

CHAPTER 1.—DRUG STORES AND THEIR OPERATIONS

Description of the business.—The stores described in this report are engaged primarily in selling drugs, proprietaries, pharmaceuticals, patent medicines, prescriptions, and toilet goods at retail. They sell a variety of other merchandise in both related and unrelated lines in widely varying proportions, but the sale of drugs, sick-room supplies, and toiletries constitutes the bulk of the business. Other stores may, and do, sell drugs and toiletries, but unless such sales predominate such stores are not classified in the Retail Census as drug stores.

Number of stores and sales.—There were 58,258 drug stores in operation in the United States in 1929 and the sales of these stores amounted to \$1,690,398,682. This national sales total represented 3.44 per cent of the country's total retail business. Table 1 enumerates these stores and sales by States. Drug stores are classified into two kinds in each of the separate State reports, namely, those with fountains and those without fountains. There are also other kinds of drug stores, but the data furnished permitted no greater segregation of classification.

There were 23,414 drug stores without fountains reported in operation during 1929. The sales of these stores amount to \$541,138,956. The drug stores with fountains reported sales of \$1,149,259,726 in 34,844 stores. The average sales volume of the stores with fountains is materially higher than in the drug stores without fountains. These national averages follow:

AVERAGE DRUG-STORE SALES

KINDS OF BUSINESS	Number of stores	Net sales	Average sales per store
All drug stores.....	58,258	\$1,690,398,682	\$20,016
Drug stores without fountains.....	23,414	541,138,956	23,112
Drug stores with fountains.....	34,844	1,149,259,726	32,983

Size of stores.—More than 75 per cent of the stores without fountains reported sales of less than \$30,000. Nearly one-fourth of the stores reported sales of less than \$10,000 and more than 55 per cent had annual sales of less than \$20,000. Despite the fact that 23.87 per cent of the stores reported sales of less than \$10,000, they did less than 6 per cent of the business of all stores without fountains. The group with sales from \$10,000 to \$20,000 accounted for one-fifth of the business.

Stores with sales of less than \$30,000 actually accounted for less than 50 per cent of the total sales of fountainless drug stores, although they constituted 76.21 per cent of the total number of stores. Hence, more than 50 per cent of the business of these stores was done by the remaining 23.79 per cent of the stores.

In contrast, only 14.67 per cent of the business of drug stores with fountains was done by the stores with less than \$20,000 of annual sales.

About 30 per cent of all drug stores (10,382) did less than \$10,000 each, but they accounted for only 3.5 per cent of the total drug-store sales. About 69 per cent of the drug stores had an annual volume of less than \$30,000 per store, but these 39,921 stores did only slightly more than 36 per cent of the total business. On the other hand, nearly 46 per cent of the business is done by the 16,641 stores with sales ranging from \$30,000 to \$100,000 annually.

Classified according to size of business (annual sales per store), the 58,258 stores making up the drug-store total for the United States are shown in the brief table below:

DRUG STORES, BY SIZE OF BUSINESS

AMOUNT OF ANNUAL SALES	STORES		SALES		Average sales per store
	Number	Per cent	Amount	Per cent	
Total—All drug stores.....	58,258	100.00	\$1,690,390,000	100.00	\$29,016
Total—All stores with sales of over \$30,000.....	18,337	31.48	1,073,535,000	63.51	58,545
Stores with sales of—					
Over \$500,000.....	25	.04	23,654,000	1.40	946,100
\$300,000 to \$500,000.....	100	.17	35,991,000	2.13	359,910
\$200,000 to \$300,000.....	277	.48	65,290,000	3.80	235,704
\$100,000 to \$200,000.....	1,294	2.22	174,199,000	10.31	134,621
\$50,000 to \$100,000.....	5,187	8.91	342,850,000	20.28	65,999
\$30,000 to \$50,000.....	11,454	19.66	431,546,000	25.53	37,070
Total—All stores with sales of less than \$30,000.....	39,921	68.52	616,855,000	36.49	15,452
Stores with sales of—					
\$20,000 to \$30,000.....	12,673	21.75	308,333,000	18.24	24,328
\$10,000 to \$20,000.....	16,866	28.95	249,069,000	14.73	14,768
Under \$10,000.....	10,382	17.82	59,453,000	3.52	5,727

Table 2 of this report analyzes the stores in greater detail, showing also separate analyses for each of the two kinds of drug stores. State reports provide similar data for each State. A study of these separate State reports discloses many significant differences in the size of stores in different sections of the country.

Geographic arrangement of stores and sales.—More than 12 per cent of the total drug-store business of the country is transacted in the stores located in the State of New York. Next in order of relative sales importance are Illinois, California, Pennsylvania, Texas, Ohio, Michigan, and Massachusetts. These eight States, which contain 47 per cent of the total population of the United States and 50 per cent of the drug stores, account for slightly less than 53 per cent of the country's drug-store business, or more than the remaining 40 States and the District of Columbia combined.

The table given below illustrates the many irregularities of geographic distribution of drug stores. The States are arranged in the order of their relative sales importance, which does not necessarily correspond closely to the order of population. Also this store arrangement does not correspond to per capita sales of drug stores. It is obvious that this is partly due to the variety of merchandise sold and the variation in the importance of many of the commodities in different sections of the country. It is, however, apparent that some relationship does exist between the number of stores and the populace. This relationship is discussed in some detail on page 11.

CENSUS OF DISTRIBUTION

DRUG-STORE SALES BY STATES

[Arranged in the order of sales importance]

STATES IN ORDER OF SALES	Drug-store sales	Per cent of United States total	Cumulative per cent of United States total	STATES IN ORDER OF SALES	Drug-store sales	Per cent of United States total	Cumulative per cent of United States total
United States, total.....	\$1,600,398,682	100.00	100.00	Kentucky.....	\$22,760,643	1.35	83.02
New York.....	203,102,709	12.02	12.02	Virginia.....	22,700,750	1.34	84.06
Illinois.....	131,448,830	7.78	10.80	Louisiana.....	21,090,101	1.25	86.21
California.....	115,831,475	6.85	20.05	Nebraska.....	20,384,040	1.21	87.42
Pennsylvania.....	113,200,508	6.71	33.35	Maryland.....	19,052,349	1.13	88.55
Texas.....	97,083,841	5.73	30.00	Colorado.....	18,273,293	1.08	89.63
Ohio.....	90,819,227	5.37	44.46	Arkansas.....	17,310,073	1.02	90.65
Michigan.....	78,790,266	4.00	40.12	Dist. of Columbia.....	16,413,828	.97	91.62
Massachusetts.....	64,378,590	3.81	62.93	Mississippi.....	16,344,178	.97	92.50
Missouri.....	60,820,797	3.63	56.46	Oregon.....	14,820,460	.88	93.47
New Jersey.....	50,688,720	3.00	59.46	West Virginia.....	13,344,706	.80	94.27
Indiana.....	46,627,488	2.70	62.22	South Carolina.....	11,891,011	.69	94.90
Oklahoma.....	37,307,270	2.21	64.43	Rhode Island.....	11,376,597	.67	95.63
Wisconsin.....	35,975,202	2.13	66.56	Maine.....	10,265,055	.61	96.24
Iowa.....	33,003,670	1.95	68.51	South Dakota.....	8,056,285	.48	96.72
Kansas.....	30,715,431	1.82	70.33	Arizona.....	7,255,425	.43	97.15
Minnesota.....	28,028,252	1.66	71.90	Montana.....	7,160,141	.42	97.57
Georgia.....	27,860,328	1.64	73.63	New Hampshire.....	6,816,603	.40	97.97
Tennessee.....	25,136,525	1.49	75.12	North Dakota.....	6,182,443	.37	98.34
Washington.....	25,110,079	1.48	76.60	Utah.....	6,100,608	.36	98.70
North Carolina.....	24,976,944	1.48	78.08	Idaho.....	6,548,620	.33	99.03
Florida.....	24,602,990	1.46	79.54	New Mexico.....	4,263,372	.25	99.28
Alabama.....	23,398,535	1.38	80.92	Vermont.....	4,217,154	.25	99.53
Connecticut.....	22,815,732	1.35	82.27	Wyoming.....	3,776,891	.22	99.75
				Delaware.....	2,514,677	.15	99.90
				Nevada.....	1,670,180	.10	100.00

Nearly 23 per cent of the drug-store business is concentrated in the East North Central Division, surrounding Chicago. The Middle Atlantic Division centering on New York City accounts for nearly 22 per cent more. These two divisions and the West North Central Division (with 11 per cent of the drug-store sales) contain 55 per cent of the country's drug stores and account for more than 55 per cent of the drug-store sales. The divisional allocation of stores and sales is as follows:

DRUG STORES AND SALES BY GEOGRAPHIC DIVISIONS

DIVISION	Per cent of total population	STORES		SALES	
		Number	Per cent	Dollars	Per cent
United States, total.....	100.00	58,258	100.00	1,600,398,682	100.00
New England.....	6.65	3,902	6.70	119,870,631	7.09
Middle Atlantic.....	21.35	12,614	21.65	309,991,943	21.71
East North Central.....	20.61	12,000	20.61	383,061,013	22.70
West North Central.....	10.83	7,515	12.90	189,200,812	11.02
South Atlantic.....	12.86	5,868	10.07	163,375,498	9.06
East South Central.....	8.05	3,403	5.95	87,045,881	5.18
West South Central.....	9.92	6,488	11.14	172,791,285	10.22
Mountain.....	3.02	1,778	3.05	54,093,599	3.20
Pacific.....	6.68	4,019	7.93	155,768,020	9.22

How size of city affects sales.—The cities of more than 30,000 population (with 38.75 per cent of the population of the country) contain 49 per cent of all drug stores and they account for nearly 59 per cent of the drug-store business. This proportion varies in different sections of the country, depending on the number of cities of more than 30,000 population located therein. In those States having a fairly large proportion of both large and small cities, the ratio of sales in the cities

of more than 30,000 population exceeds 60 per cent, and increases proportionately with the number of large cities and the increase in city population. The United States sales ratio for cities from 10,000 to 30,000 population is nearly 12 per cent with 8.77 per cent of the national population and for places of less than 10,000 population is hardly more than 20 per cent with 52.48 per cent of the population. These average ratios also vary between States depending upon the number of cities within their boundaries.

There are six States in which there are no cities of more than 30,000 population. In five of these six States the proportion of sales for the 10,000 to 30,000 group exceeds 24 per cent. Idaho (the one State excepted) with 85 per cent of the drug-store sales in places of less than 10,000 population has the highest sales ratios for the under 10,000 group of any of the States; 91.46 per cent of the population of Idaho live in such smaller communities. The lowest sales ratio for the under 10,000 places among the six States is Nevada where the ratio is 65.87 per cent. For more detailed data see Table 1.

Factors affecting sales of drug stores.—There are a number of factors which affect the sales potentialities of drug stores. One of the influencing factors naturally is population. However, population is only one of the influencing factors and alone is not a reliable index of sales potentialities because of the other factors directly affecting the buying habits of purchasers. Even between States, as reflected in the table shown below, per capita sales are unreliable and should be used only by those thoroughly conversant with the many other factors involved and then only with extreme caution and care.

Another factor which exerts a strong influence on the sales of drug stores is customer preference, which may be the result of habit induced by any one of a number of causes such as advertising, convenience of location, local reputation, religious or civic prejudice, length of store hours, and sometimes local legislative restrictions. Another factor is the character of the community which the stores are serving, while still another may be described as the character and aggressiveness of local competition. All of these factors are particularly emphasized in connection with the related lines of merchandise which are sold by drug stores. However, in the sale of these related lines the drug stores, as a general rule, have a distinct advantage over other kinds of stores. Because of the variety of merchandise sold and the long business hours, it is possible to attract many customers who would, under normal conditions, purchase from a store of another kind. It is well recognized that in most drug stores, particularly the neighborhood stores, the evening hours when most other stores are closed, are the best from the standpoint of sales.

A more reliable index, and one which takes into account many of the factors discussed, is found in a comparison of the sales of a given kind of store or a given commodity to the total retail sales of the State. The comparison of the ratio for a given State to the United States ratio expresses the relative position of that kind of store in that State. Similarly a comparison for a city may be made with the State ratio. This method is referred to as the position index. For example, in New York State the sales of drug stores constitute 2.88 per cent of the total sales in that State. The sales for all drug stores in the United States average 3.44 per cent. Thus the position index for drug stores in the State of New York is 84 (that is, 2.88 per cent is 84 per cent of 3.44 per cent).

In the table following is shown the position of drug stores in relation to all other kinds of stores in the form of a position index, with 100 representing the average ratio of drug-store sales to total retail sales.

RANKING OF STATES WITH PER CAPITA SALES AND POSITION INDEX

STATES	Per cent of drug store sales to State total sales in all stores	Position index (relation of State drug store sales to U. S. sales)	Per capita sales of drug stores	RANK				
				Order of population	Order of drug store sales	Order of per capita sales	Order of number of drug stores	Order of position index
United States.....	3.44	100	\$13.77					
NEW ENGLAND:								
Maine.....	3.33	97	12.87	35	37	26	30	20
New Hampshire.....	3.70	108	14.05	42	41	20	41	10
Vermont.....	2.77	81	11.73	46	46	32	45	45
Massachusetts.....	3.15	91	15.15	8	8	18	9	36
Rhode Island.....	3.58	104	16.55	37	36	10	35	25
Connecticut.....	2.97	86	14.20	29	23	22	27	41
MIDDLE ATLANTIC:								
New York.....	2.88	84	16.13	1	1	14	1	44
New Jersey.....	2.74	80	12.51	9	10	27	10	40
Pennsylvania.....	2.98	87	11.75	2	4	31	2	40
EAST NORTH CENTRAL:								
Ohio.....	3.17	92	13.06	4	6	23	6	34
Indiana.....	3.81	111	14.40	11	11	21	11	17
Illinois.....	3.55	103	17.23	3	2	5	3	20
Michigan.....	3.54	103	16.27	7	7	13	7	27
Wisconsin.....	2.91	86	12.24	13	13	20	13	45
WEST NORTH CENTRAL:								
Minnesota.....	2.67	78	10.93	18	16	35	17	47
Iowa.....	3.40	99	13.36	10	14	24	12	28
Missouri.....	4.13	120	16.48	10	9	11	8	9
North Dakota.....	2.03	76	9.08	38	42	43	38	48
South Dakota.....	3.16	92	11.63	36	38	34	37	35
Nebraska.....	3.02	105	14.70	32	27	19	23	22
Kansas.....	4.12	120	16.34	24	15	12	15	10
SOUTH ATLANTIC:								
Delaware.....	2.43	71	10.55	47	48	36	48	49
Maryland.....	3.08	90	11.08	28	28	33	30	38
District of Columbia.....	4.88	142	33.71	41	31	1	40	1
Virginia.....	3.77	110	9.38	20	25	41	28	18
West Virginia.....	2.98	87	7.72	27	34	47	34	39
North Carolina.....	3.82	111	7.88	12	20	48	21	16
South Carolina.....	3.96	115	6.84	26	35	49	33	11
Georgia.....	4.39	128	9.58	14	17	40	16	7
Florida.....	4.87	142	16.70	31	21	6	18	2
EAST SOUTH CENTRAL:								
Kentucky.....	3.88	113	8.71	17	24	45	22	15
Tennessee.....	3.91	114	9.61	16	18	39	20	14
Alabama.....	4.44	129	8.84	15	22	44	19	5
Mississippi.....	3.95	115	8.13	23	32	46	29	12
WEST SOUTH CENTRAL:								
Arkansas.....	4.19	122	9.33	25	30	42	26	8
Louisiana.....	4.42	128	10.04	22	26	38	24	6
Oklahoma.....	4.09	130	15.37	21	12	16	14	4
Texas.....	4.75	138	19.07	5	5	8	4	3
MOUNTAIN:								
Montana.....	2.94	85	13.32	39	40	25	39	42
Idaho.....	3.28	95	12.47	43	44	28	42	31
Wyoming.....	3.65	100	10.74	48	47	7	47	21
Colorado.....	3.92	114	17.04	33	29	4	31	13
New Mexico.....	3.59	104	10.14	45	45	37	46	24
Arizona.....	3.60	106	10.66	44	39	9	44	20
Utah.....	3.11	90	12.03	40	43	30	43	37
Nevada.....	3.33	97	18.41	49	49	3	49	30
PACIFIC:								
Washington.....	3.30	93	10.07	30	19	15	25	33
Oregon.....	3.25	94	15.54	34	33	17	32	32
California.....	3.61	105	20.40	6	3	2	5	23

There are 26 States and the District of Columbia in which the drug stores hold a better than average position, or more than 100. This indicates that in these States the drug stores do a greater proportion of total sales than in the other States. It is obvious that the District of Columbia, which is coextensive with the city of Washington can not be compared with any of the States. Also, because of the peculiarities of its composition there is very little basis for its comparison with any other city.

There are 11 States in which the position index ranges from 1 to 10 points below the national average. These States are Iowa, Maine, Nevada, Idaho, Oregon, Washington, Ohio, South Dakota, Massachusetts, Utah, and Maryland. The remaining 11 States vary from 13 to 29 points below the national average. These 11 States in the order of their position index are West Virginia, Pennsylvania, Connecticut, Montana, Wisconsin, New York, Vermont, New Jersey, Minnesota, North Dakota, and Delaware. While it is doubtless true that sales are influenced by such factors as climate, population, relative wealth and standards of living, no one of these is the dominating factor responsible for these varied differences. In fact, a study of the differences between the position index and sales suggests the presence of other influencing factors, some of which are known and therefore can be measured, and others about which little real knowledge is available and therefore can not be satisfactorily gaged.

