women's, children's and infants' shoes.....	.61
All other footwear.....	.77
Hose.....	2.44
Miscellaneous merchandise unclassified.....	2.38
Service charges to customers.....	.77

## CHAPTER 12.—FURNITURE CHAINS

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# FURNITURE AND HOME-FURNISHINGS CHAINS

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## INTRODUCTION

This report of the retail merchandising series presents facts derived from the first nation-wide Census of Distribution taken in 1930 as a part of the Fifteenth Decennial Census of the United States. It deals with retail distribution through furniture and home-furnishings chains.

Furniture chains are credited with doing an annual business exceeding \$200,000,000. There are 125 chains, operating 992 furniture stores or units, with average sales per unit of \$209,526.

The reports of the retail census, covering the year 1929, show that there are 15 sectional and national furniture chains, with 333 stores, doing an annual business of \$69,010,386, and 110 local chains with aggregate sales of \$138,839,518 in 659 stores.

Three chains operate more than 25 units each and do 14 per cent of the business; 17 chains operate 11 to 25 units each and do 28 per cent of the total; 41 chains operate 6 to 10 units each and account for 29 per cent, while the remaining 29 per cent goes to 64 small chains operating less than 6 stores each. All of the sectional and national chains are included in the larger classifications. The sales per store, however, vary little between the various size-classes of chains. Measured in terms of aggregate sales, 43 per cent of the total business is done by 9 chains, each of which exceeds \$5,000,000 per year in sales.

## GEOGRAPHICAL DISTRIBUTION

Of the \$207,000,000 of total sales, \$156,000,000 is found in cities of 100,000 and over; \$44,000,000 in cities between 10,000 and 100,000 in size; and \$7,000,000 in places of less than 10,000 population. Geographically, by volume of business, the most important division of the country is the East North-Central division centering on Chicago, followed closely by the Middle Atlantic States, with the South Atlantic States third. Sales in each of the census divisions are shown in the report, classified by size of city.

## EMPLOYMENT AND EXPENSES

The furniture chains employ 17,088 full-time employees of which 12,455 are men and 4,633 are women. There are 710 part timers, of which 629 are men and 81 are women. The full-time pay roll is \$29,648,430, which is augmented by a part-time pay roll of \$158,732. Total operating expenses, including pay roll and rent, aggregate \$78,812,856, exclusive of return on invested capital, and exclusive, of course, of the cost of merchandise. Stock on hand at the close of the year, valued at cost, is reported as \$39,460,042. The report details the employment and expense data, classified by size of chain, and indicates that the larger chain classifications show the lowest expense.

**CENTRAL-OFFICE SALARIES**

Only 18 chains reported central-office administrative salaries. These chains, with sales of \$33,491,355, employ 48 executives to whom they pay total salaries of \$685,428, or 2.05 per cent of sales, and 616 office employees whose combined salaries and wages are \$1,330,809, or 3.97 per cent of sales, making a total central-office salary expense of about 6 per cent of sales. This expense is supposed to be prorated to the stores of the chains, and included in the total operating expenses reported above.

**RENT**

Of the 992 stores of the furniture chains, 899 are operated in leased premises. The total rent paid for these leased premises is 4.33 per cent of the sales in such premises.

**CREDIT SALES**

Of the 125 chains, 110 report that they extend credit to their customers, and the sales of these 110 chains aggregate \$200,305,137. Of this amount, 14.31 per cent is on open charge account, 74.36 per cent is on the installment basis and 11.33 per cent is sold for cash. Of the 110 chains, 41 are installment credit houses which do not have open charge accounts. These 41 installment credit chains do a business of \$99,750,277 of which 93.2 per cent is on the installment business and the remaining 6.8 per cent is for cash.

Of the 992 units of all furniture chains, 176 were established in 1929, 336 in the previous five years, and the remainder were operating prior to 1925. The report shows in what sections of the country the increases occurred.

**COMMODITIES SOLD**

Total sales of all of the chains have been broken down into commodities. This commodity table discloses that 63.16 per cent of the business comes from the sale of furniture, 17.28 per cent from the sale of home furnishings including floor coverings, and 7.82 per cent from the sale of radios and radio equipment. Used furniture, traded in on purchases, accounts for about \$5,000,000 of the total sales, or 2.51 per cent. The remaining sales are scattered over a number of commodities, which are detailed in the report.

**HOME-FURNISHINGS CHAINS**

Appended to the furniture chain report, but not included in the totals therein, is a table showing briefly the operations of 29 chains selling home furnishings (exclusive of furniture) including floor coverings, bedding, draperies, kitchen utensils, and brushes. Included are 2 leased-department chains whose sales can not be disclosed except to state that they aggregate less than \$1,000,000, and 5 direct-selling (house to house) companies employing salesmen on commission, operating out of chains of branch offices. The total sales of these direct-selling companies aggregate \$21,160,190.

The 29 home-furnishings chains operate 468 stores and branch offices, employ more than 13,000 people, and do a total business of \$46,571,748, of which 54.5 per cent is on credit. The total sales of \$46,571,748 include almost \$10,000,000 of kitchen utensils, \$2,800,000 of china, glassware and crockery, \$1,600,000 of clocks, silverware, and art goods, another \$2,200,000 of gas and electrical appliances and supplies, nearly \$15,000,000 of floor coverings, draperies, bedding, and linens, as well as over \$2,000,000 for furniture and radios. The balance includes specialties which can not be revealed, as well as sales for which no commodity breakdown is available.

Because of the varied types of operation and kinds of business, the commodity breakdown is not typical of any one chain, and therefore no further analysis can be shown nor is any table included in this report.

TABLE 1.—SALES CLASSIFIED BY TYPES OF OPERATION AND SIZE OF CHAINS—FURNITURE CHAINS

SIZE-CLASS	ALL TYPES				
	Number of chains	Number of units	Net sales (1929)	Per cent of total sales	Average sales per unit
Total.....	125	992	\$207, 849, 904	100. 00	\$209, 526
Chains of—					
More than 25 units.....	3	161	30, 429, 869	14. 64	189, 005
11 to 25 units.....	17	249	57, 867, 645	27. 84	232, 400
6 to 10 units.....	41	306	59, 830, 999	28. 79	195, 526
Less than 6 units.....	64	276	59, 721, 391	28. 73	216, 382

SIZE CLASS	LOCAL CHAINS			SECTIONAL AND NATIONAL CHAINS		
	Number of chains	Number of units	Net sales (1929)	Number of chains	Number of units	Net sales (1929)
Total.....	110	659	\$138, 839, 518	15	333	\$69, 010, 386
Chains of—						
More than 25 units.....				3	161	30, 429, 869
11 to 25 units.....	8	100	24, 204, 847	9	149	33, 662, 798
6 to 10 units.....	38	283	54, 913, 280	3	23	4, 917, 719
Less than 6 units.....	1 64	276	59, 721, 391			

<sup>1</sup> Includes one sectional chain.

TABLE 2.—CHAINS CLASSIFIED BY VOLUME OF SALES—FURNITURE CHAINS

	ALL CHAINS			CHAINS OF MORE THAN 25 UNITS	
	Per cent of total sales	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)
Total.....	100. 00	125	\$207, 849, 904	3	\$30, 429, 869
Chains with annual net sales—					
In excess of \$5,000,000.....	43. 45	9	90, 304, 153	2	25, 778, 828
\$2,500,000 to \$5,000,000.....	18. 11	10	37, 647, 419	1	4, 651, 041
\$1,250,000 to \$2,500,000.....	13. 92	16	28, 931, 971		
\$625, 000 to \$1,250,000.....	17. 31	38	35, 972, 001		
\$312,500 to \$625,000.....	4. 42	21	9, 195, 605		
Less than \$312,500.....	2. 79	31	5, 798, 755		

	CHAINS OF 11 TO 25 UNITS		CHAINS OF 6 TO 10 UNITS		CHAINS OF LESS THAN 6 UNITS	
	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)
Total.....	17	\$57, 867, 645	41	\$59, 830, 999	64	\$59, 721, 391
Chains with annual net sales—						
In excess of \$5,000,000.....	3	31, 353, 771	2	13, 227, 392	2	19, 944, 162
\$2,500,000 to \$5,000,000.....	4	14, 416, 147	4	15, 025, 096	1	3, 555, 135
\$1,250,000 to \$2,500,000.....	4	7, 789, 052	8	15, 027, 471	4	6, 115, 448
\$625,000 to \$1,250,000.....	4	3, 547, 574	13	11, 977, 652	21	20, 446, 775
\$312,500 to \$625,000.....	1	595, 929	6	2, 783, 495	14	5, 816, 181
Less than \$312,500.....	1	165, 172	8	1, 789, 893	22	3, 843, 690

## CENSUS OF DISTRIBUTION

TABLE 3.—OPERATING EXPENSES<sup>1</sup>—FURNITURE CHAINS

	All chains	More than 25 units (3 chains)	11 to 25 units (17 chains)	6 to 10 units (41 chains)	Less than 6 units (64 chains)
Net sales (1929).....	\$207,849,904	\$30,429,869	\$57,867,645	\$59,830,999	\$59,721,391
Number of chains.....	125	3	17	41	64
Units operated by local chains.....	659	-----	100	283	276
Units operated by sectional and national chains.....	333	161	149	23	-----
Operating expenses, total.....	\$78,812,856	\$9,960,272	\$20,378,247	\$22,444,006	\$26,030,331
Per \$100 of sales.....	37.92	32.73	35.22	37.51	43.59
Pay roll.....	\$29,807,162	\$4,224,455	\$8,054,131	\$8,367,483	\$9,161,093
Full-time salaries.....	29,648,430	4,172,903	8,037,465	8,333,331	9,104,731
Part-time salaries.....	158,732	51,552	16,666	34,152	56,362
Total wage cost per \$100 of sales.....	14.34	13.88	13.92	13.98	15.34
Other operating expenses, including rent <sup>2</sup> .....	\$49,005,694	\$5,735,817	\$12,324,116	\$14,076,523	\$16,869,238
Per \$100 of sales.....	23.58	18.85	21.30	23.53	28.25
Rent, per \$100 of sales in leased premises (included in above figures).....	4.79	4.26	4.65	4.70	5.26
Stocks on hand, end of year, at cost.....	\$39,460,042	\$5,491,001	\$10,171,197	\$10,100,323	\$13,697,521

## EMPLOYMENT DATA

Full-time employees.....	17,088	2,386	4,455	5,253	4,994
Men.....	12,455	1,776	3,482	3,667	3,530
Women.....	4,633	610	973	1,586	1,464
Pay roll.....	\$29,648,430	\$4,172,903	\$8,037,465	\$8,333,331	\$9,104,731
Part-time employees.....	710	511	20	71	108
Men.....	629	460	18	67	84
Women.....	81	51	2	4	24
Pay roll.....	\$158,732	\$51,552	\$16,666	\$34,152	\$56,362

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

<sup>2</sup> Of the total number of units 899 are in leased premises for which the annual rent is 4.79 per cent of sales in such leased premises.

TABLE 4.—OPEN ACCOUNT AND INSTALLMENT CREDIT—FURNITURE CHAINS

	Number of chains reporting credit sales	Total net sales of chains reporting credit	OPEN ACCOUNT		INSTALLMENT		CASH SALES OF CHAINS REPORTING CREDIT	
			Amount	Per cent of total net sales	Amount	Per cent of total net sales	Amount	Per cent of total net sales
Total.....	110	\$200,305,137	\$28,654,670	14.31	\$148,951,192	74.36	\$22,699,275	11.33
Chains of—								
More than 25 units.....	3	30,429,869	2,739,075	9.00	23,560,304	77.43	4,130,490	13.57
11 to 25 units.....	13	55,272,098	4,757,885	8.61	45,933,062	83.10	4,581,151	8.29
6 to 10 units.....	39	58,494,070	8,303,190	14.20	43,789,553	74.86	6,401,327	10.94
Less than 6 units.....	55	56,109,100	12,854,520	22.91	35,668,273	63.57	7,586,307	13.52

## INSTALLMENT CREDIT

[Included above are the following chains, all of whose credit sales are on the installment plan]

Total.....	41	\$99,750,277	-----	-----	\$92,963,601	93.20	\$6,786,676	6.80
Chains of—								
More than 25 units.....	9	38,942,434	-----	-----	35,612,553	91.45	3,329,881	8.55
11 to 25 units.....	14	39,106,323	-----	-----	37,513,053	95.93	1,593,270	4.07
Less than 6 units.....	18	21,701,520	-----	-----	19,837,995	91.41	1,863,525	8.59

TABLE 5.—SALES BY COMMODITIES—FURNITURE CHAINS

	Net sales (1929)
Net sales.....	\$207,849,904
Less amount which can not be broken down into commodities.....	15,515,352
Sales further analyzed.....	192,334,552
Total.....	<i>Per cent</i> 100.00
Classification of commodities:	
Antiques, art goods, statuary, and gifts.....	.41
Electric appliances.....	1.41
Furniture <sup>1</sup> .....	63.16
Gas appliances.....	1.12
Home furnishings <sup>2</sup> .....	17.28
Silverware and clocks.....	.42
Musical instruments (pianos, player pianos, and phonographs).....	.91
Radios and radio equipment.....	7.82
Stoves, ranges, heaters—other than electric and gas.....	.95
Secondhand merchandise.....	2.51
Miscellaneous merchandise.....	4.01

<sup>1</sup> Of furniture, some of the schedules present a further breakdown by classes, as follows:

	Per cent
Total.....	63.16
Bedroom furniture.....	17.60
Living room, library, and hall furniture.....	22.36
Dining room furniture.....	8.79
Kitchen furniture.....	3.82
Other household furniture.....	10.19
Office and store furniture.....	.40

<sup>2</sup> Of home furnishings, some of the schedules present a further breakdown by commodities, as follows:

	Per cent
Total.....	17.28
Draperies, upholstery, and curtains.....	2.71
Floor coverings.....	8.60
Bedding, mattresses, springs, and pillows.....	3.62
China, glassware, crockery.....	.80
Kitchen utensils, refrigerators.....	.26
Other home furnishings.....	1.29

TABLE 6.—SALES CLASSIFIED BY SIZE OF CHAINS, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS—FURNITURE CHAINS

GEOGRAPHIC DIVISION AND SIZE OF CITY	Total all chains	CHAINS CLASSIFIED BY SIZE			
		More than 25 units (3 chains)	11 to 25 units (17 chains)	6 to 10 units (41 chains)	Less than 6 units (64 chains)
UNITED STATES					
Total net sales.....	\$207,849,904	\$30,429,869	\$57,867,645	\$59,830,999	\$59,721,391
All cities with population of—					
More than 100,000.....	156,018,953	18,999,207	44,535,136	44,867,332	47,617,278
25,000 to 100,000.....	31,714,274	6,929,273	9,756,034	8,064,705	6,964,262
10,000 to 25,000.....	12,983,876	2,742,557	1,945,533	4,553,948	3,741,838
Less than 10,000.....	7,132,801	1,758,832	1,630,942	2,345,014	1,398,013
NEW ENGLAND (DIV. 1)					
Total.....	7,854,954		1,148,701	4,145,759	2,560,494
CITIES HAVING POPULATION OF—					
More than 100,000.....	5,984,393		1,148,701	2,793,931	2,041,761
25,000 to 100,000.....	1,390,206			1,000,590	389,616
10,000 to 25,000.....	480,355			351,238	129,117
Less than 10,000.....					
MIDDLE ATLANTIC (DIV. 2)					
Total.....	53,927,266		19,307,310	17,939,112	16,680,744
CITIES HAVING POPULATION OF—					
More than 100,000.....	46,705,379		18,696,736	14,870,942	13,137,701
25,000 to 100,000.....	4,849,820		519,813	2,218,704	2,111,363
10,000 to 25,000.....	2,109,920		90,761	791,785	1,227,374
Less than 10,000.....	262,147			57,781	204,366

TABLE 6.—SALES CLASSIFIED BY SIZE OF CHAINS, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS—FURNITURE CHAINS—Continued

GEOGRAPHIC DIVISION AND SIZE OF CITY	Total all chains	CHAINS CLASSIFIED BY SIZE			
		More than 25 units (3 chains)	11 to 25 units (17 chains)	6 to 10 units (41 chains)	Less than 6 units (64 chains)
<b>EAST NORTH CENTRAL (DIV. 3)</b>					
Total.....	\$66,169,492	\$18,461,376	\$10,076,718	\$24,407,321	\$13,224,077
Cities having population of—					
More than 100,000.....	53,356,601	12,499,272	8,631,999	21,229,853	10,995,477
25,000 to 100,000.....	8,236,912	4,680,106	1,156,969	1,316,623	1,083,214
10,000 to 25,000.....	3,309,705	1,013,734	100,958	1,461,119	733,894
Less than 10,000.....	1,266,274	268,264	186,792	399,726	411,492
<b>WEST NORTH CENTRAL (DIV. 4)</b>					
Total.....	4,932,489	1,506,439	169,001	1,046,549	2,210,500
Cities having population of—					
More than 100,000.....	2,644,007	692,716	-----	729,649	1,221,642
25,000 to 100,000.....	1,200,596	763,040	169,001	268,555	-----
10,000 to 25,000.....	997,203	-----	-----	48,345	948,853
Less than 10,000.....	90,683	50,683	-----	-----	40,000
<b>SOUTH ATLANTIC (DIV. 5)</b>					
Total.....	26,586,398	3,227,859	16,422,190	5,859,768	1,076,581
Cities having population of—					
More than 100,000.....	12,900,271	767,512	9,953,931	2,049,238	129,590
25,000 to 100,000.....	9,686,770	1,486,127	5,614,953	2,064,978	520,712
10,000 to 25,000.....	1,856,506	428,220	471,814	829,628	126,844
Less than 10,000.....	2,142,851	546,000	381,492	915,924	299,435
<b>EAST SOUTH CENTRAL (DIV. 6)</b>					
Total.....	10,292,653	5,530,540	3,343,265	799,029	619,819
Cities having population of—					
More than 100,000.....	5,871,783	3,336,052	2,229,310	-----	306,421
25,000 to 100,000.....	1,543,995	-----	1,012,540	343,546	187,909
10,000 to 25,000.....	1,580,498	1,300,603	-----	279,895	-----
Less than 10,000.....	1,296,377	893,885	101,415	175,588	125,499
<b>WEST SOUTH CENTRAL (DIV. 7)</b>					
Total.....	12,811,744	-----	6,306,049	4,692,051	1,813,644
Cities having population of—					
More than 100,000.....	7,846,017	-----	3,702,990	2,744,050	1,398,977
25,000 to 100,000.....	2,083,420	-----	1,273,501	774,919	-----
10,000 to 25,000.....	1,723,023	-----	617,877	791,938	313,203
Less than 10,000.....	1,194,284	-----	711,681	381,144	101,459
<b>MOUNTAIN (DIV. 8)</b>					
Total.....	2,168,185	1,703,655	38,479	426,051	-----
Cities having population of—					
More than 100,000.....	1,703,655	1,703,655	-----	-----	-----
25,000 to 100,000.....	20,457	-----	9,257	11,200	-----
10,000 to 25,000.....	3,986	-----	3,986	-----	-----
Less than 10,000.....	440,087	-----	25,236	414,851	-----
<b>PACIFIC (DIV. 9)</b>					
Total.....	23,106,723	-----	1,055,932	515,259	21,535,532
Cities having population of—					
More than 100,000.....	19,006,847	-----	171,469	449,669	18,385,709
25,000 to 100,000.....	2,737,098	-----	-----	65,590	2,671,508
10,000 to 25,000.....	922,680	-----	660,137	-----	262,543
Less than 10,000.....	440,098	-----	224,326	-----	215,772

TABLE 7.—CHAIN UNITS CLASSIFIED BY AGE OF UNITS AND GEOGRAPHIC DIVISIONS—FURNITURE CHAINS

GEOGRAPHIC DIVISION AND AGE OF UNIT	Per cent of total units	Total units, all chains	UNITS IN CHAINS OF—			
			More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
United States totals.....	100.00	992	161	249	306	276
Established:						
1929.....	17.74	176	60	25	42	49
1925 to 1928.....	33.87	336	53	80	133	70
Prior to 1925.....	45.36	450	36	129	128	157
Units not classified by geographic divisions.....	3.03	30	12	15	3	-----
New England (Div. 1).....	100.00	42	-----	2	27	13
Established:						
1929.....	28.6	12	-----	-----	9	3
1925 to 1928.....	14.3	6	-----	-----	2	4
Prior to 1925.....	57.1	24	-----	2	16	6
Middle Atlantic (Div. 2).....	100.00	166	-----	44	49	73
Established:						
1929.....	19.3	32	-----	13	8	11
1925 to 1928.....	33.7	56	-----	13	24	19
Prior to 1925.....	47.0	78	-----	18	17	43
East North Central (Div. 3).....	100.00	305	77	42	91	95
Established:						
1929.....	11.8	36	2	2	15	17
1925 to 1928.....	41.3	126	42	18	41	25
Prior to 1925.....	46.9	143	33	22	35	53
West North Central (Div. 4).....	100.00	44	7	1	8	28
Established:						
1929.....	18.2	8	-----	-----	2	6
1925 to 1928.....	47.7	21	6	1	5	9
Prior to 1925.....	34.1	15	1	-----	1	13
South Atlantic (Div. 5).....	100.00	163	26	66	54	17
Established:						
1929.....	17.1	28	23	2	2	1
1925 to 1928.....	30.1	49	2	19	27	1
Prior to 1925.....	52.8	86	1	45	25	15
East South Central (Div. 6).....	100.00	81	39	19	13	10
Established:						
1929.....	46.9	38	35	-----	-----	3
1925 to 1928.....	25.9	21	3	2	12	4
Prior to 1925.....	27.2	22	1	17	1	3
West South Central (Div. 7).....	100.00	104	-----	46	39	19
Established:						
1929.....	7.7	8	-----	3	-----	5
1925 to 1928.....	40.4	42	-----	21	18	3
Prior to 1925.....	51.9	54	-----	22	21	11
Mountain (Div. 8).....	100.00	13	-----	3	10	-----
Established:						
1929.....	46.1	6	-----	3	3	-----
1925 to 1928.....	15.4	2	-----	-----	2	-----
Prior to 1925.....	38.5	5	-----	-----	5	-----
Pacific coast (Div. 9).....	100.00	44	-----	11	12	21
Established:						
1929.....	18.2	8	-----	2	3	3
1925 to 1928.....	29.5	13	-----	6	2	5
Prior to 1925.....	52.3	23	-----	3	7	13
Unclassified.....	3.03	30	12	15	3	-----

TABLE 8.—SALES OF HOME-FURNISHINGS CHAINS

[Not included in the furniture-chain tables]

## A.—CLASSIFIED BY TYPES OF OPERATION

TYPE OF OPERATION	Number of chains	Number of units	Net sales (1929)	Per cent of total sales
Total.....	29	468	\$46, 571, 748	100.00
Local chains.....	17	94	14, 673, 439	31.51
Sectional chains.....	5	51	10, 738, 119	23.06
National chains.....	2	66		
Chains selling direct (house-to-house).....	5	257		

## B.—SALES CLASSIFIED BY VOLUME OF SALES

	29	468	\$46, 571, 748	100.00
Total.....				
Chains having net sales—				
In excess of \$5,000,000.....	4	236	27, 999, 050	60.12
\$1,000,000 to \$5,000,000.....	5	121	14, 199, 612	30.49
\$250,000 to \$1,000,000.....	8	55	3, 039, 840	6.52
\$100,000 to \$250,000.....	6	31	993, 034	2.14
Less than \$100,000.....	6	25	340, 212	.73

TABLE 9.—EXPENSE AND CREDIT DATA <sup>1</sup> OF HOME-FURNISHINGS CHAINS

[Not included in the furniture-chain tables]

	All chains	More than 25 units (4 chains)	11 to 25 units (5 chains)	Less than 11 units (20 chains)
Net sales (1929).....	\$46, 571, 748	\$21, 007, 999	\$16, 940, 403	\$8, 623, 346
Credit sales.....	25, 376, 371	6, 867, 139	12, 178, 072	6, 331, 160
Number of chains.....	29	4	5	20
Number of units.....	468	288	84	96
Operating expenses.....	\$22, 071, 677	\$10, 723, 746	\$7, 351, 714	\$3, 996, 217
Per \$100 of sales.....	47.39	51.05	43.40	46.34
Pay roll.....	\$14, 070, 634	\$7, 282, 364	\$4, 567, 399	\$2, 220, 871
Per \$100 of sales.....	30.21	34.67	26.96	25.75
Full-time salaries.....	\$14, 057, 331	\$7, 282, 364	\$4, 560, 969	\$2, 213, 998
Full-time employees.....	13, 023	5, 489	6, 527	1, 007
Part-time salaries.....	\$13, 303	-----	\$6, 430	\$6, 873
Part-time employees.....	54	-----	23	31
Other operating expenses, including rent <sup>2</sup> .....	\$8, 001, 043	\$3, 441, 382	\$2, 784, 315	\$1, 775, 346
Per \$100 of sales.....	17.18	16.38	16.44	20.59
Rent, per \$100 of sales in leased premises (included in above figures).....	3.83	2.00	5.53	4.13
Stocks on hand, end of year, at cost.....	\$5, 169, 835	\$894, 550	\$3, 104, 284	\$1, 171, 001

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

<sup>2</sup> Of the total number of units 414 are in leased premises for which the annual rent is 3.83 per cent of sales in such leased premises.

## CHAPTER 13.—HOUSEHOLD-APPLIANCE CHAINS

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# HOUSEHOLD-APPLIANCE CHAINS

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## INTRODUCTION

This is the third report of the merchandising series, presenting facts derived from the first nation-wide Census of Distribution which is a part of the Fifteenth Decennial Census of the United States. It deals with the subject of retail distribution through chains in the household-appliance field.

Sales at retail by chains in the household-appliance field amount to \$191,500,000, according to the retail census report compiled as part of the 1930 Census of Distribution. There are 262 chains, with 4,472 units, selling electrical or gas appliances or both, and their sales in 1929, the year on which the census figures are based, total \$191,547,403.

The count includes 219 utility-operated chains, with sales of \$141,701,699 or 73.98 per cent of the total sales of all household-appliance chains, 5 manufacturer-controlled chains or sales branch systems, 3 leased-department chains, and one organization selling from house to house. Utility-operated chains consist of stores operated by public utilities, particularly electric and gas companies, for the sale of appliances to promote the greater consumption of power or heat. The report distinguishes clearly between heating appliances and power appliances.

Of the 4,472 units or stores in operation at the end of the reporting year, 56 were opened by chains organized that year, 404 were added to existing chains, 2,082 were found to be from 1 to 5 years old, and 1,930 had been in operation more than 5 years.

This report shows that 41 per cent of the sales of household-appliance chains are made in cities with population over 10,000; 19 per cent in cities between 25,000 and 100,000 in size; 13 per cent in cities between 10,000 and 25,000 in size, and the remaining 27 per cent in rural areas, towns, and small cities of less than 10,000 population. One-half of the sales are made in the eight States of New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan, and Wisconsin. Sales in the Mountain Division, often the lowest in comparison with the other more populous sections of the country, exceed the sales in four other geographic divisions including New England and the South Atlantic States, where the population is two to four times as great. In all divisions, chains of about 25 units appear to predominate in number.

Local chains, described as those which operate largely in and around one principal city, aggregate 199 in number, with 2,980 units, and do a total business of \$126,149,587 or 66 per cent of the total reported for all types of chains. Sectional chains, limited to one main section of the country such as the Pacific coast or the New England States, report sales of \$38,597,052 or 20 per cent of the total. There are 49 sectional chains, with 1,226 units. National chains do 14 per cent of the total business, or \$26,800,764. There are 14 national chains, with 266 units. This classification includes all chains whose interests are broader than those of any one section of the country.

Household-appliance chains are divided into three kinds: Those selling electrical appliances solely, those selling only gas appliances, and those selling both gas and electric appliances. There are 154 chains which sell electrical appliances only, and their sales amount to \$115,697,787 or 60 per cent of the total;

44 chains sell gas appliances only, with aggregate sales of \$20,098,352 or 10 per cent; the remaining 30 per cent of sales is made by 64 chains which sell both gas and electric appliances. An analysis of the sales of each type of chain is included in the report.

The 262 chains use far more men than women as sales people. They employ 20,635 men and 3,450 women on a full-time basis, and pay them \$33,578,560 annually in salaries, wages, and commissions. In addition they use the part-time services of 3,746 men and 1,212 women at a pay-roll cost of \$2,275,366 annually, a total yearly pay roll of nearly \$36,000,000. This total includes the compensation of sales people, sales office employees, installation men, service men, and inspectors, and a proportion of central-office administrative salaries.

Central-office administrative salaries are reported by 24 chains, the sales of which aggregate \$33,141,987 or about 17 per cent of all household-appliance chain sales. These chains report that the salaries of 63 administrative officers, active in the business, amount to 1.6 per cent of sales, and that the salaries of 1,154 central-office clerks, stenographers, and other employees aggregate an additional 6 per cent of the sales of such chains. These central-office expenses are supposed to be prorated to the stores of the chains, and to be included in the salary expense described above. The Bureau calls attention to the fact, however, that in the case of a number of the utility-operated chains which often use some of the same people to attend the salesrooms who also work in the commercial offices, in which latter the usual business of the utility company is handled, the proportion of salaries charged to the household-appliance stores is often arbitrary and in some cases is excessive. The aggregate of such excessive prorated expense is small and has little effect upon the resulting totals, and therefore has been included as reported to the Bureau.

In addition to salaries and wages, which require \$18.71 of each \$100 of net sales, the household-appliance chains pay for rent, or rental value of retail premises, a total of \$4,916,794 (\$2.57 of each \$100 of sales), and \$26,733,956 for other operating expenses, a total expense of 35.24 per cent of net sales. Stocks of merchandise on hand for sale at the end of the reporting year, at cost values, aggregate \$31,693,893.

### CREDIT SALES

Of the \$191,547,403 of total sales, \$77,175,425 or 40 per cent is sold for cash, \$75,005,115 or 39 per cent is sold on the installment basis, and the remaining \$39,366,863 or 21 per cent is sold on open charge account. These percentages vary somewhat with the three different kinds of chains. Of the 154 electrical-appliance chains, 122 sell on credit, but only 73 of the same chains report that they also sell on the installment basis. Of the 44 gas-appliance chains, 36 sell on credit and 20 of the 36 sell on installments. Of the chains which sell on the installment basis, in the case of both the gas-appliances and the electrical-appliance chains, 54 per cent of their sales are on the deferred-payment basis. There are 64 combination gas and electric appliance chains, of which 28 sell on installments and an additional 17 offer their customers the privilege of open charge accounts. Only 16 per cent of the sales of such chains is for cash, 22 per cent is on open account, and 62 per cent is on the installment plan. According to the reports received by the Census Bureau from the chains involved, a considerable number of appliance chains do no installment credit business, or did not do so in 1929.

