

RETAIL DISTRIBUTION: 1929

CHAPTER I.—GENERAL SURVEY OF RETAIL DISTRIBUTION IN THE UNITED STATES

INTRODUCTION

This is the first of three parts, comprising the volume on retail distribution in the United States, published as a result of the first Census of Distribution, which was taken as a part of the Fifteenth Decennial Census. The data were collected in 1930 and cover business activities of the year 1929.

After a trial census of 11 cities, in 1926, this first nation-wide census of retail distribution was taken by complete field canvass in 1930 and reports the business of the year 1929. Not only does it establish the foundation for future censuses of this character, but at the same time it provides a mass of data for current use by retailers, wholesalers, manufacturers, publishers, advertisers, and students of distribution. It is fortunate that the base or reporting year was 1929, for no subsequent year to date would have provided what might be described as a normal comparison between the various kinds of business and between the States, which is essential for the initial retail census. A census in 1933 would measure the nature and extent of the changes which a serious business depression brings about, but the 1929 figures provide a better picture of the normal interrelations within the retail field, relative costs of doing business and the nature of commodities sold, and are of maximum use in the formulation of current business plans.

The final statistics compiled from the data collected for 1929, were originally published in the form of individual State reports, containing detailed information for counties and incorporated places, and a summary containing statistics for the United States by States, as well as data for cities having 30,000 or more inhabitants.

Scope of the census.—The three parts of this volume contain information on number of stores, personnel, pay roll, stocks, sales, operating expenses, seasonal employment characteristics, credit business, receipts from sale of meals, receipts from repairs and service of automobiles, merchandise manufactured by retailers, returned goods and allowances, country buying, retail sales of manufacturing establishments and wholesalers, sales to other retailers, forms of organization, and sales by commodities. Whenever possible, these data were classified by kinds of business, type of operation, and size of establishment.

Part I presents all of this information summarized for the United States, for the most part by States. However, the greater portion of Part I is devoted to

the presentation of statistics relative to number of stores, personnel, pay roll, stocks, and sales, by counties and incorporated places (Table 13), and number of stores and net sales for counties and incorporated places, by kinds of business (Table 14). These tables have been consolidated in Part I for ready reference, especially for those engaged in analyzing the marketing organization and its operation in the various areas of the country.

Parts II and III present detailed statistics for the individual States on all phases of the Retail Census with the exception of the data contained in Tables 13 and 14, Part I, virtually comprising a combined reprint of the individual State reports, omitting Tables 13 and 14 for each State.

Retail distribution, as covered in this census, is the process of purveying goods to ultimate consumers for consumption or utilization, together with services incidental to the sale of goods. The function of the retailer is primarily to anticipate the wants of the consumer and to make available, at the right time and at a convenient place, a reasonable selection of goods capable of satisfying those wants. The distinguishing characteristic of a retailer is that the business is done in a retail manner, in a place of business open to the general public.

(a)—The census does not include wholly service businesses, such as laundries, dry cleaners, barber shops, and the like, nor does it include the professions, such as medicine and the law, nor does it include public utilities, such as water, gas, and electricity. Some semiservice businesses, such as garages, which sell a substantial amount of merchandise in addition to service, are included. In such cases the service income is included in the same total with the sale of merchandise, but is shown separately in later analyses in this report. (Table 9.)

(b)—Bakeries, planing mills, power laundries, and cleaning and dyeing establishments for many years have been included in the census of manufactures, and, therefore, they were not reported by the enumerators as part of the census of distribution. Bakery-goods stores shown in the retail reports are those which do not produce their own goods, or which produce them in quantities too small to be included in the census of manufactures. Lumber yards which manufacture their own lumber and millwork are likewise excluded, as are hotel dining rooms. All of these classifications, which have been excluded from the

retail census, and which sell products and service at retail, are shown in Table 11 of this report.

(c)—Some stores report that they sell a certain proportion, but less than half of their goods to other retailers. Such "wholesale" sales are included but are shown separately in Table 10 of this report. Similarly, some wholesale establishments report that they sell a certain proportion, but less than half of their goods, at retail. These retail sales are not excluded from the wholesale census. This is an important consideration in some kinds of business, such as hardware stores, where a store that is popularly known as a retail store actually may be doing more than one-half of its business at wholesale and, therefore, does not appear at all in the retail census. For this reason Table 11C, showing the retail sales made by wholesale establishments, has been included in this report.

(d)—Supply houses, including artists' supplies, barbers' supplies, and dental supplies, have been included in the wholesale census rather than in the retail census except in a very few cases. So, too, have most machinery dealers and dealers in iron and steel products, leather and findings, and junk. Undertakers are included only when their receipts include the sale of funeral supplies.

Method of taking the census.—The Census of Distribution was taken by enumerators who personally visited each establishment engaged in retail trade and secured reports on the appropriate schedule forms. In the rural districts and places having less than 10,000 inhabitants, the field work was done by the enumerators engaged on the Census of Population and Agriculture. In cities having 10,000 or more inhabitants, special enumerators were appointed to take the Census of Distribution. Six forms of schedules were used to canvass establishments engaged in retail trade. Copies of these schedules appear in the appendixes. (See p. 980.)

Method of tabulation.—The retail schedules when filled out by the enumerators were examined by the supervisors in the field and forwarded to the Bureau of the Census, Washington, D. C. Upon receipt of the schedules by this bureau, a large force of trained clerks in the Distribution Division were assigned to the task of editing them to make sure that the items had been properly entered on the schedules. The punch-card system of tabulation was used.

How stores are classified.—The information in this report is shown under kind-of-business classifications, and then according to types of operation. The business classification, although usually related broadly to the kind of merchandise carried, is not synonymous with a merchandise or commodity classification. For instance, grocery-store sales are not exclusively sales of groceries; ready-to-wear stores sell accessories and

sometimes shoes in addition to outer apparel; drug stores sell many lines other than drugs; furniture stores sell floor coverings and electric household appliances; and department stores sell furniture. Stores are classified according to their principal commodities or according to their popular designation. Types of operation are principally independent types and chain types, shown in detail in Table 5.

The complete classification list, based upon the kind of business, contains approximately 250 separate classifications, into which all returns are divided. Each return is coded in accordance with its detailed classification. However, in some cases, particularly in some of the smaller cities and in some States, it is necessary to combine as few as 2 and as many as 20 specific classifications into a smaller number of what are known as condensed classifications in order to avoid revealing the figures of individual concerns in the particular kinds of business in which only a few concerns are engaged. The full list is used with few exceptions in the State reports and for the cities whenever possible. (Table 1.) However, in order to preserve and maintain a uniform method of combining the different kinds of stores, a condensed classification groups the 200 and more separate kind-of-business classifications into 59 condensed kinds. These 59 condensed classifications are used as subheadings in all tables in which the separate classifications appear, thus making it possible to combine the kinds of business reported for the States and larger cities into the same groupings.

A later section is devoted to definitions of each of the 59 classifications mentioned above, describing also each classification contained in the complete list (these definitions appear in the order in which the classifications are listed in the tables), and to a description of the various types of operation.

Sales nearly \$53,000,000,000.—In 1929, the business year covered by this census, the known total sales at retail approximated \$53,000,000,000.

Of this total, more than \$49,000,000,000 is the aggregate of sales in the 1,543,158 retail stores analyzed in detail in this report; direct consumer sales by manufacturers, including dyeing and cleaning establishments, totaled more than \$2,400,000,000; retail sales by wholesalers amounted to nearly \$700,000,000; and meals sold in hotel dining rooms totaled \$358,000,000 in addition to the restaurant sales included in the retail census.

In addition to the nearly \$53,000,000,000 total, there is a large volume of supplies and equipment sold by wholesalers to ultimate consumers for utilization rather than for resale, sometimes called "end sales." Receipts of strictly service establishments are not included. Sales by peddlers having no established place of business, farm products sold direct from farms

to consumers, and drugs dispensed by physicians are not covered by the census. It is to be expected that in many individual cases the sales of retailers who went out of business during the census year, or operated only seasonally during the year, were not obtained.

Below is a summary of all known sales at retail. Further detail as to each item can be found in the several tables to which reference is made herein:

NATURE OF THE BUSINESS	Total sales (1929)
Total sales in all retail stores included in the Retail Census (Table 1).....	\$49,114,653,269
Additional milk-dealer sales (developed by direct correspondence since completion of the field survey) (Table 11-E).....	129,500,822
	49,244,154,091
Direct consumer sales by manufacturers (includes power laundries and dyeing and cleaning establishments) (Table 11-A).....	2,426,016,035
Retail sales by wholesalers (Table 11-C).....	680,817,082
Sales of meals in hotel dining rooms (Table 11-A).....	358,301,000
	52,718,288,208

STORES ANALYZED BY SIZE OF BUSINESS

With more than 1,543,000 stores and total sales of \$49,114,653,269, it would appear that the average store does an annual business of about \$32,000. The fact is, however, that only about 22 per cent of the stores do that much business. More than 75 per cent of the stores sell less than \$30,000, but the combined sales of all such stores are 25 per cent of the total. Less than 25 per cent of the stores do 75 per cent of the retail business of the country.

In extreme contrast, 25 per cent of the total business is done by 1 per cent of the stores, each of which does more than \$300,000 of business annually.

More than 43 per cent of the stores do a business of less than \$10,000 each, and their aggregate sales are 5.69 per cent of the total. The 50 per cent of the stores having the smallest sales do only 8.6 per cent of the total business, an average per store of somewhat less than \$5,500 annually. The average per store for the remaining 50 per cent is \$58,000 annually, and their aggregate sales 91.4 per cent of the total.