There is nothing to indicate that the per capita consumption of drugs is appreciably lower in the 22 States below the national average than in the 26 States above that average. The fact that drugs, patent medicines, etc., are frequently sold by department stores, general merchandise stores, and general stores partly explains some of the marked differences which are so evident from an examination of the tables. The fact that the sales volume is influenced by the character and proportions of related commodities sold probably furnishes a better explanation. Further discussion of this matter must be deferred until the discussion of the commodity sales of these stores.

The per capita sales column has been added solely for the purpose of illustrating the many differences and to show that no real close relationship exists between drug-store sales and population. As a relative measure for city consumption the per capita sales figures are even less reliable than as a State index.

The most consistent relationship yet developed is that which exists between population and the number of stores (rather than sales). There are few exceptions to this parallel and in each of those where a material difference appears, an obvious explanation presents itself. The following table shows the relationship between number of stores and population. This table includes all retail stores as well as drug stores only in order that significant differences in both relationships will be apparent.

NUMBER OF RETAIL STORES AND NUMBER OF DRUG STORES PER 1,000 POPULATION BY STATES AND GEOGRAPHIC DIVISIONS

DIVISIONS AND STATES	Population (thousands)	All stores	Drug stores	STORES PER 1,000 POPULATION	
				All stores	Drug stores
United States, total.....	122, 775	1, 543, 168	56, 258	12. 57	0. 47
NEW ENGLAND.....	8, 166	108, 704	3, 902	13. 32	. 48
Maine.....	797	11, 091	378	13. 91	. 47
New Hampshire.....	465	6, 557	228	14. 10	. 49
Vermont.....	360	5, 180	148	14. 41	. 41
Massachusetts.....	4, 250	54, 183	1, 971	12. 75	. 46
Rhode Island.....	687	6, 542	403	13. 89	. 59
Connecticut.....	1, 007	22, 202	774	13. 81	. 48
MIDDLE ATLANTIC.....	20, 261	385, 302	12, 614	14. 07	. 48
New York.....	12, 588	190, 017	6, 302	15. 00	. 51
New Jersey.....	4, 041	60, 010	1, 817	14. 85	. 45
Pennsylvania.....	9, 632	135, 275	4, 405	14. 04	. 46
EAST NORTH CENTRAL.....	25, 297	317, 667	12, 000	12. 56	. 47
Ohio.....	6, 647	83, 717	2, 808	12. 50	. 43
Indiana.....	3, 238	41, 618	1, 621	12. 85	. 50
Illinois.....	7, 031	96, 900	3, 809	12. 70	. 50
Michigan.....	4, 842	55, 058	2, 416	11. 56	. 50
Wisconsin.....	2, 039	39, 474	1, 202	13. 43	. 44

NUMBER OF RETAIL STORES AND NUMBER OF DRUG STORES PER 1,000 POPULATION
 BY STATES AND GEOGRAPHIC DIVISIONS—Continued

DIVISIONS AND STATES	Population (thousands)	All stores	Drug stores	STORES PER 1,000 POPULATION	
				All stores	Drug stores
WEST NORTH CENTRAL	13,207	170,644	7,515	12.83	0.50
Minnesota.....	2,584	30,725	1,079	11.98	.42
Iowa.....	2,471	32,710	1,448	13.24	.58
Missouri.....	3,629	47,039	2,336	12.96	.64
North Dakota.....	681	8,077	285	11.86	.42
South Dakota.....	603	8,845	357	12.76	.51
Nebraska.....	1,378	17,037	870	12.80	.63
Kansas.....	1,881	25,005	1,134	13.01	.60
SOUTH ATLANTIC	15,704	169,068	5,868	10.70	.37
Delaware.....	238	3,638	107	15.40	.45
Maryland.....	1,032	21,082	654	12.02	.40
District of Columbia.....	487	5,931	240	12.18	.49
Virginia.....	2,422	26,120	771	10.78	.32
West Virginia.....	1,720	17,244	475	9.97	.27
North Carolina.....	3,170	28,831	926	9.00	.29
South Carolina.....	1,730	15,036	536	8.05	.31
Georgia.....	2,909	28,687	1,132	9.80	.30
Florida.....	1,468	22,440	1,027	15.20	.70
EAST SOUTH CENTRAL	9,887	80,190	3,498	9.02	.35
Kentucky.....	2,615	27,117	887	10.37	.34
Tennessee.....	2,616	23,384	920	8.04	.35
Alabama.....	2,646	21,442	945	8.10	.30
Mississippi.....	2,010	17,256	710	8.58	.35
WEST SOUTH CENTRAL	12,177	135,482	6,488	11.13	.53
Arkansas.....	1,854	17,937	826	9.07	.44
Louisiana.....	2,102	23,288	804	11.08	.41
Oklahoma.....	2,300	27,330	1,280	11.41	.53
Texas.....	5,825	60,018	3,518	11.40	.60
MOUNTAIN	3,702	44,661	1,778	12.06	.48
Montana.....	537	6,951	272	12.94	.51
Idaho.....	445	4,016	202	11.05	.45
Wyoming.....	226	2,983	124	13.20	.55
Colorado.....	1,030	13,093	648	13.51	.62
New Mexico.....	423	4,101	133	9.91	.31
Arizona.....	436	5,098	106	11.62	.38
Utah.....	508	5,240	187	10.33	.37
Nevada.....	91	1,310	40	14.30	.50
PACIFIC	8,194	122,371	4,619	14.03	.56
Washington.....	1,563	22,110	846	14.14	.54
Oregon.....	954	14,570	567	15.27	.59
California.....	5,677	85,691	3,206	15.00	.56

Cash versus credit.—A total of 48,954 drug stores out of the United States total of 58,258 stores reported data concerning their credit activities. These 48,954 stores are included in a detailed analysis in which they are classified according to the degree of credit business. Slightly more than 54 per cent reported that they were selling entirely for cash. This 54 per cent of the stores account for 54 per cent of the business. The remaining 46 per cent reported that they sell on credit as well as for cash. However, credit represents a relatively insignificant part of the total sales.

Based on this analysis of the 48,954 stores, the fact that the 54 per cent which sell strictly for cash actually do 54 per cent of the business, invites the conclusion that cash stores have no sales advantages over credit-granting stores. However, further analysis of the figures indicates that higher average sales are reported by the fountain stores selling for cash than are reported by the strictly professional drug stores operating on the same cash basis. Other significant differences are brought out in the following table:

CREDIT SALES IN DRUG STORES

DEGREE OF CREDIT	Number of stores	Total sales, cash and credit, (shown in thousands)	Approximate cash sales (computed) (shown in thousands)	Approximate credit sales (computed) (shown in thousands)
All cash.....	26,529	\$775,944	\$775,944	-----
1 to 10 per cent credit.....	10,015	262,744	249,607	\$13,137
11 to 20 per cent credit.....	4,529	131,538	110,808	20,730
21 to 30 per cent credit.....	3,319	106,562	79,921	26,641
31 to 40 per cent credit.....	2,414	79,184	51,470	27,714
41 to 50 per cent credit.....	1,169	34,970	19,233	15,737
51 to 60 per cent credit.....	406	14,979	6,345	8,634
61 to 70 per cent credit.....	229	7,022	2,458	4,564
71 to 80 per cent credit.....	165	7,052	1,913	5,739
Over 80 per cent credit.....	179	5,301	580	5,221
Total.....	48,954	1,426,396	1,298,279	128,117
Per cent.....	-----	100.00	91.02	8.98

As indicated above, credit represents only about 9 per cent of the sales of stores reporting as to their credit activities. There is no reason to believe that the cash and credit ratios of the 9,304 stores which furnished no data on this subject would be materially different than those which did report. In fact, it is doubtful if any adjustment in percentages would be necessary in view of the fact that the reporting stores accounted for 85 per cent of the total drug-store business.

Careful consideration of the figures shown in Table 3A indicates that the drug stores with fountains and the professional type drug stores doing an all-cash business have a slight sales advantage over those credit-granting drug stores which do no more than 10 per cent of their business on a credit basis. In each of the other credit groupings the credit factor seems to offset other inherent advantages of the cash stores. Such comparisons must be made cautiously, however. There is no ground for assuming that a credit store could change to a strictly cash store and still enjoy the same patronage. Even the character of a part of the merchandise might change. Credit-granting stores may be considered, in many respects, a different kind of business from all-cash stores.

Independents versus chains in the drug field.—Chain organizations, further classified as local, sectional, or national chains operated 3,526 stores with total sales of \$312,450,889 in 1929. These 3,526 stores were operated by 249 chains and the sales represented 18.49 per cent of all drug-store sales. Of the independents, 50,088 were single-store independents, with sales of \$1,210,201,836, which is 71.59 per cent of the total; and 4,497 are 2-store and 3-store independents and local branch systems with sales of \$161,783,820, which is 9.57 per cent of the total. (See Table 4, page 39).

In the cities of more than 30,000 population 28.46 per cent of the drug-store business is done by the chains. In cities of 10,000 to 20,000 population 10.25 per cent of the drug-store business is done by the chains. In places of less than 10,000 population, the chains account for only 1.89 per cent of the business. These proportions vary somewhat in different sections of the country, as shown in Table 4.

DRUG STORES

	Total	CHAINS	
		Number or amount	Per cent of total
Number of stores.....	58,258	3,513	6.03
Sales.....	\$1,690,398,082	\$312,301,721	18.48
Expenses (per \$100 of sales).....	\$27.16	\$27.64	-----

Drug chains.—The merchandising series of reports includes one devoted to drug chains (R-66).¹ This report shows that nearly one-fourth of all chain units operating at the end of 1929 were established during that year, and that 36 per cent were opened during the period from 1925 to 1929. It also shows that 53 per cent of the chain drug stores are located in the two geographic divisions centering around New York and Chicago, namely, the East North Central and Middle Atlantic Divisions, with the greatest chain development in the division which has Chicago for its principal city. The Pacific Coast States have the third highest chain development.

The following table shows a résumé of chain-store data for ready reference:

SUMMARY—DRUG-STORE CHAINS	
Total drug-store chains.....	240
Chains operating stores with fountain.....	160
Other drug-store chains.....	80
Number of local chains.....	235
Number of sectional chains.....	14
Number of national chains.....	
Total units.....	3,513
Chains operating stores with fountain.....	3,031
Other drug-store chains.....	482
Local chains.....	1,953
Sectional and national chains.....	1,560
Total sales.....	\$312,301,721
Chains operating stores with fountain.....	288,080,707
Other drug-store chains.....	23,620,924
Local chains.....	132,017,912
Sectional and national chains.....	180,283,809
Store operating expenses (per \$100 of sales).....	27.64
Chains operating stores with fountain.....	27.88
Other drug-store chains.....	24.80
Chains extending credit.....	29.61
Chains not extending credit.....	27.35
Local chains.....	29.66
Sectional and national chains.....	28.37
Pay-roll cost, 33,417 employees (per \$100 of sales).....	13.44
Chains operating stores with fountain.....	13.47
Other drug-store chains.....	13.12
Local chains.....	13.01
Sectional and national chains.....	13.10
Other store operating expenses, including rent (per \$100 of sales).....	14.20
Chains operating stores with fountain.....	14.41
Other drug-store chains.....	11.68
Local chains.....	12.75
Sectional and national chains.....	15.27
Rent—3,451 leased stores (per \$100 of sales).....	7.43
Chains operating store with fountain (2,988 stores).....	7.65
Other drug-store chains (463 stores).....	4.76

Cost of doing business.—The average expense ratio of drug stores, including both chains and independents, is \$27.11 per \$100 of sales for the entire United States. Of this amount, pay roll is \$15.85 and rent averages \$5.65. The balance includes advertising, supplies, taxes, heat, light, power, insurance, depreciation,

¹ Copies of merchandising series of reports (18 in number) may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., separately or in quantities at 5 cents per copy. In ordering specify Census of Distribution, Retail Merchandising Series, Report No. R-66.

interest, delivery service, and other expenses incidental to the operation of drug stores.

The difference in expense between the two kinds of drug stores is negligible. Those with fountains have an average expense rate of \$27.06 per \$100 of sales, as compared with \$27.21 in the stores without fountains. Differences in wage costs are more marked, although the average variation is only about \$1 per \$100 of sales. Fountain stores pay out in salaries and wages an average of 15.43 per cent of sales, while drug stores without fountains pay out an average of 16.73 per cent. The higher wage cost in the stores without fountains is due largely to the absence of the lower-paid fountain employees as is clearly indicated by the average salaries paid. The average annual salary of full-time employees in drug stores without fountains is \$1,324 while in the fountain stores it is \$1,234. An explanatory table follows:

EMPLOYMENT AND WAGES IN DRUG STORES

	Total drug stores	Drug stores with fountains	Drug stores without fountains
Average full-time wage.....	\$1,200	\$1,234	\$1,324
Average part-time wage.....	\$283	\$288	\$272
Average sales per employee (includes proprietors, full-time and full-time equivalent of part-time employees).....	\$7,955	\$7,903	\$7,802
Number of employees per each \$100 of sales.....	1.26	1.26	1.27
Proportion of part-timers to total employees (per cent).....	10.93	10.28	18.48
Average sales per store.....	\$20,016	\$32,983	\$23,112

In contrast, the other expenses of fountain drug stores are more than 1 per cent higher, on the average, than are those of stores which do not operate fountains. The rents paid by the fountain stores, which averages nearly three-fourths of 1 per cent higher than the professional drug stores, account for the major part of this increase in other expenses. This difference in rentals is made the basis of more detailed explanation later in this chapter.

Costs vary with the size of city.—Total operating costs vary 2 to 4 per cent depending on the size of the city in which the stores are located. For the same kind and type of business it costs more to operate in a large city than in a city of moderate size and more in a small city than in a village or country town. This is because many of the factors entering into the cost of doing business are more expensive in the larger cities. Rent is higher, wages are higher and delivery is more costly. In fact, the same is true of nearly every item of expense involved in drug-store operation in a moderate sized city and is even more so in the larger cities. The general principle that expenses increase with the size of city has been definitely established by the Retail Census.

In the cities of more than 30,000 population the expense ratio for drug stores averages 28.47 per cent; in the cities of 10,000 to 30,000 population it averages 26.44 per cent, over 2 per cent less than the over 30,000 average; and nearly 1 per cent less than the national average of 27.11 per cent; in the places of less than 10,000 population the average is 24.65 which is nearly 4 per cent less than that of the large cities, and about 2.5 per cent less than the national average. For detailed data on expenses see Tables 5 and 9 of this report, and the special chapter on expenses in the Chicago-Milwaukee area beginning on page 27.

Cost of rent.—Nearly 46,000 of the 58,258 drug stores (78.74 per cent) covered by this report are operated in leased premises. These stores account for 86 per cent of the total sales of all drug stores. The cost of rent in these 45,872 stores averages \$5.65 for each \$100 of sales. It has been pointed out in an earlier paragraph that the percentage of rental cost in the drug stores with fountains (with

an average rental cost of 5.87 per cent), is higher by three-fourths of 1 per cent than the average of 5.14 per cent for the nonfountain stores. It has been indicated that the advantage in pay-roll costs obtained by the employment of lower priced fountain employees is largely offset by the necessity for selecting locations especially favorable to the sale of ice cream, fountain drinks, and lunches necessitating the outlay of a larger proportion of the stores gross sales in the form of rent.

In comparison with these rent averages for all stores, which include both chains and independents, the average rental cost for chain drug stores is \$7.43 per each \$100 of sales. The chains operating stores with fountains pay an average rental of \$7.65 per \$100 of sales, while those chains which do not operate fountains pay out only 4.76 per cent of their sales for rent. Complete expense data of the operation of drug stores by the chains will be found in the report (R-66)¹ of the merchandising series entitled "*Drug Store Chains.*"

Stocks on hand.—The stocks of merchandise on hand for sale were reported at cost valuation as of the end of the reporting year. This stock figure is not a measure of turnover and can not be used as a basis for estimating stock turn even though the stock on hand in drug stores at the end of the year be considered to be fairly representative of the average stock carried throughout the entire year, because cost valuations for stocks can not be satisfactorily related to sales without data on the actual marking rate.

In the absence of sufficient data, no attempt has been made to estimate the turnover. However, interested executives of individual stores may gain some helpful data by comparing their stock (cost values at end of year) with the following table:

RATIO OF STOCK TO SALES

KIND OF DRUG STORES	Number of stores	Annual sales (1929)	Stocks at cost (end of year)	Ratio of stock to sales
Drug stores, without fountains.....	23, 414	\$641, 138, 056	\$148, 256, 160	27. 4
Drug stores, with fountains.....	34, 844	1, 149, 256, 726	225, 732, 700	19. 6
All drug stores.....	58, 258	1, 690, 398, 682	373, 988, 860	22. 1
Drug stores in cities of over 30,000 population.....	28, 602	992, 194, 401	187, 056, 080	18. 9
Drug stores in cities of 10,000 to 30,000 population.....	5, 778	202, 001, 858	47, 894, 040	23. 7
Drug stores in places of less than 10,000 population.....	23, 883	496, 202, 423	139, 038, 740	28. 0

¹ Copies of merchandising series of reports (18 in number) may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., separately or in quantities at 5 cents per copy. In ordering specify Census of Distribution, Retail Merchandising Series Report No. R-66.