### AGE OF UNITS AND GEOGRAPHIC DISTRIBUTION

An interesting table in the report shows the number of units opened in 1929 (the reporting year), those one to five years old, and those more than five years

old, classified according to the nine Census divisions into which the country is divided. The rapidity of growth varies considerably in the different sections of the country, but for the country as a whole it appears that slightly more than 10 per cent of all units operating at the end of 1929 were opened during that year. Nearly double that rate of growth, however, was registered in the division which includes the States of Arkansas, Louisiana, Oklahoma, and Texas.

### BREAKDOWN OF SALES BY COMMODITIES

Sales are reported by commodities for each of the three kinds of chains. One table for chains dealing exclusively in electrical appliances, lists the several commodities sold and shows the relation of each to the total net sales. Similar information is shown for gas-appliance chains and for those chains selling both electric and gas appliances.

The electric-appliance chains, with total sales of \$115,697,787, report that about 70 per cent of that total represents the sale of motor-driven devices, including refrigerators. Ranges, heaters, electrical supplies, radios and service charges account for the remaining 30 per cent of sales. Refrigerator sales alone amount to nearly 15 per cent of all sales.

Less variety of commodities is shown by chains selling gas appliances. Gas stoves, water heaters and refrigerators account for nearly 70 per cent of the total sales of \$20,098,352. Other gas appliances account for 22 per cent, while the remaining 8 per cent of sales is attributed to plumbing equipment, home furnishings, and service charges to customers. Refrigerator sales alone amount to nearly 18 per cent of all sales.

The commodity reports for chains selling both electric and gas appliances show that 41 per cent of total sales is derived from the sale of electrical appliances and supplies including radios, as compared with approximately 30 per cent from the sale of gas appliances and supplies. Service charges amount to 4 per cent, miscellaneous commodities to 13 per cent, and refrigerator sales amount to 11 per cent of the total sales of \$55,751,264 by this group of chains.

A special analysis (Table 9) is included to show what commodities are sold by utility-operated chains.

TABLE 1.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS

[See map on p. 2 for States included in each division]

DIVISION AND CLASSIFICATION	Net sales of all chains	CHAINS CLASSIFIED BY SIZE				
		More than 50 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
		(13 chains)	(43 chains)	(65 chains)	(76 chains)	(65 chains)
<b>UNITED STATES</b>						
Total .....	\$191,547,403	\$22,257,226	\$65,837,027	\$58,309,531	\$30,713,333	\$14,430,286
Cities and places of—						
More than 100,000 .....	78,759,971	4,860,939	21,406,402	29,400,090	15,707,205	7,385,335
Between 25,000 and 100,000 .....	36,125,673	4,754,434	12,744,366	10,559,646	4,488,195	3,579,032
Between 10,000 and 25,000 .....	24,844,902	3,481,609	11,189,321	6,103,697	3,394,112	676,163
Less than 10,000 .....	51,816,857	9,160,244	20,496,938	12,246,098	7,123,821	2,789,756
<b>NEW ENGLAND DIV.</b>						
Total .....	9,845,448	2,867,366	1,290,264	4,196,846	1,382,162	108,810
Cities and places of—						
More than 100,000 .....	2,844,585	394,334	651,472	1,402,031	394,937	1,811
Between 25,000 and 100,000 .....	2,874,734	723,825	155,716	1,643,776	351,417	-----
Between 10,000 and 25,000 .....	1,466,226	639,470	357,848	152,026	241,094	75,788
Less than 10,000 .....	2,659,903	1,109,737	125,228	999,013	394,714	31,214

TABLE 1.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS—Continued

DIVISION AND CLASSIFICATIONS	Net sales of all chains	CHAINS CLASSIFIED BY SIZE				
		More than 50 units (13 chains)	26 to 50 units (43 chains)	11 to 25 units (65 chains)	6 to 10 units (76 chains)	Less than 6 units (65 chains)
<b>MIDDLE ATLANTIC DIV.</b>						
Total.....	\$50,505,921	\$3,594,474	\$18,573,284	\$17,960,506	\$7,333,840	\$3,043,817
Cities and places of—						
More than 100,000.....	25,791,678	663,064	6,527,722	13,301,514	4,593,056	706,322
Between 25,000 and 100,000.....	8,441,646	1,328,160	3,386,233	1,258,477	1,125,914	1,342,862
Between 10,000 and 25,000.....	6,032,283	544,524	3,035,727	1,857,280	531,857	62,895
Less than 10,000.....	10,240,314	1,058,726	5,623,602	1,543,235	1,083,013	931,738
<b>EAST NORTH CENTRAL DIV.</b>						
Total.....	45,332,085	2,996,675	6,411,609	17,249,371	11,907,806	6,766,624
Cities and places of—						
More than 100,000.....	23,497,583	1,057,749	580,092	8,569,896	8,681,206	4,608,640
Between 25,000 and 100,000.....	10,261,615	300,979	2,781,682	4,556,785	1,284,648	1,337,521
Between 10,000 and 25,000.....	4,299,165	228,954	1,473,598	1,239,766	966,328	390,439
Less than 10,000.....	7,273,722	1,408,993	1,576,237	2,882,894	975,624	429,974
<b>WEST NORTH CENTRAL DIV.</b>						
Total.....	22,976,282	597,580	8,516,031	8,442,885	3,326,950	2,092,836
Cities and places of—						
More than 100,000.....	8,256,025	189,690	3,592,456	3,212,487	129,334	1,132,058
Between 25,000 and 100,000.....	2,828,014	-----	1,361,888	796,909	590,722	78,495
Between 10,000 and 25,000.....	2,986,593	123,021	1,110,061	938,365	710,397	104,749
Less than 10,000.....	8,905,650	284,869	2,451,626	3,495,124	1,896,497	777,534
<b>SOUTH ATLANTIC DIV.</b>						
Total.....	11,058,239	4,203,763	2,996,071	2,949,433	551,729	357,243
Cities and places of—						
More than 100,000.....	2,401,096	1,205,663	375,495	687,055	132,883	-----
Between 25,000 and 100,000.....	3,359,708	509,370	1,476,991	1,012,917	102,709	257,721
Between 10,000 and 25,000.....	1,705,650	526,476	475,436	659,899	35,841	7,995
Less than 10,000.....	3,591,785	1,962,254	668,149	589,562	280,296	91,524
<b>EAST SOUTH CENTRAL DIV.</b>						
Total.....	5,777,007	1,800,102	2,442,530	1,109,614	182,708	242,053
Cities and places of—						
More than 100,000.....	981,497	51,487	930,010	-----	-----	-----
Between 25,000 and 100,000.....	630,118	337,321	66,738	84,082	35,255	106,722
Between 10,000 and 25,000.....	1,658,891	371,371	779,774	377,251	96,251	34,244
Less than 10,000.....	2,506,501	1,039,923	666,008	648,281	51,202	101,087
<b>WEST SOUTH CENTRAL DIV.</b>						
Total.....	11,952,538	1,934,016	5,325,934	1,813,442	2,654,377	224,769
Cities and places of—						
More than 100,000.....	1,520,946	-----	304,616	478,338	737,992	-----
Between 25,000 and 100,000.....	2,329,302	392,583	957,447	383,131	596,141	-----
Between 10,000 and 25,000.....	1,806,053	266,913	1,002,524	189,995	346,621	-----
Less than 10,000.....	6,296,237	1,274,520	3,061,347	761,978	973,623	224,769
<b>MOUNTAIN DIVISION</b>						
Total.....	14,072,909	353,985	10,612,568	1,740,913	791,398	574,045
Cities and places of—						
More than 100,000.....	5,595,985	-----	5,422,549	142,181	31,255	-----
Between 25,000 and 100,000.....	1,851,390	96,409	1,137,007	204,370	-----	413,604
Between 10,000 and 25,000.....	1,873,668	123,391	1,307,089	384,104	59,084	-----
Less than 10,000.....	4,751,866	134,185	2,745,923	1,010,258	701,059	160,441
<b>PACIFIC DIVISION</b>						
Total.....	20,026,974	3,909,265	9,668,736	2,846,521	2,582,363	1,020,089
Cities and places of—						
More than 100,000.....	7,870,576	1,298,952	3,021,990	1,606,588	1,006,542	936,504
Between 25,000 and 100,000.....	3,549,146	1,065,787	1,420,664	619,199	401,389	42,107
Between 10,000 and 25,000.....	3,016,373	657,489	1,647,264	304,981	406,639	-----
Less than 10,000.....	5,590,879	887,037	3,578,818	315,753	767,793	41,478

TABLE 2.—SALES CLASSIFIED BY TYPE OF OPERATION AND SIZE OF CHAIN

SIZE-CLASS	ALL TYPES OF CHAINS				LOCAL CHAINS			SECTIONAL CHAINS			NATIONAL CHAINS			
	Num-ber of chains	Num-ber of units	Net sales (1929)	Per cent of total sales	Average sales per unit	Num-ber of chains	Num-ber of units	Net sales (1929)	Num-ber of chains	Num-ber of units	Net sales (1929)	Num-ber of chains	Num-ber of units	Net sales (1929)
Total.....	262	4,472	\$191,547,403	100.0 <sup>0</sup>	\$42,833	199	2,980	\$126,149,587	49	1,226	\$38,597,052	14	286	\$26,800,764
Chains of more than 50 units.....	13	1,069	22,257,226	11.62	20,821	9	676	10,950,418	3	2,393	2 11,306,808	1	(1)	(1)
Electrical appliances.....	13	1,069	22,257,226	11.62	20,821	9	676	10,950,418	3	2,393	2 11,306,808	1	(1)	(1)
Gas appliances.....														
Electric and gas appliances.....														
Chains of 26 to 50 units.....	43	1,495	65,837,027	34.37	44,038	26	862	40,039,469	15	2,633	2 25,797,568	2	(1)	(1)
Electrical appliances.....	25	887	28,168,434	14.71	31,757	14	479	14,124,875	10	2,408	2 14,043,569	1	(1)	(1)
Gas appliances.....	2	76	1,284,928	1.67	16,907				2	76	1,284,928			
Electric and gas appliances.....	16	532	36,383,665	18.99	68,390	12	383	25,914,594	3	2,149	2 10,469,071	1	(1)	(1)
Chains of 11 to 25 units.....	65	1,042	58,309,531	30.44	55,959	49	764	40,188,687	13	2,119	7,880,737	3	59	10,240,107
Electrical appliances.....	35	586	36,365,232	18.98	62,057	26	425	20,711,662	8	2,161	2 15,663,570	1	(1)	(1)
Gas appliances.....	16	245	10,719,508	5.60	43,753	11	155	8,901,442	3	3,900	2 1,818,066	2	(1)	(1)
Electric and gas appliances.....	14	211	11,224,791	5.86	53,198	12	184	10,575,583	2	27	649,208			
Chains of 6 to 10 units.....	76	581	30,713,333	16.04	52,863	55	415	21,262,960	15	1,200	5,766,217	6	46	3,684,156
Electrical appliances.....	43	340	22,267,071	11.63	65,491	29	226	14,292,672	10	81	4,516,501	4	33	3,457,898
Gas appliances.....	15	109	3,528,976	1.84	32,376	12	87	2,401,495	3	2,222	2 577,481	1	(1)	(1)
Electric and gas appliances.....	18	132	4,917,286	2.57	37,252	14	102	4,018,793	2	3,300	2 898,493	1	(1)	(1)
Chains of less than 6 units.....	65	285	14,430,286	7.53	50,633	60	263	13,708,053	3	3,222	2 722,233	2	(1)	(1)
Electrical appliances.....	38	163	6,639,824	3.47	40,735	34	145	5,957,341						
Gas appliances.....	16	75	4,564,940	2.38	60,866	16	75	4,564,940						
Electric and gas appliances.....	11	47	3,225,522	1.68	68,628	10	43	3,185,772						

<sup>1</sup> Combined with sectional chains to avoid disclosing individual operations.

<sup>2</sup> Includes 1 national chain.

<sup>3</sup> Includes 2 national chains.

TABLE 3.—EMPLOYMENT, WAGE AND EXPENSE DATA

SIZE—CLASS	Num-ber of chains	NUMBER OF UNITS OPERATED BY			NUMBER OF EMPLOYEES AND PAY ROLL						OTHER OPERATING EXPENSES <sup>1</sup> OF STORES <sup>1</sup> (including rent)	STOCKS ON HAND END OF YEAR (at cost)	NET SALES (1929)	Total oper-ating ex-penses (per cent of sales)	
		Local chains	Sectional chains	National chains	Full time		Part time		Males	Females					Salaries and wages
					Males	Females	Males	Females							
Total, all household appliance chains.....	262	2,980	1,226	266	20,635	3,450	\$33,578,560	3,746	1,212	\$2,275,366	\$31,650,750	\$31,693,893	\$191,547,403	35.24	
Electrical appliances.....	154	1,951	916	178	14,231	2,298	21,172,268	2,243	701	1,516,348	18,464,459	17,144,906	115,697,787	35.57	
Gas appliances.....	44	285	143	45	1,970	306	3,063,983	407	85	3,362,789	3,362,789	4,616,883	20,098,352	33.39	
Electric and gas appliances.....	64	744	167	43	4,434	846	9,342,309	1,096	426	476,823	9,822,502	9,932,104	55,751,264	35.23	
Chains of more than 50 units.....	13	676	314	79	2,945	353	3,756,879	791	358	584,230	3,402,731	3,950,882	22,257,226	34.79	
Electrical appliances.....	13	676	314	79	2,945	353	3,756,879	791	358	584,230	3,402,731	3,950,882	22,257,226	34.79	
Gas appliances.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Electric and gas appliances.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Chains of 26 to 50 units.....	43	862	559	74	6,469	1,036	11,076,702	1,611	540	730,235	12,123,329	10,489,734	65,837,027	37.26	
Electrical appliances.....	25	479	370	38	3,215	432	4,999,542	661	159	362,858	4,918,056	3,913,844	28,168,434	36.50	
Gas appliances.....	2	-----	76	-----	56	31	105,956	78	37	26,582	99,703	376,452	1,284,936	18.07	
Electric and gas appliances.....	16	383	113	36	3,198	573	6,571,204	872	344	340,795	7,105,570	6,199,438	36,383,665	38.53	
Chains of 11 to 25 units.....	65	764	219	59	6,661	1,232	10,787,007	995	229	744,444	8,920,528	9,678,053	58,309,531	35.07	
Electrical appliances.....	35	425	141	20	5,003	895	7,641,846	666	144	480,057	5,826,569	5,202,971	36,365,232	38.36	
Gas appliances.....	16	155	51	39	1,023	172	1,522,340	199	40	178,512	1,961,948	2,562,433	10,719,508	34.17	
Electric and gas appliances.....	14	184	27	-----	635	165	1,622,821	130	45	55,875	1,132,011	1,912,649	11,224,791	25.31	
Chains of 6 to 10 units.....	76	415	120	46	2,937	553	4,830,286	225	68	154,663	4,483,706	5,076,794	30,713,333	30.84	
Electrical appliances.....	43	226	81	33	2,333	446	3,582,756	74	28	61,994	3,251,578	3,155,233	22,267,071	30.97	
Gas appliances.....	15	87	16	6	310	30	550,084	75	3	44,736	563,396	821,383	3,528,976	32.82	
Electric and gas appliances.....	18	102	23	7	284	77	697,446	76	37	47,933	698,732	1,100,178	4,917,286	28.76	
Chains of less than 6 units.....	65	263	14	8	1,623	276	2,527,686	124	17	61,794	2,720,456	2,498,430	14,430,286	36.80	
Electrical appliances.....	38	145	10	8	735	172	1,191,245	51	12	27,209	1,065,525	921,976	6,639,824	34.40	
Gas appliances.....	16	75	-----	-----	601	73	885,603	55	5	32,365	738,742	856,615	4,564,940	36.29	
Electric and gas appliances.....	11	43	4	-----	287	31	450,838	18	-----	2,220	916,189	719,839	3,225,522	42.45	

<sup>1</sup> Of the total number of stores, 3,126 are in leased premises, for which the annual rent aggregates \$3,278,601, or 3.47 per cent of sales in such leased premises.

TABLE 4.—OPERATING EXPENSES <sup>1</sup>

[Retail expenses only]

	Totals, all chains (262 chains)	Chains of more than 50 units (13 chains)	Chains of 26 to 50 units (43 chains)	Chains of 11 to 25 units (65 chains)	Chains of 6 to 10 units (76 chains)	Chains of less than 6 units (65 chains)
Net sales.....	\$191,547,403	\$22,257,226	\$65,837,027	\$58,309,531	\$30,713,333	\$14,430,286
Reported expenses—total.....	67,504,676	7,743,840	24,530,266	20,451,979	9,468,655	5,309,936
Total wage cost.....	35,853,926	4,341,109	12,406,937	11,531,451	4,984,949	2,589,480
Salaries and wages paid 24,085 full-time employees.....	33,578,560	3,756,879	11,676,702	10,787,007	4,830,286	2,527,686
Salaries and wages paid 4,958 part-time employees.....	2,275,366	584,230	730,235	744,444	154,663	61,794
Other operating expenses including rent <sup>2</sup> .....	31,650,750	3,402,731	12,123,329	8,920,528	4,483,706	2,720,456

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

<sup>2</sup> Of the total number of stores, 3,126 are in leased premises, for which the annual rent aggregates \$3,278,601, or 3.47 per cent of sales in such leased premises.

TABLE 5.—CREDIT SALES

	Total amounts	Per cent of sales
All household-appliance chains: Net sales of 203 chains reporting sales on open account and installments.....	\$149,635,850	100.00
Cash sales.....	35,263,872	23.57
Credit sales on open account.....	39,366,863	26.31
Credit sales on installment (121 chains).....	75,005,115	50.12
Electric household-appliance chains: Net sales of 122 chains reporting sales on open account and installments.....	95,353,225	100.00
Cash sales.....	23,639,245	24.79
Credit sales on open account.....	28,089,331	29.46
Credit sales on installments (73 chains).....	43,624,649	45.75
Gas household-appliance chains: Net sales of 36 chains reporting sales on open account and installments.....	17,013,459	100.00
Cash sales.....	5,826,326	34.25
Credit sales on open account.....	3,013,013	17.71
Credit sales on installments (20 chains).....	8,174,120	48.04
Electric and gas household-appliance chains: Net sales of 45 chains reporting sales on open account and installments.....	37,269,166	100.00
Cash sales.....	5,798,300	15.56
Credit sales on open account.....	8,264,520	22.17
Credit sales on installments (28 chains).....	23,206,346	62.27

TABLE 6.—INSTALLMENT CREDIT

NOTE.—Included in credit sales in Table 5 are a smaller number of chains selling household appliances on the installment basis. The installment sales of such chains represent from 54.1 per cent to 67.4 per cent of the same chains' totals sales, as follows:

	Total amounts	Per cent of sales
All household-appliance chains: Net sales of 121 chains reporting sales on installments.....	\$129,981,944	100.00
Cash sales.....	26,728,202	20.56
Credit sales on open account.....	28,248,627	21.73
Credit sales on installments.....	75,005,115	57.71
Electric household-appliance chains: Net sales of 73 chains reporting sales on installments.....	80,478,042	100.00
Cash sales.....	16,336,195	20.30
Credit sales on open account.....	20,517,198	25.49
Credit sales on installments.....	43,624,649	54.21
Gas household-appliance chains: Net sales of 20 chains reporting sales on installments.....	15,083,364	100.00
Cash sales.....	4,950,998	32.83
Credit sales on open account.....	1,958,246	12.98
Credit sales on installments.....	8,174,120	54.19
Electric and gas household-appliance chains: Net sales of 28 chains reporting sales on open account and installments.....	34,420,538	100.00
Cash sales.....	5,441,009	15.81
Credit sales on open account.....	5,773,183	16.77
Credit sales on installments.....	23,206,346	67.42

TABLE 7.—CHAIN UNITS CLASSIFIED BY AGE OF UNITS AND GEOGRAPHIC DIVISION

[See map on p. 2 for States included in each division]

GEOGRAPHIC DIVISIONS AND AGE OF UNITS	Total number of units <sup>1</sup>	NUMBER OF UNITS IN CHAINS OF—				
		More than 50 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
UNITED STATES.....	4,472	1,069	1,495	1,042	581	285
Established—						
1929.....	397	85	97	117	47	51
1925 to 1928.....	1,824	370	581	474	271	128
Prior to 1925.....	1,685	450	625	345	188	77
Units not classified by geographic division and age.....	566	164	192	106	75	29
NEW ENGLAND DIVISION:						
Total.....	203	76	35	48	35	9
Established—						
1929.....	18	11	1	5		1
1925 to 1928.....	39	10	3	6	17	3
Prior to 1925.....	146	55	31	37	18	5
MIDDLE ATLANTIC DIVISION:						
Total.....	610	103	193	189	82	43
Established—						
1929.....	67	17	16	28	1	5
1925 to 1928.....	243	39	68	74	44	18
Prior to 1925.....	300	47	109	87	37	20

Footnote at end of table.

TABLE 7.—CHAIN UNITS CLASSIFIED BY AGE OF UNITS AND GEOGRAPHIC DIVISIONS—Continued

GEOGRAPHIC DIVISIONS AND AGE OF UNITS	Total number of units <sup>1</sup>	NUMBER OF UNITS IN CHAINS OF —				
		More than 50 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
<b>EAST NORTH CENTRAL DIVISION:</b>						
Total .....	799	228	181	207	107	76
Established—						
1929 .....	66	12	1	27	11	15
1925 to 1928 .....	257	26	33	90	62	46
Prior to 1925 .....	476	190	147	90	34	15
<b>WEST NORTH CENTRAL DIVISION:</b>						
Total .....	512	4	202	149	93	64
Established—						
1929 .....	48	1	8	8	17	14
1925 to 1928 .....	287	3	113	96	49	26
Prior to 1925 .....	177		81	45	27	24
<b>SOUTH ATLANTIC DIVISION:</b>						
Total .....	354	142	129	50	21	12
Established—						
1929 .....	31	7	18	4		2
1925 to 1928 .....	273	118	99	28	18	10
Prior to 1925 .....	50	17	12	18	3	
<b>EAST SOUTH CENTRAL DIVISION:</b>						
Total .....	269	84	119	52	10	4
Established—						
1929 .....	29	6	20	3		
1925 to 1928 .....	189	47	83	49	6	4
Prior to 1925 .....	51	31	16		4	
<b>WEST SOUTH CENTRAL DIVISION:</b>						
Total .....	505	133	158	130	62	22
Established—						
1929 .....	88	5	22	37	16	8
1925 to 1928 .....	256	59	64	87	38	8
Prior to 1925 .....	161	69	72	6	8	6
<b>MOUNTAIN DIVISION:</b>						
Total .....	238	10	150	39	26	13
Established—						
1929 .....	19	3	11		1	4
1925 to 1928 .....	75	7	40	8	16	4
Prior to 1925 .....	144		99	31	9	5
<b>PACIFIC DIVISION:</b>						
Total .....	416	125	136	72	70	13
Established—						
1929 .....	31	23		5	1	2
1925 to 1928 .....	205	61	78	36	21	9
Prior to 1925 .....	180	41	58	31	48	2

<sup>1</sup> Totals including unclassified units distributed or prorated on basis of distribution shown for units which could be directly classified as follows: More than 5 years old, 1,930; 1 to 5 years, 2,082; established in 1929, 460.

TABLE 8.—SALES BY COMMODITIES

COMMODITY	AS REPORTED		WHEN SALES NOT REPORTED BY COMMODITIES ARE PRORATED	
	Net sales	Per cent of total	Net sales	Per cent of total <sup>1</sup>
<b>ELECTRIC HOUSEHOLD-APPLIANCE CHAINS</b>				
Total.....	\$115,697,787	100.00	\$115,697,787	100.00
Electrical appliances and supplies:				
Electric household ironing machines, washing machines, vacuum cleaners, electric fans and other motor-driven appliances, exclusive of refrigerators.....	25,229,441	21.81	63,801,273	55.15
Portable electric household heating appliances (including irons, percolators, toasters, grills, bowl heaters, etc.).....	921,072	.80	2,327,654	2.01
Electric lighting equipment (residential, commercial, and industrial, including fixtures, portables, shades, reflectors, and floodlights)....	1,323,222	1.15	3,357,313	2.90
Incandescent lamps (of all types).....	564,329	.49	1,424,687	1.23
Electrical materials, supplies, and devices used in interior electrical construction.....	189,598	.16	477,460	.41
Commercial and industrial appliances (motor driven and heating, including motors, control equipment, etc.).....	837,990	.72	2,118,271	1.83
Electric ranges, water heaters, and other heavy duty heating appliances, including air heaters over 1,000 watts.....	2,772,816	2.40	7,009,841	6.06
Other electrical appliances and supplies.....	1,267,587	1.09	3,205,641	2.77
Not distributed (electrical appliances and supplies).....	32,305,342	27.92	(?)	(?)
Gas appliances.....	1,223,700	1.06	1,565,225	1.35
Refrigerators (electric and gas).....	13,263,069	11.46	16,974,308	14.67
Radios.....	4,493,005	3.88	5,750,323	4.97
Unclassified home furnishings.....	4,039,069	3.49	5,169,896	4.47
Service charged to customers.....	1,964,395	1.70	2,515,895	2.18
Not distributed (applying to entire list of commodities).....	25,298,152	21.87	(?)	(?)
<b>GAS HOUSEHOLD-APPLIANCE CHAINS</b>				
Total.....	20,098,352	100.00	20,098,352	100.00
Gas appliances and supplies:				
Gas stoves and ranges.....	4,562,014	22.70	8,667,060	43.12
Gas water heaters.....	857,501	4.27	1,629,538	8.11
Other gas appliances (except refrigerators).....	2,337,400	11.63	4,440,867	22.10
Not distributed (gas appliances and supplies).....	4,037,829	20.09	(?)	(?)
Electrical appliances.....	407,256	2.02	508,785	2.53
Refrigerators (electric and gas).....	2,857,149	14.21	3,569,855	17.76
Radios.....	55,609	.28	69,654	.35
Unclassified home furnishings.....	210,520	1.05	263,090	1.31
Heating and plumbing equipment.....	605,510	3.01	756,398	3.76
Service charged to customers.....	154,580	.77	193,105	.96
Not distributed (applying to entire list of commodities).....	4,012,984	19.97	(?)	(?)

Footnotes at end of table.

TABLE 8.—SALES BY COMMODITIES—Continued

COMMODITY	AS REPORTED		WHEN SALES NOT REPORTED BY COMMODITIES ARE PRORATED	
	Net sales	Per cent of total	Net sales	Per cent of total
<b>CHAINS SELLING BOTH ELECTRICAL AND GAS HOUSEHOLD APPLIANCES</b>				
Total.....	\$55,751,264	100.00	\$55,751,264	100.00
Electrical appliances and supplies:				
Electric household ironing machines, washing machines, vacuum cleaners, electric fans, and other motor-driven appliances, exclusive of refrigerators.....	2,911,366	5.22	9,435,360	16.92
Portable electric household heating appliances (including irons, percolators, toasters, grills, bowl heaters, etc.).....	817,525	1.47	2,649,479	4.75
Electric lighting equipment (residential, commercial, and industrial, including fixtures, portables, shades, reflectors, and floodlights).....	336,254	.60	1,089,698	1.95
Incandescent lamps (of all types).....	800,508	1.43	2,595,587	4.66
Electrical materials, supplies, and devices, used in interior electrical construction.....	330,032	.59	1,069,679	1.92
Commercial and industrial appliances (motor-driven and heating, including motors, control equipment, etc.).....	222,072	.40	719,393	1.29
Electric ranges, water heaters, and other heavy-duty heating appliances, including air heaters over 1,000 watts.....	572,549	1.03	1,855,674	3.33
Other electrical appliances and supplies (except refrigerators).....	441,818	.79	1,432,236	2.57
Not distributed (electrical appliances and supplies).....	11,287,036	20.25	( <sup>2</sup> )	( <sup>2</sup> )
Gas appliances and supplies:				
Gas stoves and ranges.....	3,801,915	6.82	8,720,998	15.64
Gas water heaters.....	1,414,497	2.54	3,244,601	5.82
Other gas appliances (except refrigerators).....	2,112,008	3.79	4,844,770	8.69
Not distributed (electrical appliances and supplies).....	6,959,682	12.48	( <sup>2</sup> )	( <sup>2</sup> )
Refrigerators (electric and gas).....	5,187,615	9.30	6,103,662	10.95
Radios.....	1,937,744	3.48	2,279,902	4.09
Unclassified home furnishings.....	2,824,577	5.07	3,323,174	5.96
Miscellaneous unclassified.....	3,438,643	6.17	4,045,995	7.26
Service charged to customers.....	1,980,695	3.57	2,341,056	4.20
Not distributed (applying to entire list of commodities).....	8,365,728	15.00	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> In this column the sales not reported by commodities have been distributed or prorated on the basis of proration shown for the sales that were so reported.

<sup>2</sup> Prorated and added to sales of individual commodities, on basis of relative sales of individual commodities.

TABLE 9.—COMMODITIES SOLD BY UTILITY-OPERATED CHAINS

[Of the household appliance group]

	ELECTRICAL APPLIANCE CHAINS (121 chains)		ELECTRIC AND GAS APPLIANCE CHAINS (54 chains)		GAS APPLIANCE CHAINS (44 chains)	
	As reported	When sales not reported by commodities are prorated	As reported	When sales not reported by commodities are prorated	As reported	When sales not reported by commodities are prorated
	Per cent 100.00	Per cent 100.00	Per cent 100.00	Per cent 100.00	Per cent 100.00	Per cent 100.00
Ratio to total sales.....						
Electrical appliances and supplies:						
Electrical household machines.....	5.18	25.17	5.33	17.10		
Portable heating appliances.....	1.34	6.51	1.50	4.80		
Electric lighting equipment.....	.66	3.22	.62	1.98		
Incandescent lamps.....	.81	3.95	1.47	4.71		
Electrical material supplies.....	.28	1.35	.60	1.94		
Commercial and industrial appliances.....	.41	2.00	.41	1.31	2.05	2.60
Electric ranges and water heaters.....	3.72	18.06	1.05	3.36		
Other electrical appliances and supplies.....	1.58	7.67	.81	2.60		
Not distributed.....	34.44	( <sup>1</sup> )	20.68	( <sup>1</sup> )		
Gas appliances and supplies:						
Gas stoves and ranges.....			6.97	15.78	21.06	39.79
Gas water heaters.....			2.59	5.87	4.51	8.53
Other gas appliances.....	1.71	2.40	3.87	8.77	12.31	23.25
Not distributed.....			12.68	( <sup>1</sup> )	18.61	( <sup>1</sup> )
Refrigerators (electric and gas).....	10.21	14.33	9.51	11.08	15.02	19.03
Radios.....	4.31	6.04	3.50	4.07	.29	.37
Unclassified home furnishings.....	4.42	6.21	4.36	5.08	1.11	1.40
Miscellaneous unclassified.....			6.31	7.35		
Service charged to customers.....	2.21	3.09	3.61	4.20	.79	.99
Heating and plumbing equipment.....					3.19	4.04
Not distributed.....	28.72	( <sup>1</sup> )	14.13	( <sup>1</sup> )	21.06	( <sup>1</sup> )

<sup>1</sup> Prorated and added to sales of individual commodities on basis of individual commodity sales actually reported.