One-half of stores do 8.6 per cent of total business.—

For brief analysis, the stores of the country may be considered in two great classes, each embracing more than 770,000 stores. No one of the very small stores in the first group does a business exceeding \$12,000 annually, and the average is about \$5,500. The second group starts at \$12,000 and includes 2,059 stores which do an annual business of more than \$1,000,000 each, with a few stores exceeding \$35,000,000 and one close to \$100,000,000. The average sales per store of this second group of 770,000 stores is \$58,000 per annum.

A store doing \$12,000 of business can make a modest living income for its proprietor, provided the proprietor (1) works in the store in lieu of a paid employee, (2) knows the business and can select and sell merchandise with average ability, and (3) has a sufficient amount

of his own capital invested to cover the average investment in merchandise fixtures, and accounts. The latter is essential because there is insufficient margin in a \$12,000 business to cover interest on borrowed money, and because enough working capital is necessary to take advantage of every available cash discount and maintain a sound credit standing with the store's sources of supply, whether they be wholesalers or producers.

Analyzing a \$12,000 store.—In most kinds of business the gross margin on a \$12,000 volume of sales ranges between \$2,500 and \$3,500, and the average does not exceed \$3,000. That is, the cost of the merchandise which must be replaced as it is sold is about \$9,000, and \$3,000 is left to cover all expenses.

About \$750 of this \$3,000 is required for insurance, taxes, repairs, and upkeep of premises, light, heat, power, communication, sometimes a little advertising in one form or another, and other essential and unavoidable operating expenses, before taking into consideration the largest items of expense, which are pay roll and rent. Rent averages more than 4 per cent of sales, or about \$500 a year for a business doing \$12,000. It makes little difference in this expense whether the premises are leased, and the expense is actually in the form of rent, or whether the premises are owned by the proprietor and the equivalent of rent must be met in the form of fixed charges, depreciation, and interest. More than 72 per cent of the total business in the country is done in leased premises.

The \$500 for rent and \$750 for essential operating expenses leave a margin of about \$1,750 for pay roll and a possible profit. A store doing \$12,000 of business requires at least two sales people. If the proprietor and members of his family are competent to serve in this capacity, it is possible for them jointly to realize from the business a total income of the full \$1,750. If the proprietor alone works in the store, he must reinforce his own services with the services of one full-time employee and usually one part-timer. The proprietor then realizes, for his own services and as profit on his working capital, only that part of the \$1,750, which is left after paying the wages of his employees.

It is evident, therefore, that even an efficiently operated \$12,000 store can provide but a limited wage for any of the people employed in it, whether they are employees or members of the family or the proprietor himself.

Of the 770,000 stores in the first bracket (those doing \$12,000 or less) only a few approach the \$12,000 figure. The average is only about \$5,500 per store; 419,000 do a business of less than \$5,000 each, with an average of less than \$2,500 per store.

Three classes of very small stores.—There is little provision for wages in the operation of these very small stores, unless a considerable part of their receipts is for repairs or service. They may be divided

roughly into three classes; stores selling merchandise, but which are merely secondary activities of their proprietors; those which sell services as well as merchandise; and, finally, those which are hopeless and exist only until their meager capital and credit are consumed in expenses.

The first class are often operated (1) to give employment to individuals otherwise incapable of employment, whose living expenses are met from sources other than store earnings; (2) to obtain wholesale prices on supplies (usually foodstuffs and clothing) used by the proprietor's family, the proprietor being primarily engaged in other activities; (3) to sell the products of the farm or dairy or manufacturing business in which the proprietor is primarily engaged; (4) to occupy the spare time of the proprietor and/or members of his family who are primarily occupied otherwise or are employed in highly seasonal occupations.

The second class of stores able to operate on a very small volume of sales are largely personal service businesses in which merchandise sales are incidental, such as automobile paint shops or repair shops or caterers, or they are small delicatessen stores or lunch counters or refreshment stands or other similar kinds of business, in which the margin normally required for preparation or conversion or serving of the basic commodities of sale is necessarily a substantial proportion of the final sales dollar. By doing all of the work personally, the proprietor often can realize enough margin from a \$2,500 business of this kind to equal the wage he could earn by performing a *part* of the same services in a larger business.

Although the 419,378 smallest stores do only 2 per cent of the total business of the entire 1,543,158 stores, and one-half of all the stores do only 8.6 per cent of the total business, it does not follow that stores of less sales volume than \$12,000 per year, or less than \$5,000 or \$2,500, are necessarily losing enterprises or are economically unjustified. They offer little harmful or unfair competition to other stores. Except when they are operated by incompetent proprietors who depend entirely upon the sale of merchandise in the same form in which it is bought, these very small stores can survive. Certainly they perform a useful service in increasing the number of contact points between commodities and consumers, making both merchandise and service more readily available.

On the other hand it is pointed out that the cost of wholesale distribution to these smaller retailers is excessive. It is contended that when they are scattered and hard to reach they increase the wholesalers' selling expense, that the cost of handling their small orders is almost as great as the cost of handling large orders, that the credit risk is greater and collections are slower, and that altogether their business is unprofitable to the wholesaler. The fact remains that they continue in business year after year and that the wholesalers continue to sell them.

Why very small stores can survive.—Competition in the retail business is severe, and as to any kind of merchandise there is just enough margin between the average purchase price and the retail price to cover the necessary operating expenses of the average store. Stores making a profit are those which can purchase below the average price or can operate below the average ratio of expense. The very small retailer who is merely turning over goods bought in the same form in which they are sold is restrained by competition to about the average selling price, unless he operates in noncompetitive neighborhood locations or in hours when competing stores are closed. But there is nothing except his own ingenuity and sound credit standing to hold down the cost of the goods which he must purchase, and nothing but his own ability to hold down operating expenses.

Every mistake in buying or in selling, and every expense incurred, necessarily must be met from the slim margin between the selling price and the replacement cost of the goods, when nothing but merchandise is sold. But when the selling price includes a margin for processing or converting the goods into a form other than that in which they are bought, or when the income consists of the sale of services primarily and supplies incidentally, the business provides a much larger margin for the services of the proprietor. The heavy mortality in small stores comes from the other class—those who depend solely upon the sale of merchandise in the same form in which it is bought.

The other 50 per cent of stores.—The 771,607 stores constituting the other 50 per cent, each doing an annual business of more than \$12,000, with average sales of \$58,000, transact 91.4 per cent of the total retail business of the country. Summarized briefly, there are:

2,059 stores with annual sales of more than \$1,000,000 each and total sales of.....	\$6,061,841,000
4,524 stores with annual sales of \$500,000 to \$1,000,000 each and total sales of.....	3,080,040,000
8,407 stores with annual sales of \$300,000 to \$500,000 each and total sales of.....	3,192,534,000
12,966 stores with annual sales of \$200,000 to \$300,000 each and total sales of.....	3,121,806,000
40,497 stores with annual sales of \$100,000 to \$200,000 each and total sales of.....	6,780,586,000
128,869 stores with annual sales of \$50,000 to \$100,000 each and total sales of.....	8,745,541,000
176,767 stores with annual sales of \$30,000 to \$50,000 each and total sales of.....	6,748,325,000
173,458 stores with annual sales of \$20,000 to \$30,000 each and total sales of.....	4,200,105,000
215,000 stores with annual sales of \$12,000 to \$20,000 each and total sales of.....	3,010,000,000
771,607 (50 per cent of all stores and 91.4 per cent of total sales).....	44,890,778,000

A store doing \$200,000 or more of business annually is a large store. There are 28,016 such stores (1.82 per cent of the total number of stores) and they do 31.47 per cent of the total business. These larger stores are more prevalent in the Pacific Coast States and the Mountain division than elsewhere in proportion to the total number of stores in each such division, with the West North Central, South Atlantic, and

South Central divisions much below the average. Interesting comparisons, by States and by geographic divisions, are contained in Tables 4C and 4D herein, while Tables 4A and 4B show comparisons between the various kinds of business for the United States as a whole.

TYPES OF OPERATION

Heretofore there has been almost no attempt to classify stores as to type of operation except to distinguish between so-called independents and so-called chains. However, no such simple demarkation coincides with known facts and the attempts in that direction have led to confusion.

Much of the confusion arises from lack of uniform definition of terms. What one person may mean by the term "chain" is not conveyed to others with the same clarity, and local stores often are classed as chains which are not chains at all and have none of the characteristics of chains.

What constitutes a chain.—A chain is a group of reasonably similar stores in the same kind or field of business, under one ownership and management, merchandised wholly or largely from central merchandising headquarters and supplied from one or more distributing warehouses or directly from the manufacturer on orders placed by the central buyers. Mere ownership is not the distinguishing feature, and there are many financial mergers of stores without central merchandising or buying which are not chains. Change of ownership does not necessarily change the method of operation, and as long as stores continue to plan and buy independently they are independents as far as type is concerned.

Nor does an independent proprietor become a chain operator if, in lieu of adding to the size of his store, he adds one or two branch stores and continues to manage and merchandise them as if they were all under one roof. The stores become a chain only when merchandise planning and buying are centralized apart from the stores, and a warehouse or other central point or points are employed to accumulate and distribute merchandise to the stores.

For the retail census it has been necessary to set an arbitrary limit of three stores beyond which an independent proprietor is classified as a chain operator, simply for the reason that the individual returns on which the census is based do not reveal whether multiunit stores are centrally merchandised or not. If data on this point were fully and uniformly reported, it would be possible to distinguish between chains and multiunit independents even beyond the arbitrary independent limit of three stores. In the census, however, all groups of four stores or more are classified as chains except a few local branch systems, which are groups of small suburban and neighborhood branches which have

been developed around a dominant downtown parent store and which are merchandised from, and largely supplied from the stocks of, the parent store.

The principal types of operation shown in the census are:

Single-store independents.

Two-store and three-store independents.

Local branch systems (operated from a dominant parent store).

Local chains (four or more local stores, centrally merchandised).

Sectional chains (with stores in more than one city but entirely within one geographic division or section of the country).