CHAPTER 2.—COMMODITIES SOLD BY DRUG STORES

Not over 15 per cent of all retail stores keep records in such detail that they are able to report accurately their sales in terms of commodities sold. They know the amount of their total business but many stores can not tell how much of each commodity has been sold. After the experience gained in the Eleven City Census taken in 1926 it was decided to limit requests for data on the commodities sold to the stores located in the cities of more than 10,000 population and to stores in such cities doing at least \$60,000 worth of business annually.

Only about 10 per cent of the drug stores reported sales amounting to as much as \$60,000 annually. Consequently, commodity data were obtained only from that portion of the 10 per cent which was able to furnish detailed figures on each commodity. However, the sales of these stores amounted to approximately 35 per cent of the sales of all drug stores. This sizable sample of the total sales is believed to be fairly representative of the business done by all drug stores and presents a basis for reasonably accurate estimates of that portion of the retail drug business which is not reported in detail.

In the various State reports the commodity sales for each kind of store are shown as a percentage, namely, the percentage which the sales of the given commodity form of the total sales reported by commodities in that kind of store. At the same time the degree of commodity coverage, namely the percentage which the total sales of the stores reporting commodity data form of the total sales of all stores in the same kind of business, is regularly shown.

Applying the commodity ratios against the total sales of all stores in the same kind of business, it is possible to build up what is believed to be a reasonably accurate and approximately complete sales figure for any listed commodity, both for a given kind of business and for all kinds of business combined. The dollar totals as computed for the two kinds of drug stores are shown in Table 7 of this report.

This national commodity-sales table shows as nearly a complete distribution of the sales by commodities as is consistent with the data available, and is believed to be the only commodity information available on a national basis. The table indicates that in addition to sales of drugs, patent medicines, etc., which amount (on the basis stated) to \$563,000,000, and prescription sales of \$209,000,000, the drug stores also had \$221,000,000 of sales in toilet articles and toilet preparations, \$244,000,000 of fountain sales (including drinks, ice cream, and lunches), and \$216,000,000 of cigars, cigarettes, and tobacco products. In addition to these major commodity items there were also a number of other lines carried, which were of lesser sales importance to the drug stores but frequently added considerable to the sales income. The sales figures listed above do not include estimates for the value of medicines dispensed by physicians from their own stocks or by hospitals, dispensaries, and other institutions.

Competition with other kinds of stores.—It is popularly recognized that the merchandise sold in drug stores is sufficiently diversified in character to bring those stores into competition with many other kinds of stores. In the case of prescriptions the competition from other kinds of stores is entirely unimportant. The same is true in the case of drugs, patent medicines, etc., since more than 95 per cent of the total retail sales of these lines is sold in drug stores. However,

there are a number of commodity lines in which drug stores are in direct competition with stores of other kinds, and in other lines they are competing indirectly with still different kinds of stores. This condition is worthy of careful consideration, especially in relation to certain lines of merchandise which are consistently sold in drug stores but which are reported as sold in widely varying proportions. Toilet articles and preparations constitute a good typical illustration of the wide variation in the sales volume. The proportion of this merchandise sold by drug stores as reflected by the national average is about 54 per cent of the total. This figure varies between States from a low of 32.5 per cent in Rhode Island to a high of 76.5 in Florida and New Mexico. There are 10 States in which more than two-thirds of the toilet articles and preparations are sold in drug stores. These States in addition to Florida and New Mexico are Maine, New Hampshire, Oklahoma, Arizona, Idaho, Montana, Wyoming, and Oregon. In addition to the States listed above there are eight States in which the proportion of the total United States volume in toilet articles and preparations which is done by the drug stores is from 60 to 65 per cent. These eight States are Kansas, South Dakota, Delaware, Texas, Colorado, Nevada, California, and Washington.

By contrast, the other extreme shows 4 States with a ratio of less than 40 per cent of the sales in drug stores, and 15 States (including the 4 under 40 per cent) with a ratio of less than 50 per cent in drug stores.

The preceding paragraphs have covered the 53.5 per cent of the sales of toilet articles and toilet preparations which were sold by drug stores. The remaining 46.5 per cent, representing all other kinds of business which are selling this commodity item, can be confined very largely to six kinds of stores which together sell 43.5 per cent of the total. These six kinds of stores are shown below with their dollar volume in toilet articles and preparations:

APPROXIMATE SALE OF TOILET ARTICLES AND PREPARATIONS

Department stores.....	\$70,603,700
Variety stores.....	42,200,074
Patent medicine, extracts, toilettries dealers (usually house-to-house).....	27,054,138
General stores.....	20,057,313
Dry goods stores.....	7,136,704
Women's ready-to-wear stores.....	5,022,672
Other retailers (includes beauty parlors, general merchandise stores, jewelry stores, family clothing stores, mail-order houses).....	12,404,112

There are unquestionably many reasons why certain consumers prefer to purchase this merchandise from other than drug stores. The two reasons which are probably the most important to the customer are price appeal and convenience of purchase. Either may influence the sale. Certainly, merchandise of this kind is often featured at reduced prices, or as loss leaders, to draw traffic to other departments. Also the convenience to the customer of being able to purchase at the place of making other purchases is important and often has a tendency to offset any small saving which might be possible by shopping elsewhere.

Commodity sales shown in tables.—Table 8A of this report shows for the United States the approximate total sales of toilet articles and preparations, also of drugs, patent medicines, etc., and shows the kinds of stores selling these commodity lines and the proportions sold by each. This table furnishes a reasonably accurate comparison of the importance of these two lines of merchandise in each of these kinds of business. Supplementing Table 8A are three tables referred to as 8B, 8C, and 8D.

These tables list by States the approximate dollar values of toilet articles and preparations, drugs, patent medicines, etc., and prescriptions sold, shown separately for drug stores and for all other kinds of stores and the proportion of

each State's total which was sold by each. These tables provide data from which it is possible to determine the relative importance of these stores as outlets for these three commodity lines in each of the several States. They also provide an explanation of a comment made earlier in this report to the effect that climate apparently has no effect on total drug-store sales.

It might be supposed that in certain sections of the country where the climate is mild or where the temperature is more stable and less subject to sudden changes the health of the residents is better and there is less need for medicants. If so, it does not follow that the number of drug stores is also reduced or that the drug-store sales are proportionately less. Such a circumstance might logically be expected if the drug stores were engaged exclusively in the sale of drugs, patent medicines, etc. However, the high proportion of related and unrelated merchandise which these stores sell frequently offsets the effect on drug-store sales of the particularly healthful climate. The census figures indicate that the drug stores in these areas have usually increased their sales of other commodity lines to the extent that their sales have not suffered in comparison with the sales of other States or the United States as a whole. Florida and California are typical examples of what can be accomplished in successfully promoting other lines to offset low sales in drug lines. Even in number of stores these two States are above the average in relation to population, and their total sales ratios are well above the general average. The commodity figures which are shown in Tables 8A, 8B, 8C, and 8D provide the basis for further study and development of the idea. Further discussion of the commodities sold and their relative importance will be more fully covered in the section devoted to the various lines of merchandise sold.

CHAPTER 3.—OPERATING EXPENSES OF COMPETING STORES COMPARED

The following table contains the operating expenses of the two kinds of drug stores and six of their principal competitors in the sale of toiletries:

PER CENT OF OPERATING EXPENSES TO SALES

KINDS OF BUSINESS	All cities	Cities of more than 30,000 population	Cities of 10,000 to 30,000 population	Places of less than 10,000 population
	<i>Per cent of sales</i>	<i>Per cent of sales</i>	<i>Per cent of sales</i>	<i>Per cent of sales</i>
Drug stores.....	27.11	28.47	20.44	24.65
Department stores.....	28.36	29.24	24.22	19.84
Variety stores.....	24.96	25.10	24.60	24.77
Patent medicine, extracts, toiletries dealers (house and home).....	34.46	(x)	(x)	(x)
General stores.....	18.59	15.32	15.46	13.88
Dry goods stores.....	24.17	25.85	25.71	21.47
Women's ready-to-wear.....	29.10	29.91	25.98	24.88

(x) Can not show.

The kinds of business listed above are those which feature toiletries and toilet articles. They do not include cigar stores and stands, and others with which the drug stores compete for the tobacco business; nor does the table include the candy and confectionery stores, competitors for the fountain and candy business of the country. Likewise the eating places, with which many of the drug stores are competing for the light-lunch business, have been excluded. These kinds of business are fully discussed in the special food report soon to be available.¹

Department stores are the largest competitors of drug stores in the sale of toilet goods. These stores do 18.5 per cent of the nation's retail business in toilet articles and preparations and operate at an average cost of \$28.36 per \$100 of sales. The popularity of this merchandise in department stores is caused partly by price and partly because of its ready accessibility to other desired commodities. The latter is often a sufficiently important consideration, often offsetting the strictly price appeal of the so-called cut-rate drug stores. Beauty parlors operated in department stores are also instrumental in adding many dollars to the sales of toilet-goods departments.

Variety stores are large distributors of toiletries. More than 10 per cent of this commodity item is sold by such stores, which have an average operating expense of \$24.96 per \$100 of sales. Much of the merchandise of nationally advertised brands is put up in special-sized containers for the variety stores.

House-to-house canvassers, representing well-advertised manufacturers of toilet goods, patent medicines, and extracts, are large distributors of these products through agents, where practically the entire selling expense consists of salaries or commissions, and they provide keen competition for many drug stores. The major part of this business is done in the small towns and rural areas. Nearly 7 per cent of toilet-goods business of the country is done by these direct-to-user organizations.

¹ Food retailing, a special trade study of the Bureau of the Census, may be obtained from the Superintendent of Documents, Government Printing Office.

General stores found occasionally in the suburbs of the large cities but for the most part located in the small villages and in the country, distribute a material amount of toilet goods. These low-expense stores are able to do business at an expense rate averaging only \$13.59 per \$100 of sales.

Other competitors are dry goods stores with expenses of 24.17 per cent of sales and women's specialty stores having an expense ratio of 29.10 per cent. Each accounts for more than 1 per cent of the national total of toilet-goods sales. Several other kinds of business also sell this merchandise but in such insignificant amounts that they are relatively unimportant from the standpoint of competition. However, they operate at expense ratios well within the drug-store range and are in position to develop this related line.

CHAPTER 4.—RELATED COMMODITIES

Most retail stores sell a variety of merchandise which can be grouped into two classes. The first is *primary or basic commodities* which is *related or secondary commodities*. The first class consists of the representing a substantial proportion of the total goods sold and is usually synonymous in the customer's mind with the kind of store in which the second is made up of goods which are often associated by the customer with the primary merchandise sold by the store but which are secondary in mind to the primary commodities featured by the stores. Cigars and cigarettes are good typical examples. They are primary commodities in cigar stores but are related or at least secondary commodities in drug stores. Patent medicines are primary merchandise in drug stores but are "related" commodities in department stores.

Retailers are interested in related commodities.—Related commodities are of great interest to the retailer because this class of merchandise should be sold with less sales effort and at a correspondingly lower expense than other merchandise. The drug store is in a particularly advantageous position because of a variety of merchandise lines, as a result of the practices which have been developed. They remain open for business later than most of the other stores and have come to be recognized by the public as a sort of place where many different kinds of merchandise can be secured at night during the day. They have continually added more lines and expanded their field until drugs and prescriptions are only a part of their popular merchandise. The net result has been that merchandise which was once considered to be secondary has become such an important item that it is now a commodity in its own right and may be considered in either class with equal authority. Cigarettes, representing nearly 13 per cent of the drug-store sale are good examples. Basically these commodities are related rather than primary in drug stores when considered in connection with cigar stores. The same is true of the fountain sales, as evidenced by the fact that there were in 1923, 23,000 drug stores which reported no fountain sales. Yet fountain sales represented 14.5 per cent of all drug-store business and about 21 per cent of the business of stores operating fountains (which supports the belief that the fountain sales situation has now or will very soon become one of the primary lines of business in drug stores).

The cigar counter and fountain sales have been considered as related commodities in this census and have been so classed in the following table which shows a comparison of the importance of related commodities between chain and independent drug stores. The lines which have been considered as primary are: Drugs, patent medicines, etc., prescriptions, rubber goods, hospital supplies, and toilet goods. The table follows:

RELATED MERCHANDISE SOLD IN DRUG STORES

[Comparison between chains and independents]

KIND OF STORES	Total sales, all commodities	Approximate sales of other than primary merchandise
All drug stores with fountains.....	\$1, 140, 250, 726	\$520, 882, 4
Chain stores with fountains.....	288, 680, 797	130, 834, 6
All drug stores without fountains.....	541, 138, 056	99, 799, 4
Chain stores without fountains.....	23, 620, 924	6, 590, 2

Related commodities are of value to the retailer.—The drug-store executive is particularly interested in ascertaining what lines of drug merchandise are being sold by other than drug stores, and what they are doing with such lines; second, what related commodities the other drug stores are selling, to determine the nature and extent of their competition; third, how the expense ratios of these competitors compare with drug stores to develop what is the probable rate of mark up; fourth, to determine the approximate total sale of the merchandise in question in any given city or area, and, fifth, how much of this total is accounted for by each kind of store.

The answers to these questions can be obtained with a minimum of effort by referring to the several State reports of the retail census. Table 1 shows the total sales of each kind of store. Table 15 contains commodity breakdowns for nearly every kind of store. By applying the percentages shown in Table 15 against the total sales reported in Table 1 for the same kind of store it is possible to obtain a close approximation of the dollar sales of any given commodity in the kind of store under consideration.

Related commodities are of value to the manufacturer or wholesaler.—That the drug store offers a present and potential market for manufacturers and wholesalers not interested in drugs and toilet goods is evident when it is realized that fountain sales, which include ice cream and lunches, exceeded \$244,000,000 and that sales of tobacco products amounted to more than \$216,000,000 in drug stores. Confectionery and nuts added \$51,000,000 to the total receipts of these stores. It is also evident that there are other commodity lines for which the drug store provides a substantial present and prospective market.

As indicated in the table on page 22, the independent drug stores have not developed the sale of related commodities in the same proportion as the drug-store chains. In fact, the percentage of related merchandise sold in chain stores without fountains is more than 50 per cent greater than in independent stores without fountains. However, the drug chains have concentrated largely on the cities which no doubt has an important bearing on the sale of related and unrelated merchandise.

The data officially at the disposal of the bureau and available for analysis are limited to the facts contained in the retail questionnaire. This questionnaire was necessarily confined to the minimum consistent with the securing of a mass of necessary basic data. These necessary limitations preclude any attempt to itemize the innumerable commodities which have been developed as related commodities in drug stores. It is significant, however, that 37.1 per cent of drug-store sales relate to commodities other than strictly drug-store merchandise, and this indicates a total sale of such commodities of \$626,631,807.

CHAPTER 5.—DRUG STORES AS A MARKET

If the manufacturers of the major commodity lines handled by drug stores wanted to contact every drug-store buyer in the country it would require 53,488 separate contacts to reach the 58,258 drug stores and the 959 drug wholesalers: And this would not include wholesalers of candy, tobacco products, and fountain supplies and sirups nor the wholesalers of periodicals and magazines. Also these 53,488 contacts do not take into account the department stores, general stores, variety stores, etc. which are large outlets for many of the same commodity lines.

There are 52,280 independent drug-store proprietors who buy for their stores, either directly from the manufacturer or from their nearby wholesalers. The stores for which they buy do a total retail business of \$1,377,948,000 of which the sale of drugs and patent medicines represents approximately 45.6 per cent, fountain sales about 14.5 per cent, toilet goods about 13 per cent and cigars, cigarettes, and tobacco products 12.8 per cent. There are in addition 249 drug-chain buyers directing the purchases in certain commodity lines for stores with sales aggregating \$312,302,000.

There are also 959 wholesale drug houses whose total sales (wholesale valuation) amounted to \$486,779,000 in 1929. These wholesalers supply the independent stores with a large part of their merchandise especially in goods where the turnover is not sufficiently rapid to make purchasing direct from the manufacturer more economical. In the case of the small independent stores, practically all of the merchandise handled is purchased through wholesalers. It is impossible to determine from the data available how many of the independently operated stores are buying their merchandise direct from the manufacturers, but obviously a substantial proportion of the stock of independent drug stores is purchased through wholesalers.

In the case of the chains, where quantity purchases are made wherever possible, the bulk of the merchandise is purchased direct from manufacturers or their agents, with the purchases from wholesalers limited to specialties and items of merchandise for which there is infrequent demand.

Where the buyers are located.—Table on page 26 shows where the drug-store buyers are located. Few, if any, national distributors in the field would ever have occasion to contact all the drug-store buyers. However, the value of this information lies in having authentic knowledge of the number of potential buyers in any geographic division or combination of divisions in the country. These data compiled with the commodity information shown in each of the separate State reports, provide a sound index for establishing sales quotas and for planning promotional campaigns.