NOTE.—The stores included in this special commodity analysis are operated by public utility companies primarily for the sale of appliances intended to increase the consumption of gas and electricity.

## CHAPTER 14.—RESTAURANT GROUP OF CHAINS

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# THE RESTAURANT GROUP OF CHAINS

## INTRODUCTION

This is a report of the operations of the so-called restaurant chains, a group which includes seven distinct kinds of chains, of which service restaurants and cafeterias (self-service restaurants) constitute the principal business classifications.

Of the nearly \$300,000,000 of total business, cafeteria chains do one-third, service restaurants nearly one-third, and the balance is divided between lunch-room chains, lunch-counter chains, chains operating fountain lunches, those operating refreshment stands, and a few chains operating soft-drink stands. Refreshment-stand chains sell primarily bottled beverages, candy, nuts, and the delicatessen class of ready-to-serve foods, while chains operating soft-drink stands sell primarily citrus and pineapple drinks, candy, and nuts. Meals as such are a small factor with both of these kinds of chains, but meals constitute from 61 to 96 per cent of total receipts of the other kinds of chains described herein.

There are 288 chains in the restaurant group, operating 3,392 eating places or other units, with total receipts (in 1929) of \$298,969,460.

In this report they are analyzed first as a group, because of the fact that "restaurant chains" so often are referred to in financial and trade circles as if they all were in the same kind of business, and then each of the seven distinct kinds of chains is separately treated.

The 288 chains fall into the following classifications:

### SUMMARY—THE GROUP

	Chains	Units	Net sales (1929)
Restaurant group, totals.....	288	3,392	\$298,969,460
Restaurant chains (full-service restaurants).....	58	523	91,043,276
Cafeteria chains (self-serve restaurants).....	36	646	99,994,258
Lunch-room chains (table and counter service).....	82	714	39,770,293
Lunch-counter chains (counter service).....	52	652	27,244,642
Fountain-lunch chains (lunches and fountain drinks).....	14	297	32,460,153
Refreshment-stand chains (bottled beverages).....	31	406	6,228,969
Soft-drink chains (fruit drinks).....	15	154	2,227,869

Most chains of the restaurant group are local chains, operating their several units in and around some one city, but 32 are sectional and 8 are national chains.

These 40 sectional and national chains operate 1,504 of the total of 3,392 chain units, and do more than 50 per cent of the total business. Automats are classified as cafeterias. Sandwich shops are classified as lunch counters.

### OPERATING EXPENSES <sup>1</sup>

As a group, restaurants constitute a business of high operating expense compared with that of most kinds of retail business, because the "goods" sold are not sold in the same form in which they are purchased, and conversion of goods always involves expense additional to the usual operating expense. In the case of restaurants and most eating places, the principal purchase is that of supplies—raw

<sup>1</sup> Operating expenses in the restaurant business *exclude the cost of food*, but include the cost of its preparation or conversion into meals.

foods—rather than of salable commodities. In the typical service restaurants raw food costs perhaps one-half of each dollar received for meals, and 47 cents is required for preparing or converting the raw food into the edible form in which it is served, and the cost of serving the meals. The cost of labor (preparation, serving, operating) is more than one-half of the operating expense, and one-fourth of the dollar of sales. The cost to the public is more, because only a part of the cost of table service (waiters and waitresses) is paid by the restaurant, the greater part of the compensation being paid directly by the restaurant patron as a gratuity, or tip. Hence it appears neither as income nor as expense. This additional amount, varying with different classes of restaurants but generally believed to average close to 10 per cent of the amount of the check, may be added to the reported receipts of service restaurants as an estimate of the actual cost to the patron of meals purchased, and added to operating expense as an estimate of the actual cost of operation. Tables 4 and 5 provide detailed analyses of expenses.

It is essential to have this factor of additional expense in mind to understand the difference in the expense ratio between restaurant chains and cafeteria chains. Against 47.44 per cent for restaurant chains, the ratio for cafeteria chains is 40.66 but again the pay-roll cost is one-half of total expense. There is little table-service pay roll included in cafeteria expense, nor is there much included in restaurant expense. More of the sale dollar of cafeteria chains represents the cost of foodstuffs bought in the same form in which they are served, including bakery goods, salads, soups, and cooked meats.

Lunch-room chains operate at slightly less cost than cafeteria chains. The pay-roll cost is higher because some table service is provided (with a minimum of gratuities) and counter service makes up the bulk of the business, with even less gratuities to offset pay-roll expense. Lunch-counter service is even more expensive than cafeteria service. Both lunch-room chains and lunch-counter chains derive about 6 per cent of their total income from the sale of tobacco, candy, and fountain goods.

Fountain-lunch chains operate at an average expense ratio of 41.85 per cent, of which pay roll is about one-half. Refreshment-stand chains operate at an average expense ratio of 40.97 per cent, with high rent but relatively low pay-roll cost because more than one-half of their business is derived from the sale of bottled beverages requiring little preparation prior to serving.

On the other hand, chains operating soft-drink stands require more labor in preparation of their products at the point of sale, with a pay-roll ratio as high as in most restaurants, and they also require expensive locations. Rent and pay roll are almost equal in amount, and are almost the total expense. Of the average expense ratio of \$55.71 per \$100 of sales, \$22.29 is pay roll and \$24.20 is rent, leaving only \$9.22 for all other expenses.

#### SIZE OF CHAINS

In the restaurant group there are 4 chains of more than 100 units each, operating 533 restaurants, with total sales of \$59,161,236. There are 7 chains of 51 to 100 units each, operating 503 eating places with total sales of \$41,199,968. Other sizes of chains are shown in detail in Table 2 herein, which also analyzes them by volume of sales and shows the amount of sales in each of the nine geographic divisions of the country.

#### SIZE OF CITIES

About 93½ per cent of the total business of all chains in the restaurant group is in cities of more than 100,000 population. Only 1¼ per cent is in places smaller in size than 10,000 population. Of the 3,392 units, 2,864 are in cities of more

than 100,000; 262 in cities of 25,000 to 100,000; 77 in cities of 10,000 to 25,000, and 189 in smaller places. Table 8 herein shows the geographic divisions in which the chains operate, and the volume in each of four size-of-city classifications.

Nearly one-half of the total business is in the Middle Atlantic States, principally in and around New York. The Chicago area is second with 21 per cent, the Pacific coast third with 10½ per cent, and New England fourth with 10 per cent. Sales in all the five remaining divisions of the country aggregate little more than 10 per cent, or about the amount of sales in the three Pacific Coast States.

### EXPENSES VARY BY GEOGRAPHIC DIVISIONS

Not sufficient data are available to show the variation in expense by geographic divisions, except for restaurant chains and cafeteria chains. There are 46 organizations in the former, operating 319 units, which could be classified entirely in one of four divisions. There are 25 chains in the latter field, operating 334 units, which are local or sectional chains and so could be analyzed by geographic divisions.

This analysis of expenses is shown in Table 5. Three points stand out. One is that operating expenses are higher in and around Chicago than they are in and around New York, and that they are highest of all on the Pacific coast. Another is that rent also averages higher around Chicago than around New York, for locations occupied by restaurants and cafeterias. The third is that rent is cheaper on the Pacific coast than around Chicago, New York, or in New England, but pay-roll cost is much higher. Other significant comparisons are shown.

### AGE OF UNITS

Of the 3,392 units operated by the restaurant group of chains, 2,679 were analyzed according to date of establishment. Nearly one-half (46.8 per cent) had been in operation at least five years. Those established in the years 1925 to 1928, inclusive, constituted 36 per cent of the total. Only 17.2 per cent were established in 1929, and many of these were units of lunch-counter chains (sandwich shops) and soft-drink chains.

### SALES BY COMMODITIES

The error of discussing all the so-called "restaurant chains" in a group, as if they were in the same category, is illustrated graphically in the commodity table herein, where sales are broken down into commodities. This analysis (Table 6), which is shown separately for each of the seven kinds of chains composing the restaurant group of chains, also carries a total column for comparison.

It shows a wide difference between the seven kinds of chains, 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 of chains can not be regarded as a single classification, but must be divided according to the nature of the chains which constitute it.

Restaurant chains derive nearly 93 per cent of their total income from the sale of meals, at tables. The balance is chiefly from the sale of smokes, candy, nuts, and ice cream.



TABLE 2.—SALES CLASSIFIED ACCORDING TO SIZE OF CHAIN, BY SIZE OF CITY, GEOGRAPHIC DIVISION, TYPES OF OPERATION, AND VOLUME OF SALES—THE GROUP <sup>1</sup>

## A. BY SIZE OF CITY

[For analysis by cities in each geographic division, see Table 3]

[An (x) indicates that the amount must be withheld to avoid disclosure of individual operations, but it is included in the totals]

	TOTAL SALES, ALL CHAINS	CHAINS OF—				
		More than 50 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
UNITED STATES, total...	288 chains \$298,969,460	11 chains \$100,361,204	11 chains \$47,904,598	52 chains \$59,692,614	76 chains \$46,208,511	183 chains \$44,802,533
All cities having population of—						
More than 100,000.....	279,509,016	95,837,588	47,630,994	54,421,892	43,217,300	38,401,242
25,000 to 100,000.....	13,101,422	3,747,836	157,210	3,065,824	1,605,567	4,524,985
10,000 to 25,000.....	2,641,030	315,791	108,047	626,432	600,651	990,109
Less than 10,000.....	3,717,992	459,989	8,347	1,578,466	784,993	886,197

## B. BY GEOGRAPHIC DIVISIONS

[For number of units, see Table 7B]

UNITED STATES, total...	\$298,969,460	\$100,361,204	\$47,904,598	\$59,692,614	\$46,208,511	\$44,802,533
DIVISION						
New England.....	29,619,227	12,888,693	2,233,681	5,285,435	6,062,094	3,149,324
Middle Atlantic.....	147,904,619	62,897,780	35,395,037	24,956,209	11,009,683	13,645,910
East North Central.....	62,179,287	15,541,550	1,808,690	18,017,947	14,015,493	12,795,607
West North Central.....	12,596,682	2,658,852	602,562	1,831,872	3,362,861	4,140,535
South Atlantic.....	8,058,139	2,404,244	97,521	1,380,823	2,285,558	1,889,993
East South Central.....	2,856,741	1,178,031	94,634	229,986	428,556	925,534
West South Central.....	3,629,601	490,132	827,512	207,757	125,088	1,979,112
Mountain.....	822,945	(x)	(x)	70,263	314,645	349,566
Pacific.....	31,302,219	2,230,733	6,827,679	7,712,322	8,604,533	5,926,952

## C. BY TYPES OF OPERATION

ALL TYPES						
Number of chains.....	288	11	11	52	76	138
Number of units.....	3,392	1,036	370	817	572	597
Net sales (1929).....	\$298,969,460	\$100,361,204	\$47,904,598	\$59,692,614	\$46,208,511	\$44,802,533
Per cent of net sales.....	100.00	33.57	16.02	19.97	15.46	14.98
Average sales per unit.....	\$88,140	\$96,874	\$129,472	\$73,063	\$80,784	\$75,046
LOCAL CHAINS						
Number of chains.....	248	-----	7	36	71	134
Number of units.....	1,888	-----	221	555	533	579
Net sales (1929).....	\$147,449,989	-----	\$23,712,306	\$38,032,559	\$42,854,849	\$42,850,275
SECTIONAL CHAINS						
Number of chains.....	32	6	-----	<sup>2</sup> 17	5	4
Number of units.....	989	623	-----	309	39	18
Net sales (1929).....	\$98,591,416	\$52,341,537	-----	\$40,943,959	\$3,353,662	\$1,952,258
NATIONAL CHAINS						
Number of chains.....	8	5	-----	<sup>2</sup> 3	-----	-----
Number of units.....	515	413	-----	102	-----	-----
Net sales (1929).....	\$52,928,055	\$48,019,667	-----	\$4,908,388	-----	-----

<sup>1</sup> In this table the 7 kinds of chains (see text) are analyzed as a single group. Each is treated separately in subsequent tables herein.

<sup>2</sup> Includes 2 chains of more than 25 units which can not be shown separately without revealing individual operations, although they are correctly classified in the totals above.

TABLE 2.—SALES CLASSIFIED ACCORDING TO SIZE OF CHAIN, BY SIZE OF CITY, GEOGRAPHIC DIVISION, TYPES OF OPERATION, AND VOLUME OF SALES—THE GROUP—Continued

## D. BY VOLUME OF SALES

	TOTAL SALES, ALL CHAINS			CHAINS OF—			
	Per cent of total sales	Number of chains	Net sales (1929)	More than 50 units		26 to 50 units	
				Number of chains	Net sales (1929)	Number of chains	Net sales (1929)
UNITED STATES, total...	100.00	288	\$298,969,460	11	\$100,361,204	11	\$47,904,598
Chains with sales of—							
More than \$10,000,000....	34.94	5	104,451,212	4	85,197,761	1	(x)
\$5,000,000 to \$10,000,000..	7.77	4	23,222,350	—	—	2	12,448,298
\$2,500,000 to \$5,000,000....	18.51	16	55,347,515	2	7,869,298	3	12,792,984
\$1,000,000 to \$2,500,000....	17.19	34	51,402,194	4	6,845,323	1	(x)
\$500,000 to \$1,000,000.....	9.24	37	27,621,971	—	—	3	2,117,532
\$250,000 to \$500,000.....	7.76	63	23,203,516	1	(x)	—	—
\$100,000 to \$250,000.....	3.39	64	10,145,079	—	—	1	(x)
Less than \$100,000.....	1.20	65	3,575,623	—	—	—	—

	CHAINS OF—continued					
	11 to 25 units		6 to 10 units		Less than 6 units	
	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)
UNITED STATES, total.....	52	\$59,692,614	76	\$46,208,511	138	\$44,802,533
Chains with sales of—						
More than \$10,000,000....	—	—	—	—	—	—
\$5,000,000 to \$10,000,000..	1	(x)	1	(x)	—	—
\$2,500,000 to \$5,000,000....	9	28,471,366	1	(x)	1	(x)
\$1,000,000 to \$2,500,000....	9	12,344,316	12	19,066,012	8	11,980,467
\$500,000 to \$1,000,000.....	10	7,879,020	13	9,263,142	11	8,362,457
\$250,000 to \$500,000.....	8	3,429,831	13	4,659,114	41	14,665,749
\$100,000 to \$250,000.....	11	1,795,481	22	3,576,533	30	4,646,628
Less than \$100,000.....	4	193,832	14	896,248	47	2,485,543

TABLE 3.—SALES CLASSIFIED BY KINDS OF CHAINS, TYPES AND SIZES

## A. RESTAURANT CHAINS

*[An (x) indicates that the amount must be withheld to avoid disclosure of individual operations]*

	Total, all chains	CHAINS OF—		
		More than 10 units	6 to 10 units	Less than 6 units
ALL TYPES				
Number of chains.....	58	10	14	34
Number of units.....	523	280	99	144
Net sales (1929).....	\$91,043,276	\$52,204,437	\$17,469,837	\$21,369,002
Per cent of net sales.....	100.00	57.34	19.19	23.47
Average sales per unit.....	\$174,079	\$186,444	\$176,463	\$148,396
LOCAL CHAINS				
Number of chains.....	52	6	13	33
Number of units.....	345	112	93	140
Net sales (1929).....	\$52,063,405	\$15,355,295	\$15,611,736	\$21,096,374
SECTIONAL AND NATIONAL CHAINS				
Number of chains.....	6	4	-----	1 <sup>2</sup>
Number of units.....	178	168	-----	(x)
Net sales (1929).....	\$38,979,871	\$36,849,142	-----	(x)

## B. CAFETERIA CHAINS

ALL TYPES				
Number of chains.....	36	14	6	16
Number of units.....	646	532	43	71
Net sales (1929).....	\$99,994,258	\$85,491,786	\$5,581,329	\$8,921,143
Per cent of net sales.....	100.00	85.50	5.58	8.92
Average sales per unit.....	\$154,790	\$160,699	\$129,798	\$125,650
LOCAL CHAINS				
Number of chains.....	30	8	6	2 <sup>16</sup>
Number of units.....	266	152	43	71
Net sales (1929).....	\$36,178,830	\$21,676,358	\$5,581,329	\$8,921,143
SECTIONAL AND NATIONAL CHAINS				
Number of chains.....	6	6	-----	-----
Number of units.....	380	380	-----	-----
Net sales (1929).....	\$63,815,428	\$63,815,428	-----	-----

## C. LUNCH-ROOM CHAINS

ALL TYPES				
Number of chains.....	82	19	17	46
Number of units.....	714	374	140	200
Net sales (1929).....	\$39,770,293	\$20,604,742	\$8,672,425	\$10,493,126
Per cent of net sales.....	100.00	51.81	21.81	26.38
Average sales per unit.....	\$55,701	\$55,093	\$61,946	\$52,466
LOCAL CHAINS				
Number of chains.....	71	11	14	46
Number of units.....	522	206	116	200
Net sales (1929).....	\$32,079,299	\$14,095,165	\$7,491,008	\$10,493,126
SECTIONAL CHAINS				
Number of chains.....	11	8	3	-----
Number of units.....	192	168	24	-----
Net sales (1929).....	\$7,690,994	\$6,509,577	\$1,181,417	-----

<sup>1</sup> Includes 1 chain of 6 units.<sup>2</sup> Includes 1 sectional chain of 5 units.

TABLE 3.—SALES CLASSIFIED BY KINDS OF CHAINS, TYPES, AND SIZES—  
Continued

## D. LUNCH-COUNTER CHAINS

*An (x) indicates that the amount must be withheld to avoid disclosure of individual operations]*

	Total, all chains	CHAINS OF—		
		More than 10 units	6 to 10 units	Less than 6 units
<b>ALL TYPES</b>				
Number of chains.....	52	14	18	20
Number of units.....	652	431	133	88
Net sales (1929).....	\$27,244,642	\$18,349,715	\$6,022,515	\$2,872,412
Per cent of net sales.....	100.00	67.35	22.11	10.54
Average sales per unit.....	\$41,786	\$42,575	\$45,282	\$32,641
<b>LOCAL CHAINS</b>				
Number of chains.....	45	8	17	20
Number of units.....	349	137	124	88
Net sales (1929).....	\$17,441,682	\$8,860,899	\$5,708,371	\$2,872,412
<b>SECTIONAL AND NATIONAL CHAINS</b>				
Number of chains.....	7	6	1	-----
Number of units.....	303	294	9	-----
Net sales (1929).....	\$9,802,960	\$9,488,816	\$314,144	-----

## E. FOUNTAIN-LUNCH CHAINS

<b>ALL TYPES</b>				
Number of chains.....	14	5	7	2
Number of units.....	297	230	59	8
Net sales (1929).....	\$32,460,153	\$25,557,100	\$6,731,331	\$171,722
Per cent of net sales.....	100.00	78.73	20.74	.53
Average sales per unit.....	\$109,293	\$111,118	\$114,090	\$21,465
<b>LOCAL CHAINS</b>				
Number of chains.....	9	1	7	1
Number of units.....	79	16	59	4
Net sales (1929).....	\$7,109,085	(x)	\$6,731,331	(x)
<b>SECTIONAL AND NATIONAL CHAINS</b>				
Number of chains.....	5	4	-----	1
Number of units.....	218	214	-----	4
Net sales (1929).....	\$25,351,068	(x)	-----	(x)

## F. REFRESHMENT-STAND CHAINS

<b>ALL TYPES <sup>3</sup></b>				
Number of chains.....	31	7	10	14
Number of units.....	406	276	70	60
Net sales (1929).....	\$6,228,969	\$4,514,530	\$1,093,437	\$621,002
Per cent of total sales.....	100.00	72.48	17.55	9.97
Average sales per unit.....	\$15,342	\$16,357	\$15,621	\$10,350

## G. SOFT-DRINK CHAINS

<b>ALL TYPES <sup>4</sup></b>				
Number of chains.....	15	5	4	6
Number of units.....	154	100	28	26
Net sales (1929).....	\$2,227,869	\$1,236,106	\$637,637	\$354,126
Per cent of total sales.....	100.00	55.48	28.62	15.90
Average sales per unit.....	\$14,467	\$12,361	\$22,773	\$13,620

<sup>3</sup> 30 local chains, 235 units; 1 sectional chain, 171 units.<sup>4</sup> 12 local chains, 97 units; 3 sectional and national chains, 57 units.

TABLE 4A.—OPERATING EXPENSES<sup>1</sup> CLASSIFIED BY SIZE OF CHAIN—  
RESTAURANT CHAINS

[Restaurants with table service]

	Total, all chains	CHAINS OF—		
		More than 10 units	6 to 10 units	Less than 6 units
Net sales (1929).....	\$91,043,276	\$52,204,437	\$16,351,328	\$22,487,511
Number of chains.....	58	10	13	35
Units operated by local chains.....	345	112	86	147
Units operated by sectional chains.....	49	39	6	4
Units operated by national chains.....	129	129		
Operating expenses, total.....	\$43,193,782	\$26,644,216	\$6,855,382	\$9,694,184
Per \$100 of sales.....	47.44	51.04	41.93	43.11
Pay roll, total.....	\$22,802,192	\$13,985,604	\$3,525,423	\$5,291,165
Per \$100 of sales.....	25.04	26.79	21.56	23.53
Other store operating expenses, including rent.....	\$20,391,590	\$12,658,612	\$3,329,959	\$4,403,019
Per \$100 of sales.....	22.40	24.25	20.37	19.58
Rent in 504 leased premises, per \$100 of sales in such leased premises (included in figures on above line).....	9.14	10.36	7.78	7.27
Stock on hand, end of year, at cost.....	\$1,009,684	\$433,247	\$208,014	\$368,423
EMPLOYMENT DATA				
Full-time employees, total.....	22,237	13,389	3,838	5,010
Men.....	12,157	7,161	2,102	2,894
Women.....	10,080	6,228	1,736	2,116
Total pay roll.....	\$22,436,316	\$13,818,126	\$3,494,872	\$5,123,318
Part-time employees, total.....	883	474	69	340
Men.....	294	97	7	190
Women.....	589	377	62	150
Total pay roll.....	\$365,876	\$167,478	\$30,551	\$167,847

<sup>1</sup> The compilation of expense includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold in the same form in which it is bought, nor the cost of foodstuffs used in the preparation of meals, nor profit.

TABLE 4B.—OPERATING EXPENSES<sup>1</sup> CLASSIFIED BY SIZE OF CHAIN—CAFETERIA CHAINS

[Self-service restaurants]

	Total, all chains	CHAINS OF—			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
Net sales (1929) .....	\$99,994,258	\$68,178,689	\$17,313,097	\$5,581,329	\$8,921,143
Number of chains .....	36	5	9	6	16
Units operated by local chains .....	261	58	94	43	66
Units operated by sectional chains .....	264	220	39	-----	5
Units operated by national chains .....	121	121	-----	-----	-----
Operating expenses, total .....	\$40,652,803	\$27,510,695	\$6,894,762	\$2,343,859	\$3,903,487
Per \$100 of sales .....	40.66	40.35	39.82	41.99	43.76
Pay roll, total .....	\$19,926,677	\$12,788,893	\$3,885,390	\$1,172,861	\$2,079,533
Per \$100 of sales .....	19.93	18.76	22.44	21.01	23.31
Other store operating expenses, including rent .....	\$20,726,126	\$14,721,802	\$3,009,372	\$1,170,998	\$1,823,954
Per \$100 of sales .....	20.73	21.59	17.38	20.98	20.45
Rent in 628 leased premises, per \$100 of sales in such leased premises (included in figures on above line) .....	7.28	7.12	7.75	7.49	7.42
Stock on hand, end of year, at cost .....	\$1,775,095	\$1,096,354	\$194,819	\$40,415	\$443,507
EMPLOYMENT DATA					
Full-time employees, total .....	20,310	12,699	4,114	1,299	2,198
Men .....	12,857	8,951	2,062	733	1,111
Women .....	7,453	3,748	2,052	566	1,087
Total pay roll .....	\$19,393,522	\$12,432,937	\$3,780,096	\$1,157,222	\$2,023,267
Part-time employees, total .....	1,602	1,116	215	68	203
Men .....	1,107	843	84	52	128
Women .....	495	273	131	16	75
Total pay roll .....	\$533,155	\$355,956	\$105,294	\$15,639	\$56,266

<sup>1</sup> The compilation of expense includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold in the same form in which it is bought, nor the cost of foodstuffs used in the preparation of meals, nor profit.

TABLE 4C.—OPERATING EXPENSES<sup>1</sup> CLASSIFIED BY SIZE OF CHAIN—LUNCH-ROOM CHAINS

	Total, all chains	CHAINS OF—			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
Net sales (1929) .....	\$39, 770, 293	\$4, 101, 638	\$16, 503, 104	\$8, 672, 425	\$10, 493, 126
Number of chains.....	82	3	16	17	46
Units operated by local chains.....	522	71	135	116	200
Units operated by sectional chains.....	192	53	115	24	-----
Units operated by national chains.....	-----	-----	-----	-----	-----
Operating expenses, total.....	\$15, 704, 193	\$1, 747, 438	\$6, 344, 691	\$3, 461, 771	\$4, 150, 293
Per \$100 of sales.....	39. 49	42. 60	38. 45	39. 92	39. 55
Pay roll, total.....	\$8, 657, 815	\$803, 962	\$3, 434, 128	\$2, 037, 203	\$2, 382, 522
Per \$100 of sales.....	21. 77	19. 60	20. 81	23. 49	22. 70
Other store operating expenses, including rent.....	\$7, 046, 378	\$943, 476	\$2, 910, 563	\$1, 424, 568	\$1, 767, 771
Per \$100 of sales.....	17. 72	23. 00	17. 64	16. 43	16. 85
Rent in 571 leased premises, per \$100 of sales in such leased premises (included in figures on above line).....	7. 02	10. 59	6. 70	6. 40	6. 70
Stock on hand, end of year, at cost.....	\$392, 335	\$31, 397	\$143, 409	\$60, 414	\$157, 115
EMPLOYMENT DATA					
Full-time employees, total.....	8, 012	670	3, 499	1, 761	2, 082
Men.....	5, 365	323	2, 338	1, 259	1, 445
Women.....	2, 647	347	1, 161	502	637
Total pay roll.....	\$8, 485, 368	\$803, 962	\$3, 367, 495	\$1, 993, 390	\$2, 320, 521
Part-time employees, total.....	479	-----	218	141	120
Men.....	396	-----	205	122	69
Women.....	83	-----	13	19	51
Total pay roll.....	\$172, 447	-----	\$66, 633	\$43, 813	\$62, 001

<sup>1</sup> The compilation of expense includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold in the same form in which it is bought, nor the cost of foodstuffs used in the preparation of meals, nor profit.

TABLE 4D.—OPERATING EXPENSES<sup>1</sup> CLASSIFIED BY SIZE OF CHAIN—LUNCH-COUNTER CHAINS

	Total, all chains	CHAINS OF—			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
Net sales (1929).....	\$27, 244, 642	\$14, 036, 200	\$4, 313, 515	\$6, 022, 515	\$2, 872, 412
Number of chains.....	52	5	9	18	20
Units operated by local chains.....	349	33	104	124	88
Units operated by sectional chains.....	259	213	37	9	-----
Units operated by national chains.....	44	44	-----	-----	-----
Operating expenses, total.....	\$10, 195, 459	\$5, 009, 073	\$1, 662, 062	\$2, 363, 400	\$1, 160, 924
Per \$100 of sales.....	37.42	35.69	38.53	39.24	40.42
Pay roll, total.....	\$5, 612, 902	\$2, 564, 939	\$828, 919	\$1, 603, 192	\$615, 852
Per \$100 of sales.....	20.60	18.28	19.22	26.62	21.44
Other store operating expenses, including rent.....	\$4, 582, 557	\$2, 444, 134	\$833, 143	\$760, 208	\$545, 072
Per \$100 of sales.....	16.82	17.41	19.31	12.62	18.98
Rent in 601 leased premises, per \$100 of sales in such leased premises (included in figures on above line).....	7.00	6.96	12.46	3.49	8.12
Stock on hand, end of year, at cost.....	\$337, 961	\$82, 430	\$58, 975	\$176, 708	\$19, 848
EMPLOYMENT DATA					
Full-time employees, total.....	5, 883	2, 820	922	1, 467	674
Men.....	3, 955	2, 038	841	699	377
Women.....	1, 928	782	81	768	297
Total pay roll.....	\$5, 308, 959	\$2, 447, 051	\$716, 982	\$1, 575, 230	\$569, 696
Part-time employees, total.....	1, 027	406	348	141	132
Men.....	464	181	181	43	59
Women.....	563	225	167	98	73
Total pay roll.....	\$303, 943	\$117, 888	\$111, 937	\$27, 962	\$46, 156

<sup>1</sup> The compilation of expense includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold in the same form in which it is bought, nor the cost of foodstuffs used in the preparation of meals, nor profit.

TABLE 4E.—OPERATING EXPENSES<sup>1</sup> CLASSIFIED BY SIZE OF CHAIN—  
FOUNTAIN-LUNCH CHAINS

	Total, all chains	CHAINS OF—	
		More than 10 units	Less than 10 units <sup>2</sup>
Net sales (1929).....	\$32,460,153	\$25,230,846	\$7,229,307
Number of chains.....	14	4	10
Units operated by local chains.....	79	-----	79
Units operated by sectional chains.....	36	32	4
Units operated by national chains.....	182	182	-----
Operating expenses, total.....	\$13,583,947	\$11,780,207	\$1,803,740
Per \$100 of sales.....	41.85	46.69	24.95
Pay roll, total.....	\$7,043,512	\$6,113,292	\$930,220
Per \$100 of sales.....	21.70	24.23	12.87
Other store operating expenses, including rent.....	\$6,540,435	\$5,666,915	\$873,520
Per \$100 of sales.....	20.15	22.46	12.08
Rent in 293 leased premises, per \$100 of sales in such leased premises (included in figures on above line).....	8.10	8.46	6.86
Stock on hand, end of year, at cost.....	\$334,658	\$219,268	\$115,390
EMPLOYMENT DATA			
Full-time employees, total.....	6,104	5,165	939
Men.....	1,321	1,059	262
Women.....	4,783	4,106	677
Total pay roll.....	\$6,406,720	\$5,527,306	\$879,414
Part-time employees, total.....	1,405	1,286	119
Men.....	165	149	16
Women.....	1,240	1,137	103
Total pay roll.....	\$636,792	\$585,986	\$50,806

<sup>1</sup> The compilation of expense includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold in the same form in which it is bought, nor the cost of foodstuffs used in the preparation of meals, nor profit.