National chains (with stores in more than one section of the country).

Other types of lesser importance are listed in Table 5 and are defined on page 38.

Relative sales importance of chains.—Nearly 80 per cent of all stores are single-store independents, and they do 64.11 per cent of the total business. Multi-unit independents do 8.84 per cent of the total, and local chains account for another 6.71 per cent. These two local multiunit types, sometimes described as "unchained chains," together account for 15.55 per cent of total sales, which is considerably more than the total sales of all sectional and national chains.

The sales of sectional chains amount to 4.46 per cent, and sales of national chains amount to 8.06 per cent of total sales.

Unusual types of operation.—In most cases the remaining types of operation could be classified also as independents or as chains. They are separately shown to emphasize the greater significance of the methods of operation which they represent. The two most important are mail-order houses (catalogue business only) and manufacturer-controlled chains.

Selling from catalogue aggregates \$515,237,235, slightly more than 1 per cent of total sales. The retail stores of so-called mail-order houses are not included herein but are classified properly as units of national chains.

Manufacturer-controlled chains represent the effort of manufacturers, either separately or in groups, to sell their products directly to the public through their own stores or sales offices. Typical of the commodities thus sold are some plumbing fixtures, typewriters, some electrical appliances, tires and tubes, shoes, automobiles and other products usually in the nature of specialties which, for one reason or another, the manufacturer believes he can market directly to the public to better advantage than through established retailers. The census includes 3,431 units of manufacturer-controlled chains with total sales of \$389,618,089, or about three-fourths of 1 per cent of total sales.

Direct selling (house-to-house) accounts for less than one-fifth of 1 per cent of total sales, or less than \$100,000,000 in the entire country. Hucksters and peddlers with no fixed place of business often could not be located by the field enumerators. Could these additional sales have been recorded they would have added substantially to this \$100,000,000 reported. In the few kinds of business which employ the direct-selling type of operation almost entirely, such as direct sellers of brushes and brooms, aluminum ware, coffee, tea, extracts and perfumes, the expense table shows, by the high expense ratio of such business classifications, that this type of operation is as costly as that of established stores which could sell the same merchandise. The census shows 1,661 establishments classified as direct-selling. These are the local sales offices out of which the crews of canvassers work. About 31,000 people are employed, with average earnings of \$1,071 each.

Utility-operated retail stores, of which there are 4,053, engage primarily in the sale of appliances which consume gas or electrical energy generated by the utility companies which own and operate the stores. Most of the \$163,000,000 of total sales represents the sale of electrical and gas household appliances including refrigerators, ranges and heating appliances. It is by no means the total sales of such appliances. This type of operation has been growing in relative importance. It originated before the World War, at a time when the power companies felt that there was lack of interest and aggressiveness on the part of retailers in the sale of power-consuming household appliances. There is no present trend on the part of the utilities toward the discontinuance of their retail stores, although their operating expenses appear to be higher than those of other stores which sell the same appliances.

Industrial stores (commissaries) are separately classified because primarily they are not operated for profit but rather as a convenience to industrial establishments and their employees. Their combined sales are \$115,583,000.

Leased departments.—Leased departments are sections of a store managed and merchandised, not by the proprietors or operators of the store itself, but by outside operators, who may be independents or chains. It is to be expected that many leased departments operated by individuals were not identified separately from the store in the census, but 596 such operations are included in which less than 3,000 people are employed, and which have combined sales of nearly \$25,000,000. In addition there are leased-department chains which operate 3,675 such departments and do a total business of \$129,702,000. The great majority of these leased departments are in apparel and department stores, and to a lesser extent in food markets. At least the two largest national grocery

chains are now operating leased grocery departments in the stores of two of the largest department store chains. There are three millinery chains which operate millinery departments in hundreds of apparel and department stores throughout the country, and beauty shops are operated similarly by at least six national chains.

All of these miscellaneous types of operation, however, account for but a small proportion of the total sales of the country. Principal types are: Single-store independents, 64.11 per cent; multiunit independents, 8.84 per cent; local chains, 6.71 per cent; and, sectional and national chains, 12.52 per cent.

KINDS OF BUSINESS

For almost any commodity desired, the retail purchaser has a choice of several kinds of stores in which he or she may make the purchase. The habits and preferences of consumers as to the kind of store in which they elect to make their purchases vary greatly in different cities and in different sections of the country, and vary as to the commodity or article or service.

There is no constant or uniform relationship between the sales of a given kind of store in comparison with any other kind of store in different cities. They vary greatly between cities of the same size, between suburban towns and towns of equal size which are not within the zone of influence of a large city, and even more do they vary between cities and rural areas. Hence there is little value in estimates which have been made in the past, enlarged from small samples based upon the situation in some one "typical" city, because there is no such typical city.

The habits and preferences of the buying public are the controlling factors in determining the kind of stores where given commodities are sold, and the relative sales volume of different kinds of stores. These habits and preferences are influenced by price policy, credit facilities, delivery and other customer services, aggressive advertising, reputation for fair dealing and satisfactory quality, convenient location of the store, store hours or length of the business day, popularity of the proprietor, local civic and political consideration and sometimes exclusive sale of popular branded lines, such as automobiles or tires or electrical appliances.

In some places, for instance, country general stores sell more foods than do the strictly grocery stores. In some cities, combination grocery-meat stores have become as large distributors of fresh meats as are the specialized meat markets. In many cities the department stores are increasing their sale of furniture faster than are the furniture stores, and their aggressive promotion of apparel, radios, and electric household appliances has made them formidable competi-

tors of specialized stores in those lines. In other cities, department store sales are far below the average ratio and often they have not developed the sale of specialties with the success shown by specialized stores.

All stores are classified according to the principal commodities which they sell, or according to their popular designation. They are then brought together into a small number of major groups. The primary lines of merchandise are usually indicated by the name of the store, such as drug store, furniture store, grocery store or shoe store, but related lines may be of a nature far removed from that indicated by the store name. Each State report carries a table showing the nature of the commodities sold by the various kinds of stores so far as data are available, and the relative sales of each commodity. Because of the related commodities, the relative sales importance of the store groups can not be made to coincide with the relative sales importance of commodities.

The food group, for instance, does 22.07 per cent of the retail business of the country, but food as a commodity is more nearly 30 per cent of the total. A small part of the 22.07 per cent of food store sales is not of food, but on the other hand at least one-half of the sales of country general stores, most of the sales of the restaurant group and some of the sales of other kinds of stores are sales of food.

The restaurant group (restaurant and other eating places) does 4.33 per cent of the retail business of the country. The total is divided about equally between restaurants providing full table service and other eating places with varying degrees of service or none at all. These other eating places, in the order of their popularity as measured by sales, are lunch rooms, cafeterias, lunch counters, fountain-lunches, refreshment stands, soft-drink stands and box lunches. Lunch rooms combine table service and counter service. Sandwich shops are classed as lunch counters, because of the absence of table service. Automats are classed as cafeterias.

In addition to the regular eating places, there is an increasing sale of fountain drinks, ice cream, and lunches in variety stores, drug stores, cigar stores, department stores and some kinds of food stores.

Beside meals the restaurants sell bakery products, candy, ice cream, fountain drinks, and tobacco products in increasing proportions.

The automotive group does 19.58 per cent of the retail business of the country, but this also includes related commodities. On the other hand, such automotive equipment and supplies as tires, accessories, gasoline and oil are sold by variety stores, department stores, hardware stores and many kinds of country

stores which operate gasoline pumps as an adjunct to their principal business.

The general merchandise group, which does 13.12 per cent of the retail business of the country, consists of department stores, dry goods stores, variety stores, and stores selling a general line of merchandise without particular emphasis on any one class of commodities. Department stores sell 7.95 per cent of the national total of retail sales, variety stores 1.84 per cent, dry goods stores 1.35 per cent, other general merchandise stores 1.07 per cent and the sale of general merchandise by mail amounts to 0.91 per cent of total retail sales.

The apparel group does 8.63 per cent of the retail business of the country. Only a small proportion of this is from the sale of commodities unrelated to the apparel field, but a great amount of apparel is sold by other kinds of stores, especially those in the General Merchandise Group. The principal stores in the apparel field are men's stores, women's specialty stores, shoe stores, and millinery stores. There are 22 classifications in all.

The furniture and household group does 5.61 per cent of the retail business of the country, of which the furniture store ratio is 3.07 per cent. The sales ratio of stores specializing in the sale of electric and gas household appliances is 0.77 per cent, and that of radio stores is 1.15 per cent. In both instances, the commodities from the sale of which these specialized dealers derive most of their business are also sold in large quantities by other kinds of stores. About one-half of the stores specializing in the sale of electric and gas household appliances are owned and operated by public utility companies, primarily to promote the greater use of appliances which increase the consumption of power.

Of general stores (country), less than 3½ per cent do as much as \$100,000 of business per year, and 64 per cent do less than \$20,000 annually. Usually they are small general stores selling food and general merchandise, or food and clothing, or food and dry goods, usually located in small towns and rural areas. Sometimes they are operated in cities, in which case they are often located in sparsely settled neighborhoods or on the outskirts. Seldom are these stores departmentized, nor are records kept of their sales by commodities. Few were asked to supply data as to the proportion of their business which represents the sale of food and the value of other commodities which they sell. From fragmentary data it appears that the food proportion varies from about 40 per cent to 70 per cent. Commodity breakdowns obtained from 424 country general stores in all parts of the

RETAIL DISTRIBUTION

country, with aggregate sales of \$48,512,000, show considerable variation but the average is as follows:

COMMODITY	COUNTRY GENERAL STORES		
	With groceries and dry goods	With groceries, clothing, and apparel	With groceries and general merchandise
	Per cent	Per cent	Per cent
Groceries ¹	60.3	51.0	42.4
Meats and fish.....	7.0	10.5	12.2
Dry goods and notions.....	20.4	1.2	7.6
Men's clothing and furnishings.....	1.5	18.8	7.4
Women's apparel and accessories.....	2.7	9.0	4.0
Shoes.....	4.6	5.2	4.4
All other merchandise ²	3.5	4.3	22.0

¹ Includes also bakery goods, confectionery, fruits, vegetables, ice, milk, and bottled beverages.