Nearly 22 per cent of the buyer contacts are located in the Middle Atlantic Division, centering on New York City, in which city alone there are 3,673 buyers. Philadelphia contains 1,428; Pittsburgh, 314; and Buffalo, 272. These 4 cities alone contain approximately half the buyer contacts in the division. The East North Central Division, centering on Chicago, has 20 per cent of the buyer contacts of the country. Chicago has 1,693; Indianapolis, 234; Cleveland, 405; Detroit, 722; Cincinnati, 229; and Milwaukee, 338.

More than 6 per cent of the buyers are in New England centering on Boston, which itself has 372. Over 13 per cent are in the West North Central Division. St. Louis has 550 and Kansas City 334. The South Atlantic Division has more than 10 per cent of the drug-store buyers with 388 in Baltimore, 164 in Atlanta, and 187 in Washington, D.C. The States west of the Mississippi comprising the West South Central Division have more than 11 per cent of the contacts. New Orleans has 249; Dallas, 215; San Antonio, 130; and Oklahoma City, 112. The Mountain States contain 3 per cent of the buyer contacts with Denver showing 203. The Pacific Coast States have nearly 8 per cent of the total drug-store buyers of which San Francisco has 328, Los Angeles 792, and Seattle 206.

The table on the following page shows the number of buyer contacts in each of the 9 geographic divisions and in 19 principal cities. In the preparation of this table all chain stores are eliminated from each division and from each of the cities, and the entire buying power or sales volume of such chains is added to State or city where the buying offices are located. Only those cities are listed in which there were 3 or more drug chain headquarters unless at the same time there were an adequate number of drug wholesalers. In a few instances, sales figures are necessarily eliminated to avoid disclosure of individual operations, but the deleted amounts are sufficiently large to warrant the city's inclusion in the table. In some of the cities the number of drug wholesalers is not disclosed by the wholesale census and therefore can not be shown in this table. The fact that none are shown does not necessarily mean that there are none in those cities.

CENSUS OF DISTRIBUTION

RETAIL STORE BUYERS—DRUGS
(Drug stores, drug chains, and drug wholesalers) ¹
[Sales shown in thousands of dollars]

DIVISIONS AND CITIES	SINGLE-STORE INDEPENDENT CONTACTS		2-3 STORE INDEPENDENT CONTACTS		CHAIN-STORE CONTACTS (CENTRAL OFFICES)		WHOLESALE-MERCHANT CONTACTS		Total buyer contacts	Per cent of total contacts
	Stores	Sales	Contacts	Sales	Contacts	Sales	Number	Sales		
U. S. totals.....	50,235	1,218,164	2,045	161,784	249	312,302	950	486,779	53,486	100.00
NEW ENGLAND.....	3,378	88,451	138	10,649	15	3,768	63	23,883	3,806	6.7
Boston, Mass.....	332	10,029	21	1,730	3	779	16	5,280	372	-----
MIDDLE ATLANTIC.....	10,846	261,672	436	31,003	42	128,982	303	118,537	11,027	21.7
New York, N. Y.....	3,353	84,191	135	9,710	10	115,297	175	65,815	3,073	-----
Philadelphia, Pa.....	1,333	22,344	61	3,675	6	4,057	28	19,712	1,428	-----
Buffalo, N. Y.....	240	6,263	15	1,171	2	(x)	10	5,842	372	-----
Pittsburgh, Pa.....	286	7,884	12	1,246	4	1,383	12	10,080	314	-----
E. N. CENTRAL.....	9,993	254,857	447	37,353	62	94,265	184	102,288	10,686	20.0
Chicago, Ill.....	1,581	46,115	71	5,985	5	47,667	30	26,328	1,093	-----
Cleveland, Ohio.....	367	9,684	15	1,656	4	3,237	10	10,052	405	-----
Cincinnati, Ohio.....	217	5,600	10	900	2	(x)	(x)	(x)	(x)	-----
Indianapolis.....	214	5,231	17	1,292	3	7,702	(x)	(x)	(x)	-----
Ind.....	58	1,857	3	131	3	3,401	(x)	(x)	(x)	-----
Tulsa, Okla.....	645	19,105	47	3,707	14	8,930	16	10,540	722	-----
Detroit, Mich.....	90	2,374	7	538	2	(x)	(x)	(x)	(x)	-----
Grand Rapids, Mich.....	306	7,848	13	763	1	(x)	18	6,020	338	-----
Milwaukee, Wis.....	306	7,848	13	763	1	(x)	18	6,020	338	-----
W. N. CENTRAL.....	6,385	145,504	195	15,146	26	14,747	95	53,504	7,150	13.4
St. Louis, Mo.....	514	11,897	21	1,633	3	471	12	4,644	550	-----
Kansas City, Mo.....	316	7,983	13	894	5	9,737	(x)	(x)	(x)	-----
SOUTH ATLANTIC.....	5,062	116,887	214	16,515	24	30,512	105	44,278	5,405	10.1
Washington, D. C.....	175	5,507	9	4,041	1	(x)	2	(x)	187	-----
Atlanta, Ga.....	145	4,056	10	720	2	(x)	7	3,601	104	-----
Baltimore, Md.....	338	7,095	30	2,255	2	(x)	17	8,147	388	-----
E. S. CENTRAL.....	3,082	70,360	80	6,353	9	5,791	48	20,623	3,210	6.0
Birmingham, Ala.....	106	2,599	4	314	2	(x)	(x)	(x)	(x)	-----
W. S. CENTRAL.....	5,750	133,348	215	17,289	32	18,709	64	45,620	6,061	11.3
New Orleans, La.....	235	4,013	7	644	3	2,550	4	6,792	249	-----
Dallas, Tex.....	200	5,267	5	596	3	2,363	7	6,810	215	-----
MOUNTAIN.....	1,549	41,339	60	5,202	11	3,663	22	12,409	1,642	3.1
Denver, Colo.....	185	4,262	7	487	3	1,797	8	5,466	233	-----
PACIFIC.....	3,740	103,746	260	22,269	28	11,865	75	50,037	4,163	7.7
Los Angeles, Calif.....	761	22,070	57	4,776	11	5,108	23	24,240	792	-----
Seattle, Wash.....	181	4,068	12	857	3	3,405	10	5,144	206	-----
San Francisco, Calif.....	277	6,814	25	2,396	4	996	22	12,600	328	-----

(x) Indicates number can not be shown.

¹ Does not include department stores, general stores, variety stores, etc., which are large outlets for many kinds of merchandise, particularly toiletries.

This table is in agreement with other tables in this report except that the multiunit independents have been reduced to one buyer for each separate organization. It does not take into consideration the buyers for department stores, specialty stores, variety stores, general stores, and other competitors of drug stores.

CHAPTER 6.—ALL DRUG STORES LOCATED IN THE CHICAGO-MILWAUKEE AREA ANALYZED BY SIZE OF BUSINESS AND BY SIZE OF CITY

The preceding chapters of this report have been devoted to a discussion of national and State averages, supplemented by separate calculations for certain individual cities, in the belief that these general analyses are of maximum value to the greatest number of persons interested in drug store operations.

This chapter is devoted to a detailed analysis of the operating expenses of drug stores in the 22 counties located in reasonably close proximity to the cities of Chicago and Milwaukee. This territory, which has been designated as the Chicago-Milwaukee area, contains the following counties:

Illinois, 12 counties		Indiana, 3 counties	Wisconsin, 7 counties
Boone.	Kankakee.	Lake.	Dodge.
Cook.	Kendall.	Laporte.	Jefferson.
De Kalb.	Lake.	Porter.	Kenosha.
Du Page.	La Salle.		Milwaukee.
Grundy.	McHenry.		Racine.
Kane.	Will.		Sheboygan.
			Waushara.

The Chicago-Milwaukee area was selected for special study because the 22 counties comprising it contain a representative number of cities in each of the several size-of-city groups. There are 164 cities and towns of varying size from 1,000 to more than 3,000,000 population as well as a large rural population. All cities and towns are grouped according to size. In addition to Chicago and Milwaukee (the 2 cities in the over 150,000 population group) containing 65.13 per cent of the total population, there are 8 cities with populations ranging from 50,000 to 150,000, containing 8.75 per cent of the population of the area, 9 cities in the group from 25,000 to 50,000 population, containing 5.47 per cent of the population, 25 cities in the 10,000 to 25,000 group, containing 5.51 per cent of the population, 30 places from 5,000 to 10,000 population containing 3.52 per cent of the population and 90 places 1,000 to 5,000 population.

Following is a table showing by counties the number of incorporated cities and towns in each of the respective size-of-city groups:

CITIES AND TOWNS IN THE CHICAGO-MILWAUKEE AREA

COUNTIES	POPULATION					
	Over 150,000	50,000 to 150,000	25,000 to 50,000	10,000 to 25,000	5,000 to 10,000	1,000 to 5,000 ¹
Total for area.....	2	8	9	25	30	90
Illinois:						
Boone.....					1	3
Cook.....	1	3	2	12	6	34
De Kalb.....					1	3
Du Page.....				1	7	3
Grundy.....					1	1
Kane.....			2		2	4
Kankakee.....				1		4
Kendall.....						1
Lake.....			1	1	3	7
La Salle.....				3	2	4
McHenry.....					1	4
Will.....			1			7
Indiana:						
Lake.....		3		1	1	5
La Porte.....			1	1		
Porter.....					1	1
Wisconsin:						
Dodge.....				1	2	3
Jefferson.....					1	3
Kenosha.....		1				
Milwaukee.....	1		1	4	1	1
Racine.....		1				1
Sheboygan.....			1			3
Waushara.....						1

¹ Includes incorporated places only, but not the unincorporated or rural areas or any places of less than 1,000 population.

There were 3,053 drug stores operated in the Chicago-Milwaukee area in 1929. The aggregate sales of these stores amounted to \$117,188,947 for the same year. Total operating expenses were \$33,956,325 for an average operating cost of \$28.98 per \$100 of sales, compared with \$27.11 for the United States as a whole. This amount included pay roll, proprietors' compensation, interest, light, heat, power, delivery costs, and all other operating expenses.

Wage costs, by far the largest single item of expense, amounted to \$18,978,324, an average for the 3,053 stores of \$16.19 for each \$100 of sales. Wage costs include wages paid to employees, and proprietors' compensation computed at the same rate as that paid to full-time employees. This computed figure was used instead of the reported salaries of proprietors because many stores failed to report compensation for proprietors while others reported amounts which were obviously out of all proportion to sales.

Rent, the next largest single item of expense averaged \$7.36 for each \$100 of sales. In obtaining this ratio of rent to sales, only those stores which were operating in leased premises were used. Stores operating in owned premises or in premises which were partly owned and partly leased were excluded. All rents are included in total operating expenses.

Stores and sales by size of city.—Nearly 72 per cent of the stores (2,191) in the area were located in the two cities having a population of more than 150,000 and their sales represent more than 75 per cent of the total drug-store sales of the entire area of 22 counties. Nearly 8 per cent of the stores, doing slightly more than 8 per cent of the business, were located in cities having from 50,000 to 150,000

population. Five per cent of the stores, with 5 per cent of the sales, were located in cities from 25,000 to 50,000 population while 4½ per cent of the stores with 4½ per cent of the sales were found in places from 10,000 to 25,000 population. The incorporated places with a population of from 5,000 to 10,000 contained only 2.82 per cent of the stores while the sales of these stores represented 2.45 per cent of the total sales of the area. In the places of less than 5,000 population were found 7.70 per cent of the stores. These small-town drug stores were doing but 4.39 per cent of the business for the area. Following is a brief table showing the proportion of stores and sales in each of these size-of-city groups, related to the proportion of the population in each size group:

STORES AND SALES BY SIZE OF CITY

SIZE OF CITY GROUPS	Per cent of population	DRUG STORES		DRUG STORE SALES	
		Stores	Per cent	Sales	Per cent
Totals for the area.....	100.00	3,053	100.00	\$117,188,947	100.00
Cities of more than 150,000.....	65.13	2,191	71.78	88,033,394	75.12
Cities from 50,000 to 150,000.....	8.75	240	7.86	9,644,375	8.23
Cities from 25,000 to 50,000.....	5.47	162	5.31	6,170,185	5.27
Cities from 10,000 to 25,000.....	5.51	139	4.55	5,318,197	4.54
Places from 5,000 to 10,000.....	3.52	86	2.82	2,865,223	2.45
Places of less than 5,000.....	11.62	236	7.70	5,157,573	4.39

Expenses compared in various size-of-city groups.—In the studies previously completed, containing analyses of expenses, in other kinds of business, the ratios have shown that expenses generally increase as the size of city increases. National averages for drug stores, as shown in chapter 1 of this report, bear out the same conclusions for drug stores. However, valuable as the national averages are as general indexes, state and city averages (the bases for which may be found in the separate State reports on retail distribution) should be used whenever possible for studies of any specific area. The soundness of this precautionary measure is clearly established by the expense variations brought out in this study of the Chicago-Milwaukee area. The data shown in the following table, indicate that the size of city does not consistently affect the cost of doing business within the area. In the accompanying table, rent is the only item of expense which steadily increases with the size of city.

While the area covered by this special study includes a fairly representative number of cities of all sizes (see table on p. 28 for number of cities in the various size-of-city groups), the influence of the cities of Chicago and Milwaukee are reflected over a large part of the area. In view of the difference brought to light in this study, it seems important to emphasize the admonition to use State and city averages whenever possible and use national ratios only as a general index and check on the city and State ratios. This is necessary because in any kind of business there are great differences between individual stores which in extreme cases make them practically different kinds of stores. These differences disappear in any grouping of a large number of stores, but may appear as significant differences in a close analysis.

Total operating expenses for the area discussed.—The total operating expenses of the 3,053 drug stores average \$28.98 for each \$100 of sales. Wage costs account for \$16.19 of this amount while the rent averages \$7.36 for the entire area. The highest total operating-expense ratio is found in the group containing the cities of more than 150,000 population where the ratio is \$29.81 per \$100 of sales. The second highest total expense is found in the groups containing the cities ranging

in size from 25,000 to 50,000 population where the average is \$29.00 per \$100 of sales. The 5,000 to 10,000 group is third with \$27.40. The 50,000 to 150,000 group of cities is fourth with \$27.06. The group of cities with population from 10,000 to 25,000 follows with a ratio of \$25.88 while the lowest ratio (23.61 per \$100 of sales) is found in the group containing the places of less than 5,000 population.

Wage ratios compared.—Average wage costs in the various size-of-city groups follow a slightly different arrangement from that of total operating expense. The highest wage ratio is found in the group of more than 150,000 population. The 5,000 to 10,000 population group is second with \$15.85. This group is third in total operating costs. Third in average wage costs is the group containing the cities of 25,000 to 50,000 population, which was second in total expense. The 50,000 to 150,000 group is fourth with an average of \$15.02. This follows the same order as total operating cost, as is the case with the over 150,000 cities groups. The 10,000 to 25,000 cities with a wage ratio of \$14.91 and total operating cost of \$25.88 are fifth in both cases. The last group, containing places with less than 5,000 population shows a wage ratio of \$14.31, which is the lowest of the six size groups.

Variation in rentals in different sizes of cities.—It has been shown in other studies that as a general rule the rental costs for leased premises increase in direct relation to the size of the city. In the case of drug stores there is one exception but the amount of difference is not considered to be of sufficient importance to challenge previous conclusions. It is quite possible that the presence of one unusually high-class city or the reverse, in either of the two groups affected, would result in the minor difference found.

Following is a table showing the average expense ratios for the entire area and for each of the six size-of-city groups:

EXPENSES COMPARED BY SIZE OF CITY

SIZE-OF-CITY GROUPS	Number of stores	Wage costs per \$100 of sales	Total operating expense per \$100 of sales	Rent paid in leased premises per \$100 of sales
Average for entire area.....	3,053	\$16.10	\$28.08	\$7.36
Average for cities over 150,000.....	2,101	16.58	29.81	7.95
Average for 50,000 to 150,000 cities.....	240	15.02	27.06	6.11
Average for 25,000 to 50,000 cities.....	162	15.24	29.00	6.25
Average for 10,000 to 25,000 cities.....	139	14.91	25.88	4.84
Average for 5,000 to 10,000 places.....	86	15.85	27.40	4.72
Average for under 5,000 places.....	235	14.31	23.61	3.84

Stores and sales by size-of-business groups.—More than 6 per cent of the drug stores in the Chicago-Milwaukee area had annual sales of more than \$100,000 each. The aggregate sales of these 186 stores amounted to \$31,830,466 (27.16 per cent). Annual sales of \$18,356,578 (15.66 per cent) were reported by the 243 stores (7.96 per cent) whose annual sales were between \$60,000 and \$100,000. The size-of-business group containing stores with sales from \$25,000 to \$60,000, which contains the largest number of stores as well as the greatest total sales of any single group, shows 38.42 per cent of the area's sales from 39.40 per cent of

the stores. The \$10,000 to \$25,000 group contains 37.50 per cent of the stores but had only 17.32 per cent of sales, while in the group of stores with sales of less than \$10,000 each, the total sales were only 1.44 per cent from 9 per cent of the area's drug stores. A table showing the relative importance of the size-of-business groups follows:

STORES AND SALES BY SIZE-OF-BUSINESS GROUPS

SIZE-OF-BUSINESS GROUPS	DRUG STORES		DRUG STORE SALES	
	Stores	Per cent	Sales	Per cent
Total for entire area.....	3, 053	100. 00	\$117, 188, 947	100. 00
Sales of more than \$100,000.....	150	0. 00	31, 830, 466	27. 16
Sales from \$50,000 to \$100,000.....	243	7. 96	18, 356, 578	15. 66
Sales from \$25,000 to \$50,000.....	1, 291	30. 40	45, 070, 879	38. 42
Sales from \$10,000 to \$25,000.....	1, 144	37. 50	20, 295, 630	17. 32
Sales under \$10,000.....	270	0. 05	1, 636, 388	1. 44

Expenses of drug stores compared by size-of-business groups.—Recognizing the value of an expense analysis made on the basis of the size of business, a special tabulation has been prepared for drug stores showing how expense ratios vary in the different size-of-business groups.