<sup>2</sup> Includes 2 fountain-lunch chains of less than 6 units.

TABLE 4F.—OPERATING EXPENSES<sup>1</sup> CLASSIFIED BY SIZE OF CHAIN—  
REFRESHMENT-STAND CHAINS

	Total, all chains	CHAINS OF—		
		More than 10 units	6 to 10 units	Less than 6 units
Net sales (1929) .....	\$6, 228, 969	\$4, 514, 530	\$1, 093, 437	\$621, 002
Number of chains .....	31	7	10	14
Units operated by local chains .....	235	105	70	60
Units operated by sectional chains .....	171	171		
Units operated by national chains .....				
Operating expenses, total .....	\$2, 551, 767	\$1, 875, 718	\$359, 161	\$316, 888
Per \$100 of sales .....	40.97	41.55	32.85	51.03
Pay roll, total .....	\$931, 798	\$639, 441	\$162, 096	\$130, 261
Per \$100 of sales .....	14.96	14.16	14.83	20.98
Other store operating expenses, including rent .....	\$1, 619, 969	\$1, 236, 277	\$197, 065	\$186, 627
Per \$100 of sales .....	26.01	27.39	18.02	30.05
Rent in 297 leased premises, per \$100 of sales in such leased premises (included in figures on above line) .....	23.26	24.47	17.47	22.62
Stock on hand, end of year, at cost .....	\$100, 341	\$44, 218	\$23, 882	\$32, 241
EMPLOYMENT DATA				
Full-time employees, total .....	1, 147	764	200	183
Men .....	933	674	153	106
Women .....	214	90	47	77
Total pay roll .....	\$893, 505	\$615, 725	\$158, 253	\$119, 527
Part-time employees, total .....	242	113	56	73
Men .....	162	57	54	51
Women .....	80	56	2	22
Total pay roll .....	\$38, 293	\$23, 716	\$3, 843	\$10, 734

<sup>1</sup> The compilation of expense includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

TABLE 4G.—OPERATING EXPENSES<sup>1</sup> CLASSIFIED BY SIZE OF CHAIN—  
SOFT-DRINK CHAINS

	Total, all chains	CHAINS OF—		
		More than 10 units	6 to 10 units	Less than 6 units
Net sales (1929).....	\$2, 227, 869	\$1, 236, 106	\$637, 637	\$354, 126
Number of chains.....	15	5	4	6
Units operated by local chains.....	97	48	28	21
Units operated by sectional chains.....	18	13	-----	5
Units operated by national chains.....	39	39	-----	-----
Operating expenses, total.....	\$1, 241, 136	\$739, 521	\$315, 908	\$185, 707
Per \$100 of sales.....	55.71	59.83	49.54	52.44
Pay roll, total.....	\$496, 587	\$268, 457	\$114, 681	\$113, 449
Per \$100 of sales.....	22.29	21.72	17.98	32.04
Other store operating expenses, including rent.....	\$744, 549	\$471, 064	\$201, 227	\$72, 258
Per \$100 of sales.....	33.42	38.11	31.56	20.40
Rent in 128 leased premises, per \$100 of sales in such leased premises (included in figures on above line).....	24.20	26.81	25.65	11.72
Stock on hand, end of year, at cost.....	\$40, 582	\$8, 659	\$14, 905	\$17, 018
EMPLOYMENT DATA				
Full-time employees, total.....	616	238	112	266
Men.....	417	150	97	170
Women.....	199	88	15	96
Total pay roll.....	\$490, 128	\$267, 957	\$114, 038	\$108, 133
Part-time employees, total.....	15	4	1	10
Men.....	13	4	1	8
Women.....	2	-----	-----	2
Total pay roll.....	\$6, 459	\$500	\$643	\$5, 316

<sup>1</sup> The compilation of expense includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

TABLE 5.—OPERATING EXPENSES BY GEOGRAPHIC DIVISIONS—RESTAURANT CHAINS AND CAFETERIA CHAINS

(Includes only chains operating in a single geographic division)

## A. RESTAURANT CHAINS

DIVISION	Number of chains	Number of units	Net sales (1929)	TOTAL REPORTED EXPENSES		Number of employees	PAY ROLL		OTHER STORE OPERATING EXPENSES, INCLUDING RENT		Rent in leased premises, per \$100 of sales in such premises (included in figures in preceding column)
				Amount	Per \$100 of sales		Amount	Per \$100 of sales	Amount	Per \$100 of sales	
Total.....	46	319	\$50,988,636	\$22,442,857	44.02	11,752	\$12,180,786	23.89	\$10,262,071	20.13	(90¢ stores) 7.97
New England.....	3	16	1,427,497	587,808	41.18	342	330,953	23.19	256,855	17.99	7.36
Middle Atlantic.....	14	71	15,156,734	6,242,878	41.19	3,253	3,186,380	21.02	3,056,498	20.17	7.94
East North Central.....	17	114	16,990,970	7,314,387	43.05	3,958	3,901,121	22.96	3,413,266	20.09	8.80
Pacific.....	12	118	17,414,435	8,297,784	47.65	4,199	4,762,332	27.35	3,535,452	20.30	7.24

## B. CAFETERIA CHAINS

DIVISION	Number of chains	Number of units	Net sales (1929)	TOTAL REPORTED EXPENSES		Number of employees	PAY ROLL		OTHER STORE OPERATING EXPENSES, INCLUDING RENT		Rent in leased premises, per \$100 of sales in such premises (included in figures in preceding column)
				Amount	Per \$100 of sales		Amount	Per \$100 of sales	Amount	Per \$100 of sales	
Total.....	25	334	\$61,798,224	\$24,756,274	40.06	13,087	\$12,454,432	20.15	\$12,304,842	19.91	(\$19 stores) 6.36
New England.....	3	26	3,911,936	1,621,685	41.45	920	842,805	21.54	778,880	19.91	7.00
Middle Atlantic.....	11	241	50,203,431	19,703,735	39.25	9,923	9,771,172	19.46	9,932,563	19.79	6.18
East North Central.....	7	47	4,609,201	2,162,346	46.91	1,400	1,182,318	25.65	980,028	21.26	8.74
West North Central.....	4	20	3,073,656	1,271,508	41.37	844	658,137	21.41	613,371	19.96	4.97

TABLE 6.—SALES BY COMMODITIES

	SALES BY—							
	Total, all chains <sup>1</sup>	Restaurant chains (table service)	Cafeteria chains (self-service)	Lunch-room chains (tables and counter)	Lunch-counter chains	Fountain-lunch chains	Refreshment-stand chains	Soft-drink chains
Net sales (1929).....	\$298,969,460	\$91,043,276	\$99,994,258	\$39,770,293	\$27,244,642	\$32,460,153	\$6,228,969	\$2,227,869
Less amount which can not be broken down into commodities.....	4,940,970	95,641	392,957	443,738	2,213,770	1,794,864		
Sales further analyzed.....	294,028,490	90,947,635	99,994,258	39,377,336	26,800,904	30,246,383	4,434,105	2,227,869
Commodities.....	<i>Per cent</i> 100.00	<i>Per cent</i> 100.00	<i>Per cent</i> 100.00	<i>Per cent</i> 100.00	<i>Per cent</i> 100.00	<i>Per cent</i> 100.00	<i>Per cent</i> 100.00	<i>Per cent</i> 100.00
Apple juice and apples.....	.08							.95
Citrus and pineapple drinks.....	.48							64.85
Grape beverages.....	.05							6.41
Root beer.....	.02							3.08
Bottled beverages.....	1.42	.10		.38	1.83			6.46
Soft drinks (not described).....	.08			.18				0.91
Bakery products, fresh.....	1.45	.84	.75	.09	.03	8.59	3.25	
Cigars, cigarettes, and tobacco.....	2.00	2.18	1.34	3.45	3.47	.34	2.46	3.18
Confectionery and nuts.....	3.50	1.94	.11	2.39	.43	19.26	17.30	8.46
Deli-cassens, ready-to-serve foods.....	.62	.08	.02	.02	3.34		13.80	
Fountain sales, ice cream, and lunches.....	3.37	1.51	.02	2.26	1.98	21.07	6.59	
Milk and cream.....	.07	.06		.13	.05	.32		
Receipts from sale of meals <sup>2</sup> .....	86.11	92.80	96.78	90.36	87.21	50.33	2.26	
Service.....	.14	.43		.01				.16
Drugs and toiletries.....	.01		.01					.27
Groceries.....	.12	.06	.01		1.00	.09		.02
Meats, including poultry.....	.06							
Nonfood products.....	.42		.99	.72				.06

<sup>1</sup> See explanation on page 187 giving reason for including this total column.

<sup>2</sup> Some lunch sales included with fountain sales.

TABLE 7.—UNITS CLASSIFIED BY SIZE OF CHAIN, DATE OF ESTABLISHMENT, AND GEOGRAPHIC DIVISIONS—THE GROUP

## A. BY DATE OF ESTABLISHMENT

	Per cent of total units	Total units, all chains	UNITS IN CHAINS OF—					
			More than 100 units	51 to 100 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
Total, all units.....		3, 392	533	503	370	817	572	597
Less—Unable to classify.....		713	129	182	162	240		
Number analyzed.....	100. 0	2, 679	404	321	208	577	572	597
Established:								
In 1929.....	17. 2	461	26	114	64	49	97	111
1925 to 1928.....	36. 0	963	137	137	100	181	189	219
Previous to 1925.....	46. 8	1, 255	241	70	44	347	286	267

## B. BY GEOGRAPHIC DIVISIONS

[For dollars of sales, see TABLE 2B.]

UNITED STATES, total.....	100. 00	3, 392	533	503	370	817	572	597
DIVISION								
New England.....	7. 19	244	115	8	6	30	34	51
Middle Atlantic.....	33. 99	1, 153	278	200	182	212	144	137
East North Central.....	26. 56	901	85	199	39	325	123	130
West North Central.....	9. 29	315	13	66	41	55	60	80
South Atlantic.....	4. 84	164	22	18	4	28	63	29
East South Central.....	2. 06	70	9	8	3	3	16	31
West South Central.....	3. 69	125	3	4	39	8	24	47
Mountain.....	1. 56	53	1		1	20	17	14
Pacific.....	10. 82	367	7		55	136	91	78

TABLE 8.—SALES CLASSIFIED BY SIZE OF CITY AND GEOGRAPHIC DIVISIONS—  
THE GROUP

DIVISION AND SIZE OF CITY	Per cent of total sales	Total sales, all chains
UNITED STATES, total.....	100.00	\$298,969,460
All cities having population of—		
More than 100,000.....	93.49	279,509,016
25,000 to 100,000.....	4.38	13,101,422
10,000 to 25,000.....	.88	2,641,030
Less than 10,000.....	1.25	3,717,992
NEW ENGLAND, total.....	100.00	29,619,227
Cities having population of—		
More than 100,000.....	91.18	27,007,851
25,000 to 100,000.....	7.19	2,130,388
10,000 to 25,000.....	1.09	322,841
Less than 10,000.....	.54	158,147
MIDDLE ATLANTIC, total.....	100.00	147,904,619
Cities having population of—		
More than 100,000.....	96.16	142,222,421
25,000 to 100,000.....	2.51	3,709,811
10,000 to 25,000.....	.89	1,319,795
Less than 10,000.....	.44	652,592
EAST NORTH CENTRAL, total.....	100.00	62,179,287
Cities having population of—		
More than 100,000.....	95.90	59,633,558
25,000 to 100,000.....	2.78	1,726,880
10,000 to 25,000.....	.24	149,839
Less than 10,000.....	1.08	669,010
WEST NORTH CENTRAL, total.....	100.00	12,596,682
Cities having population of—		
More than 100,000.....	86.16	10,853,586
25,000 to 100,000.....	7.28	917,064
10,000 to 25,000.....	1.53	192,323
Less than 10,000.....	5.03	633,709
SOUTH ATLANTIC, total.....	100.00	8,058,139
Cities having population of—		
More than 100,000.....	71.65	5,773,635
25,000 to 100,000.....	18.39	1,482,214
10,000 to 25,000.....	1.41	113,231
Less than 10,000.....	8.55	689,059
EAST SOUTH CENTRAL, total.....	100.00	2,856,741
Cities having population of—		
More than 100,000.....	93.85	2,681,191
25,000 to 100,000.....	4.58	130,762
10,000 to 25,000.....		
Less than 10,000.....	1.57	44,788
WEST SOUTH CENTRAL, total.....	100.00	3,629,601
Cities having population of—		
More than 100,000.....	87.10	3,161,378
25,000 to 100,000.....	7.94	288,094
10,000 to 25,000.....	1.18	42,791
Less than 10,000.....	3.78	137,338
MOUNTAIN, total.....	100.00	822,945
Cities having population of—		
More than 100,000.....	20.81	171,278
25,000 to 100,000.....	4.54	37,342
10,000 to 25,000.....	26.20	215,591
Less than 10,000.....	48.45	398,734
PACIFIC, total.....	100.00	31,302,219
Cities having population of—		
More than 100,000.....	89.46	28,004,118
25,000 to 100,000.....	8.56	2,678,867
10,000 to 25,000.....	.91	284,619
Less than 10,000.....	1.07	334,615

# CHAPTER 15.—NEWSDEALER CHAINS

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# THE NEWSDEALER GROUP OF CHAINS

## INTRODUCTION

Chains which operate news stands throughout the country, in railroad stations and other public places, have developed a substantial business which, in 1929, the last year affording normal measurement, exceeded \$100,000,000.

In addition to their primary business as newsdealers, this group of chains has added such activities as the operation of restaurants or lunch counters, fountains, stationery stores, and novelty and gift shops. Because of the interconnections of these several kinds of business, this report has been arranged to include four related classifications in addition to newsdealer chains, as follows:

	Number of chains	Number of units	Net sales (1929)
Group totals.....	123	3,207	\$104,055,733
Newsdealer chains.....	61	882	24,307,266
Newsdealer-restaurant chains.....	7	1,802	36,433,958
Bookstore chains.....	30	349	35,482,077
Stationery chains.....	5	29	3,750,616
Art and gift shop chains.....	13	106	3,270,279
Novelty-store chains.....	7	39	811,537

Newsdealer chains often operate two or more news stands in one location, such as in a large railroad terminal. In the 882 locations mentioned above there are actually 1,049 stands or other places of business, but the multiple stands under one roof are counted as a single location in this report.

Routes covering railroad trains are included in the sales of the location from which such vendors operate and draw their supplies, and when several such vendor routes are operated from the same supply source they are treated herein as a single unit.

Commodity sales data included herein are derived from the withdrawal records of the chains, which show the total retail value of each commodity withdrawn by all of the units of the chain regardless of location. These values are accumulated for all chains, and the amounts are expressed as percentages or ratios of total sales. (See Table 4 and other commodity tables.)

## NEWSDEALER CHAINS

Of the 61 newsdealer chains, 50 are local and 11 are sectional or national chains. The local chains operate in 562 locations, with total sales of \$11,727,900 (48 per cent of the total). Six sectional chains and 5 national chains operate 487 stands in 320 locations, with total sales of \$12,579,366. Nearly one-half of this total is done by 2 chains in 170 locations. Eight chains, operating in 572 locations, do more than two-thirds of the total business of all newsdealer chains. Only three chains do more than \$2,500,000 each, although nine do more than \$1,000,000 each.

**Distribution of sales.**—More than \$21,000,000 of the \$24,307,266 of sales is in cities of more than 100,000 population. (Sales on trains are credited to the cities in which the terminals or supply bases are located.) Only 4 per cent of the business is done in places of less than 10,000 population. New York leads in sales, with Chicago second, Boston third, and the terminal cities on the Pacific coast fourth.

Of the 882 locations operated by newsdealer chains, 730 are in cities of more than 100,000 population, 71 are in cities of 30,000 to 100,000 population, 39 are in cities of 10,000 to 30,000 population, and 42 are in places of less than 10,000 population.

**Age of chains.**—About two-thirds of all chain units were established prior to 1925. About one-fourth were added in the four years from 1925 to 1928, inclusive, and of all the units (locations) operating at the time of the census, 10 per cent were established during 1929.

**Expenses.**—Small local chains, with limited territory, operate at a much lower expense ratio than do the large national chains. The average for 38 such small chains is \$24.31 per \$100 of sales, in comparison with an average for the 8 large chains of more than \$40. Both pay roll and rent are higher in proportion. High expense is unavoidable in the sale of commodities of low unit cost in stores or locations of low annual sales volume, as is shown in numerous instances in Retail Census reports. Operating expense in all these chains averages \$39.39 per \$100 of sales. Pay-roll averages 65 per cent of total expenses and rent averages 30 per cent, or nearly \$12 per \$100 of sales. In the larger chains a substantial proportion of receipts is from the sale of meals and fountain drinks, accounting for the higher payroll cost and to some extent for the higher rental cost.

**Commodities sold.**—The sale of newspapers and magazines is nearly two-thirds (63.76 per cent) of the total business of newsdealer chains. Confectionery, nuts, and popcorn constitute 14½ per cent, smokes 8¼ per cent, and miscellaneous other commodities total about 4 per cent. Fountain sales and receipts from the sale of meals total 9½ per cent of total sales. The latter compares with a total of nearly 45 per cent from the same sources in the case of newsdealer-restaurant chains, which are separately described below.

### NEWSDEALER-RESTAURANT CHAINS

Seven chains which operate both restaurants (or lunch rooms) and news stands are classified in census reports separate from newsdealer chains. In these seven chains the sale of magazines and newspapers does not predominate, but is substantially equal to receipts from the sales of meals and from fountains.

None of these is a local chain. Of the 1,802 units operated, only 87 are those of a sectional chain. Practically all (1,715) are units of national chains, or companies operating over extensive areas in two or more geographic divisions of the country. Sales in the 1,802 units totaled, in the census year 1929, \$36,433,958. Expenses totaled \$12,137,783, or one-third of sales. Of this, pay roll was \$6,513,440. Rent averaged 14.88 per cent of sales in leased premises. The difference in the size of the average transaction, between these chains and the newsdealer chains, is reflected in the lower expense ratio.

**Commodities sold.**—Meals constitute 39 per cent of the total sales of newsdealer-restaurant chains and fountain sales add 6 per cent more. The total of 45 per cent is about equal to the sale of magazines and newspapers (46.67 per cent).

Smokes (cigars, cigarettes, tobacco and smokers' supplies) aggregate 3.96 per cent of total sales, confectionery and nuts 1.65 per cent, and all other commodities 2.66 per cent. The latter includes such miscellaneous merchandise as books, drug sundries, notions, toys, and such wearables as hosiery, collars, ties, and handkerchiefs. More detail is shown in the commodity table herein (Table 8).

### BOOKSTORE CHAINS

Chains operating bookstores are closely allied to newsdealer chains and are included in this report, although separately classified. There are 30 such chains, operating 349 units with annual sales (1929) of \$35,482,077.

Four chains operate more than 25 units each, 4 operate 11 to 25 units, and 12 operate 6 to 10 units. There are 10 smaller chains operating less than 6 units each, but doing 17 per cent of the total business.

Of the 349 units operated by all bookstore chains, 321 are in cities of more than 100,000 population; 16 are in cities of 30,000 to 100,000; 4 are in cities of 10,000 to 30,000; and 8 are in places of less than 10,000 population.

**Sales volume of chains.**—Four chains do more than \$2,500,000 of business annually, 9 have sales of \$1,000,000 to \$2,500,000 each, 6 average between \$500,000 and \$1,000,000, and 11 do less than one-half million dollars each.

More than one-third of the total sales is in the middle Atlantic division, around New York. The Chicago division is second, the west north central third, and the Pacific coast fourth. Sales in the South Atlantic States are practically equal to those in the New England States.

**Credit business.**—Credit constitutes the largest part of the business of 21 chains. Of total sales of \$27,776,383 by these chains, open-account credit sales total \$7,879,610, or 28.37 per cent; installment credit sales total \$12,699,153, or 45.72 per cent; and cash sales total \$7,197,620, or 25.91 per cent. Six of these chains report that the installment proportion of their business exceeds 67 per cent. They include canvasser chains selling reference books and other books in sets.

Nine chains sell entirely for cash, and their sales aggregate \$7,705,694, or about the same as the cash sales of credit-granting chains. Thus for the 30 book-store chains, 58 per cent of the total business is credit business and 42 per cent is cash business.

**Expenses.**—Total expense reported by the bookstore chains totals \$14,391,937, or \$40.56 per \$100 of sales. Of this, \$25.63 is pay roll. Rent averages 4.69 per cent of sales, or about the average retail rental cost. Stores operating entirely for cash usually show a higher rental ratio than credit-granting stores, no matter what kind of business they are engaged in, and the same is true of bookstore chains.

The expense table herein (Table 10) contains also a comparison between expenses of credit-granting chains and all-cash chains. The ratio for the former is \$41.82, or \$1.26 above the average, and the ratio for all-cash chains is \$36.02, or \$4.54 below the average. The rent ratio, however, is \$4.09 in the case of credit-granting chains and \$6.79 in the case of all-cash chains. Other comparisons of expense, pay roll, and personnel figures are shown in Table 10.

**Age of chains.**—Practically all units of book-store chains were established prior to 1929, only 12 new stores having been opened that year. Between 1925 and 1928 (inclusive), 54 units were established. This record is quite different from that of most kinds of chains, for in most fields the addition of new units to old chains and the establishment of entirely new chains in the period from 1925 to 1929 accounts for a substantial proportion of the total number of units enumerated at the time of the census.

**Commodities sold.**—Books constitute 87 per cent of the total sales of these chains. Magazines and newspapers total 8.63 per cent. Religious goods constitute 2.64 per cent. The small balance is detailed in the commodity table herein (Table 12).

### STATIONERY CHAINS

The five stationery chains included in this group, operating 29 units, did a total business in 1929 of \$3,750,616. Reported expenses average \$33.48 per \$100 of sales, of which pay roll is \$19. The 29 stores required 426 employees. Rent averages \$5.60 per \$100 of sales in leased premises. Because of the small number of chains, no further data can be shown.

Stationery sales totaled 41.80 per cent of total sales, followed by books and magazines 17.43 per cent, furniture and equipment for office and stores 16.96 per cent, printing 12.37 per cent, and paper goods 5.06 per cent. Commodities making up the balance are shown in Table 14 herein.

### ART AND GIFT SHOP CHAINS

Included in this group are 13 chains operating 106 art and gift shops, with total sales in 1929 of \$3,270,279. Reported expenses average \$39.73 per \$100

of sales, of which pay roll is \$16. The 106 stores required 420 employees, of which 68 were part-timers. Rent averages \$12.85 per \$100 of sales in leased premises. No further data can be revealed, because of the small number of chains.

Art goods, stationery, and gifts total 51½ per cent of total sales, with china, glassware, and crockery adding 16 per cent. Other important commodity classifications are jewelry, office equipment, dry goods and wearables, paper goods, photographic supplies, and service. Details are shown in Table 16.

### NOVELTY-STORE CHAINS

Seven chains of novelty stores report a total business in 1929 of \$811,537, in 39 stores or units. Reported expense averages \$40.09 per \$100 of sales, of which pay roll is \$17. The 39 stores employed 89 full-time employees and 47 part-timers. All premises are leased, and rent averages 13.65 per cent of sales. Because of the small number of chains, no further data can be shown. The small total of sales makes a commodity table difficult without revelation, and none is included.

These chains should not be confused with variety-store chains included in this report. Among the principal commodities sold by novelty-store chains are oriental art goods, novelty jewelry, framed mottoes, pictures, and souvenirs.

TABLE 1.—SUMMARY, NEWSDEALER GROUP OF CHAINS

	Number and amount		Number and amount
<b>NEWSDEALER CHAINS (Tables 2 to 6):</b>		<b>BOOKSTORE CHAINS—Continued.</b>	
Number of chains.....	61	Number of units operated.....	349
Local chains.....	50	Local chains.....	22
Sectional and national chains..	11	Sectional and national chains..	327
Number of locations (some locations include 2 or more units (stands) operating under the same roof, making a total of 1,049 units in all).....	882	Total net sales (1929).....	\$35,482,077
Local chains.....	562	Credit sales (58 per cent).....	\$20,578,763
Sectional and national chains..	320	Cash sales (42 per cent).....	\$14,903,314
Total net sales (1929).....	\$24,207,266	Store operating expense (per \$100 of sales).....	\$40.56
Store operating expense (per \$100 of sales).....	\$39.39	Pay-roll cost, 6,433 employees (per \$100 of sales).....	\$25.63
Pay roll cost, 7,287 employees (per \$100 of sales).....	\$25.94	Other store operating expense including rent (per \$100 of sales).....	\$14.93
Other store operating expense, including rent (per \$100 of sales).....	\$13.45	Rent, 299 leased premises (per \$100 of sales).....	\$4.69
Rent, 415 leased locations (per \$100 of sales).....	\$11.92	<b>STATIONERY CHAINS (Tables 13 and 14):</b>	
<b>NEWSDEALER-RESTAURANT CHAINS (Tables 7 and 8):</b>		Number of chains.....	5
Number of chains.....	7	Number of units operated.....	29
Number of units operated.....	1,802	Local chains.....	22
Sectional chains.....	87	National chains.....	7
National chains.....	1,715	Total net sales (1929).....	\$3,750,616
Total net sales (1929).....	\$36,433,958	<b>ART AND GIFT SHOP CHAINS (Tables 15 and 16):</b>	
<b>BOOKSTORE CHAINS (Tables 9 to 12):</b>		Number of chains.....	13
Number of chains.....	30	Number of units operated.....	106
Local chains.....	5	Local chains.....	75
Sectional and national chains..	25	Sectional and national chains..	31
		Total net sales (1929).....	\$3,270,279
		<b>NOVELTY-STORE CHAINS (Table 17):</b>	
		Number of chains.....	7
		Number of units operated.....	39
		Local chains.....	29
		National chains.....	10
		Total net sales (1929).....	\$811,537

TABLE 2.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, GEOGRAPHIC DIVISION, TYPES OF OPERATION, AND VOLUME OF SALES—NEWSDEALER CHAINS

## A. BY SIZE OF CITY

[For more detail see Table 6]

SIZE OF CITY	Total sales, all chains	CHAINS OF—		
		More than 25 units <sup>1</sup>	6 to 25 units	Less than 6 units
UNITED STATES, total.....	61 chains \$24,307,266	8 chains \$16,624,490	15 chains \$6,547,857	38 chains \$1,134,919
All cities having population of—				
More than 100,000.....	21,388,606	15,701,005	4,724,441	963,160
30,000 to 100,000.....	1,433,629	622,951	810,678	-----
10,000 to 30,000.....	557,547	137,994	322,794	96,759
Less than 10,000.....	927,484	162,540	689,944	75,000

<sup>1</sup> Unites signify separate locations. See text.

## B. BY GEOGRAPHIC DIVISIONS

[For number of units see Table 5-B]

UNITED STATES, total.....	\$24,307,266	\$16,624,490	\$6,547,857	\$1,134,919
GEOGRAPHIC DIVISION				
New England.....	4,117,437	2,168,544	1,948,893	-----
Middle Atlantic.....	7,665,285	6,929,631	530,654	205,000
East North Central.....	4,593,505	3,563,806	417,742	611,957
West North Central.....	1,345,296	880,442	464,854	-----
South Atlantic.....	844,849	458,078	290,012	96,759
East South Central.....	516,637	471,572	45,065	-----
West South Central.....	540,553	481,825	58,728	-----
Mountain.....	784,916	379,766	405,150	-----
Pacific.....	3,898,788	1,290,826	2,386,759	221,203

## C. BY TYPES OF OPERATION

ALL TYPES				
Number of chains.....	61	8	15	38
Number of units.....	882	572	156	154
Net sales (1929).....	\$24,307,266	\$16,624,490	\$6,547,857	\$1,134,919
Per cent of net sales.....	100.00	68.39	26.94	4.67
LOCAL CHAINS				
Number of chains.....	50	4	8	38
Number of units.....	562	331	77	154
Net sales (1929).....	\$11,727,900	\$7,403,442	\$3,189,539	\$1,134,919
SECTIONAL CHAINS				
Number of chains.....	6	-----	6	-----
Number of units.....	67	-----	67	-----
Net sales (1929).....	\$2,432,803	-----	\$2,432,803	-----
NATIONAL CHAINS				
Number of chains.....	5	15	-----	-----
Number of units.....	253	253	-----	-----
Net sales (1929).....	\$10,146,563	\$10,146,563	-----	-----

<sup>1</sup> Includes 1 chain of 12 units which can not be shown separately because of disclosure, although it is correctly classified in the totals above.