² Hardware, furniture, drugs, toiletries, smokes, feed, coal, and gasoline.

The lumber and building group does 5.34 per cent of the total retail business of the country. This group consists of lumber yards selling principally at retail, building material dealers, electrical shops, heating and plumbing shops and paint and glass stores. Allied with this group, but separately classified, are *hardware and farm implement stores* which do 2.5 per cent of the total retail sales.

These two groups border on the field of supply-and-equipment dealers. The supply-and-equipment field is the borderline between retailing and wholesaling, in that although such dealers sell to the ultimate consumer for utilization rather than for resale, the business is done in a quasi-wholesale manner. The stores and dealers included in the retail census are those which report that the greater part of their business is done at retail and that they are regarded in their trade as retailers. Other dealers who are popularly regarded as retailers, especially many lumber yards and hardware dealers, are included only in the wholesale census because their reports show that more than one-half of their business is done at wholesale. The lumber and building group includes only those dealers, therefore, who are primarily retailers. Others who do a large proportion but not one-half of their business at retail are reported in the wholesale census, which also shows the proportion which is done at retail.

Farmers' supply stores, as a group, do 2.29 per cent of the total retail business. There are 10 classifications, including principally seed stores, fertilizer dealers, harness shops and feed stores. Many feed stores also sell coal and groceries.

Drug stores do 3.44 per cent of the total retail business, of which one-third to one-half is the sale of drug commodities and the balance is fountain sales, tobacco products, candy, books and miscellaneous merchandise. Chain-store competition has popularized the sale of an ever increasing list of related commodities, even in independent drug stores, and the stores are attracting more and more of such business because

of their long hours and convenient locations. Contrary to general belief, more than 50,000 of the 58,258 drug stores are single-store independents and only 18½ per cent of the total business is done by chains. Of the chain store proportion, nearly 40 per cent is done by local chains which operate all of their stores in and around one city, and are strictly local enterprises.

Coal, wood, and ice dealers do 2.06 per cent of the total retail business, and this proportion varies greatly in different sections of the country. It varies primarily because of climatic conditions, but also because of two other factors. One is habit and the preference of consumers as to where they find it most convenient to buy these commodities. The other factor is the degree of acceptance of electricity, gas and oil burners in place of coal and wood, and mechanical refrigerators in place of ice.

There are no national chains in this field, but of 19,118 places of business 1,401 are units of sectional and local chains and such chains do 18½ per cent of the total business.

Jewelry stores do 1.09 per cent of the total retail business of the country, in 20,000 stores. Of this number 837 are installment jewelry stores, who base their appeal primarily upon ease of payment by means of long-term installment credit. These stores do 17½ per cent of the total jewelry store business at an expense rate only one point (3 per cent) higher than that of the old-line jewelry stores.

Chains operate only 370 jewelry stores and do 6.4 per cent of the total jewelry store business, most of which is in the installment field.

All other kinds of stores not included above do 4.71 per cent of the total retail business. The book store ratio is 0.24 and the cigar store ratio is 0.83. The ratio of florists sales to total sales is 0.36, news dealers 0.31, office and store appliance and equipment dealers 0.66, and secondhand stores 0.3. A detailed list of the other kinds of stores making up all but 0.63 of the total of 4.71 per cent may be found in Table 1 of this summary. Classifications so combined in the summary, aggregating 0.63 per cent of total sales, may be found elaborated in the Connecticut, Massachusetts, and Ohio reports, which provide a basis for a further breakdown of this item in other State reports.

FORMS OF ORGANIZATION

The four forms under which all stores are organized are sole proprietorships, partnerships, corporations, and cooperative associations. In retail census reports the first two are combined under the classification of proprietorships, signifying stores operated by their owners whose compensation necessarily depends upon the earnings of the stores. Proprietors are reported separately from employees, and their drawing accounts are not included in the pay roll. In lieu of

the amounts of drawing account which they reported, many of which were fantastic in proportion to sales and which afforded no sound basis for computation of operating expenses, there is added in the census reports a wage value for proprietors' services. This wage value is computed on the basis of the average annual wage paid to full-time employees in the same kind of business, in the same State.

The stores which are organized as *proprietorships* constitute 84.07 per cent of all the stores and do 51.4 per cent of the total business.

The *corporate* form of organization covers 15.77 per cent of the stores, and these stores do 48.23 per cent of the total business. Practically all of the chains are corporations, as are a majority of the larger independent stores.

Negro proprietorships, or stores operated by Negro proprietors, are classified separately at the request of a number of organizations of colored people. In each State report the number and sales of such stores are shown. In all States in which there are enough such stores to justify analysis, a further table is added which shows the stores classified by kinds of business.

There are in the United States 25,701 stores operated by Negroes, and their sales aggregate \$101,146,043. The principal classifications are:

- Grocery stores.
- Filling stations.
- Restaurants and lunch rooms.
- Cigar stores and cigar stands.
- Drug stores.

Another form of proprietorship which is shown separately is that of oriental mutuals. This classification includes all stores which could be identified as stores operated by Chinese or Japanese proprietors. Many oriental mutuals report scores of names as proprietors. For the purpose of this census the number shown as proprietors has been scaled down to a figure in proportion to the sales of the store. The largest number of oriental mutuals in any State is in California, and the California report includes an extra table analyzing such stores according to kinds of business.

✓ There are in the United States 3,865 stores classed as oriental mutuals, and their sales aggregate \$88,578,405.

RETAIL OPERATING EXPENSES

The average cost of doing business as shown by the expense figures reported to the census, is \$24.83 per \$100 of sales. If an interest return is to be allowed on the store's capital invested in merchandise, fixtures, and accounts receivable, an interest rate of 6 per cent would add 1 to 1¼ per cent to the 24.83 per cent. A margin for profit, which averages less than 2 per cent, brings the total to about \$28 per \$100 of sales, the remaining \$72 being the net cost of the goods which are sold.

This is a brief summary of the average situation throughout the country. Of this expense, 57 per cent goes for wage cost and about 16 per cent for rent, or the equivalent of rent in the case of owned premises (for about 28 per cent of the total business is conducted in owned premises). The remaining expense goes for advertising, supplies, heat, light, power, communication, travel, taxes, insurance, interest on borrowed money, repairs, and depreciation (or its complement, which is the cost of modernization). Delivery and the extension of credit are functions or customer-services involving two or more of these natural expenses, including wage cost.

Expenses vary greatly with different kinds of business, and so does the proportion of the sales dollar which is required to replace the goods sold. Expenses also vary considerably in different sections of the country, as shown by comparison of State averages, and they increase with the size of the city.

Although the average expense ratio is 24.83 per cent of sales, one-half of the business is conducted at a lower ratio and one-half at a higher ratio.

The major groups provide a broad measure of the variation in expense. The lowest expense of any group is that of country general stores, with an average ratio of 13.59 per cent. The food group is second with 19.5 per cent. The automotive group follows with 22.06 per cent. The ratio of the lumber and building group is 25.99 which is followed closely by that of the general merchandise group, 26.81 per cent. The apparel group averages 30.64 per cent, the furniture and household group averages 32.51 per cent, and the restaurant group averages 40.04 per cent. The "other stores" group averages 27 per cent and includes such classifications as hardware stores with 26.63 per cent, drug stores 27.1 per cent, news dealers 27.09 per cent, cigar stores 27.9 per cent, book stores 32.46 per cent, and jewelry stores 35.5 per cent.

Group averages, which must be very general at best, as is true of all expense averages shown in the census reports, do not show the extreme variation which exists between different kinds of stores, or why some retailers can operate at a ratio as small as 11 per cent while others require more than 50 per cent.

The variation depends largely upon the factors of value of the unit of sale, extent of conversion or processing, or the addition of service, individual attention required in selling, technical or popular knowledge of the merchandise, cost of delivery, installation and maintenance, degree of specialization of the lines carried, proportion of related commodities sold and efficiency of management. Merchandising and buying efficiency, although having a slight effect on expense, affects mainly the margin between selling price (which is fixed largely by competition of the most efficient stores) and the cost of goods sold, by reducing the

latter. This margin is known as the maintained or realized margin. It is not a part of expense, but provides the fund out of which all expenses must be met.

Ratios under 15 per cent.—Feed stores selling feed, flour, grain, and sometimes coal, groceries and farm implements, operate at a lower average expense than any other kind of store. The average expense ratio for feed stores is 10.82 per cent, fertilizer dealers 11.07 per cent, feed stores selling groceries 12.13 per cent, and feed stores selling coal 13.23 per cent. Grain elevators which sell grain at retail operate at 8.78 per cent.

Principal reasons for the very low expense of feed stores are: Low value and low rent of sales premises (rent averages about 1.2 per cent of sales), minimum of advertising and selling salaries, practically no delivery and large unit of sale. The business has distinct seasons of heavy sales and many commodities are delivered directly from railroad sidings. Credit is an important service rendered to their customers by feed stores, and the average account runs longer than that at most other stores. Feed-store expense is strong evidence in favor of the conclusion that retail credit, properly managed, is not additional expense but is offset by savings in other directions. There is strong evidence of this in the expense ratio of other kinds of stores as well.

General stores constitute the only other store classification whose expense ratio is less than 15 per cent of sales. These general stores average 13.59 per cent expense, or 25 per cent more than feed stores. Rent averages 1.47 per cent, which is also nearly 25 per cent higher than feed stores, for better store plants are required, in better locations. The unit of sale is much smaller and more attention of salespeople is required. Usually these stores do very little advertising, but a large part of their business is on credit. The work in the stores is divided almost equally between proprietor-owners and employees. Seventy per cent of the premises are owned by the stores which operate therein.