This special tabulation would seem to indicate that, without exception, in the Chicago-Milwaukee area the operating costs of drug stores decrease proportionately as the stores increase in size (volume of sales), although when the figures for the independent stores are isolated the expense ratio rises again with the largest businesses. The highest expense ratio is shown in the stores with less than \$10,000 of annual sales. Operating costs in these stores amounted to \$47.47 for each \$100 of sales, of which wage costs averaged \$28.53 and rent averaged \$12.52. In the stores with sales ranging from \$10,000 to \$25,000 total expense averaged \$30.40, per \$100 of sales, with wages averaging \$17.39 and rent \$7.75. This 17-point difference in operating costs between these two sizes of stores indicates the limited possibilities for profit in stores doing less than \$10,000 of business annually.

The group with annual sales ranging from \$25,000 to \$60,000 shows an average operating expense of \$28.57 per \$100 of sales, which is about one-half point under the \$60,000 to \$100,000 group with its average of \$29.01. The slight variation in expenses between these two groups suggests that within the range of these two groups there is an ideal size which may be operated with the greatest degree of economy without sacrificing any of the stores' individuality and effectiveness.

The \$25,000 to \$60,000 group, with its total operating cost of \$28.57 per \$100 of sales, has a wage cost averaging \$16.79 and a rental cost averaging \$6.73. In the \$60,000 to \$100,000 group the wage ratio is \$16.25 and rent is \$6.65. Since the total operating cost of these stores is \$29.01 it is clear that all other expenses amount to only \$6.11. The 186 stores, in the 22 counties comprising this area, with sales in 1929 in excess of \$100,000 each, show the lowest operating costs of any of the five-size groups. Their total expense ratio of \$27.70 per \$100 of sales is made up of wage costs, \$13.93, rent \$8.14 (the highest in any size group) and all other expenses of \$5.63 for each \$100 of sales.

A summary table follows, showing the variations in expense ratios between each of the five-size groups:

SIZE-OF-BUSINESS GROUPS	Number of stores	EXPENSES FOR EACH \$100 OF SALES		
		Wage costs per \$100 of sales	Total operating expense per \$100 of sales	Rent paid in leased premises per \$100 of sales
Total for entire area.....	3,063	\$16.19	\$28.98	\$7.30
Sales of more than \$100,000.....	180	13.93	27.70	8.14
Sales from \$60,000 to \$100,000.....	243	16.25	29.01	6.65
Sales from \$25,000 to \$60,000.....	1,204	16.79	28.57	6.73
Sales from \$10,000 to \$25,000.....	1,144	17.39	30.40	7.75
Sales under \$10,000.....	276	28.53	47.47	12.52

Comparison between chains and independents operating in the Chicago-Milwaukee area.—There were 283 chain drug stores and 2,770 independent drug stores in operation during 1929 in the Chicago-Milwaukee area. The chain sales totaled \$33,319,565 as compared with sales of \$83,869,382 by the independently operated stores. Throughout all census reports, multiunit retailers with two or three stores are excluded from the chain classification and are considered multiunit independents.

Degree of chain penetration in various sizes of cities.—Nearly 90 per cent of the chain stores in the entire area were located and operated in Chicago and Milwaukee, the two cities in the area having more than 150,000 population. The sales of these stores represented 90.86 per cent of all chain drug-store sales in the area. The group of cities with 50,000 to 150,000 population contained 7.42 per cent of the chain drug stores whose sales were 6.12 per cent of the chain store total. In the cities from 25,000 to 50,000 population were found 2.47 per cent of the chain stores doing 2.89 per cent of the chain business.

Only one chain drug store was operated in the 10,000 to 25,000 population group while in the 5,000 to 10,000 and in the under 5,000 group no chain drug stores were found. No data on the one chain store located in the 10,000 to 25,000 group can be shown because it would disclose individual store operations. It is evident, from an examination of the data contained in Table 9 that in 1929 the retail drug-store chains had not penetrated, to any appreciable extent into the cities below 50,000 population in the Chicago-Milwaukee area, and that for the most part their stores were located in the cities having a population in excess of 150,000. (In this connection attention is directed to the data contained in Merchandising Series Report No. R-66 entitled "Retail Distribution—Drug Store Chains" covering all drug-store chains in the United States which brings out substantially the same conclusions as are developed in this study of one specific area.)

Average size of drug stores operated by the chains.—The Chicago-Milwaukee area contained only 283 chain drug stores which represented 9.27 per cent of all drug stores in the area. However, the sales of these stores amounted to more than 28 per cent of the area's total drug-store sales. Of this total of chain drug stores, more than half had annual sales in excess of \$100,000 and their aggregate sales were of \$25,899,571 or 77.73 per cent of the total chain drug-store sales for the area. More than 22 per cent of the stores had annual sales ranging from \$60,000 to \$100,000 while about 15 per cent were in the \$25,000 to \$60,000 groups. The \$10,000 to \$25,000 group contained slightly more than 9 per cent

of the chain drug stores while the group under \$10,000 had only four chain stores, each of which were new stores opened during 1929 and in operation for only a portion of the year.

Chains predominate as large-store operators.—Nearly 80 per cent of the drug stores with annual sales in excess of \$100,000 were operated by the chains and they did about \$1 per cent of the total business of this large-store group. In the group of stores with annual sales ranging from \$60,000 to \$100,000 the chains operate 25.93 per cent of the stores doing 27.62 per cent of the business of the group. The 211 chain drug stores with sales of more than \$60,000 actually accounted for more than 26 per cent of the entire sales volume of all drug stores in the area.

Table 9 of this report contains a detailed analysis of the 3,053 drug stores located in the Chicago-Milwaukee area. It shows complete sales data by size-of-business groups as well as by size-of-city groups. It further classifies the expenses of the business on the same basis. The four chain stores in the under \$10,000 volume-group are not comparable because they had operated only for part of the year.

Expenses of chains and independents compared.—Table 9 also contains an interesting comparison of operating expenses between chain drug stores and independent drug stores. This expense analysis is further segregated to show separate data by size-of-business groups and by size-of-city groups. The expense ratios show that chain stores doing more than \$100,000 a year in cities having more than 50,000 population are operated at an expense rate approximately 2 per cent lower than that of the independents in the same size of city. The chain stores operating with a volume of less than \$100,000 annually in the cities with more than 50,000 population show higher expense ratios than the independents. The other groups contain few if any chain stores and for that reason no further multiple correlation is possible. Wage ratios of the chains are also lower than those of the independents in both size-of-city groups above mentioned and in the same size-of-store groups. Rents paid by the chains are consistently higher than those of the independents. For full detailed information on wage costs, total operating expenses and rents, see Table 9 previously referred to which contains the data arranged by size of business for each of the six size-of-city groups.

TABLE 1.—DRUG STORES AND SALES, BY STATES AND GEOGRAPHIC DIVISIONS AND BY SIZE OF CITY

DIVISIONS AND STATES	TOTAL			CITIES OVER 30,000 POPULATION			
	Stores	Sales	Per cent of United States total	Number of cities	Stores	Sales	Per cent of State total
United States, total.....	58,258	\$1,690,398,682	100.00	310	28,002	\$992,184,401	58.70
NEW ENGLAND.....	3,902	119,870,631	7.09	45	2,243	74,054,367	61.78
Connecticut.....	774	22,815,732	1.35	8	432	13,405,421	58.70
Maine.....	378	10,265,955	.61	2	69	2,698,693	25.31
Massachusetts.....	1,971	64,378,590	3.81	26	1,395	47,737,953	74.15
New Hampshire.....	228	6,816,603	.40	2	59	1,702,333	24.97
Rhode Island.....	403	11,376,597	.67	4	288	8,000,067	75.08
Vermont.....	148	4,217,154	.25				
MIDDLE ATLANTIC.....	12,614	366,991,948	21.72	64	8,670	205,894,540	72.45
New Jersey.....	1,817	50,688,726	3.00	22	1,036	31,605,859	62.47
New York.....	6,392	203,102,700	12.02	22	5,067	165,741,916	81.60
Pennsylvania.....	4,405	113,200,508	6.70	20	2,527	68,480,765	60.50
EAST NORTH CENTRAL.....	12,006	388,661,013	22.70	81	7,055	270,454,015	70.49
Illinois.....	3,809	131,448,830	7.78	20	2,488	101,045,220	78.87
Indiana.....	1,621	46,627,488	2.76	13	727	27,181,320	58.20
Michigan.....	2,410	78,700,266	4.06	15	1,489	55,906,882	71.07
Ohio.....	2,868	90,819,227	5.37	23	1,769	60,671,219	72.75
Wisconsin.....	1,292	35,975,202	2.13	10	592	20,159,374	56.04
WEST NORTH CENTRAL.....	7,515	186,200,812	11.02	21	2,385	79,869,106	42.80
Iowa.....	1,448	38,003,676	1.95	7	316	9,856,915	26.80
Kansas.....	1,134	30,715,413	1.82	3	224	8,063,408	26.25
Minnesota.....	1,079	28,028,262	1.66	3	467	15,083,800	53.81
Missouri.....	2,336	59,829,797	3.53	5	1,163	39,022,432	66.22
Nebraska.....	376	20,384,946	1.21	2	206	6,589,417	32.32
North Dakota.....	285	6,182,443	.37				
South Dakota.....	367	8,056,285	.48	1	10	647,644	8.04
SOUTH ATLANTIC.....	5,868	163,375,498	9.66	34	2,268	82,087,234	50.01
Delaware.....	107	2,514,577	.15	1	63	1,756,283	69.84
District of Columbia.....	240	16,413,828	.97	1	240	16,413,828	100.00
Florida.....	1,027	24,602,999	1.46	5	384	10,541,995	42.86
Georgia.....	1,132	27,869,328	1.64	5	367	12,471,224	44.76
Maryland.....	654	19,052,349	1.13	3	473	14,009,065	76.08
North Carolina.....	926	24,970,944	1.48	8	240	6,491,088	38.00
South Carolina.....	530	11,891,011	.70	2	74	2,248,626	18.91
Virginia.....	771	22,709,766	1.34	6	304	10,799,211	47.51
West Virginia.....	475	13,344,766	.79	3	123	4,364,314	32.70
EAST SOUTH CENTRAL.....	3,468	87,645,881	5.19	13	1,050	35,866,981	40.92
Alabama.....	945	23,398,535	1.38	3	270	9,171,725	39.20
Kentucky.....	887	22,766,643	1.35	4	304	10,307,690	45.54
Mississippi.....	710	16,344,178	.97	2	51	1,902,084	11.04
Tennessee.....	926	25,136,525	1.49	4	425	14,426,532	57.39
WEST SOUTH CENTRAL.....	6,488	172,791,285	10.21	21	1,768	84,400,444	37.31
Arkansas.....	326	17,310,073	1.02	2	89	2,820,830	16.33
Louisiana.....	864	21,090,101	1.25	3	354	10,415,998	49.39
Oklahoma.....	1,280	37,307,270	2.21	3	254	10,090,001	26.40
Texas.....	3,618	97,083,841	5.73	13	1,061	40,269,709	41.47
MOUNTAIN.....	1,778	54,063,599	3.20	8	442	17,837,049	32.97
Arizona.....	166	7,255,425	.43	2	55	3,061,036	42.19
Colorado.....	648	18,273,293	1.08	3	289	10,237,793	56.03
Idaho.....	202	5,548,620	.33				
Montana.....	272	7,100,141	.42	1	21	895,569	12.51
Nevada.....	46	1,076,189	.06				
New Mexico.....	133	4,298,372	.25				
Utah.....	187	6,109,608	.36				
Wyoming.....	124	3,776,891	.23	2	77	3,642,741	59.62
PACIFIC.....	4,619	155,768,020	9.21	23	2,731	101,068,585	64.89
California.....	3,206	115,831,475	6.85	17	2,062	80,527,489	69.52
Oregon.....	597	14,820,466	.88	1	238	6,402,230	43.20
Washington.....	846	25,116,079	1.48	5	401	14,138,866	56.30

TABLE 1.—DRUG STORES AND SALES, BY STATES AND GEOGRAPHIC DIVISIONS AND BY SIZE OF CITY—Continued

DIVISIONS AND STATES	CITIES 10,000 TO 80,000 POPULATION				PLACES UNDER 10,000 POPULATION		
	Number of cities	Stores	Sales	Per cent of State total	Stores	Sales	Per cent of State total
United States, total.....	645	5,773	\$202,001,858	11.95	23,883	\$490,202,423	29.35
NEW ENGLAND.....	84	685	21,008,061	17.52	974	24,808,210	20.70
Connecticut.....	12	117	3,560,270	15.60	225	5,850,041	25.04
Massachusetts.....	7	69	2,207,101	21.60	240	5,400,161	53.19
New Hampshire.....	44	322	9,750,218	15.16	254	6,884,419	10.69
Rhode Island.....	8	69	2,112,664	30.09	110	3,001,706	44.04
Vermont.....	10	93	2,330,160	20.56	22	427,474	3.76
Vermont.....	3	25	1,032,745	24.49	133	3,184,409	75.51
MIDDLE ATLANTIC.....	162	1,212	30,004,032	10.87	2,732	61,193,371	16.08
New Jersey.....	33	214	7,704,084	15.20	487	11,318,783	22.33
New York.....	47	351	13,118,222	6.46	984	24,242,571	11.94
Pennsylvania.....	72	617	19,081,726	16.86	1,261	25,632,017	22.64
EAST NORTH CENTRAL.....	137	1,085	38,551,800	10.05	3,805	74,655,108	19.46
Illinois.....	38	270	10,435,731	7.94	1,042	19,907,870	15.19
Indiana.....	21	199	7,234,134	15.52	695	12,212,034	26.19
Michigan.....	25	195	7,248,065	0.20	732	15,544,719	19.73
Ohio.....	36	273	8,890,708	9.70	830	15,857,300	17.46
Wisconsin.....	17	140	4,742,652	13.18	500	11,073,170	30.78
WEST NORTH CENTRAL.....	68	600	22,633,270	12.16	4,530	83,705,346	44.05
Iowa.....	14	140	4,555,074	13.81	692	18,591,787	50.33
Kansas.....	17	167	6,404,151	21.05	743	16,187,854	52.70
Minnesota.....	11	63	2,037,704	0.41	549	10,307,108	35.78
Missouri.....	11	122	4,109,315	6.87	1,061	16,098,050	26.91
Nebraska.....	6	48	1,880,459	0.23	622	11,915,070	58.45
North Dakota.....	4	29	1,518,544	24.50	256	4,663,899	75.44
South Dakota.....	5	31	1,467,123	18.21	307	5,941,518	73.75
SOUTH ATLANTIC.....	67	616	21,496,069	13.16	2,984	59,191,595	36.23
District of Columbia.....					44	768,204	36.16
Florida.....	9	133	4,024,852	16.36	510	10,036,162	40.70
Georgia.....	10	98	3,250,952	11.66	607	12,147,162	43.69
Maryland.....	3	18	907,449	4.76	163	3,535,235	18.65
North Carolina.....	13	108	3,739,150	14.97	578	11,746,700	47.03
South Carolina.....	7	82	2,786,726	23.44	380	6,855,059	57.05
Virginia.....	8	92	3,492,158	15.38	375	8,427,387	37.11
West Virginia.....	7	85	3,205,370	24.70	297	5,685,016	42.60
EAST SOUTH CENTRAL.....	35	366	11,791,085	13.45	2,052	39,987,215	45.03
Alabama.....	11	124	4,049,387	17.31	551	10,177,423	43.49
Kentucky.....	9	102	2,824,652	12.41	481	9,574,401	42.05
Mississippi.....	11	105	3,550,724	21.76	554	10,885,420	66.00
Tennessee.....	4	35	1,361,022	5.41	466	9,349,971	37.20
WEST SOUTH CENTRAL.....	48	615	21,912,011	12.68	4,115	86,409,830	50.01
Arkansas.....	7	114	3,109,687	17.96	623	11,375,550	65.71
Louisiana.....	5	78	2,270,861	10.79	432	8,397,242	39.22
Oklahoma.....	13	132	6,109,915	16.38	894	20,230,454	54.22
Texas.....	23	291	10,416,648	10.73	2,166	46,408,584	47.80
MOUNTAIN.....	19	169	7,457,536	13.79	1,167	28,799,014	53.24
Arizona.....	5	38	1,527,910	8.30	321	6,507,680	35.61
Colorado.....	2	16	783,662	14.12	130	4,765,058	85.88
Idaho.....	5	49	1,921,570	26.84	202	4,342,995	60.65
Montana.....	1	12	672,142	34.13	34	1,104,047	65.87
Nevada.....	3	28	1,381,843	32.19	105	2,911,529	67.81
New Mexico.....	1	6	207,665	3.40	104	2,259,362	39.99
Utah.....	2	20	1,062,938	28.14	104	2,718,953	71.86
Wyoming.....							
PACIFIC.....	45	424	17,246,701	11.07	1,464	37,452,734	24.04
California.....	30	276	11,240,572	0.70	838	24,035,414	20.78
Oregon.....	5	54	2,023,987	13.66	275	6,394,249	49.14
Washington.....	10	94	3,982,142	15.85	351	6,995,071	27.85