TABLE 2.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, GEOGRAPHIC DIVISION, TYPES OF OPERATION, AND VOLUME OF SALES—NEWSDEALER CHAINS—Continued

[An (x) indicates that the amount must be withheld to avoid disclosure of individual operations]

D. BY VOLUME OF SALES

VOLUME OF SALES	TOTAL SALES, ALL CHAINS			CHAINS OF—					
	Per cent of total sales	Number of chains	Net sales (1929)	More than 25 units		6 to 25 units		Less than 6 units	
				Number of chains	Net sales (1929)	Number of chains	Net sales (1929)	Number of chains	Net sales (1929)
UNITED STATES, total.	100.00	61	Dollars 24, 307, 266	8	Dollars 16, 624, 490	15	Dollars 6, 547, 857	38	Dollars 1, 134, 919
Chains with sales of—									
More than \$2,500,000.....	38.18	3	9, 279, 578	3	9, 279, 578	—	—	—	—
\$1,000,000 to \$2,500,000.....	38.11	6	9, 262, 254	4	6, 611, 098	2	2, 651, 156	—	—
\$500,000 to \$1,000,000.....	14.73	5	3, 580, 843	1	(x)	4	2, 847, 029	—	—
\$100,000 to \$500,000.....	7.12	9	1, 731, 987	—	—	6	987, 858	3	744, 129
Less than \$100,000.....	1.86	38	452, 604	—	—	3	61, 814	35	390, 790

TABLE 3.—OPERATING EXPENSES<sup>1</sup>—NEWSDEALER CHAINS

	Total, all chains	CHAINS OF—		
		More than 25 units	6 to 25 units	Less than 6 units
Net sales (1929).....	\$24, 307, 266	\$16, 624, 490	\$6, 547, 857	\$1, 134, 919
Number of chains.....	61	8	15	38
Operating expenses, total.....	\$9, 574, 528	\$6, 701, 431	\$2, 597, 179	\$275, 918
Per \$100 of sales.....	\$39.39	\$40.31	\$39.66	\$24.31
Pay roll, total.....	\$6, 304, 372	\$4, 386, 788	\$1, 760, 689	\$156, 895
Per \$100 of sales.....	\$25.94	\$26.39	\$26.89	\$13.82
Other operating expenses, including rent.....	\$3, 270, 156	\$2, 314, 643	\$836, 490	\$119, 023
Per \$100 of sales.....	\$13.45	\$13.92	\$12.78	\$10.49
Rent in 415 leased locations per \$100 of sales in such leased locations (included in figures above).....	\$11.92	\$13.94	\$5.48	\$10.27
Stocks on hand, end of year, at cost.....	\$530, 987	\$292, 832	\$143, 262	\$94, 893
EMPLOYMENT DATA				
Full-time employees, total.....	7, 035	5, 227	1, 700	108
Men.....	5, 978	4, 468	1, 413	97
Women.....	1, 057	759	287	11
Total pay roll.....	\$6, 226, 999	\$4, 380, 983	\$1, 714, 339	\$131, 677
Part-time employees, total.....	252	7	127	118
Men.....	233	—	116	117
Women.....	19	7	11	1
Total pay roll.....	\$77, 373	\$5, 805	\$46, 350	\$25, 218

<sup>1</sup>This computation of expenses includes no return on capital invested in merchandise, fixtures or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

TABLE 4.—SALES BY COMMODITIES—NEWSDEALER CHAINS

	Per cent of total sales		Per cent of total sales
Net sales (1929) (coverage 100 per cent).....	\$24,307,266	Commodities—Continued.	<i>Per cent</i>
Commodities.....	<i>Per cent</i> 100.00	Bottled beverages.....	.51
Magazines and newspapers.....	63.76	Books.....	.12
Confectionery, nuts, popcorn.....	14.54	Drugs and drug sundries.....	.18
Cigars, cigarettes, and tobacco.....	8.24	Flowers.....	.03
Receipts from the sale of meals.....	7.61	Fruits and vegetables.....	.25
Fountain sales and ice cream.....	1.88	Novelties.....	.03
Bakery products.....	.02	Stationery.....	.12
		Miscellaneous merchandise.....	1.85
		Service.....	.12
		Sales to other dealers.....	.74

TABLE 5.—UNITS CLASSIFIED BY DATE OF ESTABLISHMENT AND GEOGRAPHIC DIVISIONS—NEWSDEALER CHAINS

## A. DATE OF ESTABLISHMENT

DATE OF ESTABLISHMENT	NUMBER OF UNITS <sup>1</sup>		CHAINS OF—		
	Number	Per cent	More than 25 units	6 to 25 units	Less than 6 units
Total, all locations.....	882	-----	572	156	154
Less—can not classify.....	239	-----	188	51	-----
Number classified.....	643	100.0	384	105	154
Established—					
In 1929.....	64	10.0	26	20	18
1925 to 1928.....	159	24.7	95	26	38
Prior to 1925.....	420	65.3	263	59	98

## B. GEOGRAPHIC LOCATION OF UNITS

[For dollars of sales, see Table 2-B]

UNITED STATES, total.....	882	100.00	572	156	154
GEOGRAPHIC DIVISION					
New England.....	83	9.41	51	32	-----
Middle Atlantic.....	268	30.39	243	21	4
East North Central.....	327	37.07	162	24	141
West North Central.....	33	3.74	21	12	-----
South Atlantic.....	56	6.35	38	13	5
East South Central.....	15	1.70	13	2	-----
West South Central.....	14	1.59	9	5	-----
Mountain.....	18	2.04	6	12	-----
Pacific coast.....	68	7.71	29	35	4

<sup>1</sup> Units signify separate locations. See text.

TABLE 6.—SALES CLASSIFIED BY SIZE OF CITY, IN EACH GEOGRAPHIC DIVISION—NEWSDEALER CHAINS

[Elaborating the data shown in Table 2A. This table classifies the sales of each unit separately]

DIVISION AND SIZE OF CITY	Per cent of total sales	Total sales, all chains	DIVISION AND SIZE OF CITY	Per cent of total sales	Total sales, all chains
UNITED STATES, total.....	100.00	\$24,307,266	SOUTH ATLANTIC, total.....	100.00	\$844,549
All cities having population of—			Cities having population of—		
More than 100,000.....	87.99	21,388,606	More than 100,000.....	66.68	563,349
30,000 to 100,000.....	5.90	1,433,629	30,000 to 100,000.....	7.91	66,837
10,000 to 30,000.....	2.29	557,547	10,000 to 30,000.....	15.67	132,373
Less than 10,000.....	3.82	927,484	Less than 10,000.....	9.74	82,290
NEW ENGLAND, total.....	100.00	4,117,437	EAST SOUTH CENTRAL, total.....	100.00	516,637
Cities having population of—			Cities having population of—		
More than 100,000.....	77.29	3,182,459	More than 100,000.....	77.66	401,208
30,000 to 100,000.....	13.82	569,087	30,000 to 100,000.....	19.49	100,723
10,000 to 30,000.....	3.16	130,043	10,000 to 30,000.....	2.85	14,706
Less than 10,000.....	5.73	235,848	Less than 10,000.....		
MIDDLE ATLANTIC, total.....	100.00	7,665,285	WEST SOUTH CENTRAL, total.....	100.00	540,553
Cities having population of—			Cities having population of—		
More than 100,000.....	95.16	7,293,915	More than 100,000.....	89.13	481,825
30,000 to 100,000.....	2.77	212,566	30,000 to 100,000.....	7.68	41,502
10,000 to 30,000.....	.37	28,254	10,000 to 30,000.....	.89	4,805
Less than 10,000.....	1.70	130,550	Less than 10,000.....	2.30	12,421
EAST NORTH CENTRAL, total.....	100.00	4,593,605	MOUNTAIN DIVISION, total.....	100.00	784,916
Cities having population of—			Cities having population of—		
More than 100,000.....	98.27	4,514,143	More than 100,000.....	47.20	370,505
30,000 to 100,000.....	.63	28,740	30,000 to 100,000.....	11.37	89,264
10,000 to 30,000.....	.69	31,609	10,000 to 30,000.....	16.86	132,332
Less than 10,000.....	.41	19,013	Less than 10,000.....	24.57	192,815
WEST NORTH CENTRAL, total.....	100.00	1,345,296	PACIFIC COAST, total.....	100.00	3,898,788
Cities having population of—			Cities having population of—		
More than 100,000.....	73.71	991,606	More than 100,000.....	92.07	3,589,596
30,000 to 100,000.....	9.82	132,124	30,000 to 100,000.....	4.94	192,786
10,000 to 30,000.....	3.66	49,179	10,000 to 30,000.....	.88	34,246
Less than 10,000.....	12.81	172,387	Less than 10,000.....	2.11	82,160

TABLE 7.—SUMMARY, NEWSDEALER-RESTAURANT CHAINS

	Number and amount		Number and amount
Number of chains.....	7	Expenses, total.....	\$12,137,783
Number of units operated.....	1,802	Expense ratio—total (per \$100 of sales).....	33.31
By sectional chains.....	87	Total number of employees (660 part-timers included).....	9,387
By national chains.....	1,715	Total pay roll (part-time proportion, \$188,711).....	\$6,513,440
Total net sales (1929).....	\$36,433,958	Total operation expenses, except pay roll.....	\$5,624,343
Stock on hand, end of year, at cost....	\$1,901,000	Rent in 1,322 locations, in per cent to sales in such leased locations (included in total expense).....	14.88

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

TABLE 8.—SALES BY COMMODITIES—NEWSDEALER-RESTAURANT CHAINS

	Per cent of total sales		Per cent of total sales
Net sales (1929) (coverage, 100 per cent)	\$36,433,958	Commodities—Continued:	<i>Per cent</i>
Commodities.....	<i>Per cent</i> 100.00	Books.....	0.10
Magazines and newspapers.....	46.67	Drug sundries and toiletries.....	.23
Receipts from sale of meals.....	39.08	Flowers.....	.03
Fountain sales and ice cream.....	5.98	Fruits and vegetables.....	.24
Cigars, cigarettes, and tobacco.....	3.96	Notions.....	.17
Confectionery and nuts.....	1.65	Toys and games.....	.01
		Women's accessories and men's furnishings.....	.07
		Miscellaneous merchandise.....	1.81

TABLE 9.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, GEOGRAPHIC DIVISIONS, AND TYPES OF OPERATION—BOOKSTORE CHAINS

[An (x) indicates that the amount must be withheld to avoid disclosure of individual operations]

## A. BY SIZE OF CITY

SIZE OF CITY	Total sales, all chains	CHAINS OF—			
		More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
UNITED STATES, total.....	<i>30 chains</i> \$35,482,077	<i>4 chains</i> \$9,133,210	<i>4 chains</i> \$3,401,175	<i>12 chains</i> \$16,814,680	<i>10 chains</i> \$6,133,012
All cities with population of—					
More than 100,000.....	35,028,763	8,975,046	3,195,703	16,814,680	6,043,334
30,000 to 100,000.....	349,516	144,369	181,482	-----	23,665
10,000 to 30,000.....	32,383	8,393	23,990	-----	-----
Less than 10,000.....	71,415	5,402	-----	-----	66,013

## B. BY GEOGRAPHIC DIVISIONS

[For number of units see Table 11-B]

UNITED STATES, total.....	\$35,482,077	\$9,133,210	\$3,401,175	\$16,814,680	\$6,133,012
DIVISION					
New England.....	2,505,902	276,596	209,563	1,377,737	642,006
Middle Atlantic.....	12,905,883	3,986,075	609,064	5,782,355	2,528,389
East North Central.....	8,513,159	1,763,605	634,201	4,226,457	1,888,896
West North Central.....	3,724,385	695,179	457,949	1,949,525	621,732
South Atlantic.....	2,475,158	644,307	466,368	1,340,818	(x)
East South Central.....	667,698	322,186	122,451	85,293	(x)
West South Central.....	1,465,250	333,282	401,926	730,042	-----
Mountain.....	366,904	285,462	(x)	(x)	-----
Pacific.....	2,857,738	826,518	433,563	1,307,101	290,556

## C. BY TYPES OF OPERATION

ALL TYPES					
Number of chains.....	30	4	4	12	10
Number of units.....	349	155	62	90	42
Net sales (1929).....	\$35,482,077	\$9,133,210	\$3,401,175	\$16,814,680	\$6,133,012
Per cent of net sales.....	100.00	25.74	9.59	47.39	17.28
LOCAL CHAINS					
Number of chains.....	5	-----	-----	1	4
Number of units.....	22	-----	-----	6	16
Net sales (1929).....	\$1,041,619	-----	-----	(x)	(x)
SECTIONAL CHAINS					
Number of chains.....	6	1	1	3	1
Number of units.....	106	67	11	24	4
Net sales (1929).....	\$6,420,142	(x)	(x)	\$4,257,061	(x)
NATIONAL CHAINS					
Number of chains.....	19	3	3	8	5
Number of units.....	221	88	51	60	22
Net sales (1929).....	\$28,020,316	\$7,254,067	\$3,272,706	\$12,420,799	\$5,072,744

TABLE 10.—OPERATING EXPENSES<sup>1</sup>—BOOKSTORE CHAINS

	Total, all chains	Credit chains	All-cash chains
Net sales (1929).....	\$35,482,077	\$27,776,383	\$7,705,694
Credit sales.....		\$20,578,763	
Per \$100 of sales.....		\$74.09	
Number of chains.....	30	21	9
Units operated by local chains.....	22	14	8
Units operated by sectional chains.....	106	12	94
Units operated by national chains.....	221	206	15
Operating expenses, total.....	\$14,391,937	\$11,616,667	\$2,775,270
Per \$100 of sales.....	\$40.56	\$41.82	\$36.02
Pay roll, total.....	\$9,095,387	\$7,421,589	\$1,673,798
Per \$100 of sales.....	\$25.63	\$26.72	\$21.72
Other store operating expenses, including rent.....	\$5,296,550	\$4,195,078	\$1,101,472
Per \$100 of sales.....	\$14.93	\$15.10	\$14.30
Rent in leased premises, per \$100 of sales in such leased premises (included in figures on above line).....	<sup>2</sup> \$4.69	<sup>3</sup> \$4.09	<sup>4</sup> \$6.79
Stock on hand, end of year, at cost.....	\$5,592,820	\$4,034,004	\$1,558,816
EMPLOYMENT DATA			
Full-time employees.....	5,813	4,311	1,502
Men.....	3,172	2,509	663
Women.....	2,641	1,802	839
Total pay roll.....	\$8,907,922	\$7,329,068	\$1,578,854
Part-time employees.....	670	393	277
Men.....	371	284	87
Women.....	299	109	190
Total pay roll.....	\$187,465	\$92,521	\$94,944

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

<sup>2</sup> 299 leased premises.

<sup>3</sup> 189 leased premises.

<sup>4</sup> 110 leased premises.

TABLE 11.—CHAIN UNITS CLASSIFIED BY DATE OF ESTABLISHMENT, AND GEOGRAPHIC DIVISIONS—BOOKSTORE CHAINS

## A. DATE OF ESTABLISHMENT

DATE OF ESTABLISHMENT	Per cent of total units	Total units, all chains	UNITS IN CHAINS OF—			
			More than 25 units	11 to 25 units	6 to 10 units	Less than 6 units
Total, all units.....	100.00	319	155	62	90	42
All units established:						
In 1929.....	3.44	12	4	4	4	—
1925 to 1928.....	15.47	54	11	37	5	1
Previous to 1925.....	43.84	153	10	21	81	41
Unclassified units.....	37.25	130	130	—	—	—

## B. GEOGRAPHIC LOCATION OF UNITS

[For dollars of sales, see Table 9B]

UNITED STATES, total.....	100.00	319	155	62	90	42
DIVISION						
New England.....	4.59	16	5	3	5	3
Middle Atlantic.....	36.96	129	89	8	23	9
East North Central.....	19.77	69	19	10	21	19
West North Central.....	8.88	31	12	7	7	5
South Atlantic.....	9.17	32	10	10	11	1
East South Central.....	3.15	11	4	3	3	1
West South Central.....	4.59	16	6	6	4	—
Mountain.....	1.72	6	3	2	1	—
Pacific coast.....	11.17	39	7	13	15	4

TABLE 12.—SALES BY COMMODITIES—BOOKSTORE CHAINS

	Per cent of total sales		Per cent of total sales
Net sales (1929).....	\$35,482,077	Commodities—Continued.	
Less—amount which can not be broken down into commodities...	1,889,050	Stationery, etc.—Continued.	
Sales further analyzed.....	33,593,027	Magazines and news- papers.....	8.63
	<i>Per cent</i>	Paper and paper goods..	.73
Commodities.....	100.00	Other stationery.....	.53
Stationery, books and magazines...	97.18	Religious goods.....	2.64
Books.....	87.29	Music.....	.06
		Miscellaneous merchandise.....	.05
		Service.....	.07

TABLE 13.—SUMMARY—STATIONERY CHAINS

	Number and amount		Number and amount
Number of chains.....	5	Expenses—Continued.	
Number of units operated.....	29	Total number of employees.....	426
By local chains.....	22	Total pay roll.....	\$711,485
By national chains.....	7	Total operating expenses, except pay roll.....	\$544,386
Total net sales (1929).....	\$3,750,616	Rent in 27 leased premises, in per cent to sales in such premises (in- cluded in total expense).....	5.60
Stock on hand, end of year, at cost.....	\$1,083,031		
Expenses, total.....	\$1,255,871		
Total expense ratio (per \$100 of sales).....	33.48		

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

TABLE 14.—SALES BY COMMODITIES—STATIONERY CHAINS

	Per cent of total sales		Per cent of total sales
Net sales (1929).....	\$3,750,616	Commodities—Continued.	
Less—amount which can not be broken down into commodities...	347,212	Printing.....	12.37
Sales further analyzed.....	3,403,404	Office and store furniture.....	8.78
	<i>Per cent</i>	Office and store equipment.....	8.18
Commodities:	100.00	Gifts, novelties, and greeting cards..	2.95
Stationery, books, and magazines...	64.29	Cameras and photographic supplies..	.83
Stationery.....	41.80	Circulating libraries.....	.84
Books.....	16.04	Fountain pens.....	1.08
Magazines.....	1.39	Leather goods.....	.52
Paper and paper goods....	5.06	Picture frames.....	.16

TABLE 15.—SUMMARY—ART AND GIFT SHOP CHAINS

	Number and amount		Number and amount
Number of chains.....	13	Expenses, total—Continued.	
Number of units operated.....	106	Total number of employees (68 part-timers included).....	420
By local chains.....	75	Total payroll (part-time proportion, \$24,346).....	\$522,839
By sectional chains.....	26	Total operating expenses, except payroll.....	\$776,377
By national chains.....	5	Rent in 104 leased premises, in per cent to sales in such premises (included in total expense).....	12.85
Total net sales (1929).....	\$3,270,279		
Stock on hand, end of year, at cost.....	\$1,361,532		
Expenses, total.....	<sup>1</sup> \$1,299,216		
Total expense ratio (per \$100 of sales).....	39.73		

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profits.

TABLE 16.—SALES BY COMMODITIES—ART AND GIFT SHOP CHAINS

	Per cent of total sales		Per cent of total sales
Net sales (1929).....	\$3,270,279	Commodities—Continued.	
Less—Amount which can not be broken down into commodities.....	\$81,695	Drug sundries, incense, smokes.....	0.46
Sales further analyzed.....	2,388,584	Jewelry.....	5.30
		Office equipment.....	4.07
		Photo-finishing sales.....	1.46
		Photographic supplies and cameras.....	1.40
		Pictorial novelties.....	4.30
Commodities.....	<i>Per cent</i> 100.00	Wooden and paper goods, artificial flowers.....	3.13
Art goods, statuary and gifts.....	51.58	Dry goods and notions.....	3.26
China, glassware, crockery, etc.....	15.96	Women's apparel and lingerie.....	6.79
Books, leather goods, toys, and games.....	.86	Fountain sales.....	.92
		Sales to other dealers.....	.51

TABLE 17.—SUMMARY—NOVELTY-STORE CHAINS

	Number and amount		Number and amount
Number of chains.....	7	Expenses, total.....	<sup>1</sup> \$327,933
Number of units operated.....	39	Total expense ratio (per \$100 of sales).....	40.09
By local chains.....	29	Total number of employees (47 part-timers included).....	136
By national chains.....	10	Total payroll (part-time proportion, \$6,733).....	\$138,282
Total net sales (1929).....	\$811,537	Total operating expenses, except payroll.....	\$189,651
Stock on hand, end of year, at cost.....	\$123,808	Rent, in per cent to sales (included in total expense).....	13.65

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

## CHAPTER 16.—DRUG STORE CHAINS

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# DRUG STORE CHAINS

## INTRODUCTION

This report of the retail merchandising series presents facts derived from the first nation-wide Census of Distribution, which is a part of the Fifteenth Decennial Census of the United States and covered the operations of the year, 1929. It deals with retail distribution through drug store chains.

Sales at retail by drug store chains in 1929 amounted to \$312,301,721. There were 249 chains, with 3,513 stores or units, of which 169 chains operated drug stores with fountains, and 80 operated stores without fountains. Both kinds of stores are analyzed in this report. Fountain sales usually include lunches.

The 249 chains employ the services of 31,861 full-time employees and 1,556 part timers, at a total annual pay roll cost of \$41,981,491. Other operating expenses, including rent, aggregate \$44,356,022, making a total operating expense of \$86,337,513 or \$27.64 per \$100 of sales. The average rent is \$7.43 per \$100 of sales, computed on the basis of the rent paid for 3,451 stores operated in wholly leased premises. Stocks on hand at the end of the year are valued at cost at \$40,754,028 which, at retail values, would indicate a turnover rate of 5.2 times. The report shows, however, that both the expense rate and the rate of turnover vary considerably between stores without fountains and those with fountains (and usually lunches), and between chains operating in large cities and those operating in the smaller cities and towns. See Tables 9A and 9B for a comparison of stock-sales ratio by geographic divisions, and Tables 7A and 7B for expense comparisons.

Chains operating stores without fountains do a total business of \$23,620,924 in comparison with a total business of \$288,680,797 by chains operating what may be described as typical chain drug stores, which usually derive nearly one-fourth of their revenue from soda fountain sales, and ice cream, confectionery, nuts and bottled beverages and another 18 per cent from the cigar counter.

## SALES BY COMMODITIES

An analysis of more than 91 per cent of all sales by chains operating drug stores with fountains indicates the following relative sales in the order of importance of commodities:

	<i>Drug stores with fountains</i>	Per cent
Prescriptions.....	4.27	4.27
Drugs, pharmaceuticals, medicines.....	37.95	37.95
Toilet articles and preparations.....	10.38	10.38
Soda fountain sales, ice cream, fountain lunches.....	19.75	19.75
Confectionery and nuts.....	3.39	3.39
Bottled beverages.....	.12	.12
Cigars, cigarettes, and tobacco.....	18.74	18.74
Miscellaneous merchandise.....	5.40	5.40
Total.....	100.00	100.00

A comparable analysis of sales by chains operating drug stores without fountains, based upon a commodity coverage of somewhat less than 50 per cent because the balance of the chains were not able to report their sales by commodities, is as follows:

*Drug stores without fountains*

	Per cent
Prescriptions .....	6. 70
Drugs, pharmaceuticals, medicines.....	35. 99
Toilet articles and preparations.....	22. 88
Confectionery, nuts, ice cream, and bottled beverages....	5. 66
Cigars, cigarettes, and tobacco.....	18. 02
Miscellaneous merchandise.....	10. 75
Total.....	100. 00

### SALES BY SIZE OF CITY

About 77 per cent of all chain sales are in cities of more than 100,000 population; 14 per cent in cities between 100,000 and 30,000 population; 6 per cent in cities between 30,000 and 10,000 population, and 3 per cent in places with less than 10,000 population.

More than 60 per cent of chain sales are in the areas surrounding Chicago, New York, and the Pacific coast cities, in that order of importance. The balance are located quite uniformly throughout the remaining divisions of the country, usually in cities of more than 30,000 population.

### ANALYSIS BY VOLUME OF SALES AND TYPES OF OPERATION

Four chains do an annual volume of sales in excess of \$9,700,000 each, their combined business amounting to more than that of all the other 245 chains combined. The seven largest chains do nearly two-thirds of the total business of all chains operating stores with fountains. This report contains an analysis of sales on the basis of the annual volume of sales of each chain.

Although the great majority of chains are local in territory, and operate about four-sevenths of all the stores, their combined sales are less than those of the 14 sectional and national chains. These 14 chains, with 1,560 stores, do a combined business of \$180,283,809, or about 58 per cent of the total chain store business, while 235 local chains, with 1,953 stores, show aggregate sales of \$132,017,912. Of the chains operating stores without fountains, local chains greatly outnumber the sectional and national chains in the number of stores and in sales. A local chain is any combination of four or more drug stores located in and around one city, owned and operated centrally. A single drug store is classified as a single-store independent; two or three drug stores operated by the same proprietor are classified as 2-store or 3-store independents. A sectional chain is a chain operating drug stores in several cities in the same section or geographic division of the country, and a national chain operates in more than one section. When the census was taken there were too few national chains to permit of their being shown separately in this report, although since then some of the sectional chains have expanded into new territory and have become national chains.

### AGE OF UNITS AND EXPANSION OF CHAINS

Of the 3,031 stores with fountains operating at the end of 1929, nearly one-fourth were established during that year. More than one-third were opened during the four preceding years. Hardly more than one-third of all the chain stores in operation at the time of the census were in existence five years earlier. The largest proportionate and actual increase in 1929 was made by the large chains of more than 50 units, which added 27 per cent of their stores that year; chains

with 26 to 50 units added 24 per cent; chains of 11 to 25 units added 22 per cent; chains of 6 to 10 units added 17 per cent, and chains of less than 6 units added 14 per cent of their stores during the year 1929. Although chains operating drug stores without fountains show a slower rate of growth, of the 482 units in operation at the end of 1929 the number opened during that year is about 17 per cent.

### CREDIT SALES

Only 93 chains report that they extend to their customers the convenience of a charge account. The total sales of these 93 chains, of which 66 are chains operating stores with fountains and 27 are other drug store chains, aggregate \$42,189,222 or about 13½ per cent of all drug store chain sales. The amount of business done on credit by these 93 chains is \$5,186,002 or 12.3 per cent of their total sales.

A series of tables in this report compares the operating expenses of chains extending credit with those of chains which sell entirely for cash, and indicates that the former operate at a rate somewhat higher in relation to sales than the all-cash, no-delivery chains. This relation exists between the two classes of chains, whether they are compared in total or are further segregated into chains operating stores with fountains and chains operating stores without fountains.

There seems to be justification in this report for asserting that the drug store operating on the full-service basis, with charge accounts and deliveries, is in a class just as distinctly different from the all-cash, no-delivery store, as the fountainless, apothecary-type drug store is in a class distinctly different from the typical drug store with fountain, lunch, and merchandise departments. This has no relation to whether the stores are operated by chains or independents. Each of these classes might be considered a separate kind of business, subject to its own set of principles, its own level of expenses and its own operating policies. The expense comparison tables indicate that the full-service (charge-delivery) drug store operates at an average expense 2.12 per cent higher in relation to sales than does the cash-carry store, and that the store with fountain operates at an average expense 3.4 per cent higher, in relation to sales, than does the fountainless store.

This situation does not mean that the chain offering credit and delivery could drop 2¼ per cent of its expense by withdrawing those services, nor does it mean that the store with fountain could drop 3.08 per cent of its expense by closing its fountain. If it did either of these, it would change the character of its business, would lose a large proportion of its present trade and to maintain its volume it must succeed in attracting new trade of another type to replace it. Such a change would involve not only a change in policy but also a change in business classification. Each kind of business is distinct in itself, and necessarily has its compensating advantages or disadvantages to offset the difference in primary expense rate, because it continues to survive and add new units in free competition with the other kinds of chains.

### EXPENSES COMPARED BY SIZE OF CITY

The report contains expense comparisons between chains operating in large cities (with population over 100,000) and smaller cities (with population of less than 30,000). The tables show separately those chains without fountains and those operating stores with fountains. Only the chains operating all their units in one size of city are included in this expense comparison.

The difference in expense rate between the two sizes of cities averages 4.4 per cent and it is consistently higher in the large cities regardless of the size of the chain. The difference shows primarily in pay roll and rent. Total expense in the large cities is \$30.40 per \$100 of sales, in comparison with \$26.00 per \$100 of sales in the smaller cities. Pay-roll cost is \$15.50 and \$14.00 per \$100 of sales, respectively.

Rental cost in the large cities is 6.3 per cent, in comparison with 4.1 per cent in the smaller cities. Rental cost, wherever it is used in this report, refers to rent paid for wholly leased premises, and is related always to total sales in such leased premises only. That rent, pay roll, and some other expenses are consistently lower in proportion to sales in the smaller cities than they are in large cities has been pointed out in other reports of the Merchandising Series of the Retail Census.

### CENTRAL OFFICE ADMINISTRATIVE SALARIES

Nine drug chains operating stores without fountains report that their pay-roll expense in the central offices, including executives, buyers, merchandisers, and clerks, averages \$3.00 per \$100 of their sales. Of those operating stores with fountains, 24 report that their central office pay roll averages \$2.30 per \$100 of their sales. The 33 chains average less than 2½ per cent. Central office expenses are supposed to have been prorated to the stores and included in the stores' operating expenses. No further detail is available, and the above is included incidentally for such light as it may throw upon the operation of drug store chains.