Ratios between 15 and 20 per cent.—There are 14 kinds of stores which operate at an expense rate between 15 per cent and 20 per cent. A study of these stores and their characteristics throws much light on the question of what are the elements which make for low-cost operation of retail stores.

The lowest-expense classification in the group is that of combination grocery stores (grocery stores with fresh-meat departments). The average ratio is 15.78 per cent of sales. It is significant that the grocery store ratio is 17.36 per cent while that of meat markets is 18.96 per cent. Another kind of combination store, that of meat markets with groceries, operates at an average ratio of 17.21 per cent. The combination grocery store ratio, however, is lower than that of either the straight grocery store or the meat market.

An underlying reason for this analogy is the effect on expense of the low cost of selling related merchandise. In this case, meat is a related commodity. Most customers enter the stores for groceries, and buy meat because it is more convenient for them than to go to another store for meat. In the same way these stores have developed large sales of fresh fruits and vegetables, dairy products, and bakery goods. Typically the combination grocery store to-day sells about 2½ per cent of bakery goods, 6 per cent of fruits and vegetables, 17 per cent of meat, and 15 per cent of milk, ice cream, and dairy products in addition to 55 per cent of canned goods and other groceries.

Only about one-third of the combination store business is done by chains, but most chains in the grocery field have developed the combination kind of store, either entirely or in part. In spite of the fact that these stores handle a great number of small transactions, with the average sales check less than 50 cents, and that many of the stores extend short-term credit and make deliveries, the nature of the commodities, the fast turnover of stock and the advantage of selling a large proportion of related merchandise (which typically sells with less sales effort and at a lower expense than primary commodities) make the combination grocery store one of the most economical distributors of food in the retail field.

The general merchandise store with foods operates at an expense ratio of 16.17 per cent. It compares closely with some kinds of country general stores, except that usually it is located in the larger towns and in the cities, and sells more general merchandise than groceries. General merchandise stores without food departments operate at an average expense ratio of 21.66 per cent and partake of the nature of small department stores. Army and Navy goods stores are another form of general merchandise stores and operate at an average ratio of 24.98 per cent. As a rule they sell the lower priced lines of clothing and furnishings, apparel and accessories, bedding and blankets, household supplies and camping and sporting goods. They should not be confused with stores of other kinds which advertise membership in a buying club known as an Army and Navy stores association.

Another low-expense business is the sale of automobiles. Although used-car dealers average 21.76 per cent of sales as expense, new car dealers average 17.71 per cent. The latter sell new cars and trucks primarily, but also such used cars as have been traded in on new-car purchases. The automobile dealer who also sells farm implements operates at an even lower ratio of 16.18 per cent. The reason for the difference between this classification and that of automobile dealers is primarily the increased cost of doing business in larger cities. Most automobile dealers who also sell farm implements are located in comparatively small cities and towns, whereas a large proportion of

automobile dealers in the main classification are located in large cities and in the suburbs of such cities. The cost of business increases with the size of the city. Another factor to be considered, but of less importance, is the fact that many dealers who sell farm implements carry little stock, selling largely from sample and catalogue.

One reason for the relatively low cost of selling automobiles is the size of the unit of sale. Another is the custom of requiring purchasers to pay a high rate of interest on deferred payments and the cost of insurance against loss by reason of fire, theft, and defalcation. The result of this custom, which originated in the automobile field and is limited almost entirely to that field, is that the dealer can transfer the installment contract, and the premium which he collects from purchasers, to an outside finance company and be relieved of all expense incident to deferred payments. Thus he enjoys many of the advantages of doing a credit business on virtually a cash basis of expense, with the additional advantage of sales in large units. Offsetting those expense advantages somewhat is the cost of conditioning, demonstrating, and maintaining the cars before sale, and any repairs which may be required during a guarantee period. The loss on trade-ins is not a part of expense, but is considered a charge against the gross margin on sales.

Slightly higher in expense ratio, but still under 20 per cent, are farm implement dealers who are classified separately as to those selling farm implements, machinery, and equipment, or those selling farm implements and hardware. The former operate at an average ratio of 17.04 per cent, while the latter average 18.86 per cent. Both ratios are amply explained by the nature of the business and the factors recited above as applicable to similar kinds of business.

Egg and poultry dealers operate at a low expense ratio, averaging 17.09 per cent. This highly specialized business has an expense advantage over dairy products stores, which also sell milk, butter, cheese, ice cream, and other products in addition to eggs and sometimes poultry. A popular location for egg and poultry dealers is a stall in a food market. Most of the sales are for cash.

Dairy products stores operate at an average ratio of 19.82 per cent. The business is largely for cash and deliveries are rare. The average rent of these stores is 3.22 per cent of sales. Milk, ice cream, butter, and cheese make up the bulk of sales. In comparison, milk dealers report an average rent of only 0.83 per cent but their expense ratio averages 30.87 per cent because of the high cost of delivery and the small unit of sale.

Mail-order apparel houses also operate below 20 per cent, the average ratio being 19.23 per cent. This compares with an average ratio in general merchandise mail-order houses of 22.84 per cent. Both apply

to catalogue business only, and if the same companies also operate retail stores, such stores are separately classified. These ratios are typical of the cost of retail distribution by mail. The reason for the decline of mail-order distribution involves problems of merchandising and the promotion of sales, rather than expense.

With the exception of lumber dealers who also sell hardware, which is a kind of business classified separately from dealers in lumber and building materials, the above are all of the kinds of business which operate at an average ratio less than 20 per cent. Lumber-hardware dealers average 19.66 per cent although dealers in lumber and building materials average 21.62 per cent. Delivery and handling of bulky materials constitute a large item of expense in both lumber-dealer classifications.

Ratios over 20 per cent.—The great bulk of retail business is conducted at expense ratios between 20 per cent and 34 per cent (the average is under 25 per cent) but there are 56 classifications besides those in the restaurant group which require more than \$34 of each \$100 of sales for necessary expenses. In most instances the reason is not extravagance but, like the restaurant group, it includes the cost of conversion of goods from one form into another plus a high proportion of selling or repair services.

Since competition in all retail fields is intense, it is evident that the average expense ratio in any kind of store is the measure of the essential cost of operating a typical store in that field. Stores are in competition not only with other stores in the same business but also with stores in many other kinds of business, with stores in other cities and with other magnets attracting the spendable dollar, such as entertainment, recreation, travel, education, and savings. What the customer spends with the retailer is what the customer is willing to spend for the merchandise and service which the retailer provides, in free competition with all other calls on the customer's dollar.

Most commodities are available in several qualities of material and workmanship, and each store tries to offer merchandise of the quality and at the price which its customers prefer, together with whatever services the customers desire and are willing to pay for. This free play of selection between thousands of retailers and their customers, in all parts of the country, is reflected in the average expense ratios shown in Table 2 of this summary.

High-expense ratios and their causes.—Businesses which require a high expense ratio may be divided into seven groups according to the underlying reason for the expense.

First are those businesses which include in their operating expenses the cost of conversion or partial manufacture of the commodities sold. What they sell is different from what they buy, and the change or

conversion involves expense. This expense is really a part of the cost of production and should increase the cost of merchandise rather than the expense of selling, but there is no way of segregating the one from the other because many of the same people and facilities are engaged in both functions.

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

Other businesses which show high expense ratios because of the element of conversion or partial manufacture are the following:

	Average expense ratio (per cent)
Candy stores and nut stores.....	38.40
Bakery goods stores, including small bakeries which produce and sell their own products.....	36.06
Caterers (high conversion cost and high serving cost).....	38.68
Picture and picture framing stores.....	43.30
Awning and banner dealers (mostly made to order).....	41.37
Lamp and shade shops.....	40.62
Glass and mirror shops (cutting, fitting, repair).....	44.52
Printers and lithographers.....	51.15
Monument and tombstone works (making finished stones to order, from rough blocks).....	41.88
Millinery shops (see next paragraph).....	43.76

Millinery shops are included above because of their high conversion costs in the process of converting shapes and trimmings into finished hats and in retrimming and altering. A large number of millinery shops, however (proportion unknown), buy their hats finished in the same form in which they are sold. Regardless of alteration or conversion costs, selling expenses are high in millinery shops because of the nature of the business. Millinery is a high-style commodity, requiring a range of selection in colors, sizes, and shapes as well as material and price. It requires careful merchandising, expert selection, and fast-moving stocks as well as skillful selling. The unit of sale is good, but customer selection is slow and business is sporadic, requiring a high grade of sales people without being able to keep them fully occupied. Rent is high, averaging 15 per cent, because (1) good locations in the heart of the retail district are preferred and (2) many millinery shops operate as leased departments in women's apparel stores and department stores. There are

several chains of such leased departments, many of them operating on a national scale.

The second group of high-expense businesses consists of those in which repair service predominates over the cost of supplies used in connection with such service. Since service, or labor, constitutes the main element sold, and since the cost of such labor appears as expense rather than as cost of goods, the expense ratio may be as high as 50 or even 60 cents of the dollar of gross income.

Body, fender, and paint shops, for instance, have an average expense ratio of 60.82 per cent; radiator shops, 58.65 per cent; repair garages, 44.58 per cent; battery and brake repair shops, 41.80 per cent; harness shops, 39.63 per cent; bicycle shops, 37.64 per cent; and shops selling both bicycles and motor cycles, 35.17 per cent. It will be noted that the higher the proportion of merchandise sold the lower is the expense ratio. Aircraft dealers are in somewhat the same classification at present, because sales of aircraft are infrequent and much income is derived from repair and service operations and instruction. The average expense ratio is 39.58 per cent. Later, if aircraft become much more popular and dealers are disassociated from the operation of airports, aircraft dealers will be in an expense bracket more nearly comparable with that of automobile dealers because of the high unit of sale and other elements paralleling those now applicable to the automotive field.