TABLE 2.—DRUG STORES CLASSIFIED BY SIZE OF BUSINESS

[Sales expressed in thousands of dollars]

	Total, drug stores	DRUG STORES	
		Without fountains	With fountains
United States total:			
Number of stores.....	58,258	23,414	34,844
Per cent of stores.....	100.00	100.00	100.00
Net sales.....	\$1,690,399	\$641,139	\$1,149,260
Per cent of net sales.....	100.00	100.00	100.00
STORES WITH ANNUAL SALES OF—			
\$500,000 and over:			
Number of stores.....	25	3	22
Per cent of stores.....	0.04	0.01	0.06
Net sales.....	\$23,664	\$3,007	\$10,937
Per cent of net sales.....	1.40	0.68	1.74
\$300,000 to \$499,999:			
Number of stores.....	100	18	82
Per cent of stores.....	0.17	0.08	0.24
Net sales.....	\$35,991	\$6,367	\$20,624
Per cent of net sales.....	2.13	1.18	2.68
\$200,000 to \$299,999:			
Number of stores.....	277	47	230
Per cent of stores.....	0.48	0.20	0.66
Net sales.....	\$65,290	\$11,168	\$54,132
Per cent of net sales.....	3.86	2.00	4.71
\$100,000 to \$199,999:			
Number of stores.....	1,204	234	1,000
Per cent of stores.....	2.22	1.00	3.04
Net sales.....	\$174,199	\$30,862	\$143,337
Per cent of net sales.....	10.31	5.70	12.47
\$50,000 to \$99,999:			
Number of stores.....	5,187	1,370	3,817
Per cent of stores.....	8.90	5.85	10.95
Net sales.....	\$342,856	\$88,031	\$254,825
Per cent of net sales.....	20.28	16.27	22.17
\$30,000 to \$49,999:			
Number of stores.....	11,454	3,898	7,550
Per cent of stores.....	19.66	16.65	21.69
Net sales.....	\$431,545	\$148,250	\$285,295
Per cent of net sales.....	25.53	27.03	24.83
\$20,000 to \$29,999:			
Number of stores.....	12,673	4,747	7,926
Per cent of stores.....	21.76	20.27	22.75
Net sales.....	\$308,333	\$114,938	\$193,396
Per cent of net sales.....	18.24	21.24	16.83
\$10,000 to \$19,999:			
Number of stores.....	16,866	7,508	9,358
Per cent of stores.....	28.95	32.07	26.86
Net sales.....	\$249,069	\$109,166	\$139,903
Per cent of net sales.....	14.73	20.17	12.17
\$5,000 to \$9,999:			
Number of stores.....	6,431	3,270	3,155
Per cent of stores.....	11.04	13.99	9.05
Net sales.....	\$48,315	\$24,409	\$23,906
Per cent of net sales.....	2.86	4.61	2.08
Less than \$5,000:			
Number of stores.....	3,951	2,313	1,638
Per cent of stores.....	6.78	9.88	4.70
Net sales.....	\$11,128	\$6,272	\$4,856
Per cent of net sales.....	0.66	1.16	0.42

TABLE 3A.—CREDIT SALES IN DRUG STORES

CLASSIFIED BY DEGREE OF CREDIT	ALL DRUG STORES REPORTING		DRUG STORES WITHOUT FOUNTAINS		DRUG STORES WITH FOUNTAINS	
	United States total stores and sales (these reporting as to their credit activity)	Per cent of stores and sales	Stores and sales	Per cent of stores and sales	Stores and sales	Per cent of stores and sales
Total reporting:						
Number of stores.....	48,953	100.0	19,512	100.0	29,441	100.0
Net sales.....	\$1,426,300	100.0	\$447,466	100.0	\$978,940	100.0
All-cash stores:						
Number of stores.....	26,529	54.2	10,148	52.1	16,381	55.0
Net sales.....	\$775,944	54.4	\$212,994	47.0	\$562,950	57.6
Cash credit stores and proportion of credit:						
1 to 10 per cent credit:						
Number of stores.....	10,015	20.4	3,919	20.1	6,096	20.7
Net sales.....	\$262,744	18.4	\$85,250	19.1	\$177,488	18.1
11 to 20 per cent credit:						
Number of stores.....	4,528	9.3	1,007	0.8	2,621	8.9
Net sales.....	\$131,538	9.2	\$44,041	10.0	\$86,597	8.8
21 to 30 per cent credit:						
Number of stores.....	3,319	6.8	1,417	7.2	1,002	0.5
Net sales.....	\$106,502	7.5	\$38,472	8.0	\$68,030	7.0
31 to 40 per cent credit:						
Number of stores.....	2,414	4.9	1,119	5.7	1,295	4.4
Net sales.....	\$79,184	5.0	\$33,023	7.5	\$46,501	4.7
41 to 50 per cent credit:						
Number of stores.....	1,169	2.4	542	2.8	627	2.1
Net sales.....	\$34,970	2.5	\$14,354	3.2	\$20,616	2.1
51 to 60 per cent credit:						
Number of stores.....	408	0.8	180	0.9	229	0.7
Net sales.....	\$14,979	1.0	\$6,591	1.5	\$8,388	0.8
61 to 70 per cent credit:						
Number of stores.....	229	0.5	113	0.6	116	0.4
Net sales.....	\$7,022	0.5	\$3,367	0.8	\$3,665	0.4
71 to 80 per cent credit:						
Number of stores.....	165	0.3	89	0.4	76	0.3
Net sales.....	\$7,652	0.5	\$5,524	1.2	\$2,128	0.2
Over 80 per cent credit:						
Number of stores.....	179	0.4	78	0.4	101	0.4
Net sales.....	\$5,801	0.4	\$2,344	0.5	\$3,467	0.4

TABLE 3B.—CREDIT SALES IN DRUG STORES, BY STATES

DIVISION AND STATE	TOTAL STORES REPORTING		ALL-CASH STORES		CASH-CREDIT STORES	
	Number of stores	Net sales	Number of stores	Net sales	Number of stores	Net sales
United States, totals.....	48,954	\$1,426,396	26,529	\$775,944	22,425	\$650,452
DIVISION						
NEW ENGLAND.....	3,121	98,623	2,151	65,814	970	32,809
Connecticut.....	609	18,894	408	11,785	201	7,109
Maine.....	332	9,116	201	5,072	131	4,044
Massachusetts.....	1,469	50,202	1,073	35,537	396	14,665
New Hampshire.....	203	6,237	136	3,879	72	2,358
Rhode Island.....	362	10,174	274	7,670	88	2,504
Vermont.....	141	4,000	59	1,871	82	2,129
MIDDLE ATLANTIC.....	9,933	301,988	7,247	212,710	2,686	89,278
New Jersey.....	1,326	38,538	928	26,425	398	12,113
New York.....	4,941	166,607	3,768	120,548	1,173	46,059
Pennsylvania.....	3,666	96,843	2,551	65,737	1,115	31,106
EAST NORTH CENTRAL.....	10,137	321,380	6,211	208,154	3,926	113,226
Illinois.....	3,437	119,936	2,407	89,015	1,030	30,921
Indiana.....	1,319	35,935	767	21,076	552	14,859
Michigan.....	2,026	65,828	1,203	40,556	823	25,272
Ohio.....	2,250	68,838	1,339	42,779	911	25,959
Wisconsin.....	1,105	30,843	495	14,628	610	16,215
WEST NORTH CENTRAL.....	6,528	163,961	2,627	70,698	3,901	93,263
Iowa.....	1,325	30,397	467	10,234	858	20,163
Kansas.....	1,074	29,182	424	11,722	650	17,460
Minnesota.....	844	22,268	293	8,799	551	13,469
Missouri.....	1,934	51,349	958	30,203	976	21,146
Nebraska.....	805	18,915	281	5,979	524	12,936
North Dakota.....	241	5,194	78	1,234	163	3,960
South Dakota.....	305	6,656	126	2,527	179	4,129
SOUTH ATLANTIC.....	5,021	132,395	2,397	60,921	2,624	71,474
Delaware.....	102	2,479	56	1,600	46	979
District of Columbia.....	64	2,257	64	2,257
Florida.....	892	21,126	575	13,057	317	8,069
Georgia.....	1,027	25,528	354	7,996	673	17,532
Maryland.....	489	14,832	362	11,357	127	3,475
North Carolina.....	845	22,970	319	8,164	526	14,806
South Carolina.....	499	11,006	236	4,493	263	6,513
Virginia.....	705	20,994	286	8,784	419	12,210
West Virginia.....	398	11,203	209	5,570	189	5,633
EAST SOUTH CENTRAL.....	3,268	82,985	1,200	29,409	2,068	53,576
Alabama.....	898	22,528	316	7,580	582	14,948
Kentucky.....	827	20,996	313	8,032	514	12,964
Mississippi.....	664	15,505	218	3,796	446	11,709
Tennessee.....	879	23,956	353	10,001	526	13,955
WEST SOUTH CENTRAL.....	5,917	159,484	2,315	52,700	3,602	106,784
Arkansas.....	771	16,300	308	5,529	463	10,771
Louisiana.....	768	19,360	340	7,266	428	12,094
Oklahoma.....	1,191	35,475	581	17,077	610	18,398
Texas.....	3,187	88,349	1,086	22,823	2,101	65,521
MOUNTAIN.....	1,530	46,672	642	16,418	888	30,254
Arizona.....	147	6,474	54	1,827	93	4,647
Colorado.....	571	15,855	271	7,099	300	8,756
Idaho.....	180	4,904	69	1,562	111	3,342
Montana.....	241	6,302	87	2,063	154	4,239
Nevada.....	38	1,513	10	269	28	1,244
New Mexico.....	104	3,412	35	691	69	2,721
Utah.....	136	4,738	63	1,329	73	3,409
Wyoming.....	113	3,474	53	1,573	60	1,896
PACIFIC.....	3,499	118,908	1,739	59,120	1,760	59,788
California.....	2,288	83,843	1,185	43,866	1,103	39,977
Oregon.....	493	13,091	247	5,949	246	7,142
Washington.....	718	21,974	307	9,305	411	12,669

TABLE 4.—DRUG STORES AND SALES—Continued

TYPE OF OPERATION	WEST NORTH CENTRAL DIVISION—continued			
	Total	Cities of over 30,000 population	Cities 10,000 to 30,000 population	Places under 10,000 population
Local chains:				
Stores.....	157	121	19	17
Net sales.....	\$14,496	\$12,626	\$1,145	\$725
Per cent of total, by type.....	7.78	15.81	5.06	0.87
Sectional chains:				
Stores.....	1	1		
Net sales.....	\$70	\$70		
Per cent of total, by type.....	0.04	0.09		
National chains:				
Stores.....	94	90	4	
Net sales.....	\$10,985	\$10,727	\$258	
Per cent of total, by type.....	5.90	13.43	1.14	
Other types of operation:				
Stores.....	19	1		18
Net sales.....	\$533	\$10		\$523
Per cent of total, by type.....	0.29	0.01		0.62
	SOUTH ATLANTIC DIVISION			
Total, all types:				
Stores.....	5,868	2,268	616	2,984
Net sales.....	\$163,375	\$82,686	\$21,497	\$59,192
Per cent of total.....	100.00	100.00	100.00	100.00
Single-store independents:				
Stores.....	5,041	1,734	517	2,790
Net sales.....	\$116,159	\$45,480	\$17,059	\$53,620
Per cent of total, by type.....	71.10	55.01	79.36	90.59
2 and 3 store independents and local branch:				
Stores.....	471	274	73	124
Net sales.....	\$16,515	\$10,823	\$2,490	\$3,202
Per cent of total, by type.....	10.11	13.09	11.58	5.41
Local chains:				
Stores.....	156	108	13	35
Net sales.....	\$8,903	\$7,378	\$623	\$902
Per cent of total, by type.....	5.45	8.92	2.90	1.52
Sectional chains:				
Stores.....	128	113	9	6
Net sales.....	\$16,663	\$15,407	\$968	\$238
Per cent of total, by type.....	10.20	18.63	4.50	0.49
National chains:				
Stores.....	51	39	4	8
Net sales.....	\$4,407	\$3,598	\$357	\$452
Per cent of total, by type.....	2.70	4.35	1.66	0.76
Other types of operation:				
Stores.....	21			21
Net sales.....	\$728			\$728
Per cent of total, by type.....	0.44			1.23
	EAST SOUTH CENTRAL DIVISION			
Total, all types:				
Stores.....	3,468	1,050	366	2,052
Net sales.....	\$87,646	\$35,867	\$11,792	\$39,987
Per cent of total.....	100.00	100.00	100.00	100.00
Single-store independents:				
Stores.....	3,057	793	311	1,953
Net sales.....	\$69,264	\$22,775	\$9,429	\$37,060
Per cent of total, by type.....	79.03	63.50	79.96	92.69
2 and 3 store independents and local branch:				
Stores.....	177	74	35	68
Net sales.....	\$6,358	\$3,315	\$1,303	\$1,740
Per cent of total, by type.....	7.26	9.24	11.05	4.35
Local chains:				
Stores.....	146	125	15	6
Net sales.....	\$6,235	\$5,339	\$775	\$121
Per cent of total, by type.....	7.11	14.88	6.57	0.30
Sectional chains:				
Stores.....	34	30	3	1
Net sales.....	\$2,281	\$2,115	\$147	\$19
Per cent of total, by type.....	2.60	5.90	1.25	0.05

TABLE 4.—DRUG STORES AND SALES—Continued

TYPE OF OPERATION	PACIFIC DIVISION			
	Total	Cities of over 30,000 population	Cities 10,000 to 30,000 population	Places under 10,000 population
Total, all types:				
Stores.....	4,619	2,731	424	1,464
Net sales.....	\$155,768	\$101,068	\$17,246	\$37,454
Per cent of total.....	100.00	100.00	100.00	100.00
Single-store independents:				
Stores.....	3,735	2,039	338	1,358
Net sales.....	\$103,422	\$56,887	\$12,780	\$33,755
Per cent of total, by type.....	66.40	56.29	74.10	90.12
2 and 3 store independents and local branch:				
Stores.....	572	403	69	100
Net sales.....	\$22,269	\$15,296	\$3,592	\$3,381
Per cent of total, by type.....	14.29	15.14	20.83	9.03
Local chains:				
Stores.....	174	156	15	3
Net sales.....	\$11,340	\$10,554	\$709	\$77
Per cent of total, by type.....	7.28	10.44	4.11	0.21
Sectional chains:				
Stores.....				
Net sales.....				
Per cent of total, by type.....				
National chains:				
Stores.....	133	132	1	
Net sales.....	\$18,413	\$18,258	\$155	
Per cent of total, by type.....	11.82	18.06	0.90	
Other types of operation:				
Stores.....	5	1	1	3
Net sales.....	\$324	\$73	\$10	\$241
Per cent of total, by type.....	0.21	0.07	0.06	0.64

¹ In comparing this table with the text table appearing on page 14 it must be realized that many chains operate some stores of a different kind from that applicable to the chains as a whole. This explains the comparatively insignificant differences between the two tables.

TABLE 5A.—OPERATING EXPENSES

[By kinds of stores]

	DRUG STORES		
	Total	Without fountains	With fountains
Number of stores.....	58,258	23,414	34,844
Net sales.....	\$1,690,398,682	\$541,138,956	\$1,149,259,726
Proprietors.....	57,415	24,381	33,034
Employees:			
Full time.....	148,580	42,467	106,113
Part time.....	30,272	9,630	20,642
Pay roll:			
Total.....	\$195,762,402	\$58,847,577	\$136,914,825
Per cent of sales.....	11.58	10.87	11.91
Average salary per full-time employee.....	\$1,260	\$1,324	\$1,234
Part time.....	\$8,565,830	\$2,616,352	\$5,949,478
Value of proprietors' services ¹	\$72,046,325	\$31,696,553	\$40,349,772
Total wage cost.....	\$267,862,747	\$90,524,130	\$177,338,617
Per cent of sales.....	15.85	16.73	15.43
All other expenses (including rent).....	\$190,350,923	\$56,730,091	\$133,620,832
Total operating expense (per cent of sales).....	27.11	27.21	27.06

¹ Proprietors compensation is computed at the same rate paid to full time employees.