TABLE 1.—SUMMARY—DRUG STORE CHAINS

Total drug store chains.....	249
Chains operating stores with fountain.....	169
Other drug store chains.....	80
Number of local chains.....	235
Number of sectional chains }.....	14
Number of national chains }.....	
Total units.....	3,513
Chains operating stores with fountain.....	3,031
Other drug store chains.....	482
Local.....	1,953
Sectional and national.....	1,560
Total sales.....	\$312,301,721
Chains operating stores with fountain.....	288,680,797
Other drug store chains.....	23,620,924
Local chains.....	132,017,912
Sectional and national chains.....	180,283,809
Store operating expenses (per \$100 of sales).....	27.64
Chains operating stores with fountain.....	27.88
Other drug store chains.....	24.80
Chains extending credit.....	29.61
Chains not extending credit.....	27.35
Local chains.....	26.66
Sectional and national chains.....	28.37
Pay roll cost, 33,417 employees (per \$100 of sales).....	13.44
Chains operating stores with fountain.....	13.47
Other drug store chains.....	13.12
Local chains.....	13.91
Sectional and national chains.....	13.10
Other store operating expenses, including rent (per \$100 of sales).....	14.20
Chains operating stores with fountain.....	14.41
Other drug store chains.....	11.68
Local chains.....	12.75
Sectional and national chains.....	15.27
Rent—3,451 leased stores (per \$100 of sales).....	7.43
Chains operating stores with fountain (2,988 stores).....	7.65
Other drug store chains (463 stores).....	4.76

TABLE 2.—SALES OF DRUG STORE CHAINS

A. SALES CLASSIFIED BY GEOGRAPHIC DIVISIONS AND SIZE OF CHAIN

DIVISION	NET SALES (1929)		SALES OF UNITS OF—				
	Amount	Per cent of total	Chains of more than 50 units	Chains of 26 to 50 units	Chains of 11 to 25 units	Chains of 6 to 10 units	Chains of less than 6 units
Total, all drug store chains.....	\$312,301,721	100.00	\$180,679,790	\$35,417,081	\$36,419,124	\$26,116,415	\$33,669,311
New England.....	20,503,056	6.56	15,999,950	—	—	1,856,152	2,646,954
Middle Atlantic.....	74,585,116	23.88	51,520,907	4,299,773	9,568,085	5,650,415	3,545,936
East North Central.....	90,869,399	29.10	49,784,955	14,988,217	15,477,453	5,144,380	5,474,394
West North Central.....	25,690,056	8.23	11,112,881	3,671,386	237,108	1,941,324	8,727,357
South Atlantic.....	29,722,126	9.52	19,837,750	3,751,451	2,794,778	1,284,184	2,053,963
East South Central.....	11,043,148	3.53	6,858,397	1,274,749	1,177,480	1,232,311	500,211
West South Central.....	21,705,752	6.95	3,353,704	6,624,774	4,104,127	3,930,034	3,694,113
Mountain.....	7,931,726	2.54	3,825,767	—	—	1,353,150	2,752,809
Pacific coast.....	30,250,342	9.69	18,385,479	806,731	3,060,093	3,724,465	4,273,574

B. SALES CLASSIFIED BY SIZE OF CITY AND SIZE OF CHAIN

Total, all drug store chains.....	\$312,301,721	100.00	\$180,679,790	\$35,417,081	\$36,419,124	\$26,116,415	\$33,669,311
All units in cities and places of—							
More than 100,000.....	239,489,841	76.69	143,664,310	28,740,066	26,297,516	17,447,423	23,340,526
30,000 to 100,000.....	43,445,275	13.91	25,212,473	3,573,015	5,528,733	5,091,444	4,039,610
10,000 to 30,000.....	20,108,296	6.44	9,274,182	1,800,178	3,104,221	2,050,222	3,879,493
Less than 10,000.....	9,258,309	2.96	2,528,825	1,303,822	1,488,654	1,527,326	2,409,682

TABLE 3.—SALES BY TYPES OF OPERATION AND SIZE OF CHAIN—DRUG STORE CHAINS

[ An (x) indicates that the amount must be withheld to avoid disclosure of individual operations, but it is included in the totals ]

SIZE OF CHAIN	TOTALS, ALL CHAINS				
	Number of chains	Number of units	Net sales (1929)	Per cent of total sales	Average sales per unit
All drug store chains.....	249	3,513	\$312,301,721	100.00	\$88,924
Chains operating drug stores with fountains.....	169	3,031	288,680,797	92.44	95,274
Chains of—					
More than 50 units.....	8	1,595	180,679,790	57.85	113,279
26 to 50 units.....	12	420	34,610,350	11.08	82,406
11 to 25 units.....	24	355	28,069,722	9.00	79,154
6 to 10 units.....	46	320	21,344,159	6.84	66,910
Less than 6 units.....	79	341	23,946,776	7.67	70,225
Other drug store chains.....	80	482	23,620,924	7.56	49,006
Chains of—					
More than 11 units.....	9	145	9,126,133	2.92	62,939
6 to 10 units.....	14	97	4,772,256	1.53	49,199
Less than 6 units.....	57	240	9,722,535	3.11	40,511

TABLE 3.—SALES BY TYPES OF OPERATION AND SIZE OF CHAIN—DRUG STORE CHAINS—Continued

SIZE OF CHAIN	LOCAL CHAINS			SECTIONAL AND NATIONAL CHAINS		
	Number of chains	Number of units	Net sales (1929)	Number of chains	Number of units	Net sales (1929)
All drug store chains.....	235	1,953	\$132,017,912	14	1,560	\$180,283,809
Chains operating drug stores with fountains.....	159	1,527	113,790,454	10	1,504	174,890,343
Chains of—						
More than 50 units.....	2	130	7,533,753	6	1,465	173,146,037
26 to 50 units.....	12	420	34,610,350			
11 to 25 units.....	23	332	26,829,568	1	23	(x)
6 to 10 units.....	45	312	21,132,495	1	8	(x)
Less than 6 units.....	77	333	23,684,288	2	8	(x)
Other drug store chains.....	76	426	18,227,458	4	56	5,393,466
Chains of—						
More than 11 units.....	6	94	3,909,528	3		(x)
6 to 10 units.....	14	97	4,772,256			
Less than 6 units.....	56	235	9,545,674	1		(x)

TABLE 4.—CLASSIFICATION OF CHAINS BY VOLUME OF SALES—DRUG STORE CHAINS

## A. CHAINS OPERATING DRUG STORES WITH FOUNTAINS

	ALL CHAINS		Per cent of total sales
	Number of chains	Net sales (1929)	
Total.....	169	\$288,680,797	100.00
Chains with annual net sales—			
In excess of \$5,000,000.....	7	179,957,336	62.33
\$2,500,000 to \$5,000,000.....	12	40,806,312	14.13
\$1,000,000 to \$2,500,000.....	12	19,328,250	6.70
\$500,000 to \$1,000,000.....	22	19,620,179	6.80
\$250,000 to \$500,000.....	34	14,123,368	4.89
\$150,000 to \$250,000.....	57	12,203,038	4.23
Less than \$150,000.....	25	2,642,314	.92

## B. OTHER DRUG STORE CHAINS

	Number of chains	Net sales (1929)	Per cent of total sales
Total.....	80	\$23,620,924	100.00
Chains with annual net sales—			
In excess of \$1,000,000.....	6	9,683,440	40.99
\$500,000 to \$1,000,000.....	5	2,779,719	11.77
\$250,000 to \$500,000.....	18	4,863,189	20.59
\$100,000 to \$250,000.....	36	5,273,897	22.33
Less than \$100,000.....	15	1,020,679	4.32

TABLE 5.—CHAIN UNITS CLASSIFIED BY AGE OF UNITS—DRUG STORE CHAINS

A. CHAINS OPERATING DRUG STORES WITH FOUNTAINS

AGE OF UNIT	ALL CHAINS		NUMBER OF UNITS IN CHAINS OF—									
	Per cent of total units	Total number of units	More than 50 units		26 to 50 units		11 to 25 units		6 to 10 units		Less than 6 units	
			Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number
Total.....	100.00	3,031	100.00	1,595	100.00	420	100.00	355	100.00	320	100.00	341
All units established 1929.....	23.89	724	27.65	441	24.05	101	22.53	80	16.88	54	14.08	48
All units established 1925 to 1928, inclusive.....	36.92	1,119	39.81	635	35.48	149	30.14	107	32.50	104	36.36	124
All units established prior to 1925.....	39.19	1,188	32.54	519	40.47	170	47.33	168	50.62	162	49.56	169

B. OTHER DRUG STORE CHAINS

AGE OF UNIT	ALL CHAINS		NUMBER OF UNITS IN CHAINS OF—					
	Per cent of total units	Total number of units	More than 11 units		6 to 10 units		Less than 6 units	
			Per cent	Number	Per cent	Number	Per cent	Number
Total.....	100.00	482	100.00	145	100.00	97	100.00	240
All units established 1929.....	16.81	81	21.38	31	27.83	27	9.58	23
All units established 1925 to 1928, inclusive.....	28.84	139	33.79	49	34.02	33	23.75	57
All units established prior to 1925.....	54.35	262	44.83	65	38.15	37	66.67	160

TABLE 6.—OPERATING EXPENSES 1—DRUG STORE CHAINS  
A. ALL DRUG STORE CHAINS

	STORES IN CHAINS OF—						Less than 6 units
	More than 100 units	50 to 100 units	26 to 50 units	11 to 25 units	6 to 10 units		
Total, all chains							
Net sales (1929).....	\$312,301,721	\$13,219,025	\$38,353,057	\$35,960,854	\$27,381,416	\$33,669,311	
Number of chains.....	249	3	13	31	62	136	
Units operated by local chains.....	1,953	130	420	385	450	568	
Units operated by sectional chains.....	478	62	60	74	8	13	
Units operated by national chains.....	1,082						
Operating expenses.....	\$86,337,513	\$3,363,771	\$10,024,506	\$9,840,259	\$7,508,275	\$8,927,841	
Per \$100 of sales.....	27.64	25.45	26.14	27.36	27.42	26.52	
Pay roll.....	\$41,981,491	\$2,014,797	\$5,118,655	\$4,666,844	\$3,794,279	\$4,918,483	
Per \$100 of sales.....	13.44	15.24	13.35	12.98	13.86	14.61	
Other store operating expenses, including rent.....	\$44,356,022	\$1,348,974	\$4,905,851	\$5,173,415	\$3,713,996	\$4,009,358	
Per \$100 of sales.....	14.20	10.21	12.79	14.38	13.56	11.91	
Rent in 3,451 leased premises, per \$100 of sales in such leased premises (included in above line).....	7.43	5.18	5.97	5.94	5.86	4.65	
Stocks on hand, end of year, at cost.....	\$40,754,028	\$1,732,799	\$4,002,460	\$4,772,907	\$4,443,432	\$6,135,524	
EMPLOYMENT DATA							
Full-time employees.....	31,861	1,492	4,285	3,705	3,032	3,561	
Men.....	22,377	1,042	3,238	2,513	2,298	2,711	
Women.....	9,484	450	1,047	1,192	734	850	
Total pay roll, full time.....	\$41,353,732	\$1,958,455	\$4,997,123	\$4,570,565	\$3,664,739	\$4,764,238	
Part-time employees.....	1,556	154	279	279	332	353	
Men.....	1,297	122	242	216	281	281	
Women.....	259	37	37	63	47	72	
Total pay roll, part time.....	\$627,759	\$56,342	\$121,532	\$96,279	\$129,540	\$154,185	

B. CHAINS OPERATING DRUG STORES WITH FOUNTAINS

Net sales (1929)-----	\$288,680,797	\$163,718,058	\$13,219,025	\$38,353,057	\$28,089,722	\$21,344,159	\$23,946,776
Number of chains-----	169	4	3	13	24	46	79
Units operated by local chains-----	1,527	261	130	420	332	312	333
Units operated by sectional chains-----	422	1,082	62	60	23	8	8
Units operated by national chains-----	1,082						
Operating expenses-----	\$80,480,671	\$46,672,861	\$3,363,771	\$10,024,506	\$8,107,285	\$6,226,501	\$6,085,747
Per \$100 of sales-----	27.88	28.51	25.45	26.14	28.85	29.17	25.41
Pay roll, total-----	\$38,884,011	\$21,468,433	\$2,014,797	\$5,118,655	\$3,840,042	\$3,124,621	\$3,317,463
Per \$100 of sales-----	13.47	13.11	15.24	13.35	13.66	14.64	13.85
Other store operating expenses, including rent-----	\$41,596,660	\$25,204,428	\$1,348,974	\$4,905,851	\$4,267,243	\$3,101,850	\$2,768,284
Per \$100 of sales-----	14.41	15.40	10.21	12.79	15.19	14.53	11.56
Rent in 2,088 leased premises, per \$100 of sales in such leased premises (included in line above)-----							
Stocks on hand, end of year, at cost-----	7.65	9.08	5.18	5.97	6.42	6.35	4.29
	\$36,150,667	\$19,666,906	\$1,732,799	\$4,002,460	\$3,237,717	\$3,443,989	\$4,066,796
EMPLOYMENT DATA							
Full-time employees-----	29,751	15,786	1,492	4,285	3,163	2,528	2,497
Men-----	20,730	10,575	1,042	3,238	2,144	1,916	1,815
Women-----	9,021	5,211	450	1,047	1,019	612	682
Total pay roll, full time-----	\$38,330,235	\$21,398,552	\$1,938,455	\$4,997,123	\$3,749,963	\$3,024,830	\$3,201,312
Part-time employees-----	1,364	159	154	279	260	242	270
Men-----	1,139	122	151	242	202	210	212
Women-----	225	37	3	37	58	32	58
Total pay roll, part time-----	\$553,776	\$69,881	\$56,342	\$121,532	\$90,079	\$99,791	\$116,151

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit. The size-figures in this table do not agree with the other tables for the reason that combinations were necessary to avoid disclosure of individual operations.

TABLE 6.—OPERATING EXPENSES—DRUG STORE CHAINS—Continued  
C. OTHER DRUG STORE CHAINS (WITHOUT FOUNTAINS)

	STORES IN CHAINS OF—						Less than 6 units
	More than 100 units	50 to 100 units	26 to 50 units	11 to 25 units	6 to 10 units		
Total, all chains	\$23, 620, 924			\$7, 861, 132	\$6, 037, 257	\$9, 722, 535	
Net sales (1929)	80			7	16	57	
Number of chains	426			53	138	235	
Units operated by local chains	56			51		5	
Units operated by sectional chains							
Operating expenses	\$5, 856, 842			\$1, 732, 974	\$1, 281, 774	\$2, 842, 004	
Per \$100 of sales	24.80			22.04	21.23	29.23	
Pay roll	\$3, 097, 480			\$826, 802	\$669, 658	\$1, 601, 020	
Per \$100 of sales	13.12			10.32	11.09	16.47	
Other store operating expenses, including rent	\$2, 739, 362			\$906, 172	\$612, 116	\$1, 241, 074	
Per \$100 of sales	11.68			11.52	10.14	12.76	
Rent in 463 leased premises, per \$100 of sales in such leased premises (included in line above)	4.76			4.54	3.57	5.56	
Stocks on hand, end of year, at cost	\$4, 603, 361			\$1, 535, 190	\$999, 443	\$2, 068, 728	
EMPLOYMENT DATA							
Full-time employees	2, 110			542	504	1, 064	
Men	1, 647			369	382	896	
Women	463			173	122	168	
Total pay roll, full time	\$3, 023, 497			\$820, 602	\$639, 909	\$1, 562, 986	
Part-time employees	192			19	90	83	
Men	158			14	75	69	
Women	34			5	15	14	
Total pay roll, part time	\$73, 983			\$6, 200	\$29, 749	\$38, 034	



TABLE 6.—OPERATING EXPENSES—DRUG STORE CHAINS—Continued  
E. ALL-CASH CHAINS—DRUG STORES WITH FOUNTAINS

	EXPENSES OF STORES IN CHAINS OF—						Less than 6 units
	More than 100 units	50 to 100 units	26 to 50 units	11 to 25 units	6 to 10 units		
Total, all chains							
Net sales (1929).....	\$253,087,581	\$13,219,025	\$27,559,873	\$19,570,343	\$12,326,082	\$16,694,200	
Number of chains.....	103	3	9	14	26	47	
Units operated by local chains.....	1,042	130	332	197	181	202	
Units operated by sectional chains.....	350	261	62	23		4	
Units operated by national chains.....	1,082	1,082					
Operating expenses.....	\$69,893,969	\$3,363,771	\$6,801,405	\$5,462,673	\$3,659,783	\$3,933,476	
Per \$100 of sales.....	27.62	25.45	24.68	27.91	29.69	23.56	
Pay roll.....	\$33,297,240	\$2,014,797	\$3,411,242	\$2,563,323	\$1,699,030	\$2,140,415	
Per \$100 of sales.....	13.16	15.24	12.38	13.10	13.78	12.82	
Other store operating expenses, including rent.....	\$36,596,729	\$1,348,974	\$3,390,163	\$2,899,350	\$1,960,753	\$1,793,061	
Per \$100 of sales.....	14.46	10.21	11.30	14.81	15.91	10.74	
Rent in 2,440 leased premises, per \$100 of sales in such leased premises (included in above line).....	7.88	9.08	5.86	6.22	7.07	3.95	
Stocks on hand, end of year, at cost.....	\$30,601,818	\$1,732,799	\$2,787,355	\$2,001,804	\$1,842,244	\$2,570,710	
EMPLOYMENT DATA							
Full-time employees.....	25,460	1,492	3,031	2,197	1,314	1,640	
Men.....	17,300	1,042	2,158	1,367	1,008	1,150	
Women.....	8,160	450	873	830	306	490	
Total pay roll, full time.....	\$32,932,221	\$1,958,455	\$3,334,611	\$2,519,039	\$1,651,618	\$2,069,946	
Part-time employees.....	946	154	212	152	108	161	
Men.....	779	151	183	107	97	119	
Women.....	167	3	29	45	11	42	
Total pay roll, part time.....	\$365,019	\$56,342	\$70,631	\$44,284	\$47,412	\$70,469	

F. CREDIT-GRANTING CHAINS—OTHER DRUG STORE CHAINS

Net sales (1929).....	\$6,595,006					\$1,771,074	\$4,824,932
Credit sales.....	\$1,156,920					\$234,632	\$922,288
Per cent of net sales.....	17.54					13.25	19.21
Number of chains.....	27					5	22
Units operated by local chains.....	150					63	87
Units operated by sectional chains.....	5					5	5
Units operated by national chains.....							
Operating expenses.....	\$1,908,941					\$528,348	\$1,385,593
Per \$100 of sales.....	28.94					29.56	28.72
Pay roll.....	\$1,076,064					\$297,203	\$778,861
Per \$100 of sales.....	16.31					16.78	16.14
Other store operating expenses (including rent).....	\$832,877					\$226,145	\$606,732
Per \$100 of sales.....	12.63					12.77	12.58
Rent in 149 leased premises, per \$100 of sales in such leased premises (included in above line).....	5.21					5.27	5.19
Stocks on hand, end of year, at cost.....	\$1,352,242					\$358,062	\$994,180
EMPLOYMENT DATA							
Full-time employees.....	729					185	544
Men.....	604					163	441
Women.....	125					22	103
Total pay roll, full time.....	\$1,035,617					\$275,629	\$759,988
Part-time employees.....	112					73	39
Men.....	93					63	30
Women.....	19					10	9
Total pay roll, part time.....	\$40,447					\$21,574	\$18,873

See footnote, bottom of page 227.



TABLE 7.—COMPARISON OF OPERATING EXPENSES—DRUG STORE CHAINS

A. CHAINS OPERATING DRUG STORES WITH FOUNTAINS

ITEM	LARGE-CITY LOCALS (With population of 100,000 and over)			
	Total <sup>1</sup>	Chains of—		
		11 to 25 units	6 to 10 units	Less than 6 units
Number of chains.....	64	9	20	35
Number of units.....	420	126	141	153
Net sales (1929).....	\$28,630,696	\$9,183,474	\$10,721,935	\$8,725,287
Total operating expenses.....	\$8,704,833	\$2,946,842	\$3,189,871	\$2,568,120
Per \$100 of sales.....	30.40	32.09	29.75	29.43
Total employees.....	3,696	1,199	1,403	1,094
Total salaries.....	\$4,316,938	\$1,375,532	\$1,532,239	\$1,409,167
Per \$100 of sales.....	15.08	14.98	14.29	16.15
Full-time employees.....	3,460	1,199	1,260	1,001
Full-time salaries.....	\$4,208,201	\$1,375,532	\$1,473,314	\$1,359,355
Part-time employees.....	236	—	143	93
Part-time salaries.....	\$108,737	—	\$58,925	\$49,812
Other operating expenses (including rent).....	\$4,387,895	\$1,571,310	\$1,657,632	\$1,158,953
Per \$100 of sales.....	15.32	17.11	15.46	13.28
Rent, per \$100 of sales in such leased premises (included in above line).....	6.47	6.75	6.88	5.67

ITEM	SMALLER CITY LOCALS (With population less than 30,000)			
	Total <sup>1</sup>	Chains of—		
		11 to 25 units	6 to 10 units	Less than 6 units
Number of chains.....	18	2	3	13
Number of units.....	96	22	20	54
Net sales (1929).....	\$4,478,853	\$1,024,303	\$1,091,900	\$2,362,655
Total operating expenses.....	\$1,150,461	\$285,528	\$220,896	\$644,037
Per \$100 of sales.....	25.69	27.87	20.23	27.26
Total employees.....	515	104	106	305
Total salaries.....	\$583,015	\$134,228	\$108,609	\$340,178
Per \$100 of sales.....	13.02	13.10	9.94	14.40
Full-time employees.....	455	91	100	264
Full-time salaries.....	\$562,012	\$129,679	\$107,206	\$325,127
Part-time employees.....	60	13	6	41
Part-time salaries.....	\$21,003	\$4,549	\$1,403	\$15,051
Other operating expenses (including rent).....	\$567,446	\$151,300	\$112,287	\$303,859
Per \$100 of sales.....	12.67	14.77	10.29	12.86
Rent, per \$100 of sales in such leased premises (included in above line).....	4.28	4.87	3.16	4.55

<sup>1</sup>Totals on this table will not agree with other tables as only 3 of the size-of-city classes were used here.

<sup>2</sup>In 412 leased premises.

<sup>3</sup>In 95 leased premises.

See footnote, bottom of page 227.

TABLE 7. COMPARISON OF OPERATING EXPENSES—DRUG STORE CHAINS—CON.

## B. OTHER DRUG STORE CHAINS

ITEM	LARGE-CITY LOCALS (With population of 100,000 and over)			
	Total <sup>1</sup>	Chains of—		
		11 to 25 units	6 to 10 units	Less than 6 units
Number of chains.....	38	2	5	31
Number of units.....	189	24	33	132
Net sales (1929).....	\$7,591,163	\$933,270	\$522,651	\$6,135,242
Total operating expenses.....	\$2,323,649	\$214,837	\$186,767	\$1,922,045
Per \$100 of sales.....	30.61	23.01	35.73	31.33
Total employees.....	954	86	119	749
Total salaries.....	\$1,308,185	\$126,129	\$115,665	\$1,066,391
Per \$100 of sales.....	17.23	13.51	22.13	17.38
Full-time employees.....	887	78	119	690
Full-time salaries.....	\$1,277,695	\$122,091	\$115,665	\$1,039,939
Part-time employees.....	67	8	-----	59
Part-time salaries.....	\$30,490	\$4,038	-----	\$26,452
Other operating expenses (including rent).....	\$1,015,464	\$88,708	\$71,102	\$855,654
Per \$100 of sales.....	13.38	9.50	13.60	13.95
Rent, per \$100 of sales in such leased premises (included in above line).....	<sup>4</sup> 6.13	4.98	5.41	6.37

ITEM	SMALLER-CITY LOCALS (With population less than 30,000)			
	Total <sup>1</sup>	Chains of—		
		11 to 25 units	6 to 10 units	Less than 6 units
Number of chains.....	20	-----	2	18
Number of units.....	87	-----	12	75
Net sales (1929).....	\$2,965,446	-----	\$440,429	\$2,525,017
Total operating expenses.....	\$782,723	-----	\$122,463	\$660,260
Per \$100 of sales.....	26.39	-----	27.80	26.15
Total employees.....	343	-----	69	274
Total salaries.....	\$457,185	-----	\$67,414	\$389,771
Per \$100 of sales.....	15.41	-----	15.30	15.44
Full-time employees.....	314	-----	62	252
Full-time salaries.....	\$445,522	-----	\$65,325	\$380,197
Part-time employees.....	29	-----	7	22
Part-time salaries.....	\$11,663	-----	\$2,089	\$9,574
Other operating expenses (including rent).....	\$325,538	-----	\$55,049	\$270,489
Per \$100 of sales.....	10.98	-----	12.50	10.71
Rent, per \$100 of sales in such leased premises (included in above line).....	<sup>5</sup> 3.92	-----	5.56	3.63

<sup>1</sup>Totals on this table will not agree with other tables as only 3 of the size-of-city classes were used here.<sup>4</sup>In 182 leased premises.<sup>5</sup>In 14 leased premises.

See footnote, bottom of page 227.

TABLE 8.—SALES BY COMMODITIES—DRUG STORE CHAINS

A.—CHAINS OPERATING STORES WITH FOUNTAINS

	Total 169 chains, net sales, 1929	8 chains of more than 50 units	12 chains of 26 to 50 units	24 chains of 11 to 25 units	46 chains of 6 to 10 units	79 chains of less than 6 units
Net sales—chains operating stores with fountains.....	\$288, 680, 797	\$180, 679, 790	\$34, 610, 350	\$28, 099, 722	\$21, 344, 159	\$23, 946, 776
Less—amount which can not be broken down into commodities.....	24, 047, 235	2, 726, 071	3, 743, 168	5, 744, 683	4, 947, 614	6, 885, 699
Sales further analyzed.....	264, 633, 562	177, 953, 719	30, 867, 182	22, 355, 039	16, 396, 545	17, 061, 077
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Commodities:	100.00	100.00	100.00	100.00	100.00	100.00
Prescriptions.....	4.27	2.96	8.46	4.39	7.40	6.91
Drugs, pharmaceuticals, chemicals, patent medicines, and compounds.....	37.95	42.32	32.31	29.23	27.78	23.88
Soda fountain sales and ice cream, lunches.....	19.75	19.89	16.38	23.06	23.19	16.76
Confectionery and nuts.....	3.39	3.28	2.61	4.00	3.99	4.53
Bottled beverages.....	.12	-----	-----	.34	.39	1.03
Toilet articles and preparations.....	10.38	10.05	10.79	11.56	7.41	14.29
Cigars, cigarettes, and tobacco.....	18.74	18.88	22.30	18.09	13.35	16.83
Miscellaneous merchandise (including stationery, school supplies, rubber goods, surgical and hospital supplies, and all other merchandise not otherwise classified).....	5.40	2.62	6.97	9.33	16.49	15.77

B.—OTHER DRUG STORE CHAINS

	Total 80 chains, total sales	9 chains of more than 11 units	14 chains of 6 to 10 units	57 chains of less than 6 units
Net sales—other drug chains.....	\$23, 620, 924	\$9, 126, 133	\$4, 772, 256	\$9, 722, 535
Less—amount which can not be broken down into commodities.....	12, 601, 149	2, 908, 319	2, 386, 792	7, 306, 038
Sales further analyzed.....	11, 019, 775	6, 217, 814	2, 385, 464	2, 416, 497
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Commodities:	100.00	100.00	100.00	100.00
Prescriptions.....	6.70	3.28	.21	21.89
Drugs, pharmaceuticals, chemicals, patent medicines, and compounds.....	35.99	35.16	39.02	35.14
Ice cream, confectionery and nuts, and bottled beverages.....	5.66	5.83	-----	10.78
Toilet articles and preparations.....	22.88	30.35	23.43	3.12
Cigars, cigarettes, and tobacco.....	18.02	15.61	37.34	5.17
Miscellaneous, unclassified.....	10.75	9.77	-----	23.90

TABLE 9.—STOCK—SALES RATIO<sup>1</sup> BY GEOGRAPHIC DIVISIONS—DRUG STORE CHAINS

## A. CHAINS OPERATING DRUG STORES WITH FOUNTAINS

DIVISION	Number of chains	Number of units	Total net sales	Cost of stock	Per cent of sales
Total, all divisions.....	2 155	1, 429	\$102, 101, 099	\$14, 177, 411	13. 89
New England.....	11	60	3, 618, 719	589, 383	16. 29
Middle Atlantic.....	29	353	24, 854, 772	3, 475, 018	13. 98
East North Central.....	39	351	22, 474, 206	3, 125, 485	13. 91
West North Central.....	16	122	13, 231, 327	1, 721, 829	13. 01
South Atlantic.....	10	89	6, 994, 951	792, 941	11. 34
East South Central.....	7	136	5, 427, 396	990, 822	18. 26
West South Central.....	22	190	16, 463, 128	2, 083, 598	12. 66
Mountain.....	10	55	3, 625, 494	583, 242	16. 09
Pacific coast.....	11	73	5, 411, 106	815, 093	15. 06

## B. OTHER DRUG STORE CHAINS

[An (x) indicates that the amount must be withheld to avoid disclosure of individual operations, but it is included in the total]

DIVISION	Number of chains	Number of units	Total net sales	Cost of stock	Per cent of sales
Total, all divisions.....	2 75	442	\$20, 343, 329	\$3, 794, 861	18. 65
New England.....	6	27	884, 387	177, 299	20. 05
Middle Atlantic.....	9	53	1, 939, 674	478, 041	24. 65
East North Central.....	14	112	6, 333, 163	1, 174, 738	18. 55
West North Central.....	8	33	1, 090, 116	264, 693	24. 28
South Atlantic.....	9	53	1, 163, 892	180, 327	15. 49
East South Central.....	1	(x)	(x)	(x)	(x)
West South Central.....	9	40	1, 802, 854	283, 321	15. 72
Mountain.....	2	(x)	(x)	(x)	(x)
Pacific coast.....	17	112	6, 453, 757	1, 099, 798	17. 04

<sup>1</sup> Stock—sales ratio is the per cent or ratio of stock at the end of the year, at cost, to net sales for the year at retail. It is not equivalent to turnover, to compute which requires a monthly stock figure at retail, averaged throughout the year.

<sup>2</sup> Only those chains located wholly in 1 geographic division were used in this table.

## CHAPTER 17.—JEWELRY CHAINS

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# JEWELRY CHAINS

---

## INTRODUCTION

There are 65 jewelry store chains in the United States, operating 438 stores with total annual sales in 1929 amounting to \$35,687,555. Of these chains, 41 are so-called credit jewelry chains, operating 283 stores, identified in all Retail Census reports as installment jewelry stores, as distinguished from the usual kind of jewelry store, which also extends credit, as a rule, but does not make its appeal on the basis of deferred payments or installment credit terms. These installment credit jewelry chains report annual sales for the year 1929 of \$29,135,314, which may be compared with total annual sales of all installment credit jewelry stores in the United States of about \$60,000,000, indicating a chain ratio in this kind of business of nearly 50 per cent.

The remaining 24 chains operate 155 jewelry stores of the usual kind, with aggregate sales of \$6,552,241, a negligible factor in comparison with total annual sales, in the nearly 20,000 such jewelry stores, of about \$478,000,000. Although these 24 chains are not classified as installment jewelers, an analysis of the sales of 14 of them shows that 10 per cent of their sales is on the installment basis (compared with 80 per cent by installment jewelry chains), 42 per cent of their sales is on open charge accounts, and 48 per cent is for cash. Only 5.5 per cent of installment jewelry chain sales is on open account, and nearly 15 per cent is for cash.

Included in the count of chains given above are five organizations operating 49 leased jewelry departments in apparel and department stores, with aggregate sales of \$1,520,509. Because of the small number of companies involved, and the fact that one of them is an installment jewelry chain, no further facts about them as a type can be revealed in this report, in order to avoid disclosure of individual operations. However, they are included in the totals.

## EMPLOYMENT, WAGES, AND OPERATING EXPENSES

The chains employ 2,899 full-time employees and 542 part-timers, with an aggregate annual pay roll of \$5,416,487. The average annual salary of full-time employees of the installment jewelry chains is reported to be \$1,865, while that of full-time employees of the other jewelry chains is reported to be \$1,701.

In the aggregate the operating expenses of the installment jewelry chains amount to \$43.44 per \$100 of their sales, of which pay roll is 14.93 per cent. In comparison, the chains which are not classified as installment chains show operating expenses amounting to \$40.46 per \$100 of their sales, of which pay roll is

16.30 per cent. For installment jewelry chains the rent paid for leased premises amounts to 5.6 per cent of the aggregate sales on such premises; the corresponding percentage for other jewelry chains is 9.36. Both of these rent percentages are based upon the cost of rent of leased premises, in proportion to sales in such leased premises. More than 80 per cent of the premises are leased. Operating expenses do not include any return in the form of interest on capital invested in fixtures, merchandise, and accounts. Central office salaries of seven of the installment jewelry chains average 6.7 per cent of the total sales of these seven chains, and are supposed to have been prorated to the stores of the chains. Stocks of merchandise on hand at the end of the year aggregate \$7,445,600 at cost, indicating a retail turnover of about two times, in installment jewelry chains. The stocks total \$2,795,159 in other jewelry chains.

### SALES BY COMMODITIES

Diamond jewelry is the largest single item of merchandise sold, in both kinds of jewelry chains. Watches constitute a close second. In the stores of the installment chains these two items together constitute 61 per cent of total sales, and they make up more than 40 per cent of the sales of the other chains. All jewelry items constitute 91.68 per cent of total sales of the installment chains and 88.04 per cent of total sales of the other jewelry chains. Other commodities are electrical appliances, optical goods, china, glassware, and radios. Receipts from the repair department amount to 2.35 per cent of installment chain sales and 1.77 per cent of other jewelry chain sales. The report contains commodity tables analyzing the sales of each kind of chain in considerable detail.