A third group in the high-expense field is made up of those kinds of business wherein the unit of sale is small and the retailer is required to make daily or frequent delivery over long routes. The milk dealer is a good example. Retailers of bottled beverages face the same expense problems, with average expenses of 46.10 per cent. Ice dealers also have this high delivery cost with low-unit sales, and their average expense ratio is 43.17 per cent.

Another high-expense business requiring expensive delivery is that of dealers in single building materials, such as cement or sand or building stone. The basic materials which they sell are relatively cheap if they could be used at the point where they are produced or quarried, but every operation required to move them to the dealer's yard, to unload and store them, to weigh or measure them, and to deliver them to the user is cumbersome and expensive, often requiring special equipment and the use of power. In spite of the fact that the unit of sale is relatively large and that the dealer has little need for expensive location or means of protecting his stock from the elements, his average expense ratio is 42.51 per cent.

Closely paralleling this third group is the fourth group of businesses, selling commodities requiring application or installation or fabrication for which a high proportion of skilled labor is added to the prime cost

of the commodities in the process of selling. This group consists of the following:

	Average expense ratio (per cent)
Drapery, curtain, and upholstery dealers.....	37.55
Stove and range dealers.....	36.16
Roofing dealers.....	45.22
Electrical shops.....	40.21
Electric household appliance dealers.....	39.20
Heating appliance and oil burner dealers.....	43.49
Plumbing shops.....	39.33
Paint and glass stores.....	35.96
Irrigation and drainage supply dealers.....	38.04
Optometrists.....	51.60
Custom tailors.....	50.05
Dressmakers.....	55.20

There are other high-expense businesses which sell service primarily which would be classified with service businesses if the census had covered the service field. One is the parking garage and parking lot selling supplies as well as the service of parking. Their average expense ratio is 52.28 per cent, of which rent alone is 25.40 per cent of income. Fully 40 per cent of their receipts, however, are from the sale of commodities, mostly gasoline and oil. Another business is that of conducting circulating libraries. Those which also sell books are included in the census, and their expense ratio averages 44.12 per cent.

There are at least two business classifications in which all or most of the dealers included are using the direct-selling or house-to-house type of operation. In each the cost of selling is more than 50 per cent of sales. The merchandise is sold in the same form in which it is bought, and none of the elements described herein as causes of high expense exist except that of low unit of sale. Aluminumware is retailed in this way at an average expense ratio of 52.96 per cent, and brushes and brooms are similarly retailed at an average ratio of 52.04 per cent.

The last group of high-expense businesses can not be included in any of the previous groups for the reason that the justification for their high expense is not as capable of classification. Some of them at least have developed selling practices that are unnecessarily expensive. Others pay higher rent or higher selling salaries than the commodities may warrant. Without further comment here, the businesses in this last group are listed below:

	Average expense ratio (per cent)
Men's hat shops.....	36.56
Fur shops.....	33.85
Umbrella shops.....	39.35
Musical instrument dealers (without radio).....	40.88
Radio-musical instrument dealers.....	35.96
Cigar stands (not cigar stores).....	42.46
Florists.....	43.40
Art and gift shops.....	33.87
Novelty and souvenir shops.....	33.17
Jewelry stores.....	35.88
Installation jewelry stores.....	36.30
Luggage shops.....	35.01
Dealers in accounting and legal forms.....	35.35
Office and store mechanical appliance dealers.....	36.71

	Average expense ratio (per cent)
Typewriter dealers.....	42.24
Dealers in antique and used furniture.....	45.80
Women's exchanges (homemade foods and handicraft).....	36.09
Secondhand stores (average for the group).....	43.05

Comparisons by States.—Although the average expense ratio is 24.83 per cent, there are 7 States in which it averages less than 21 per cent. Some but not all of these are also the States in which rental cost is much below the average. They are Mississippi with an average expense ratio of 18.66, Arkansas 20.06, Vermont 20.14, South Dakota 20.41, North Dakota 20.71, New Mexico 20.81, and South Carolina 20.98 per cent. In 8 other States the ratio is under 22 per cent and in 9 more it is between 22 and 23 per cent.

Although the average rent ratio is 4.17 per cent, there are 7 States in which it averages less than 2.75 per cent. In order, they are Kentucky with 2.11 per cent; Vermont, 2.21 per cent; South Dakota, 2.49 per cent; Mississippi, 2.60 per cent; Kansas, 2.68 per cent; Arkansas, 2.72 per cent; and North Dakota, 2.73 per cent. In 10 other States the rent averages less than 3 per cent of sales.

EMPLOYMENT, WAGES, AND SEASONAL VARIATION

Retailing normally employs the services of more than 6,000,000 people and pays in wages approximately \$100,000,000 per week. The average annual payment to full-time employees is \$1,312. The proportion of part-time employees to total employees is 13 to 14 per cent (depending upon the season of the year) and the greatest total variation in employment between the season of maximum employment (December 15) and that of minimum employment (April 15) is 7 per cent. Men constitute 68 per cent of total employees and women 32 per cent.

Number of retail workers.—The number of people engaged in retailing includes not only those working full time and those reported as part-timers, but also such proprietor-owners as are actively engaged in the operation of their stores. There are 3,833,581 full-time employees included in the census, 676,559 part-timers and 1,510,607 active proprietor-owners, a total of 6,020,747 retail workers.

The food group reports the highest number, with 19.79 per cent of the United States total. Of the 1,191,698 employed by the stores of this group, 468,301 are proprietors. Other groups are the automotive group, with 15.43 per cent; the general-merchandise group, with 14.54 per cent; the restaurant group, with 10.41 per cent; the apparel group, with 8.37 per cent; the furniture and household group, with 5.37 per cent; the lumber and building group, with 4.74 per cent; and country general stores, with 4.31 per cent. All other retail stores account for the remainder, including such important classifications as

hardware stores, drug stores, jewelry stores, farmers' supply stores and coal-wood-ice dealers, the figures for which are shown in Table 1 herein.

Total wage cost.—Total wage cost consists of pay roll to employees and wage-compensation to proprietors. The amount paid out to employees is fixed, and is reported in Table 2 as pay roll. To arrive at a comparable basis for proprietors' compensation, the average salary paid to full-time employees in the same kind of business in the same State was used as the basis of computation. The amount shown as proprietors' compensation is intended only to cover the wage equivalent of the employees whom they displace. Many concerns reported no actual salaries paid to proprietors and others reported fantastic amounts out of all proportion to sales. The uniform basis of wage-value was adopted instead.

The total annual pay roll of all stores, exclusive of proprietors' compensation, is \$5,189,669,960 or approximately \$100,000,000 per week. The wage-value of proprietors' services, computed on the basis described above, totals \$1,822,890,369, which is used in lieu of the arbitrary drawing accounts of such proprietors. The total wage cost is \$7,012,560,329, or 14.28 per cent of total sales.

This wage cost varies considerably between different kinds of business, the higher costs reflecting both a higher wage scale and a greater proportion of service in comparison with the value of actual merchandise sold. There is a pertinent discussion of this subject elsewhere in this section of the report, under the heading "Operating expenses" (p. 21).

The proportion of wage cost to total sales varies also between different parts of the country, partly because of the difference in the cost of living and partly because of competition with various industrial activities which result in competition for desirable labor and hence higher wage scales. Mississippi, with an average wage cost of 11.41 per cent, provides an extreme contrast to California with 15.51 per cent, or Illinois and the District of Columbia with 15.2 per cent. Mississippi also shows the lowest average annual wage of \$1,017 in comparison with \$1,506 in New York and \$1,483 in New Jersey. Nevada shows a still higher average of \$1,593. That wage scales alone do not control wage cost is shown by the fact that California, with the highest wage cost, does not pay the highest average wage, and that the District of Columbia reports a lower average wage (\$1,373) than many States whose average wage cost is much less but whose compensation per employee is higher.

Seasonal variation.—Seasonal comparisons of employment are limited to the seasons represented by the four reported dates of April 15, July 15, October 15, and December 15. For the retail industry as a whole, the extreme variation between the year's peak of employment in December and the lowest reported season

is 7 per cent, expressed in percentage to the yearly average. In many kinds of business the seasonal variation is much greater and would increase the average variation but for the fact that the peaks in some fields coincide with the minimum requirements in other fields.

The food group and the restaurant group show an extreme seasonal variation of 3 to 4 per cent, in contrast to 11 per cent in the apparel group and 27 per cent in the general merchandise group. The peak of employment in the automotive group is in the summer months, which are least active in many stores. The extreme fluctuation in the general merchandise group is largely the result of the holiday season peak in December, and of the more general use of part-timers in busy seasons.

Table 3A in this report shows seasonal data by kinds of business. A similar table in each State report shows comparative State data, disclosing some significant differences between different parts of the country, which are also disclosed in part by a comparison of State averages in Table 3B herein.

Data by sex.—Classified according to sex, 68 per cent of all employees are men. Of part-time employees, 63 per cent are men, indicating that in employing part-timers a larger proportion of women are used than the full-time proportion. This is due to the kinds of business which employ part-timers as a regular means of meeting the needs of sales peaks, as will be shown by a study of Table 3A. Of proprietors, 91 per cent are men, the only exceptions to the male majority being millinery shops, infants' wear shops, and art and gift shops. Women's exchanges are operated almost entirely by women. About one-half of the women's ready-to-wear specialty shops are managed by women. There are many kinds of business in which women employees outnumber men two to one.

RETAIL CREDIT

Credit sales exceed one-third of the total sales of all stores in the United States. Stores which sell entirely for cash do 35 per cent of the total business. The remaining 65 per cent is done by stores which extend some credit, and the figure includes both credit and cash sales.