CENSUS OF DISTRIBUTION

TABLE 5B.—OPERATING EXPENSES

[By size of city]

	DRUG STORES			
	United States, total	Cities of over 30,000 population	Cities 10,000 to 30,000 population	Places under 10,000 population
Number of stores.....	58,258	28,602	5,773	23,883
Net sales.....	\$1,690,398,682	\$992,194,401	\$202,001,558	\$496,202,423
Proprietors.....	57,415	25,264	5,502	26,649
Employees:				
Full time.....	148,580	92,782	18,090	37,708
Part time.....	30,272	15,877	3,159	11,236
Pay roll:				
Total.....	\$195,762,402	\$126,099,309	\$23,944,735	\$45,718,358
Average salary per full-time employee.....	\$1,260	\$1,305	\$1,276	\$1,142
Per cent of sales.....	11.58	12.71	11.85	9.21
Part time.....	\$8,565,830	\$5,046,387	\$370,576	\$2,648,867
Value of proprietors' services.....	\$72,046,325	\$34,592,615	\$7,020,552	\$30,433,158
Total wage cost.....	\$267,862,747	\$160,745,944	\$30,965,287	\$76,151,516
Per cent of sales.....	15.85	16.20	15.33	15.35
All other expenses (including rent).....	\$190,350,923	\$121,738,130	\$22,448,859	\$46,163,934
Total operating expense (per cent of sales).....	27.11	28.47	26.44	24.65
Per cent of drug-store sales.....	100.00	58.70	11.95	29.35
Per cent of United States, total.....	3.44	2.02	0.41	1.01

TABLE 6.—OPERATING EXPENSES

[Rent]

DATA ON ALL STORES OPERATING IN LEASED PREMISES	DRUG STORES		
	Total	Without fountains	With fountains
Number of stores.....	45,872	16,950	28,922
Rent paid.....	\$82,003,619	\$22,310,864	\$59,692,755
Net sales.....	\$1,451,944,575	\$434,287,486	\$1,017,657,089
Rental cost in (per cent of sales).....	5.65	5.14	5.87

TABLE 7.—COMMODITIES SOLD IN DRUG STORES

COMMODITIES SOLD	ALL DRUG STORES		DRUG STORES WITH FOUNTAINS		DRUG STORES WITHOUT FOUNTAINS	
	United States, total	Per cent	United States, total	Per cent	United States, total	Per cent
Total sales.....	\$1,690,398,682	100.0	\$1,149,259,726	100.0	\$541,138,956	100.0
Bottled beverages.....	7,069,021	0.4	6,131,993	0.5	937,038	0.2
Cigars, cigarettes, and tobacco.....	216,034,130	12.8	168,982,860	14.7	47,051,320	8.7
Confectionery and nuts.....	51,202,758	3.0	42,917,007	3.7	8,285,751	1.5
Drugs, patent medicines, etc.....	562,550,169	33.3	348,084,736	30.3	214,465,433	39.6
Fountain sales, ice cream, and lunches.....	244,369,635	14.5	244,369,635	21.3	-----	-----
Miscellaneous merchandise.....	80,781,514	4.8	47,384,468	4.1	33,397,046	6.2
Prescriptions.....	208,635,205	12.4	111,350,196	9.7	97,285,009	18.0
Rubber goods.....	36,022,380	2.1	19,333,197	1.7	16,689,183	3.1
Stationery, books, periodicals.....	27,174,639	1.6	17,046,388	1.5	10,128,301	1.9
Surgical and hospital supplies.....	35,818,871	2.1	17,278,773	1.5	18,540,098	3.4
Toilet articles and preparations.....	220,740,250	13.0	126,380,473	11.0	94,359,777	17.4

TABLE 8A.—APPROXIMATE SALES OF TOILET ARTICLES AND PREPARATIONS AND DRUGS, PATENT MEDICINES, ETC., AND PRESCRIPTIONS IN ALL KINDS OF STORES

KINDS OF BUSINESS	TOILET ARTICLES AND PREPARATIONS		DRUGS, PATENT MEDICINE, ETC.	
	Sales	Per cent	Sales	Per cent
Total all stores.....	\$412,955,922	100.0	\$590,775,327	100.0
Total drug stores.....	220,740,250	53.5	562,550,169	95.2
With fountains.....	126,380,473	30.6	348,084,736	58.9
Without fountains.....	94,359,777	22.9	214,465,433	36.3
Total, all other stores.....	192,245,672	46.5	28,225,158	4.8
Department stores.....	76,503,769	18.5	6,677,506	1.1
Variety, 5-and-10, and to-a-dollar stores.....	42,266,974	10.2		
Patent medicines, extracts, toiletries, stores (usually house to house).....	27,954,138	6.8	12,080,921	2.1
Country general stores ¹	20,957,313	5.1	6,985,772	1.2
Dry goods stores.....	7,136,794	1.7		
Women's ready-to-wear stores.....	5,022,572	1.2		
Beauty shops.....	3,909,076	0.9		
General merchandise stores.....	2,288,688	0.6	751,019	0.1
Jewelry stores.....	1,944,483	0.5		
Family clothing stores.....	1,681,301	0.4		
Mail order houses (catalogue only).....	1,604,858	0.4	1,729,940	0.3
Cigar stores.....	975,706	0.2		

¹ In the absence of data distinguishing the sale of toilet articles and preparations from several other commodities in country general stores, the same ratios are used as those found to exist in department stores.

TABLE 8B.—COMPARISON OF APPROXIMATE SALES OF TOILET ARTICLES AND PREPARATIONS IN DRUG STORES AND OTHER KINDS OF STORES, BY STATES

DIVISIONS AND STATES	Total sales of toilet articles and preparations	Per cent of United States total	AMOUNT SOLD IN DRUG STORES		AMOUNT SOLD IN ALL OTHER STORES	
			Amount	Per cent	Amount	Per cent
United States, total.....	\$412,965,922	100.0	\$320,740,250	53.45	\$192,245,672	46.55
NEW ENGLAND.....	25,828,496	6.25	10,838,653	41.96	14,989,843	58.04
Connecticut.....	4,276,892	1.04	1,547,718	36.19	2,729,174	63.81
Maine.....	2,895,967	0.70	1,943,063	67.10	952,904	32.90
Massachusetts.....	14,349,522	3.48	5,392,172	37.58	8,957,350	62.42
New Hampshire.....	1,158,527	0.28	805,698	69.55	352,829	30.45
Rhode Island.....	2,408,306	0.58	784,741	32.58	1,623,565	67.42
Vermont.....	739,282	0.18	365,261	49.41	374,021	50.59
MIDDLE ATLANTIC.....	103,226,777	25.00	48,432,790	46.92	54,793,987	53.08
New Jersey.....	13,811,900	3.35	7,087,549	51.31	6,724,351	48.69
New York.....	56,426,421	13.66	26,799,183	47.49	29,627,238	52.51
Pennsylvania.....	32,988,456	7.99	14,546,058	44.00	18,442,398	55.91
EAST NORTH CENTRAL.....	87,892,837	21.27	45,480,414	51.75	42,412,423	48.25
Illinois.....	28,233,470	6.83	15,864,968	56.19	12,368,502	43.81
Indiana.....	10,134,097	2.45	5,354,775	52.84	4,779,322	47.16
Michigan.....	14,749,698	3.57	7,346,527	49.81	7,403,171	50.19
Ohio.....	26,341,077	6.37	13,137,171	49.87	13,203,906	50.13
Wisconsin.....	8,434,495	2.04	3,776,973	44.78	4,657,522	55.22
WEST NORTH CENTRAL.....	43,407,696	10.51	22,491,493	51.81	20,916,203	48.19
Iowa.....	8,869,964	2.15	4,535,689	51.14	4,334,275	48.85
Kansas.....	5,186,763	1.26	3,313,308	63.88	1,873,455	36.12
Minnesota.....	7,317,347	1.77	3,017,315	41.24	4,300,032	58.76
Missouri.....	14,386,476	3.48	7,301,132	50.75	7,085,344	49.25
Nebraska.....	4,463,782	1.08	2,431,395	54.47	2,032,387	45.53
North Dakota.....	1,400,305	0.34	791,497	56.52	608,808	43.48
South Dakota.....	1,783,059	0.43	1,101,157	61.76	681,902	38.24
SOUTH ATLANTIC.....	40,752,378	9.87	23,121,558	56.74	17,630,820	43.26
Delaware.....	692,225	0.17	445,875	64.41	246,350	35.59
District of Columbia.....	3,047,173	0.74	1,380,177	45.29	1,666,998	54.71
Florida.....	7,131,629	1.73	5,458,780	76.54	1,672,849	23.46
Georgia.....	7,687,812	1.86	4,430,155	57.63	3,257,657	42.37
Maryland.....	3,953,351	0.96	1,503,502	38.03	2,449,849	61.97
North Carolina.....	6,549,309	1.58	3,843,607	58.69	2,705,702	41.31
South Carolina.....	2,192,733	0.53	1,180,880	53.85	1,011,853	46.15
Virginia.....	5,649,232	1.36	3,003,552	53.17	2,645,680	46.83
West Virginia.....	3,848,912	0.93	1,875,030	48.72	1,973,882	51.28
EAST SOUTH CENTRAL.....	19,506,245	4.72	10,569,905	54.19	8,936,340	45.81
Alabama.....	5,409,137	1.31	3,194,598	59.06	2,214,539	40.94
Kentucky.....	4,414,485	1.07	1,955,351	44.29	2,459,134	55.71
Mississippi.....	4,020,488	0.98	2,171,367	54.01	1,849,121	45.99
Tennessee.....	5,662,135	1.37	3,248,589	57.37	2,413,546	42.63
WEST SOUTH CENTRAL.....	36,006,010	8.72	23,148,441	64.29	12,857,569	35.71
Arkansas.....	4,042,179	0.98	2,394,662	59.24	1,647,517	40.76
Louisiana.....	4,645,846	1.12	2,678,065	57.64	1,967,781	42.36
Oklahoma.....	6,856,357	1.66	4,706,952	68.65	2,149,405	31.35
Texas.....	20,461,628	4.96	13,368,762	65.34	7,092,866	34.66
MOUNTAIN.....	13,902,307	3.37	9,441,788	67.92	4,460,519	32.08
Arizona.....	1,772,160	0.43	1,320,012	74.49	452,148	25.51
Colorado.....	4,538,924	1.10	2,733,398	60.22	1,805,526	39.78
Idaho.....	1,405,927	0.34	1,061,782	75.52	344,145	24.48
Montana.....	2,281,692	0.55	1,723,503	75.54	558,189	24.46
Nevada.....	505,230	0.12	331,137	65.54	174,093	34.46
New Mexico.....	1,271,354	0.31	973,043	76.54	298,311	23.46
Utah.....	1,160,752	0.28	564,493	48.63	596,259	51.37
Wyoming.....	966,268	0.24	734,420	76.01	231,848	23.99
PACIFIC.....	42,463,176	10.28	27,215,208	64.09	15,247,968	35.91
California.....	33,307,009	8.07	21,250,016	63.80	12,056,993	36.20
Oregon.....	3,852,702	0.93	2,682,219	69.62	1,170,483	30.38
Washington.....	5,303,465	1.28	3,282,973	61.90	2,020,492	38.10

TABLE 8C.—COMPARISON OF APPROXIMATE SALES OF DRUGS, PATENT MEDICINES, ETC., IN DRUG STORES AND OTHER KINDS OF STORES, BY STATES

DIVISIONS AND STATES	Total sales of drugs, patent medicines, etc.	Per cent of United States total	AMOUNT SOLD IN DRUG STORES		AMOUNT SOLD IN ALL OTHER STORES	
			Amount	Per cent	Amount	Per cent
United States total	\$590, 775, 327	100.00	\$562, 550, 164	95.22	\$28, 225, 163	4.78
NEW ENGLAND.....	44, 540, 271	-----	43, 933, 147	98.64	607, 124	1.36
Connecticut.....	9, 708, 120	1.64	9, 598, 910	98.88	109, 210	1.12
Maine.....	4, 169, 646	0.71	4, 092, 756	98.16	76, 890	1.84
Massachusetts.....	23, 260, 446	3.94	22, 994, 477	98.86	266, 969	1.14
New Hampshire.....	1, 779, 304	0.30	1, 733, 835	97.44	45, 469	2.56
Rhode Island.....	3, 746, 298	0.63	3, 713, 899	99.14	32, 399	0.86
Vermont.....	1, 876, 457	0.32	1, 799, 270	95.89	77, 187	4.11
MIDDLE ATLANTIC.....	132, 229, 666	-----	126, 873, 629	95.95	5, 356, 037	4.05
New Jersey.....	20, 538, 640	3.48	20, 013, 150	97.44	525, 490	2.56
New York.....	69, 183, 160	11.71	66, 348, 813	95.90	2, 834, 347	4.10
Pennsylvania.....	42, 507, 866	7.20	40, 511, 666	95.30	1, 996, 200	4.70
EAST NORTH CENTRAL.....	133, 547, 777	-----	126, 093, 179	94.42	7, 454, 598	5.58
Illinois.....	40, 416, 611	6.84	38, 139, 902	94.37	2, 276, 709	5.63
Indiana.....	16, 808, 481	2.85	16, 136, 416	96.00	672, 065	4.00
Michigan.....	29, 117, 646	4.93	26, 758, 809	91.90	2, 358, 837	8.10
Ohio.....	33, 523, 164	5.67	32, 365, 036	96.55	1, 158, 128	3.45
Wisconsin.....	13, 681, 875	2.32	12, 693, 016	92.77	988, 859	7.23
WEST NORTH CENTRAL.....	65, 635, 305	-----	60, 911, 204	92.80	4, 724, 101	7.20
Iowa.....	12, 810, 527	2.17	11, 821, 576	92.28	988, 951	7.72
Kansas.....	9, 258, 597	1.57	8, 830, 756	95.92	427, 841	4.05
Minnesota.....	13, 289, 514	2.25	11, 523, 141	86.71	1, 766, 373	13.29
Missouri.....	17, 770, 489	3.01	16, 893, 285	95.06	877, 204	4.94
Nebraska.....	7, 376, 983	1.25	6, 986, 379	94.71	390, 604	5.29
North Dakota.....	2, 027, 804	0.34	1, 865, 928	92.02	161, 876	7.98
South Dakota.....	3, 101, 391	0.52	2, 940, 139	94.80	161, 252	5.20
SOUTH ATLANTIC.....	56, 299, 116	-----	53, 219, 510	94.53	3, 079, 606	5.47
Delaware.....	1, 110, 029	0.19	1, 096, 613	98.79	13, 416	1.21
District of Columbia.....	3, 324, 340	0.56	3, 241, 399	97.51	82, 941	2.49
Florida.....	7, 885, 614	1.33	7, 798, 322	98.89	87, 292	1.11
Georgia.....	10, 776, 592	1.82	9, 608, 304	89.16	1, 168, 288	10.84
Maryland.....	7, 818, 788	1.32	7, 541, 943	96.46	276, 845	3.54
North Carolina.....	6, 836, 740	1.16	6, 451, 636	94.37	385, 060	5.63
South Carolina.....	3, 773, 353	0.64	3, 615, 091	95.81	158, 262	4.19
Virginia.....	8, 767, 936	1.48	8, 330, 928	95.02	437, 008	4.98
West Virginia.....	6, 005, 718	1.02	5, 535, 224	92.17	470, 494	7.83
EAST SOUTH CENTRAL.....	29, 430, 210	-----	27, 541, 194	93.58	1, 889, 016	6.42
Alabama.....	6, 777, 777	1.15	6, 378, 857	94.11	398, 920	5.89
Kentucky.....	8, 919, 534	1.51	8, 442, 544	94.65	476, 990	5.35
Mississippi.....	5, 456, 348	0.92	5, 060, 506	92.75	395, 842	7.25
Tennessee.....	8, 276, 551	1.40	7, 659, 287	92.54	617, 264	7.46
WEST SOUTH CENTRAL.....	58, 781, 673	-----	56, 795, 451	96.62	1, 986, 222	3.38
Arkansas.....	6, 616, 745	1.12	6, 262, 049	94.64	354, 696	5.36
Louisiana.....	10, 558, 222	1.79	10, 309, 109	97.64	249, 113	2.36
Oklahoma.....	11, 194, 583	1.89	10, 865, 790	97.06	328, 793	2.94
Texas.....	30, 412, 123	5.15	29, 358, 503	96.54	1, 053, 620	3.46
MOUNTAIN.....	18, 320, 441	-----	17, 483, 616	95.43	836, 825	4.57
Arizona.....	2, 348, 062	0.40	2, 295, 775	97.77	52, 287	2.23
Colorado.....	5, 871, 029	0.99	5, 440, 212	92.66	430, 817	7.34
Idaho.....	1, 905, 154	0.32	1, 863, 019	97.79	42, 135	2.21
Montana.....	2, 074, 994	0.35	1, 985, 176	95.67	89, 818	4.33
Nevada.....	585, 416	0.10	549, 323	93.83	36, 093	6.17
New Mexico.....	1, 206, 074	0.20	1, 136, 440	94.23	69, 634	5.77
Utah.....	2, 885, 862	0.49	2, 819, 970	97.72	65, 892	2.28
Wyoming.....	1, 443, 850	0.25	1, 393, 701	96.53	50, 149	3.47
PACIFIC.....	51, 990, 868	-----	49, 699, 234	95.59	2, 291, 634	4.41
California.....	37, 323, 478	6.32	35, 767, 775	95.83	1, 555, 703	4.17
Oregon.....	4, 898, 145	0.83	4, 476, 899	91.40	421, 246	8.60
Washington.....	9, 769, 245	1.65	9, 454, 560	96.78	314, 685	3.22