### SUMMARY

	Number of chains	Number of units	Net sales (1929)
Total, all jewelry chains.....	65	438	\$35,687,555
Jewelry chains—installment credit.....	41	283	29,135,314
Jewelry chains (other than installment).....	24	155	6,552,241
Leased-department jewelry chains (included in the above classifications but can not be reported separately because of individual operations).....	5	49	1,520,509

#### Number of units:

Established prior to 1925.....	181 (41.32 per cent)
Established from 1925 to 1928, inclusive.....	160 (36.53 per cent)
Established during 1929.....	76 (17.35 per cent)
Date of establishment unknown.....	21 (4.80 per cent)
Installment jewelry chains (based on 41 chains):	
Cash sales.....	14.77 per cent
Open-account sales.....	5.48 per cent
Installment sales.....	79.75 per cent
Jewelry chains other than installment (based on 14 chains):	
Cash sales.....	47.83 per cent
Open-account sales.....	41.80 per cent
Installment sales.....	10.37 per cent
Operating expenses:	
Installment jewelry chains—	
Total store expenses.....	\$43.44 per \$100 of sales
Total wage cost.....	\$14.93 per \$100 of sales
Rent (based on 266 stores).....	\$5.16 per \$100 of sales
Jewelry chains other than installment—	
Total store expenses.....	\$40.46 per \$100 of sales
Total wage cost.....	\$16.30 per \$100 of sales
Rent (based on 134 stores).....	\$9.36 per \$100 of sales

TABLE 1.—SALES CLASSIFIED BY GEOGRAPHIC DIVISIONS AND SIZE OF CITY—  
ALL JEWELRY STORE CHAINS

GEOGRAPHIC DIVISION AND SIZE OF CITY	Net sales	GEOGRAPHIC DIVISION AND SIZE OF CITY	Net sales
<b>UNITED STATES</b>		<b>SOUTH ATLANTIC (DIV. 5)</b>	
Total net sales.....	\$35,687,555	Total.....	\$4,208,767
Cities and places of—		Cities and places of—	
More than 100,000.....	26,664,948	More than 100,000.....	3,184,121
25,000 to 100,000.....	7,248,376	25,000 to 100,000.....	815,545
10,000 to 25,000.....	1,417,668	10,000 to 25,000.....	184,601
Less than 10,000.....	356,563	Less than 10,000.....	24,500
<b>NEW ENGLAND (DIV. 1)</b>		<b>EAST SOUTH CENTRAL (DIV. 6)</b>	
Total.....	2,823,449	Total.....	1,683,587
Cities and places of—		Cities and places of—	
More than 100,000.....	2,170,390	More than 100,000.....	1,348,258
25,000 to 100,000.....	602,006	25,000 to 100,000.....	197,046
10,000 to 25,000.....	40,388	10,000 to 25,000.....	116,081
Less than 10,000.....	10,655	Less than 10,000.....	22,202
<b>MIDDLE ATLANTIC (DIV. 2)</b>		<b>WEST SOUTH CENTRAL (DIV. 7)</b>	
Total.....	9,050,384	Total.....	1,153,973
Cities and places of—		Cities and places of—	
More than 100,000.....	6,852,753	More than 100,000.....	575,056
25,000 to 100,000.....	1,894,126	25,000 to 100,000.....	398,074
10,000 to 25,000.....	291,225	10,000 to 25,000.....	123,306
Less than 10,000.....	12,280	Less than 10,000.....	57,537
<b>EAST NORTH CENTRAL (DIV. 3)</b>		<b>MOUNTAIN DIVISION (DIV. 8)</b>	
Total.....	11,129,156	Total.....	248,752
Cities and places of—		Cities and places of—	
More than 100,000.....	8,226,743	More than 100,000.....	97,006
25,000 to 100,000.....	2,472,908	25,000 to 100,000.....	103,142
10,000 to 25,000.....	279,475	10,000 to 25,000.....	48,604
Less than 10,000.....	150,030		
<b>WEST NORTH CENTRAL (DIV. 4)</b>		<b>PACIFIC COAST (DIV. 9)</b>	
Total.....	499,108	Total.....	4,890,379
Cities and places of—		Cities and places of—	
More than 100,000.....	364,082	More than 100,000.....	3,846,539
25,000 to 100,000.....	24,327	25,000 to 100,000.....	844,344
10,000 to 25,000.....	110,524	10,000 to 25,000.....	168,916
Less than 10,000.....	175	Less than 10,000.....	30,580

TABLE 2A.—CHAINS CLASSIFIED ACCORDING TO VOLUME OF SALES

	Number of chains	Total net sales (1929)	Per cent of total sales
Total, all jewelry chains.....	65	\$35,687,555	100.00
In excess of—			
\$1,000,000.....	8	14,334,997	40.17
\$600,000 to \$1,000,000.....	11	8,965,074	25.12
\$300,000 to \$600,000.....	19	8,336,698	23.36
\$100,000 to \$300,000.....	20	3,646,749	10.22
Less than \$100,000.....	7	404,037	1.13

TABLE 2B.—SALES CLASSIFIED BY TYPES OF OPERATION AND SIZE OF CHAINS

SIZE—CLASS	ALL TYPES				
	Number of chains	Number of units	Net sales (1929)	Per cent of total sales	Average sales per unit
Totals, all jewelry chains.....	65	438	\$35,687,555	100.00	\$81,478
Jewelry chains—installment credit.....	41	283	29,135,314	81.64	102,952
Chains of—					
More than 10 units.....	5	88	8,127,109	22.77	92,353
6 to 10 units.....	13	95	10,322,487	28.93	108,658
Less than 6 units.....	23	100	10,685,718	29.94	106,857
Jewelry chains—other than installment.....	24	155	6,552,241	18.36	42,273
Chains of—					
More than 6 units.....	10	90	4,197,807	11.76	46,642
Less than 6 units.....	14	65	2,354,434	6.60	36,222

SIZE—CLASS	LOCAL CHAINS			SECTIONAL AND NATIONAL CHAINS		
	Number of chains	Number of units	Net sales (1929)	Number of chains	Number of units	Net sales (1929)
Totals, all jewelry chains.....	43	247	\$19,578,578	22	191	\$16,108,977
Jewelry chains—installment credit.....	29	158	16,446,212	12	125	12,689,102
Chains of—						
More than 10 units.....	10	75	6,960,632	8	108	11,488,964
6 to 10 units.....		83	9,485,580	4	17	1,200,138
Less than 6 units.....	19					
Jewelry chains—other than installment.....	14	89	3,132,366	10	66	3,419,875
Chains of—						
More than 6 units.....	4	42	1,528,767	6	48	2,669,040
Less than 6 units.....	10	47	1,603,599	4	18	750,835

TABLE 3.—OPERATING EXPENSES

## A.—JEWELRY CHAINS—INSTALLMENT CREDIT

	All chains	More than 11 units (5 chains)	6 to 10 units (13 chains)	Less than 6 units (23 chains)
Net sales (1929).....	\$29,135,314	\$8,127,109	\$10,322,487	\$10,685,718
Number of chains.....	41	5	13	23
Units operated by local chains.....	158	11	64	83
Units operated by sectional and national chains.....	125	77	31	17
Operating expenses <sup>1</sup> .....	\$12,655,584	\$3,472,833	\$4,422,130	\$4,760,621
Per \$100 of sales.....	43.44	42.73	42.84	44.55
Pay roll.....	\$4,348,758	\$1,164,543	\$1,493,882	\$1,690,333
Per \$100 of sales.....	14.93	14.33	14.47	15.82
Full-time salaries.....	\$4,277,659	\$1,129,074	\$1,476,444	\$1,672,141
Full-time employees.....	2,293	626	781	886
Part-time salaries.....	\$71,099	\$35,469	\$17,438	\$18,192
Part-time employees.....	288	67	154	67
Other operating expenses, including rent.....	\$8,306,826	\$2,308,290	\$2,928,248	\$3,070,288
Per \$100 of sales.....	28.51	28.40	28.37	28.73
Rent, in 266 leased premises per \$100 of sales in such leased premises (included in preceding figures).....	5.16	4.92	4.59	6.17
Stocks on hand, end of year, at cost.....	\$7,445,600	\$2,443,705	\$2,405,275	\$2,596,620

See footnote at end of table.

TABLE 3.—OPERATING EXPENSES—Continued

B.—OTHER JEWELRY CHAINS

	All chains	More than 6 units (10 chains)	Less than 6 units (14 chains)
Net sales (1929).....	\$6, 552, 241	\$4, 197, 807	\$2, 354, 434
Number of chains.....	24	10	14
Units operated by local chains.....	89	42	47
Units operated by sectional and national chains.....	66	48	18
Operating expenses <sup>1</sup> .....	\$2, 650, 716	\$1, 716, 003	\$934, 713
Per \$100 of sales.....	40.46	40.88	39.70
Pay roll.....	\$1, 067, 729	\$678, 574	\$389, 155
Per \$100 of sales.....	16.30	16.17	16.53
Full-time salaries.....	\$1, 031, 190	\$649, 715	\$381, 475
Full-time employees.....	606	409	197
Part-time salaries.....	\$36, 539	\$28, 859	\$7, 680
Part-time employees.....	254	210	44
Other operating expenses, including rent.....	\$1, 582, 987	\$1, 037, 429	\$545, 558
Per \$100 of sales.....	24.16	24.71	23.17
Rent in 134 leased premises per \$100 of sales in such leased premises (included in preceding figures).....	9.36	10.57	7.73
Stocks on hand, end of year, at cost.....	\$2, 795, 159	\$1, 333, 605	\$1, 461, 554

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

TABLE 4.—CREDIT BUSINESS

SIZE-CLASS	Number of chains reporting credit sales	Total net sales in chains reporting credit sales	CREDIT SALES				CASH SALES	
			Open account	Per cent of total net sales	Installment	Per cent of total net sales	In chains reporting sales	Per cent of total net sales
Total—Jewelry chains—installment credit.....	41	\$29, 135, 314	\$1, 597, 720	5.48	\$23, 234, 753	79.75	\$4, 302, 841	14.77
Chains of—								
More than 11 units.....	5	8, 127, 109	4, 465	.06	7, 150, 519	87.98	972, 125	11.96
6 to 10 units.....	13	10, 322, 487	233, 405	2.26	8, 561, 806	82.94	1, 527, 276	14.80
Less than 6 units.....	23	10, 685, 718	1, 359, 850	12.72	7, 522, 428	70.40	1, 803, 440	16.88
Total—Jewelry chains other than installment.....	14	4, 106, 933	1, 716, 683	41.80	425, 916	10.37	1, 964, 334	47.83
Chains of—								
More than 6 units.....	5	2, 348, 614	1, 017, 780	43.34	277, 005	11.79	1, 053, 829	44.87
Less than 6 units.....	9	1, 758, 319	698, 903	39.75	148, 911	8.47	910, 505	51.78

TABLE 5.—UNITS CLASSIFIED BY AGE IN EACH GEOGRAPHIC DIVISION  
[ALL JEWELRY CHAINS]

GEOGRAPHIC DIVISION	Per cent of total units	Total units	DATE OF ESTABLISHMENT OF UNITS			Units whose ages can not be determined
			1929	1925 to 1928	Previous to 1925	
UNITED STATES (ALL DIVISIONS)						
Total.....	100.00	438	76	160	181	21
New England.....	11.42	50	11	5	17	17
Middle Atlantic.....	22.60	99	15	47	36	1
East North Central.....	31.05	136	24	43	67	2
West North Central.....	5.03	22	5	8	9	-----
South Atlantic.....	9.13	40	7	18	15	-----
East South Central.....	5.02	22	4	13	5	-----
West South Central.....	2.73	12	2	5	5	-----
Mountain.....	2.06	9	-----	8	1	-----
Pacific coast.....	10.96	48	8	13	26	1

TABLE 6.—SALES BY COMMODITIES

A.—JEWELRY CHAINS—INSTALLMENT CREDIT		B.—JEWELRY CHAINS OTHER THAN INSTALLMENT	
COMMODITY	Net sales (1929)	COMMODITY	Net sales (1929)
Total net sales (1929).....	\$29,135,314	Total net sales (1929).....	\$6,552,241
Amount which can not be broken down into commodities.....	3,724,025	Amount which can not be broken down into commodities.....	3,472,565
Sales further analyzed.....	25,411,289	Sales further analyzed.....	3,079,676
	<i>Per cent</i>		<i>Per cent</i>
	100.00		100.00
Jewelry, silverware, clocks, and watches.....	91.68	Jewelry, silverware, clocks, and watches.....	88.04
Of the above 57.51 per cent is further broken down as follows:		Of the above 42.79 per cent is further broken down as follows:	
Clocks.....	5.08	Clocks.....	1.09
Watches.....	25.93	Watches.....	19.66
Diamond jewelry.....	35.12	Diamond jewelry.....	21.93
Rings, other than diamond.....	6.02	Rings, other than diamond.....	8.58
Gold and gold filled jewelry.....	5.40	Gold and gold-filled jewelry.....	10.24
Plated silverware.....	1.93	Plated silverware.....	3.96
Sterling silverware.....	2.87	Sterling silverware.....	2.89
All other jewelry.....	9.33	All other jewelry.....	19.69
Electrical appliances.....	.88	Leather goods and luggage.....	3.31
China and glassware.....	.86	Miscellaneous merchandise, unclassified.....	6.88
Leather and luggage.....	.30	Receipts from repairs and service.....	1.77
Optical goods.....	1.34		
Radio.....	.78		
Toilet articles.....	.23		
Miscellaneous merchandise, unclassified.....	1.58		
Receipts from repairs and service.....	2.35		

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# HARDWARE CHAINS

## INTRODUCTION

There are in the United States 75 hardware chains, operating 458 stores or units with total annual sales of \$31,595,632. Of these, 4 are manufacturer-controlled chains or sales branch systems selling hardware specialties directly to the public through 21 specialized stores, with aggregate sales of \$3,810,846. The specialties are tools, cutlery, and tanks, and because of the small number of companies involved, no further detail can be given without disclosure of individual operations. The other 71 chains operate 437 general hardware stores, with aggregate sales of \$27,784,786, whose operations are analyzed in this report, which is one of the merchandising series of the Retail census.

Only 6 chains operate more than 10 units each. The 93 stores operated by these 6 chains report average sales per store of \$36,203, whereas 23 chains with 6 to 10 units each and 42 chains with less than 6 units each show average sales per store of more than \$70,000. Only 11 chains do a business of as much as \$700,000 per year.

### NEARLY ALL LOCAL CHAINS WITH FEW UNITS

All but two organizations are local chains, so no data can be shown by types of operation. Local chains are those whose stores are located in and around some one city. Sectional and national chains cover larger areas, as the terms imply.

### GEOGRAPHIC DISTRIBUTION

Hardware chain distribution is heaviest in the Pacific Coast States. The East North Central division around Chicago is second in order of sales, with the South Atlantic States third. About 42 per cent of the total business of the chains is in cities with population of 100,000 and more, 15 per cent in cities of 25,000 to 100,000 population, 10 per cent in cities of 10,000 to 25,000 population, and 33 per cent in places of less than 10,000 population.

In the following table the percentage of total sales in different sizes of cities may be compared with the percentage of the total population.

CLASS OF CITIES	Per cent of total population	Per cent of total sales
Total.....	100.0	100.0
Cities over 100,000.....	29.6	42.0
25,000 to 100,000.....	10.5	15.0
10,000 to 25,000.....	7.4	10.0
Under 10,000.....	52.5	33.0

**EMPLOYMENT AND EXPENSES**

The hardware chains, operating 437 stores, employ 2,418 people on a full-time basis and 216 part-timers. Pay roll of full-time employees totals \$3,699,535, and the part-time pay roll is \$116,441. Other operating expenses, including rent, aggregate \$3,662,444. The average expense rate indicated by these totals, which is \$26.92 per \$100 of sales, is not typical of any one size group, however, as is apparent from a study of Table 4. This computation of expenses includes no return on capital invested in merchandise, fixtures, and accounts, and of course it does not include cost of merchandise sold. Of the 437 stores operated, 390 are in leased premises, for which the annual rent is \$4.15 per \$100 of the total sales in leased premises.

**CREDIT SALES**

Credit is extended to their customers by 53 chains which do 80 per cent of the total business of all the chains. No installment business is reported. The open-account credit sales aggregate \$11,436,068, or 51 per cent of the total business of the chains which sell on credit. This ratio is fairly typical of the three size classifications except that three chains, which operate 10 or more units each, report average credit business of 41 per cent.

**GROWTH OF CHAINS**

Of the 437 stores operating at the end of 1929, 70, or 16 per cent, were opened during that calendar year, 123 were opened between 1925 and 1928, and the remainder were in operation prior to 1925. The largest number of new stores and the largest percentage of growth in 1929 occurred in the East South Central division. No stores whatever were added in the Mountain division or in the Pacific Coast States.

**COMMODITIES SOLD**

The report indicates that about 30 per cent of the total sales of all the chains consists of builders' hardware, shelf hardware, and tools. Building materials add another 4 per cent, plus 10½ per cent for paints and varnishes. Tractors and automobile accessories account for about 12 per cent, with farm and garden equipment adding another 8 per cent. Electrical appliances account for 9 per cent and kitchen utensils 8 per cent of total sales. Seeds, bulbs, and nursery stock are sold to the extent of 3.99 per cent of the total, while the remaining 13.93 per cent is made up of miscellaneous commodities, including stoves and ranges, plumbing equipment, silverware, leather goods, bicycles, toys, and games.

**CHAINS IN RELATED FIELDS**

In addition to the hardware chains, this report includes 89 chains selling farm machinery, heating and plumbing supplies, paint, wall papers, and miscellaneous electrical supplies. These 89 chains operate 1,501 stores, with aggregate annual sales of \$67,212,668. These are summarized in Table 1 and analyzed in some detail in Tables 8 to 22, inclusive.

TABLE 1.—SUMMARY

	Number of chains	Number of units	Net sales (1929)
Hardware chains, totals.....	75	458	\$31,595,632
Manufacturer-controlled chains of specialized stores (which are not further analyzed herein to avoid disclosure of individual operations).....	4	21	3,810,846
Other hardware chains (analyzed in Tables 2 to 7, inclusive).....	71	437	27,784,786
Farm machinery chains (analyzed in Tables 8 and 9).....	11	86	5,692,520
Heating and plumbing supply chains (analyzed in Tables 10 to 14).....	20	831	35,535,858
Paint and wall-paper chains (analyzed in Tables 15 to 20, inclusive).....	55	565	25,365,336
Electrical supply (miscellaneous) chains <sup>1</sup> (analyzed in Tables 21 and 22).....	3	19	618,954

<sup>1</sup> Electrical supply chains included herein are those which do not sell radios. See report entitled "Retail Distribution by Radio Chains," for those which sell radios and electrical supplies.

Because all five of the classifications above are in the general field of supply and equipment dealers, which field is divided between wholesale and retail distribution, only those chains reporting that more than 50 per cent of their business is at retail can be included as retail chains. Chains and individual stores reporting that more than 50 per cent of their sales are at wholesale, or to industrial users or to the construction industry, are included entirely in the wholesale Census, with the retail proportion indicated therein but not included in this report on retail chains.

TABLE 2.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS—HARDWARE CHAINS

GEOGRAPHIC DIVISION AND SIZE OF CITY	All chains (71)	CHAINS CLASSIFIED BY SIZE		
		More than 10 units (6 chains)	6 to 10 units (23 chains)	Less than 6 units (42 chains)
<b>UNITED STATES:</b>				
Total net sales.....	\$27,784,786	\$3,366,885	\$12,095,603	\$12,322,298
Number of units.....	437	93	163	176
All cities with population of—				
More than 100,000.....	11,778,257	2,507,434	3,543,038	5,727,785
25,000 to 100,000.....	4,285,997	1,044	1,955,192	2,329,761
10,000 to 25,000.....	2,642,183	305,080	1,872,935	464,168
Less than 10,000.....	9,078,349	553,327	4,724,438	3,800,584
<b>NEW ENGLAND DIVISION.....</b>	<b>2,444,005</b>	<b>148,908</b>	<b>1,462,780</b>	<b>832,317</b>
Cities with population of—				
More than 100,000.....	1,651,311	148,908	1,046,692	455,711
Between 25,000 and 100,000.....	519,941	-----	231,729	288,212
Between 10,000 and 25,000.....	216,914	-----	136,920	79,994
Less than 10,000.....	55,839	-----	47,439	8,400
<b>MIDDLE ATLANTIC DIVISION.....</b>	<b>2,604,599</b>	<b>872,201</b>	<b>1,020,051</b>	<b>712,347</b>
Cities with population of—				
More than 100,000.....	1,148,405	383,571	233,248	531,586
25,000 to 100,000.....	265,305	-----	241,853	23,452
10,000 to 25,000.....	337,717	234,511	103,206	-----
Less than 10,000.....	853,172	254,119	441,744	157,309

TABLE 2.—SALES CLASSIFIED BY SIZE OF CHAIN, SIZE OF CITY, AND GEOGRAPHIC DIVISIONS—HARDWARE CHAINS—Continued

GEOGRAPHIC DIVISION AND SIZE OF CITY	All chains (71)	CHAINS CLASSIFIED BY SIZE		
		More than 10 units (6 chains)	6 to 10 units (23 chains)	Less than 6 units (42 chains)
EAST NORTH CENTRAL DIVISION.....	5,062,681	620,263	2,521,280	1,921,138
Cities with population of—				
More than 100,000.....	2,334,314	618,722	956,477	759,115
25,000 to 100,000.....	1,778,133	1,044	1,054,515	722,574
10,000 to 25,000.....	217,780	-----	180,978	36,802
Less than 10,000.....	732,454	497	329,310	402,647
WEST NORTH CENTRAL DIVISION.....	935,756	378,829	255,500	301,427
Cities with population of—				
More than 100,000.....	378,829	378,829	-----	-----
25,000 to 100,000.....	55,919	-----	55,919	-----
10,000 to 25,000.....	26,212	-----	26,212	-----
Less than 10,000.....	474,796	-----	173,369	301,427
SOUTH ATLANTIC DIVISION.....	3,715,691	779,662	693,294	2,242,735
Cities with population of—				
More than 100,000.....	1,854,204	756,452	146,295	951,457
25,000 to 100,000.....	497,657	-----	-----	497,657
10,000 to 25,000.....	39,063	-----	39,063	-----
Less than 10,000.....	1,324,767	23,210	507,936	793,621
EAST SOUTH CENTRAL DIVISION.....	1,550,601	213,633	898,521	438,447
Cities with population of—				
More than 100,000.....	478,686	40,239	-----	438,447
25,000 to 100,000.....	121,176	-----	121,176	-----
10,000 to 25,000.....	90,906	25,764	65,142	-----
Less than 10,000.....	859,833	147,630	712,203	-----
WEST SOUTH CENTRAL DIVISION.....	3,598,010	-----	1,369,362	2,228,648
Cities with population of—				
More than 100,000.....	990,872	-----	-----	990,872
25,000 to 100,000.....	37,500	-----	-----	37,500
10,000 to 25,000.....	582,129	-----	334,748	247,381
Less than 10,000.....	1,987,509	-----	1,034,614	952,895
MOUNTAIN DIVISION.....	2,203,651	203,608	258,418	1,741,625
Cities with population of—				
More than 100,000.....	30,932	30,932	-----	-----
25,000 to 100,000.....	647,345	-----	-----	647,345
10,000 to 25,000.....	44,805	44,805	-----	-----
Less than 10,000.....	1,480,569	127,871	258,418	1,094,280
PACIFIC COAST DIVISION.....	5,669,792	149,781	3,616,397	1,903,614
Cities with population of—				
More than 100,000.....	2,910,704	149,781	1,160,326	1,600,597
25,000 to 100,000.....	363,021	-----	250,000	113,021
10,000 to 25,000.....	1,086,657	-----	986,666	99,991
Less than 10,000.....	1,309,410	-----	1,219,405	90,005

TABLE 3.—CHAINS CLASSIFIED BY VOLUME OF SALES—HARDWARE CHAINS

	ALL CHAINS		CHAINS OF MORE THAN 10 UNITS		CHAINS OF 6 TO 10 UNITS		CHAINS OF LESS THAN 6 UNITS	
	Number of chains	Net sales	Number of chains	Net sales	Number of chains	Net sales	Number of chains	Net sales
All chains.....	71	\$27,784,786	6	\$3,366,885	23	\$12,095,603	42	\$12,322,298
Chains with annual net sales in excess of:								
\$700,000.....	11	11,668,294	4	2,949,644	6	6,339,222	4	4,078,884
\$375,000.....	28	20,222,476						
\$215,000.....	42	24,257,693	4	2,949,644	17	11,221,321	21	10,086,728
\$135,000.....	53	26,199,061	6	3,366,885	21	11,868,161	26	10,964,015
\$95,000.....	60	27,035,698	6	3,366,885	23	12,095,603	31	11,573,210
\$75,000.....	64	27,371,593	6	3,366,885	23	12,095,603	35	11,909,105

TABLE 4.—OPERATING EXPENSES<sup>1</sup>—HARDWARE CHAINS

	All (71) chains	More than 10 units (6 chains)	6 to 10 units (23 chains)	Less than 6 units (42 chains)
Net sales (1929).....	\$27,784,786	\$3,366,885	\$12,095,603	\$12,322,298
Number of chains.....	71	6	23	42
Number of units.....	437	93	168	176
Operating expenses.....	\$7,478,420	\$1,073,912	\$3,185,060	\$3,219,448
Per \$100 of sales.....	26.92	31.90	26.33	26.13
Pay roll.....	\$3,815,976	\$642,037	\$1,553,915	\$1,620,024
Per \$100 of sales.....	13.73	19.07	12.85	13.15
Full-time salaries.....	\$3,699,535	\$573,347	\$1,526,866	\$1,599,322
Full-time employees.....	2,418	398	913	1,107
Part-time salaries.....	\$116,441	\$68,690	\$27,049	\$20,702
Part-time employees.....	216	20	117	79
Other operating expenses, including rent <sup>2</sup> .....	\$3,662,444	\$431,875	\$1,631,145	\$1,599,424
Per \$100 of sales.....	13.19	12.83	13.48	12.98
Rent, per \$100 of sales, in such leased premises.....	4.15	5.43	4.02	3.88
Stocks on hand, end of year, at cost.....	\$8,765,356	\$680,657	\$3,775,901	\$4,308,798

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

<sup>2</sup> Of the total number of units, 390 are in leased premises for which the annual rent is 4.15 per cent of sales in such leased premises.

TABLE 5.—CREDIT SALES—HARDWARE CHAINS

SIZE—CLASS	Number of chains reporting credit sales	Total net sales (in chains reporting credit)	APPLIES ONLY TO CHAINS WHICH EXTEND CREDIT			
			Credit sales (open account) <sup>1</sup>		Cash sales	
			Amount	Per cent of total sales	Amount	Per cent of total sales
Total, all chains which extend credit.....	53	\$22,279,296	\$11,436,068	51.33	\$10,843,228	48.67
Chains of—						
More than 10 units.....	3	1,450,748	593,870	40.94	856,878	59.06
6 to 10 units.....	17	9,678,460	4,994,621	51.61	4,683,839	48.39
Less than 6 units.....	33	11,150,088	5,847,577	52.44	5,302,511	47.56

<sup>1</sup> No chains report installment credit sales.

TABLE 6.—CHAIN UNITS CLASSIFIED BY AGE OF UNITS AND GEOGRAPHIC DIVISIONS—HARDWARE CHAINS

GEOGRAPHIC DIVISION AND AGE OF UNITS	Per cent of total units	Total all chains (71)	NUMBER OF UNITS IN CHAINS OF—		
			More than 10 units	6 to 10 units	Less than 6 units
UNITED STATES, total.....	100.0	<i>Units</i> 437	93	168	176
All units:					
Established in—					
1929.....	16.0	70	13	30	27
1925 to 1928.....	28.1	123	6	70	47
Previous to 1925.....	53.6	234	73	66	95
Unclassified.....	2.3	10	1	2	7
NEW ENGLAND DIV., total.....	100.0	44	1	30	13
Established—					
1929.....	36.4	16		15	1
1925 to 1928.....	34.1	15		14	1
Previous to 1925.....	29.5	13	1	1	11
MIDDLE ATLANTIC DIV., total.....	100.0	56	17	18	21
Established—					
1929.....	12.5	7			7
1925 to 1928.....	14.3	8		2	6
Previous to 1925.....	73.2	41	17	16	8
EAST NORTH CENTRAL DIV., total.....	100.0	114	31	34	49
Established—					
1929.....	10.5	12	2	2	8
1925 to 1928.....	31.6	36		19	17
Previous to 1925.....	57.9	66	29	13	24
WEST NORTH CENTRAL DIV., total.....	100.0	17	3	10	4
Established—					
1929.....	47.1	8		7	1
1925 to 1928.....	17.6	3		2	1
Previous to 1925.....	35.3	6	3	1	2
SOUTH ATLANTIC DIV., total.....	100.0	55	16	20	19
Established—					
1929.....	3.6	2			2
1925 to 1928.....	41.8	23	2	14	7
Previous to 1925.....	54.6	30	14	6	10
EAST SOUTH CENTRAL DIV., total.....	100.0	28	11	10	7
Established—					
1929.....	64.3	18	11	6	1
1925 to 1928.....	25.0	7		3	4
Previous to 1925.....	10.7	3		1	2
WEST SOUTH CENTRAL DIV., total.....	100.0	46		19	27
Established—					
1929.....	15.2	7			7
1925 to 1928.....	23.9	11		7	4
Previous to 1925.....	60.9	28		12	16
MOUNTAIN DIV., total.....	100.0	22	11	3	8
Established—					
1929.....					
1925 to 1928.....	27.3	6	4	2	
Previous to 1925.....	72.7	16	7	1	8
PACIFIC COAST DIV., total.....	100.0	45	2	22	21
Established—					
1929.....					
1925 to 1928.....	31.1	14		7	7
Previous to 1925.....	68.9	31	2	15	14

TABLE 7.—SALES BY COMMODITIES—HARDWARE CHAINS

	Net sales (1929)
Net sales (1929).....	\$27,784,786
Less—amount which can not be broken down into commodities.....	14,549,218
Sales further analyzed.....	13,235,568
	<i>Per cent</i>
Total.....	100.00
Builders' hardware, shelf hardware, tools.....	30.26
Building materials.....	4.16
Paints and varnishes.....	10.54
Tractors, and automobile accessories.....	11.88
Farm and garden equipment.....	8.22
Silverware, utensils, and crockery.....	7.93
Electrical and gas appliances and supplies and plumbing equipment.....	9.09
Seeds, bulbs, and nursery stock.....	3.99
Sporting goods, toys, and games.....	6.45
Miscellaneous merchandise.....	7.48

TABLE 8.—SUMMARY—FARM MACHINERY CHAINS

Number of chains.....	11
Number of units, 7 local chains.....	34
Sales, local chains.....	\$2,504,422
Number of units, 4 sectional chains.....	52
Sales, sectional chains.....	\$3,188,098
Total net sales (1929).....	\$5,692,520
Stock on hand, end of year, at cost.....	\$2,351,314
Employees and wages:	
Full-time employees.....	448
Salaries and wages to full-time employees.....	\$682,418
Part-time employees.....	25
Salaries and wages to part-time employees.....	\$15,620
Expenses:	
Pay roll.....	\$698,038
Other store operating expenses, including rent <sup>1</sup> .....	544,543
Total operating expenses.....	\$1,242,581
Total operating expenses—\$100 of sales.....	21.83
Credit sales in 11 chains.....	\$4,093,934
Per cent of credit sales to total sales.....	71.92

<sup>1</sup> Of the 86 units, 64 are in leased premises for which the annual rent is \$1.88 per \$100 of sales in such leased premises.