In the stores which extend credit to their customers, the credit sales constitute about one-half (52.69 per cent) of such stores' total sales. This is equivalent to 34.29 per cent of the total sales of all stores, including those which sell entirely for cash. This 34.29 per cent includes both open-account and installment credit.

Thus, approximately one-third of the total business is done by stores doing all of their business for cash, one-third is cash business in stores which extend credit, and the remaining one-third, or about \$16,820,000,000 annually, is credit business in such stores.

Proportion of credit to total sales.—The 65 per cent of the total business which is done by credit-granting stores is summarized below:

	Per cent of total number of stores	Per cent of total sales of all stores
Stores which do up to 10 per cent of their business on credit.....	9.99	8.04
11 to 20 per cent on credit.....	6.25	5.35
21 to 30 per cent on credit.....	4.97	4.91
31 to 40 per cent on credit.....	4.94	5.38
41 to 50 per cent on credit.....	6.57	7.05
51 to 60 per cent on credit.....	3.62	6.56
61 to 70 per cent on credit.....	3.85	6.37
71 to 80 per cent on credit.....	4.02	6.53
More than 80 per cent on credit.....	6.01	14.88
All-cash stores.....	50.22 49.78	65.07 34.93
	100.00	100.00

As explained elsewhere, the term "retail credit" means credit extended by retailers to their customers. Some retailers, particularly automobile dealers, use outside finance companies to carry their deferred-payment accounts. The proportions above apply only to credit extended by retailers.

Installment credit.—Because of the lack of complete data, no tabulations were made of the total amount of installment business. A test run of all data for five States, selected to represent five widely scattered sections of the country, indicates that installment sales are approximately 13 per cent of total sales and that open-account sales are approximately 21 per cent of total sales. This is on the basis of credit reported as having been extended by retailers. In addition, there was probably \$1,500,000,000 of financing of retail installment purchases by finance companies. Whether any of this is duplicated in the approximately \$6,500,000,000 of installment credit indicated by the above 5-State test as having been extended by retailers is unknown. It is probable, however, that in 1929 installment credit extended by retailers totaled close to \$6,500,000,000 in addition to that financed by outside finance companies, and that open-account credit totaled about 10¼ billion dollars (\$10,290,000,000).

Outstandings.—Accounts outstanding on the books of retailers at the end of 1929 were not reported, but are believed to have been about \$5,220,000,000, of which \$2,280,000,000 would represent the approximate balance of open accounts and \$2,940,000,000 would represent the outstanding balance of installment accounts. The total is approximately equal to the total amount of currency in circulation. These accounts were paid in due course during 1930 with a loss of less than 1 per cent. Other accounts were put on the books, and they in turn were duly paid, with little loss to retailers even in the difficult period which followed. The balance outstanding on open accounts

turns about four times per year, and that on installment accounts turns at least twice per year, each time in the form of new business. Consumers have protected their credit and have continued to keep their credit accounts in satisfactory condition throughout a period of general business depression.

Personal credit records maintained continuously.—To conduct and safeguard this vast amount of credit business, the stores of the country have developed a network of interrelated retail credit associations, with local bureaus in every city and almost every town of importance. This nation-wide network is store owned, is nonprofit making and serves not only the retailers but also the medical profession, the public-utility companies, and the finance and loan companies. In its files are rating cards on every person in the United States who has a credit standing, and the record is transferred from city to city wherever the individual moves. In some cities there are also privately owned rating bureaus which cooperate with the national association.

It is a characteristic of the retail industry that the basis for credit is not capital primarily, but character. Retail credit is based upon personal background, ability to earn a decent living, and the habit of paying bills with reasonable promptness when they are due.

Losses nominal.—The extension and collection of credit accounts are in the hands of experienced retail credit managers, who also direct the activities of the local and national credit associations. It is only the small retailer who will not bother to avail himself of the facilities of the local rating bureau, and who extends credit unsystematically, who finds credit business too costly to justify its convenience. The stores of the country extend more than \$16,000,000,000 of such credit annually, with a normal loss of less than one-half of 1 per cent.

Proportion of retail credit, by States.—The proportion of credit sales to total retail sales is summarized below by States:

	Per cent		Per cent
UNITED STATES.....	34.29	WEST NORTH CENTRAL DIVISION.....	32.85
NEW ENGLAND DIVISION.....	32.82	Minnesota.....	34.80
Maine.....	30.65	Iowa.....	32.01
New Hampshire.....	28.14	Missouri.....	32.23
Vermont.....	34.93	North Dakota.....	34.91
Massachusetts.....	32.66	South Dakota.....	27.34
Connecticut.....	34.26	Nebraska.....	30.76
Rhode Island.....	34.22	Kansas.....	35.09
MIDDLE ATLANTIC DIVISION.....	31.64	SOUTH ATLANTIC DIVISION.....	35.72
New York.....	31.00	Delaware.....	33.47
New Jersey.....	32.17	Maryland.....	37.36
Pennsylvania.....	32.57	District of Columbia.....	41.32
EAST NORTH CENTRAL DIVISION.....	33.95	Virginia.....	36.73
Ohio.....	33.16	West Virginia.....	33.64
Indiana.....	32.80	North Carolina.....	37.10
Illinois.....	29.90	South Carolina.....	30.02
Michigan.....	35.09	Georgia.....	37.77
Wisconsin.....	33.83	Florida.....	29.23

	Per cent		Per cent
EAST SOUTH CENTRAL DIVISION.....	37.29	MOUNTAIN DIVISION.....	39.09
Kentucky.....	37.74	Montana.....	40.93
Tennessee.....	38.20	Idaho.....	34.20
Alabama.....	37.44	Wyoming.....	41.38
Mississippi.....	35.02	Colorado.....	38.98
		New Mexico.....	38.64
WEST SOUTH CENTRAL DIVISION.....	36.25	Arizona.....	41.02
Arkansas.....	34.94	Utah.....	36.96
Louisiana.....	33.18	Nevada.....	43.55
Oklahoma.....	37.82	PACIFIC DIVISION.....	39.47
Texas.....	36.61	Washington.....	40.00
		Oregon.....	35.84
		California.....	39.87

Table 7, shown in three parts in this volume, presents various comparisons between States and between kinds of business in further explanation of the several credit factors set forth above.

RETAIL DISTRIBUTION BY CHAINS

Retail chains do 21.9 per cent of the total retail business in the United States.

There are 7,061 chain-store organizations in all, operating 159,638 stores or units, or about 10 per cent of all the stores in the country. Sales of these chains aggregate \$10,740,385,208, or 21.9 per cent of total sales in all retail stores, both chain and otherwise.

Local, sectional, and national chains.—Classified by types, local chains operate 52,465 stores with total sales of \$3,293,890,000; sectional chains operate 41,083 stores with sales of \$2,191,250,000; and national chains operate 51,058 stores with sales of \$3,960,087,000. Other types of chains operate the balance, as shown in a summary at the end of this section (p. 30). Chains are classified as local if substantially all of their stores are located in and around some one city. Sectional chains are those whose stores are located in any one section of the country, such as the New England States or the Pacific Coast States or the Gulf Southwest. National chains are those whose operations and interests are broader than those of any one section of the country. Other classifications are self-explanatory. Independents who operate two or three stores, and those who have built up small local branch systems whose stores are merchandised and supplied from the stocks of central parent stores rather than from warehouses or other central depots are not classified by the Retail Census as chains and are not included above. There are 64,814 such stores with total sales of \$4,340,026,000. (See Multiunit independents, p. 29.)

Food chains.—There are in the United States 481,891 stores of all types classified as food stores, with aggregate sales of \$10,837,421,585. In addition, there are 104,089 country general stores which also sell food whose sales of \$2,570,744,006 include at least \$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 are 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, principally department stores and variety stores, there are 54,636 stores of all types with aggregate sales of \$6,444,100,907. In this field there are 665 chains, operating 12,029 stores with sales of \$2,162,547,176, a ratio of 33.5 per cent. Of the 665 chains, 148 are variety chains, 312 are general merchandise store chains, 169 are dry-goods chains, 3 are chains of mail-order distributing houses (catalog business only), and 33 are 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 do 28.2 per cent of the total business. Of the 114,296 apparel stores of all kinds, with aggregate sales of \$4,240,892,577, there are 17,218 chain stores operated by 1,243 chains, and the chain business amounts to \$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) includes 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 does not fully represent the influence of chains in the automotive field.

Although many motor-car dealers confine their sales largely to one make of vehicles, all but 1,290 of the 40,797 retail dealers come within the classification of independents. The 1,290 chain units are operated by 167 chains and do an aggregate business of \$616,594,816, a ratio of about 10 per cent. There are 128 accessory, tire, and battery chains, with 2,049 units and sales of \$122,031,641.

Of the 121,513 filling stations in the country, 30,038 are 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, there are 505 chains which operate 6,814 stores with sales of \$560,073,714, a ratio of 20.3 per cent. There are 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, primarily designed to sell electric and gas appliances. Of the 8,931 household-appliance stores, 4,472 are chain units with sales of \$191,547,403, a ratio of 50 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, of which there are 16,037 in the country, do an aggregate business of \$561,772,000. In this field there are 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 operate 3,392 units, compared with a total of 134,293 eating places in the country. The chains do an aggregate business of \$298,969,460, a ratio to total restaurant sales of 14.1 per cent. In addition there are 7 restaurant-newsdealer chains with total sales of \$36,433,958.

Other kinds of chains.—In the lumber and building group, out of 52,814 yards and stores, with aggregate sales of \$2,621,063,720, there are 8,457 chain units of 647 chains, with sales of \$488,491,290, a ratio of 18.6 per cent. There are 561 chains selling lumber and building materials, 20 heating and plumbing chains, and 55 paint, glass, and wall-paper chains.