TABLE 8D.—APPROXIMATE SALES OF PRESCRIPTIONS IN DRUG STORES, BY STATES

DIVISIONS AND STATES	DRUG STORES					
	Total		With fountains		Without fountains	
	Amount	Per cent	Amount	Per cent	Amount	Per cent
United States total.....	\$229,525,930	100.00	\$132,240,921	57.61	\$97,285,009	42.39
NEW ENGLAND.....	15,570,041	6.78	10,679,581	68.59	4,890,460	31.41
Connecticut.....	4,017,384	1.75	2,992,187	74.48	1,025,197	25.52
Maine.....	1,249,905	0.54	519,968	41.60	729,937	58.40
Massachusetts.....	7,659,865	3.34	5,571,258	72.73	2,088,607	27.27
New Hampshire.....	870,056	0.38	584,201	67.15	285,855	32.85
Rhode Island.....	1,263,833	0.55	889,316	70.37	374,517	29.63
Vermont.....	508,998	0.22	122,651	24.10	386,347	75.90
MIDDLE ATLANTIC.....	58,408,800	25.45	30,208,531	51.72	28,200,269	48.28
New Jersey.....	8,932,900	3.89	4,678,154	52.37	4,254,746	47.63
New York.....	29,540,876	12.87	15,839,974	53.62	13,700,902	46.38
Pennsylvania.....	19,935,024	8.69	9,690,403	48.61	10,244,621	51.39
EAST NORTH CENTRAL.....	43,685,114	19.03	26,799,537	61.35	16,885,577	38.65
Illinois.....	19,070,059	8.31	12,616,174	66.16	6,453,885	33.84
Indiana.....	4,392,203	1.91	2,622,446	59.71	1,769,757	40.29
Michigan.....	7,016,255	3.05	3,107,027	44.28	3,909,228	55.72
Ohio.....	8,529,559	3.72	5,918,288	69.39	2,611,271	30.61
Wisconsin.....	4,677,038	2.04	2,535,602	54.21	2,141,436	45.79
WEST NORTH CENTRAL.....	27,804,456	12.11	14,544,442	52.31	13,260,014	47.69
Iowa.....	5,227,172	2.28	2,518,707	48.18	2,708,465	51.82
Kansas.....	4,313,714	1.88	3,026,979	70.18	1,286,735	29.82
Minnesota.....	6,205,382	2.70	2,976,716	47.97	3,228,666	52.03
Missouri.....	7,130,044	3.10	4,014,957	56.31	3,115,087	43.69
Nebraska.....	2,886,648	1.26	1,265,017	43.82	1,621,631	56.18
North Dakota.....	781,285	0.34	245,465	31.42	535,820	68.58
South Dakota.....	1,260,211	0.55	496,601	39.41	763,610	60.59
SOUTH ATLANTIC.....	22,144,776	9.65	16,123,297	72.81	6,021,479	27.19
Delaware.....	439,040	0.19	264,529	60.25	174,511	39.75
District of Columbia.....	2,403,185	1.05	2,245,561	93.44	157,624	6.56
Florida.....	2,653,660	1.16	1,683,789	63.45	969,871	36.55
Georgia.....	2,998,252	1.30	1,911,339	63.75	1,086,913	36.25
Maryland.....	3,323,858	1.45	2,492,113	74.98	831,745	25.02
North Carolina.....	4,112,060	1.79	3,264,075	79.38	847,985	20.62
South Carolina.....	2,198,809	0.96	1,530,516	69.61	668,293	30.39
Virginia.....	2,802,841	1.22	1,852,333	66.09	950,508	33.91
West Virginia.....	1,213,071	0.53	879,042	72.46	334,029	27.54
EAST SOUTH CENTRAL.....	12,410,434	5.41	7,995,627	64.43	4,414,807	35.57
Alabama.....	3,188,226	1.39	2,308,567	72.25	884,659	27.75
Kentucky.....	3,770,365	1.64	2,228,573	59.11	1,541,792	40.89
Mississippi.....	2,188,328	0.96	1,253,320	57.27	935,008	42.73
Tennessee.....	3,263,515	1.42	2,210,167	67.72	1,053,348	32.28
WEST SOUTH CENTRAL.....	24,941,651	10.87	14,819,277	59.42	10,122,374	40.58
Arkansas.....	2,264,593	0.99	1,141,994	50.43	1,122,599	49.57
Louisiana.....	3,369,583	1.47	2,110,425	62.63	1,259,158	37.37
Oklahoma.....	4,284,640	1.87	2,497,564	58.29	1,787,076	41.71
Texas.....	15,022,835	6.54	9,069,294	60.37	5,953,541	39.63
MOUNTAIN.....	6,584,119	2.87	3,624,312	55.05	2,959,807	44.95
Arizona.....	828,275	0.36	520,310	62.82	307,965	37.18
Colorado.....	2,296,449	1.00	1,636,857	71.28	659,592	28.72
Idaho.....	697,430	0.30	282,704	40.54	414,726	59.46
Montana.....	996,475	0.44	356,450	35.77	640,025	64.23
Nevada.....	224,782	0.10	61,764	27.48	163,018	72.52
New Mexico.....	556,579	0.24	169,167	30.39	387,412	69.61
Utah.....	745,563	0.33	458,591	61.51	286,972	38.49
Wyoming.....	238,566	0.10	138,469	58.04	100,097	41.96
PACIFIC.....	17,976,539	7.83	7,446,317	41.42	10,530,222	58.58
California.....	12,264,675	5.34	5,957,629	48.58	6,307,046	51.42
Oregon.....	1,988,421	0.87	542,118	27.26	1,446,303	72.74
Washington.....	3,723,443	1.62	946,570	25.42	2,776,873	74.58

TABLE 9.—AN ANALYSIS OF STORES, SALES, AND EXPENSES IN THE CHICAGO-MILWAUKEE AREA BY SIZE OF BUSINESS AND BY SIZE OF CITY

[Shown separately for chains and independents]

DRUG STORES	Number of stores	Proportion of chains and independent stores, per cent	Net sales 1929	Proportion of chains and independent sales, per cent	Wage costs per \$100 of sales	Total operating expense per \$100 of sales	Rental cost per \$100 of sales in leased premises
Total for area.....	3, 053	100.00	\$117, 188, 947	100.00	\$16. 19	\$28. 98	\$7. 36
Independents.....	2, 770	90. 73	83, 869, 382	71. 57	16. 89	29. 14	6. 97
Chains.....	283	9. 27	33, 319, 565	28. 43	14. 45	28. 60	8. 24
Sales of more than \$100,000.....	186	100.00	31, 830, 466	100.00	13. 93	27. 70	8. 14
Independents.....	38	20. 43	5, 930, 895	18. 63	14. 89	29. 02	7. 61
Chains.....	148	79. 57	25, 899, 571	81. 37	13. 71	27. 36	8. 27
Sales from \$60,000 to \$100,000.....	243	100.00	18, 356, 578	100.00	16. 25	29. 03	6. 65
Independents.....	180	74. 07	13, 275, 928	72. 32	16. 14	27. 93	6. 06
Chains.....	63	25. 93	5, 080, 652	27. 68	16. 55	31. 82	8. 07
Sales from \$25,000 to \$60,000.....	1, 204	100.00	45, 070, 879	100.00	16. 79	28. 57	6. 73
Independents.....	1, 162	96. 51	43, 207, 618	95. 87	16. 76	28. 33	6. 65
Chains.....	42	3. 49	1, 863, 261	4. 13	17. 42	34. 28	8. 29
Sales from \$10,000 to \$25,000.....	1, 144	100.00	20, 295, 636	100.00	17. 39	30. 49	7. 75
Independents.....	1, 118	97. 73	19, 831, 546	97. 71	17. 31	30. 19	7. 73
Chains.....	26	2. 27	464, 090	2. 29	20. 77	39. 34	8. 87
Sales under \$10,000.....	276	100.00	1, 635, 388	100.00	28. 53	47. 47	12. 52
Independents.....	272	98. 55	1, 623, 397	99. 27	28. 58	47. 55	12. 61
Chains ¹	4	1. 45	11, 991	0. 73	20. 46	36. 28	3. 04
CITIES OF MORE THAN 150,000 POPULATION							
Total drug stores.....	2, 191	100.00	88, 033, 394	100.00	16. 58	29. 81	7. 95
Independents.....	1, 937	88. 41	57, 760, 343	65. 61	17. 63	30. 28	7. 68
Chains.....	254	11. 59	30, 273, 051	34. 39	14. 57	28. 97	8. 42
Sales of more than \$100,000.....	161	100.00	27, 810, 096	100.00	14. 07	28. 13	8. 53
Independents.....	26	16. 15	4, 130, 053	14. 85	14. 98	29. 67	8. 90
Chains.....	135	83. 85	23, 680, 043	85. 15	13. 91	27. 86	8. 47
Sales from \$60,000 to \$100,000.....	167	100.00	12, 768, 351	100.00	16. 62	29. 81	7. 21
Independents.....	110	65. 87	8, 172, 704	64. 01	16. 61	28. 61	6. 70
Chains.....	57	34. 13	4, 595, 647	35. 99	16. 63	31. 96	8. 11
Sales from \$25,000 to \$60,000.....	842	100.00	31, 484, 169	100.00	17. 69	29. 91	7. 35
Independents.....	807	95. 94	29, 907, 067	94. 99	17. 70	29. 65	7. 29
Chains.....	35	4. 06	1, 577, 102	5. 01	17. 55	34. 68	8. 42
Sales from \$10,000 to \$25,000.....	823	100.00	15, 747, 383	100.00	16. 88	29. 45	8. 29
Independents.....	800	97. 21	14, 339, 115	91. 06	17. 93	31. 17	8. 26
Chains.....	23	2. 79	408, 268	8. 94	21. 19	40. 88	9. 19
Sales under \$10,000.....	198	100.00	1, 223, 395	100.00	27. 97	47. 97	13. 49
Independents.....	194	97. 97	1, 211, 404	99. 22	28. 04	48. 09	13. 62
Chains ¹	4	2. 03	11, 991	0. 98	20. 46	36. 28	3. 04
CITIES FROM 50,000 TO 150,000 POPULATION							
Total drug stores.....	240	100.00	9, 644, 375	100.00	15. 02	27. 06	6. 11
Independents.....	219	91. 25	7, 603, 709	78. 84	15. 44	27. 36	5. 98
Chains.....	21	8. 75	2, 040, 666	21. 16	13. 43	25. 92	6. 67
Sales of more than \$100,000.....	14	100.00	2, 287, 824	100.00	12. 58	24. 85	5. 48
Independents.....	5	35. 71	887, 129	38. 60	13. 69	27. 36	4. 65
Chains.....	9	64. 29	1, 410, 695	61. 40	11. 89	23. 27	6. 14
Sales from \$60,000 to \$100,000.....	25	100.00	1, 867, 224	100.00	17. 13	29. 08	6. 03
Independents.....	20	80. 00	1, 471, 584	78. 82	17. 24	28. 39	5. 68
Chains.....	5	20. 00	395, 640	21. 18	16. 69	31. 63	7. 33
Sales from \$25,000 to \$60,000.....	112	100.00	4, 061, 416	100.00	14. 55	26. 00	6. 01
Independents.....	107	95. 54	3, 868, 614	95. 30	14. 42	25. 63	5. 99
Chains.....	5	4. 46	192, 802	4. 70	17. 12	33. 45	8. 29
Sales from \$10,000 to \$25,000.....	71	100.00	1, 273, 561	100.00	16. 40	29. 48	7. 41
Independents.....	69	97. 18	1, 232, 032	96. 74	16. 36	29. 57	7. 54
Chains.....	2	2. 82	41, 529	3. 26	17. 59	26. 56	4. 33
Sales under \$10,000.....	18	100.00	114, 350	100.00	30. 65	49. 43	10. 93
Independents.....	18	100.00	114, 350	100.00	30. 65	49. 43	10. 93
Chains.....							

¹ New stores opened in 1929 and operated only for part of the year.

TABLE 9.—AN ANALYSIS OF STORES, SALES, AND EXPENSES IN THE CHICAGO-MILWAUKEE AREA BY SIZE OF BUSINESS AND BY SIZE OF CITY—Continued

DRUG STORES	Number of stores	Proportion of chains and independent stores, per cent	Net sales 1929	Proportion of chains and independent sales, per cent	Wage costs per \$100 of sales	Total operating expense per \$100 of sales	Rental cost per \$100 of sales in leased premises
CITIES FROM 25,000 TO 50,000 POPULATION							
Total drug stores.....	162	100.00	\$6,170,185	100.00	\$15.24	\$29.00	\$6.25
Independents.....	155	95.68	5,208,783	84.42	15.92	28.68	6.30
Chains.....	7	4.32	961,402	15.58	11.57	22.44	6.03
Sales of more than \$100,000.....	8	100.00	1,385,558	100.00	12.79	23.97	5.65
Independents.....	4	50.00	576,725	41.63	15.14	27.55	5.77
Chains.....	4	50.00	808,833	58.37	11.10	21.42	5.56
Sales from \$60,000 to \$100,000.....	18	100.00	1,311,177	100.00	14.54	27.64	6.10
Independents.....	17	94.44	(x)	(x)	(x)	(x)	(x)
Chains.....	1	5.56	(x)	(x)	(x)	(x)	(x)
Sales from \$25,000 to \$60,000.....	62	100.00	2,379,195	100.00	15.85	28.09	6.10
Independents.....	61	98.39	(x)	(x)	(x)	(x)	(x)
Chains.....	1	1.61	(x)	(x)	(x)	(x)	(x)
Sales from \$10,000 to \$25,000.....	60	100.00	1,016,816	100.00	16.38	29.88	7.42
Independents.....	59	98.33	(x)	(x)	(x)	(x)	(x)
Chains.....	1	1.67	(x)	(x)	(x)	(x)	(x)
Sales under \$10,000.....	14	100.00	77,439	100.00	37.33	55.08	10.33
Independents.....	14	100.00					
Chains.....							
CITIES FROM 10,000 TO 25,000 POPULATION							
Total drug stores.....	139	100.00	5,318,197	100.00	14.91	25.88	4.84
Independents.....	138	(x)	(x)	(x)	(x)	(x)	(x)
Chains.....	1	(x)	(x)	(x)	(x)	(x)	(x)
Sales of more than \$100,000.....	2	100.00	212,874	100.00	13.80	23.17	2.68
Independents.....	2	100.00					
Chains.....							
Sales from \$60,000 to \$100,000.....	23	100.00	1,736,494	100.00	14.17	25.18	4.33
Independents.....	23	100.00					
Chains.....							
Sales from \$25,000 to \$60,000.....	68	100.00	2,667,805	100.00	14.68	25.17	4.79
Independents.....	67	(x)	(x)	(x)	(x)	(x)	(x)
Chains.....	1	(x)	(x)	(x)	(x)	(x)	(x)
Sales from \$10,000 to \$25,000.....	40	100.00	681,629	100.00	17.17	30.15	7.49
Independents.....	40	100.00					
Chains.....							
Sales under \$10,000.....	6	100.00	19,395	100.00	44.73	64.26	12.73
Independents.....	6	100.00					
Chains.....							
PLACES FROM 5,000 TO 10,000 POPULATION							
Total drug stores.....	86	100.00	2,865,223	100.00	15.85	27.40	4.72
Independents.....	86	100.00					
Chains.....							
Sales of more than \$100,000.....	1	(x)	(x)	(x)	(x)	(x)	(x)
Independents.....	1	(x)	(x)	(x)	(x)	(x)	(x)
Chains.....							
Sales from \$60,000 to \$100,000.....	6	(x)	(x)	(x)	(x)	(x)	(x)
Independents.....	6	(x)	(x)	(x)	(x)	(x)	(x)
Chains.....							
Sales from \$25,000 to \$60,000.....	44	100.00	1,686,122	100.00	15.33	26.59	4.52
Independents.....	44	100.00					
Chains.....							
Sales from \$10,000 to \$25,000.....	32	100.00	634,136	100.00	16.73	28.63	5.52
Independents.....	32	100.00					
Chains.....							
Sales under \$10,000.....	3	100.00	8,000	100.00	45.00	64.94	14.21
Independents.....	3	100.00					
Chains.....							

TABLE 9.—AN ANALYSIS OF STORES, SALES, AND EXPENSES IN THE CHICAGO-MILWAUKEE AREA BY SIZE OF BUSINESS AND BY SIZE OF CITY—Continued

DRUG STORES	Number of stores	Proportion of chains and independent stores, per cent	Net sales 1929	Proportion of chains and independent sales, per cent	Wage costs per \$100 of sales	Total operating expense per \$100 of sales	Rental cost per \$100 of sales in leased premises
PLACES UNDER 5,000 POPULATION							
Total drug stores:							
Independents.....	235	100.00	\$5,157,573	100.00	\$14.31	\$23.61	\$3.84
Chains.....							
Sales of more than \$100,000:							
Independents.....							
Chains.....							
Sales from \$60,000 to \$100,000:							
Independents.....	4	100.00	260,481	100.00	17.58	26.89	3.11
Chains.....							
Sales from \$25,000 to \$60,000:							
Independents.....	76	100.00	2,762,172	100.00	13.44	22.05	3.55
Chains.....							
Sales from \$10,000 to \$25,000:							
Independents.....	118	100.00	1,942,111	100.00	14.05	24.02	4.11
Chains.....							
Sales under \$10,000:							
Independents.....	37	100.00	192,809	100.00	24.98	37.69	7.07
Chains.....							