TABLE 9.—SALES BY COMMODITIES—FARM MACHINERY CHAINS

	Net sales (1929)
Net sales (1929).....	\$5,692,520
Less—amount which can not be broken down into commodities.....	3,844,691
Sales further analyzed.....	1,847,829
	<i>Per cent</i>
Total.....	100.00
Farm machinery and farm wagons, includes tractors.....	81.62
Commercial cars and trucks (new and used).....	8.43
Stoves, heaters, ranges.....	1.76
Hardware.....	2.06
Leather goods and harness.....	.32
Miscellaneous merchandise.....	2.22
Service.....	3.59

TABLE 10.—SUMMARY—HEATING AND PLUMBING CHAINS

## A.—BY TYPES OF OPERATION

TYPE OF OPERATION	Number of chains	Number of units	Net sales (1929)	Per cent of total sales
Total, all types.....	20	831	\$35,535,858	100.00
Local chains.....	8	44	4,644,242	13.07
Sectional and national chains.....	5	660	21,731,665	61.15
Manufacturer-controlled chains and sales branch systems.....	7	127	9,159,951	25.78

## B.—BY VOLUME OF SALES

	20	831	\$35,535,858	100.00
Total, all chains.....				
Chains having net sales—				
In excess of \$1,200,000.....	5	607	27,756,290	78.11
\$600,000 to \$1,200,000.....	6	143	5,605,477	15.77
\$150,000 to \$600,000.....	6	68	1,884,431	5.30
Less than \$150,000.....	3	13	289,660	.82

TABLE 11.—SALES CLASSIFIED BY SIZE OF CITY AND GEOGRAPHIC DIVISIONS—HEATING AND PLUMBING CHAINS

GEOGRAPHIC DIVISION	Total net sales (1929)	NET SALES IN CITIES AND PLACES HAVING POPULATION OF—			
		More than 100,000	25,000 to 100,000	10,000 to 25,000	Less than 10,000
United States, total.....	\$35,535,858	\$19,763,405	\$7,898,753	\$6,056,607	\$1,817,093
New England.....	3,403,149	2,671,566	582,627	117,179	31,777
Middle Atlantic.....	8,124,619	3,957,293	2,355,340	1,671,022	140,964
East North Central.....	15,484,095	7,414,914	3,719,247	3,183,044	1,166,890
West North Central.....	2,284,102	1,091,029	439,030	652,691	101,352
South Atlantic.....	1,178,933	715,649	385,427	77,857	.....
East South Central.....	563,442	371,849	147,287	44,306	.....
West South Central.....	121,477	107,825	.....	13,652	.....
Mountain.....	524,327	204,269	144,215	130,751	45,092
Pacific coast.....	3,851,714	3,229,011	125,580	166,105	331,018

TABLE 12.—EMPLOYMENT, WAGE, AND EXPENSE DATA—HEATING AND PLUMBING CHAINS

Number of chains.....	20
Number of units.....	831
Total net sales (1929).....	\$35,535,858
Stocks on hand, end of year, at cost.....	\$4,670,087
Employees and wages:	
Full-time employees.....	6,145
Salaries and wages to full-time employees.....	\$12,266,713
Part-time employees.....	31
Salaries and wages to part-time employees.....	\$11,810
Expenses:	
Pay roll.....	\$12,277,523
Other store operating expenses, including rent <sup>1</sup> .....	\$4,514,151
Total operating expenses.....	\$16,791,674
Total operating expenses—\$100 of sales.....	47.25
Credit sales, open account in 14 chains.....	\$4,343,456
Credit sales, installment in 11 chains.....	\$13,704,788

<sup>1</sup> Of the 831 units, 820 are in leased premises for which the annual rent is \$1.91 per \$100 of sales in such leased premises.

TABLE 13.—CHAIN UNITS CLASSIFIED BY AGE OF UNITS AND GEOGRAPHIC DIVISIONS—HEATING AND PLUMBING CHAINS

GEOGRAPHIC DIVISION	Per cent of total units	Total number of units	DATE OF ESTABLISHMENT OF UNITS		
			1929	1925 to 1928	Previous to 1925
United States, total.....	100.00	831	28	174	629
New England.....	7.34	61	5	24	32
Middle Atlantic.....	17.81	148	3	10	135
East North Central.....	52.83	439	17	118	304
West North Central.....	9.27	77	1	3	73
South Atlantic.....	3.37	28	-----	4	24
East South Central.....	1.68	14	1	-----	13
West South Central.....	.36	3	-----	-----	3
Mountain.....	2.05	17	-----	-----	17
Pacific coast.....	5.29	44	1	15	28

TABLE 14.—SALES BY COMMODITIES—HEATING AND PLUMBING CHAINS

	Net sales (1929)
Net sales (1929).....	\$35,535,858
Less—amount which can not be broken down into commodities.....	1,134,488
Sales further analyzed.....	34,401,370
	<i>Per cent</i>
Total.....	100.00
Heating and plumbing equipment and supplies.....	56.27
Oil burners.....	19.68
Stoves, ranges, heaters, and other hardware.....	2.36
Building materials.....	2.47
Fuel oil.....	.39
Gas stoves, ranges.....	.63
Miscellaneous merchandise.....	1.43
Secondhand merchandise.....	.75
Receipts from service operations.....	16.02

TABLE 15.—SUMMARY—PAINT AND WALL-PAPER CHAINS

A—BY TYPES OF OPERATION

	Number of chains	Number of units	Net sales (1929)	Per cent of total sales
Total, all types.....	55	565	\$25,365,336	100.00
Local chains.....	29	185	7,363,541	29.03
Sectional chains.....	15	169	9,234,066	36.40
National chains.....	3	104	6,891,047	27.17
Leased department chains.....	8	107	1,876,682	7.40

B—BY VOLUME OF SALES

	Number of chains	Number of units	Net sales (1929)	Per cent of total sales
Total, all chains.....	55	565	\$25,365,336	100.00
Chains having net sales—				
In excess of \$1,200,000.....	5	145	11,624,272	45.83
\$600,000 to \$1,200,000.....	6	78	4,816,213	18.99
\$300,000 to \$600,000.....	12	104	4,833,302	19.05
\$150,000 to \$300,000.....	14	131	2,785,278	10.98
\$75,000 to \$150,000.....	8	47	901,749	3.56
Less than \$75,000.....	10	60	404,522	1.59

## CENSUS OF DISTRIBUTION

TABLE 16.—SALES CLASSIFIED BY SIZE OF CITY AND GEOGRAPHIC DIVISIONS—  
PAINT AND WALL-PAPER CHAINS

GEOGRAPHIC DIVISION	Total net sales (1929)	NET SALES IN CITIES AND PLACES HAVING POPULATION OF—			
		More than 100,000	Between 25,000 and 100,000	Between 10,000 and 25,000	Less than 10,000
United States, total.....	\$25,365,336	\$18,106,409	\$4,879,610	\$2,069,453	\$309,864
New England.....	1,774,474	1,421,217	346,868	-----	6,389
Middle Atlantic.....	5,226,379	4,151,199	738,246	314,090	22,844
East North Central.....	5,798,089	4,242,228	1,206,040	298,280	51,541
West North Central.....	2,936,971	1,735,219	522,814	503,107	175,831
South Atlantic.....	2,292,601	1,475,827	493,913	291,077	31,784
East South Central.....	1,170,500	970,189	120,850	79,461	-----
West South Central.....	2,724,843	2,091,513	533,124	78,731	21,475
Mountain.....	656,230	255,397	366,580	34,253	-----
Pacific coast.....	2,785,249	1,763,620	551,175	470,454	-----

TABLE 17.—OPERATING EXPENSES <sup>1</sup>—PAINT AND WALL-PAPER CHAINS

	All (55) chains	More than 26 units (3 chains)	11 to 25 units (15 chains)	6 to 10 units (17 chains)	Less than 6 units (20 chains)
Net sales (1929).....	\$25,365,336	\$7,539,655	\$8,346,894	\$4,643,377	\$4,835,410
Number of chains.....	55	3	15	17	20
Number of units.....	565	123	233	122	87
Operating expenses.....	\$7,875,118	\$2,070,279	\$3,001,599	\$1,280,398	\$1,522,842
Per \$100 of sales.....	31.05	27.46	35.96	27.57	31.49
Pay roll.....	\$3,278,931	\$868,414	\$1,203,939	\$540,780	\$665,798
Per \$100 of sales.....	12.93	11.52	14.42	11.65	13.77
Full-time salaries.....	\$3,256,905	\$867,232	\$1,189,223	\$537,673	\$662,777
Full-time employees.....	2,080	573	800	361	346
Part-time salaries.....	\$22,026	\$1,182	\$14,716	\$3,107	\$3,021
Part-time employees.....	84	6	58	13	7
Other operating expenses, including rent <sup>2</sup> .....	\$4,596,187	\$1,201,865	\$1,797,660	\$739,618	\$857,044
Per \$100 of sales.....	18.12	15.94	21.54	15.92	17.72
Rent, per \$100 of sales in leased premises.....	7.21	6.21	10.21	5.97	5.21
Stocks on hand, end of year, at cost....	\$5,686,279	\$1,930,168	\$1,862,324	\$907,822	\$985,965

<sup>1</sup> This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

<sup>2</sup> Of the total number of units 552 are in leased premises for which the annual rent is \$7.21 per \$100 of sales in such leased premises.

TABLE 18.—CREDIT SALES—PAINT AND WALL PAPER CHAINS

SIZE—CLASS	Number of chains reporting credit sales	Net sales in chains reporting credit	APPLIES ONLY TO CHAINS WHICH EXTEND CREDIT			
			Credit sales		Cash sales	
			Open account	Per cent of sales	In chains reporting credit	Per cent of sales
All chains which extend credit, total....	34	\$20,342,301	\$12,865,587	63.24	\$7,476,714	36.76
Chains of—						
More than 25 units.....	2	6,828,150	5,068,958	74.24	1,759,192	25.76
11 to 25 units.....	8	6,604,392	3,870,379	58.60	2,734,013	41.40
6 to 10 units.....	9	3,718,603	2,243,332	60.33	1,475,271	39.67
Less than 6 units.....	15	3,191,156	1,682,918	52.74	1,508,238	47.26

TABLE 19.—CHAIN UNITS CLASSIFIED BY AGE OF UNITS AND GEOGRAPHIC DIVISIONS—PAINT AND WALL PAPER CHAINS

GEOGRAPHIC DIVISION	Per cent of total units	Total number of units	DATE OF ESTABLISHMENT OF UNITS		
			1929	1925 to 1928	Previous to 1925
United States, total.....	100.00	565	258	170	137
<i>Per cent to total number of units.....</i>			<i>45.66</i>	<i>30.09</i>	<i>24.25</i>
New England.....	8.85	50	27	11	12
Middle Atlantic.....	20.36	115	68	31	16
East North Central.....	32.75	185	54	54	77
West North Central.....	12.03	68	27	22	19
South Atlantic.....	8.85	50	23	25	2
East South Central.....	2.66	15	10	5	-----
West South Central.....	5.48	31	19	8	4
Mountain.....	1.59	9	6	2	1
Pacific coast.....	7.43	42	24	12	6

TABLE 20.—SALES BY COMMODITIES—PAINT AND WALL PAPER CHAINS

	Net sales (1929)
Net sales (1929).....	\$25,365,336
Less—amount which can not be broken down into commodities.....	11,375,121
Sales further analyzed.....	13,990,215
<i>Total.....</i>	<i>Per cent</i> 100.00
Paints, varnishes, and lacquers.....	55.82
Glass.....	6.52
Painters' supplies.....	14.50
Wall paper.....	18.12
Miscellaneous merchandise.....	5.04

TABLE 21.—SUMMARY—ELECTRICAL SUPPLY (MISCELLANEOUS) CHAINS

Number of chains.....	3
Number of units.....	19
Total net sales (1929).....	\$618,954
Stock on hand, end of year, at cost.....	\$188,288
Employees and wages:	
Full-time employees.....	103
Salaries and wages to full-time employees.....	\$110,571
Part-time employees.....	2
Salaries and wages to part-time employees.....	\$94
Expenses:	
Payroll.....	\$110,665
Other store operating expenses including rent <sup>1</sup> .....	\$206,881
Total operating expenses—per \$100 of sales.....	33.42
Credit sales (open account).....	\$129,829
Credit sales (installment).....	\$412,796

<sup>1</sup> Of the 19 units 8 are in leased premises for which the annual rent is \$5.70 per \$100 of sales in such leased premises.

TABLE 22.—SALES BY COMMODITIES—ELECTRICAL SUPPLY (MISCELLANEOUS)  
CHAINS

	Net sales (1929)
Net sales (1929) .....	\$618,954
Less—amount which can not be broken down into commodities .....	184,383
Sales further analyzed .....	434,571
	<i>Per cent</i>
Total .....	100.00
Electric lighting equipment .....	99.14
Other electrical appliances and supplies .....	.49
Service charges .....	.37

## CHAPTER 19.—OFFICE APPLIANCE CHAINS

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# OFFICE APPLIANCE CHAINS

## INCLUDING PROFESSIONAL AND SCIENTIFIC SUPPLY CHAINS

### INTRODUCTION

Sales at retail by office-appliance chains amount to \$169,707,027, according to reports received from chain-store organizations in connection with the first nation-wide Census of Distribution, which is a part of the Fifteenth Decennial Census of the United States. There are 55 chains, with 1,707 stores or units, of which 1,639 are store and office appliance salesrooms, and 68 are stores selling professional and scientific supplies. Both kinds are analyzed in this report, which also includes a short summary of the 6 typewriter chains of sales branches.

The 55 chains employ the services of 21,011 employees at a total annual payroll cost of \$45,453,321. Other operating expenses, including rent, aggregate \$20,180,517, making a total operating expense of \$65,633,838, or \$38.67 per \$100 of sales. The rent ratio is \$2.32 per \$100 of sales, computed on the basis of the rent paid for 1,504 stores operated in wholly leased premises in relation to sales in such leased premises. Stock on hand at the end of the year is valued, at cost, at \$18,359,151.

### OFFICE APPLIANCE CHAINS

There are 45 office, school, and store appliance chains showing aggregate sales in 1,639 units of \$164,535,060. Of this number, 5 are local chains operating 33 units with sales of \$2,888,355, 14 are sectional chains operating 96 units with sales of \$10,452,226, and 26 are national chains operating 1,510 units with sales of \$151,194,479. The latter includes the manufacturer-controlled chains of the typewriter companies. The 45 appliance chains are to be distinguished from 10 chains specializing in professional and scientific supplies.

The appliance chains show average sales per unit of \$100,387 and an average store operating expense of \$38.94 per \$100 of sales. Pay roll is \$27.08 per \$100 of sales. Of the 1,639 stores 1,454 are in leased premises for which the cost of rent averages \$2.29 per \$100 of sales in such leased premises.

### GROWTH OF THE OFFICE APPLIANCE CHAINS

Of the 975 chain units classified as to age, only 3 per cent were established in 1929 and 10 per cent were established in the four years from 1925 to 1928. About 7 out of 8 units in operation at the end of 1929 were established prior to 1925. The relatively small number of units established between 1925 and 1929 is unusual in chain retailing, most kinds of chains registering substantial increases during that period.

### GEOGRAPHIC DISTRIBUTION OF UNITS

Of the 1,639 chain units analyzed, 1,082 are located in cities of more than 100,000; 430 in cities of 25,000 to 100,000; 113 in cities of 10,000 to 25,000; and 14 in places of less than 10,000 population. The five East North Central States, surrounding Chicago, contain 21.78 per cent. The Middle Atlantic States contain 17.75 per cent, while the South Atlantic States contain 11.78 per cent.

Next in order are the West North Central States with 11.41 per cent and the West South Central States with 9.64 per cent. Table 5 shows the distribution of stores in other geographic divisions, and further analyzed the data by size of chain.

Table 2B, analyzing sales geographically, shows that the division which leads in the number of units does not lead in sales. The Middle Atlantic States, with sales of \$55,512,733, lead the district surrounding Chicago. The South Atlantic States, third in the number of units, is exceeded in sales by the West North Central States with total sales of \$14,725,123, and by the New England States with sales of \$13,002,060. The Pacific Coast States, with sales of \$13,452,457 are ahead of the West South Central States with sales of \$9,954,810, although the latter contain slightly more units. Table 2B shows the distribution of sales in each of the nine geographic divisions, and further divides these data by size of chain.

### CREDIT OPERATIONS

Not all appliance chains do a credit business. The 29 chains that report that they extend credit operate 64.55 per cent of the total number of units, and they do 72.98 per cent of the total sales of all appliance chains. They operate 1,058 stores with aggregate sales of \$120,073,205, of which 90.42 per cent or \$108,562,619, is credit business.

### SALES BY COMMODITIES

Typewriters and accessories constitute more than 20 per cent of total sales of all chains in the appliance classification. Adding and calculating machines account for more than another 20 per cent, while general office equipment totals 16 per cent. A list of commodities is shown in Table 6.

### TYPEWRITER CHAINS

Included in the 45 appliance chains are 6 typewriter chains operating 395 units with sales of \$31,924,025. The average store operating expense for these chains is \$44.18 per \$100 of sales. Pay roll cost is \$30.19 per \$100 of sales. Of the total number of stores, all except one are in leased premises for which the cost of rent averages \$2.57 per \$100 of sales in such leased premises.

### PROFESSIONAL AND SCIENTIFIC SUPPLY CHAINS

Not included in the appliance chain figures above are 10 professional and scientific supply chains showing aggregate sales in 68 units of \$5,171,967. There are 2 local chains operating 9 units with sales of \$859,768, and 8 sectional and national chains operating 59 units with sales of \$4,312,199. Stocks on hand at the end of the year is valued at cost at \$700,953. Although all of the geographic divisions of the country are represented, the Middle Atlantic States and the States surrounding Chicago show the greatest volume of sales.

The average store operating expense of these chains is \$30.36 per \$100 of sales. Pay roll is \$17.34 per \$100 of sales. Of the 68 stores, 50 are in leased premises for which the cost of rent averages \$3.06 per \$100 of sales in such leased premises.

The six chains that report that they extend credit operate 50 per cent of the total number of units, and they do 70.69 per cent of the total sales of all the professional and scientific supply chains. They operate 34 stores with aggregate sales of \$3,656,083, of which 79.62 per cent or \$2,910,958 is credit business.

Surveyors' instruments and drawing materials constitute more than 40 per cent of total sales of these professional and scientific supply chains. Surgical instruments, appliances, and supplies add more than 17 per cent, while X-ray machines and supplies add nearly 13 per cent. A list of the commodities is shown in Table 9.

TABLE 1.—SUMMARY

Total number of chains.....	55
Office, school, and store appliance chains (including 6 typewriter chains).....	45
Professional and scientific supply chains.....	10
Number of local chains.....	7
Number of sectional and national chains.....	48
Total number of units.....	1,707
Office, school, and store appliance chains.....	1,639
Professional and scientific supply chains.....	68
Total net sales (1929).....	\$169,707,027
Office, school, and store appliance chains.....	164,535,060
Professional and scientific supply chains.....	5,171,967
Total reported credit sales.....	\$111,473,577
Office, school, and store appliance chains.....	108,562,619
Professional and scientific supply chains.....	2,910,958
Average total operating expense (per \$100 of sales).....	38.67
Office, school, and store appliance chains (per \$100 of sales).....	38.94
Professional and scientific supply chains (per \$100 of sales).....	30.36
Average pay roll cost (included in total expense above)—21,011 employees (per \$100 of sales)....	26.78
Office, school, and store appliance chains—20,521 employees (per \$100 of sales).....	27.08
Professional and scientific supply chains—490 employees (per \$100 of sales).....	17.34
Average rent cost (included in total expense above)—1,504 leased stores (per \$100 of sales)....	2.32
Office, school, and store appliance chains—1,454 leased stores (per \$100 of sales).....	2.29
Professional and scientific supply chains—50 leased stores (per \$100 of sales).....	3.06

TABLE 2.—SALES BY SIZE-CLASSES—OFFICE-APPLIANCE CHAINS

## A. BY SIZE OF CITY

SIZE OF CITY	TOTAL SALES, ALL CHAINS (45 chains)	CHAINS OF—					
		More than 100 units (5 chains)	51 to 100 units (4 chains)	26 to 50 units (5 chains)	11 to 25 units (11 chains)	6 to 10 units (8 chains)	Less than 6 units (12 chains)
UNITED STATES, total.....	\$164,535,060	\$92,383,294	\$21,903,490	\$17,537,312	\$23,867,821	\$3,287,200	\$5,555,943
<i>Per cent of total sales.....</i>	<i>100.00</i>	<i>56.15</i>	<i>13.31</i>	<i>10.66</i>	<i>14.50</i>	<i>2.00</i>	<i>3.38</i>
Number of units.....	1,639	837	310	177	203	60	52
All cities having popula- tion of:							
More than 100,000.....	\$143,499,199	\$75,398,959	\$18,771,190	\$17,456,049	\$23,586,431	\$2,950,347	\$5,336,223
25,000 to 100,000.....	17,238,452	14,571,306	2,215,243	81,263	240,968	27,793	101,879
10,000 to 25,000.....	3,617,093	2,409,483	782,057	-----	40,422	309,060	76,071
Less than 10,000.....	180,316	3,546	135,000	-----	-----	-----	41,770

## B. BY GEOGRAPHIC DIVISIONS

[For number of units see Table 5]

UNITED STATES, total.....	\$164,535,060	\$92,383,294	\$21,903,490	\$17,537,312	\$23,867,821	\$3,287,200	\$5,555,943
New England.....	13,002,060	7,298,621	1,956,431	1,208,353	1,571,172	833,500	133,983
Middle Atlantic.....	55,512,733	30,214,200	6,819,118	6,015,064	8,174,718	1,462,439	2,827,194
East North Central.....	38,306,882	18,872,227	5,512,077	4,337,203	7,383,163	558,595	1,643,617
West North Central.....	14,725,123	8,326,542	1,710,476	1,849,597	2,339,436	260,937	238,135
South Atlantic.....	11,695,756	6,986,608	1,781,472	1,333,405	1,432,818	69,574	91,879
East South Central.....	4,615,607	3,442,825	663,356	267,438	52,722	-----	189,266
West South Central.....	9,954,810	6,402,216	1,101,321	921,057	1,480,941	10,401	38,874
Mountain.....	3,269,632	2,493,001	287,196	269,886	116,708	-----	102,541
Pacific.....	13,452,457	8,347,054	2,072,043	1,335,309	1,316,143	91,754	290,154



TABLE 3.—CREDIT AND INSTALLMENT SALES—OFFICE APPLIANCE CHAINS

SIZE CLASS	Number of chains reporting credit sales	Total net sales of chains reporting credit	CREDIT SALES				CASH SALES	
			Open account		Installment		Amount	Per cent of sales
			Amount	Per cent of sales	Amount	Per cent of sales		
All chains which report credit, total.....	29	\$120,073,205	\$91,779,743	76.44	\$16,782,876	13.98	\$11,510,586	9.58
Chains having—								
More than 50 units.....	5	81,920,302	59,229,534	72.30	13,318,816	16.26	9,371,952	11.44
26 to 50 units.....	5	17,537,312	14,611,852	83.32	2,882,100	16.43	43,360	.25
11 to 25 units.....	8	16,317,017	15,146,483	92.82	384,517	2.36	786,017	4.82
6 to 10 units.....	5	1,955,040	966,332	49.43	122,560	6.27	866,148	44.30
Less than 6 units..	6	2,343,534	1,825,542	77.90	74,883	3.19	443,109	18.91

TABLE 4.—OPERATING EXPENSES—OFFICE APPLIANCE CHAINS

ITEMS	Total all chains	CHAINS OF—					Less than 6 units
		More than 50 units	26 to 50 units	11 to 25 units	6 to 10 units		
Net sales (1929).....	\$164,535,060	\$114,286,784	\$17,537,312	\$23,867,821	\$3,287,200	\$5,555,943	
Number of chains.....	45	9	5	11	8	12	
Units operated by local chains.....	33	41	15	15	18	18	
Units operated by sectional chains.....	96	177	33	30	40	26	
Units operated by national chains.....	1,510	1,147	177	158	20	8	
Operating expenses, total.....	\$64,063,875	\$47,029,331	\$6,536,247	\$7,968,680	\$970,204	\$1,559,413	
Per \$100 of sales.....	38.94	41.15	37.27	33.39	29.51	28.07	
Pay roll, total.....	\$44,556,757	\$33,579,696	\$4,657,162	\$4,612,664	\$687,819	\$1,019,416	
Per \$100 of sales.....	27.08	29.38	26.56	19.33	20.92	18.35	
Other store-operating expenses, including rent.....	\$19,507,118	\$13,449,635	\$1,879,085	\$3,356,016	\$282,385	\$539,997	
Per \$100 of sales.....	11.86	11.77	10.71	14.06	8.59	9.72	
Rent (1,454 leased premises); Per \$100 of sales in such leased premises (included in expense figures above).....	2.29	2.01	2.48	3.44	3.36	2.79	
Stock on hand, end of year, at cost.....	\$17,653,198	\$11,288,659	\$2,244,980	\$3,129,210	\$279,692	\$715,657	
Full-time employees, total.....	20,361	15,107	2,204	2,340	287	423	
Men.....	16,889	12,716	1,737	1,856	235	345	
Women.....	3,472	2,391	467	484	52	78	
Total full-time pay roll.....	\$44,438,034	\$33,493,577	\$4,657,162	\$4,610,109	\$687,819	\$989,367	
Part-time employees, total.....	160	137	4	4	19	19	
Men.....	143	120	4	4	19	19	
Women.....	17	17	—	—	—	—	
Total part-time pay roll.....	\$118,723	\$86,119	—	\$2,555	—	\$30,049	

NOTE.—This compilation of expense includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold nor profit.

TABLE 5.—CHAIN UNITS CLASSIFIED ACCORDING TO DATE OF ESTABLISHMENT AND GEOGRAPHIC DIVISIONS—OFFICE APPLIANCE CHAINS

## A. BY DATE OF ESTABLISHMENT

	Per cent of total units	Total units all chains	UNITS IN CHAINS OF—					
			More than 100 units	51 to 100 units	26 to 50 units	11 to 25 units	6 to 10 units	Less than 6 units
Total.....		1,639	837	310	177	203	60	52
Total classified by date established.....	100.00	975	498	222	37	106	60	52
In 1929.....	3.00	28	4	7	2	11	3	1
1925 to 1928.....	10.00	95	6	17	1	33	18	20
Previous to 1925.....	87.00	852	488	198	34	62	39	31

## B. BY GEOGRAPHIC DIVISIONS

[For dollars of sales, see TABLE 2B]

UNITED STATES, total.....	100.00	1,639	837	310	177	203	60	52
New England.....	8.36	137	58	30	14	20	13	2
Middle Atlantic.....	17.75	291	129	57	40	37	17	11
East North Central.....	21.78	357	158	75	37	55	16	16
West North Central.....	11.41	187	100	27	23	27	6	4
South Atlantic.....	11.78	193	108	38	19	21	3	4
East South Central.....	5.61	92	57	20	7	4		4
West South Central.....	9.64	158	89	29	15	20	1	4
Mountain.....	4.70	77	52	10	6	5		4
Pacific.....	8.97	147	86	24	16	14	4	3

TABLE 6.—SALES BY COMMODITIES—OFFICE APPLIANCE CHAINS

	Net sales (1929)
Net sales (1929) (coverage 100 per cent).....	\$164,535,060
	<i>Per cent</i> 100.00
Commodities:	
Office and school supplies.....	7.39
Office and store mechanical appliances.....	32.56
Adding and calculating machines.....	23.83
Addressing machines.....	1.26
Batteries.....	.08
Check-protecting devices.....	1.09
Dictating machines.....	.66
Dictographs.....	.85
Duplicating machines and supplies.....	4.34
Printing and autographic registers.....	.45
Office and store furniture and equipment.....	25.29
Filing equipment.....	2.71
Store equipment.....	.88
Store furniture.....	2.82
Office equipment.....	16.56
Office furniture.....	1.23
Safes and vault doors.....	1.09
Typewriters and accessories.....	21.23
Repairs and service.....	6.00
Sales to other retailers.....	.05
Secondhand merchandise.....	.04
Store fixtures.....	7.44
Billiard tables.....	.03
Butchers' supplies.....	.12
Cash registers.....	4.64
Counters and show cases.....	.02
Refrigerators.....	.69
Scales.....	1.85
Trucks (hand).....	.09

TABLE 7.—SUMMARY—PROFESSIONAL AND SCIENTIFIC SUPPLY CHAINS

	Net sales (1919)
Number of chains.....	10
Number of units operated by:	
Local chains.....	9
Sectional chains.....	29
National chains.....	30
Total net sales (1929).....	\$5, 171, 967
Stock on hand, end of year, at cost.....	\$700, 953
Expenses.....	\$1, 569, 963
Average expense ratio (per \$100 of sales).....	30. 36
(Includes rent in 50 leased premises amounting to \$3.66 per \$100 of sales in such leased premises.)	
Total number of employees.....	490
Total pay roll.....	\$896, 564
Total operating expenses, except pay roll.....	\$673, 399

NOTE.—This computation of expenses includes no return on capital invested in merchandise, fixtures, or accounts. Expenses do not include, of course, the cost of merchandise sold, nor profit.

TABLE 8.—SALES BY COMMODITIES—PROFESSIONAL AND SCIENTIFIC SUPPLY CHAINS

	Net sales (1929)
Net sales (1929) (coverage, 100 per cent).....	\$5, 171, 967
	<i>Per cent</i> 100. 00
Commodities:	
Surveyors' instruments and drawing materials.....	40. 64
Surgical instruments, appliances, and supplies.....	17. 03
X-ray machines and supplies.....	12. 80
Professional and scientific instruments and supplies.....	8. 66
Artificial limbs and accessories.....	5. 17
Biologicals.....	7. 05
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