In the hardware field 75 chains operate 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 total 58,258, with sales of \$1,690,398,682. Of these, 3,513 are operated by 249 chains, with sales of \$312,301,721, a ratio of 18.5 per cent. There are 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 is 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 have been 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 operate 64,814 stores with total sales of \$4,340,025,921.

Chains summarized by kinds of business.—Each chain is classified on page 28 in accordance with the kind of business which constitutes its principal activity. Many of the classifications are further analyzed in a series of 18 separate booklets constituting the Merchandising Series of the retail census (see footnote, p. 30).

RETAIL DISTRIBUTION

CHAIN STORE SUMMARY

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

KIND OF BUSINESS	Number of chains	Number of stores	Total net sales of chains	Chain ratio ¹	KIND OF BUSINESS	Number of chains	Number of stores	Total net sales of chains	Chain ratio ¹
United States total	7,061	159,638	\$10,740,385,208	21.9	Furniture and household—Continued.				
Food group, total	1,461	61,418	\$,514,390,664	29.0	Household-appliance chains, total.....	262	4,472	\$191,547,403	50.5
Candy, nut, and confectionery chains.....	123	1,461	53,893,959		Electrical-appliance chains (R-61).....	154	3,045	115,697,787	
Dairy-products chains.....	85	1,201	835,561,399		Gas-appliance chains (R-61).....	49	505	20,098,352	
Fruit-and-vegetable chains.....	51	383	15,426,330		Electric and gas appliance chains (R-61).....	59	922	55,751,294	
Grocery-and-meat chains, total.....	1,053	56,601	\$,028,694,828		Tent and awning dealer chains.....	4	18	1,303,003	
Grocery chains (R-70).....	313	12,330	490,046,311		Radio chains, total.....	85	884	112,801,655	20.0
Combination-store chains (R-70).....	475	41,136	2,881,827,445		Radio (only).....	6	48	5,312,026	
Meat-market chains (R-70).....	234	2,753	189,577,081		Radio and accessories.....	23	261	31,275,510	
Fish-market chains (R-70).....	12	51	1,540,415		Radio and musical instruments.....	56	556	70,213,520	
Grocery-and-dry-goods-store chains (R-70).....	10	187	11,331,102		Restaurants and eating group, total	288	3,392	298,969,480	14.1
Grocery-and-feed-store chains (R-70).....	9	44	3,372,472		Restaurant chains (R-77).....	58	523	91,043,270	
Caterer-and-bakery chains.....	110	1,216	40,572,053		Cafeteria chains (R-77).....	36	640	99,994,258	
All other food chains.....	39	954	40,342,117		Lunch-room chains (R-77).....	32	714	39,770,293	
General merchandise group,² total	665	12,029	2,162,547,176	33.5	Lunch-counter chains (R-77).....	52	627	27,244,402	
Department-store chains (R-74).....	33	2,560	665,172,188		Fountain-and-lunch chains (R-77).....	14	292	32,400,153	
Mail-order chains (catalogue business only).....	3	25	395,274,978		Refreshment-stand chains (R-77).....	31	406	6,228,909	
Dry-goods-store chains.....	169	1,336	66,502,876		Soft-drink stand chains (R-77).....	15	154	2,227,869	
General-merchandise-store chains.....	312	2,661	225,749,036		Lumber and building group, total	647	8,457	488,491,290	18.6
Variety-store chains (5-and-10, and to-a-dollar) (R-73).....	148	5,447	809,758,118		Lumber and building material chains.....	561	6,937	418,285,542	
Apparel group, total	1,243	17,218	1,197,086,412	28.2	Other lumber and building chains.....	8	105	8,085,600	
Men's-wear chains, total.....	286	3,054	270,959,212		Heating and plumbing chains (R-68).....	20	831	36,535,858	
Clothing chains (R-60).....	84	893	88,432,317		Paint, wall paper, and glass store chains (R-68).....	55	565	25,305,336	
Clothing-and-furnishings chains (R-60).....	87	701	110,571,557		Electrical supply chains (R-68).....	3	19	618,954	
Custom-tailoring chains (R-60).....	29	238	19,073,534		Other chains, total	1,068	16,768	1,139,908,742	14.4
Men's-furnishings chains (R-60).....	49	480	23,588,439		Hardware chains (R-68).....	75	458	31,605,632	
Men's-hat chains (R-60).....	37	692	29,203,367		Art and gift chains.....	13	100	3,270,279	
Women's-apparel chains (R-6).....	222	2,240	302,615,372		Blue prints and printers (chains).....	5	35	2,304,013	
Family-clothing chains.....	136	1,661	132,246,609		Bookstore chains.....	30	349	35,482,077	
Millinery chains.....	167	3,062	74,389,008		Cigar-store and cigar-stand chains.....	90	2,218	102,733,330	
Shoe chains, total	320	6,099	369,149,760	45.7	Coal, wood, and ice dealer chains.....	116	1,415	184,143,077	
Men's-shoe chains (R-67).....	24	505	25,510,704		Farm-machinery-dealer chains (R-68).....	11	80	5,092,520	
Women's-shoe chains (R-67).....	62	850	78,294,199		Farmers-supply-store chains.....	7	54	3,109,400	
Family-shoe chains (R-67).....	234	4,744	265,344,857		Feed-store chains.....	100	1,019	71,142,705	
All other apparel chains, total	112	1,102	47,676,449		Drug-store chains, total	249	3,513	512,301,781	18.6
Furrier chains.....	7	47	3,871,811		Drug stores with fountain (R-66).....	169	3,031	288,080,797	
Glove chains.....	3	27	1,444,393		Drug stores without fountain (R-66).....	80	482	23,020,924	
Hosiery chains.....	66	718	32,180,243		Florist chains.....	22	124	5,700,189	
Infants'-wear chains.....	5	27	1,555,983		Hatcheries (chains).....	12	87	1,500,970	
Knit-goods chains.....	5	57	2,611,968		Jewelry chains, total.....	65	438	36,097,655	6.7
Lingerie-and-corset chains.....	20	158	4,848,373		Installment jewelry chains (R-65).....	41	233	29,136,314	31.2
Umbrella chains.....	2	46	1,183,678		Jewelry chains (R-65).....	24	155	6,552,241	1.5
Other apparel and accessories chains.....	4	22			Luggage chains.....	6	51	935,070	
Automotive group, total	1,186	33,554	1,378,969,750	14.3	Music-store chains (without radio).....	10	108	5,519,435	
Motor-vehicle-dealer chains (R-71).....	167	1,200	616,594,816		Monument-dealer chains.....	4	17	1,024,166	
Used-car dealer chains (R-71).....	6	33	5,110,484		Newsdealer, including restaurant news-dealers, total.....	68	2,684	80,741,224	
Accessory, tire and battery chains, total (R-72).....	128	2,049	132,031,641		Newsdealer chains (R-76).....	61	822	24,307,205	
Tire chains (R-72).....	67	1,137	58,331,233		Restaurant-newsdealer chains (R-76).....	7	1,802	36,433,953	
Automobile accessory chains (R-72).....	52	855	50,486,300		Novelty store chains.....	7	39	811,637	
Battery chains (R-72).....	9	57	4,164,108		Office-appliance chains (equipment, furniture, and supplies) (R-75).....	45	1,630	164,535,060	
Filling-station chains (R-63).....	864	30,038	620,024,296		Scientific-and-medical-supply chains (R-75).....	10	68	5,171,967	
Garage chains (R-63).....	15	91	4,051,840		Optical-goods chains.....	20	148	6,878,233	
Bicycle-dealer chains.....	3	12	148,172		Patent-medicine chains (house-to-house).....	6	55	574,997	
Aircraft-dealer chains (R-71).....	3	41	2,003,001		Photo-supply chains.....	3	44	12,018,895	
Furniture and household group, total	505	6,814	580,073,714	20.3	Rubber-goods-store chains.....	2	17	1,732,310	
Furniture chains (R-64).....	125	992	207,849,904		Sanitary-supply chains.....	3	30		
Home-furnishings chains (other than furniture and electrical appliances) (R-64).....	29	468	46,571,748		Seed-store chains.....	5	28	2,087,400	
					Sewing-machine chains.....	5	1,145	50,134,584	
					Sporting-goods chains.....	4	40	3,568,125	
					Beauty-shop chains (only those which sell merchandise).....	20	306	15,212,019	
					Stationery chains.....	5	29	3,750,616	
					Undertaker chains (only those which sell merchandise).....	11	53	2,198,925	
					All other chains.....	9	64	3,565,135	
					Secondhand-store chains.....	28	201	3,189,201	

SUMMARY BY TYPES OF OPERATION	Number of units	Total net sales of chains	Per cent of total chains sales	SUMMARY BY TYPES OF OPERATION	Number of units	Total net sales of chains	Per cent of total chains sales
Total, all types of chains	159,638	\$10,740,385,208	100.0	Mail-order chains.....	25	\$395,274,978	3.7
Local chains.....	52,465	3,293,890,233	30.7	Leased-department chains.....	3,675	129,702,438	1.2
Sectional chains.....	41,083	2,191,250,396	20.4	Utility-operated chains.....	4,053	103,370,589	1.5
National chains.....	51,058	3,960,085,002	36.9	Manufacturer-controlled chains.....	3,431	389,018,089	3.6
				Miscellaneous minor types of chains.....	3,848	217,191,493	2.0

¹ 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 80 per cent of straight grocery business, operate a few meat markets and only about one-half of their total business is combination-store volume. In 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.

² Relates to total sales of food group plus one-half of sales of country general stores.
³ 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.

NOTE.—The Merchandising Series of reports referred to above may be obtained from the Superintendent of Documents, Government Printing Office, Washington, separately or in quantities, at 5 cents per copy. In ordering, specify "Census of Distribution, Retail Merchandising Series, Report No. —." Remit by check, money order, or currency (at sender's risk); but not postage stamps.