

**EXPENSES AND PROFITS OF
LIMITED PRICE VARIETY CHAINS
IN 1935**

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FOREWORD

The Bureau of Business Research of the Harvard Business School began in 1930 a series of studies of the margins, expenses, and profits of various types of chain stores. The series thus far includes bulletins dealing with food chains in 1929, 1932, 1933, and 1934; drug chains in 1929, 1931, and 1932; shoe chains in 1929, 1931, and 1932; women's apparel chains in 1929 and 1931; department store chains in 1929, 1931, 1932, 1933, and 1934; ownership groups of department stores in 1931, 1932, 1933, and 1934; and limited price variety chains in 1929, 1931, 1932, 1933, 1934, and 1935. Throughout this period the Bureau has continued to prepare and publish its annual bulletin presenting operating results of department stores and departmentized specialty stores.

Like its immediate predecessors, this current study, the fifth devoted to limited price variety chains, has been financed by the Limited Price Variety Stores Association. To the Association and its president, Dr. Paul H. Nystrom, the Bureau expresses its appreciation not only for financial support but for interest and co-operation in the carrying out of the study. Without the help of many persons in the individual companies, these bulletins would not be possible. The Bureau is grateful for that help.

All data used in the preparation of this bulletin, unless otherwise noted, were submitted to the Bureau by individual firms on a standard form of profit and loss statement developed by the Bureau particularly for use in the surveys of limited price variety chains. All statements of individual firms were handled on a strictly confidential basis. Under no circumstances did members of the trade, students in the School, or any other persons outside the Bureau staff have access to the figures of individual chains. As soon as the profit and loss statements were received, all identifying data were removed and each statement went through the various stages of the statistical work under a code number.

This bulletin was written by Assistant Professor Stanley F. Teele. Members of the Bureau staff directly concerned with the supervision of the study were Assistant Professor Carl N. Schmalz and Miss Elizabeth A. Burnham.

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EXPENSES AND PROFITS OF LIMITED PRICE VARIETY CHAINS IN 1935

GENERAL SUMMARY

In 1935, 30 limited price variety chains, doing approximately 90% of this type of business in the United States, had slightly lower aggregate profits than in the preceding year in spite of a modest increase in aggregate sales. These 30 chains in 1935 made sales of \$742,000,000, on which volume they had an aggregate net profit of \$33,000,000, or 4.51 cents out of each dollar received. Gross margin, the difference between the sum taken in over the counters of their 4,974 stores and the payments made for merchandise, amounted to \$269,000,000, or 36.25 cents out of the average sales dollar, operating expenses, including interest on the capital invested, totalled \$236,000,000, or 31.74 cents per dollar spent by consumers. These and other figures for the variety chain trade as a whole are summarized on this page.

Gross Margin Slightly Lower

One of the most striking developments in the variety chain trade during the period covered by the Bureau studies was the sharp advance in gross margin rates between 1932 and 1933. This advance, which carried the typical figure well above that recorded for 1929, was explained partly on the basis of the windfall advantage of rapidly rising prices in 1933 and partly on the basis of a general, although probably not a concerted, effort by variety chain executives to offset the influence on net profits of actual and anticipated increases in operating expenses. That this latter cause was a major factor is borne out by the records of 1934 and 1935. With prices of manufactured goods showing only modest fluctuations, gross margin rates in 1934 and 1935

declined somewhat from the peak figure in 1933, but in 1935 remained well above the 1929 level.

A continuation of the slow decline in typical gross margin rates seems likely for the immediate future. With further increases in dollar sales volume, several relatively inflexible expense items, notably tenancy costs, will fall somewhat in relation to sales. Moreover, although the variety chains apparently have not taken advantage of the end of the N.R.A. by reducing expenditures for personnel, it is probable that some increase in sales can be handled without a proportionate rise in dollar pay roll costs. With the existing degree of competition among the variety chains, it will be surprising if lower percentage expenses are not accompanied by a further decline in gross

margin rates. This sequence of events should prove helpful to the long-run future of the trade.

Modest Expense Rise More Than Offset By Higher Sales

In Tables 2 and 3, are shown summarized figures for 15 identical variety chains for each year for which the Bureau has received reports. Table 2 presents aggregate figures and percentages computed from these aggregates; Table 3 consists of dollar figures for the average individual store. Total operating expenses per store in 1935 of \$51,839 were slightly above the figure for 1934 of \$51,419. The increase was \$420, or 0.8%. Since sales per store rose from \$167,488 to \$171,821, or 2.5%, however, there was a slight decline in the total expense percentage, from 30.70% of sales to 30.17% of sales.

**Table 1. Summarized Figures for
30 Variety Chains: 1935**

(Aggregate Net Sales = 100%)

Number of Firms.....	30
Number of Stores.....	4,974
Aggregate Net Sales.....	\$742,112,383
GROSS MARGIN	36.25%
Salaries and Wages.....	15.26%
Tenancy Costs.....	10.01
All Other Expense including Interest.....	6.47
TOTAL EXPENSE including Interest.....	31.74%
NET PROFIT OR LOSS	4.51%
Net Other Income (including interest on net worth)	3.13
NET GAIN: Percentage of Net Sales	7.64%
Percentage of Net Worth.....	14.50%
Stock-turn (times a year, based on beginning and ending inventories).....	4.68

Table 2. Summarized Figures for 15 Identical Variety Chains: 1929, 1931-1935

(Aggregate Net Sales = 100%)

Items	1929	1931	1932	1933	1934	1935
Number of Stores	1,588	2,086	2,188	2,195	2,228	2,274
Aggregate Net Sales (in thousands)	\$353,560	\$356,977	\$321,218	\$332,098	\$373,164	\$390,721
Average Sales per Store (in thousands)	223	171	147	152	167	172
GROSS MARGIN	32.71%	32.22%	31.48%	35.66%	35.01%	34.48%
Salaries and Wages	13.00%	13.09%	13.00%	13.88%	14.37%	14.18%
Tenancy Costs (including Light, Water, Power, and Depreciation)	8.48	10.99	12.67	12.03	10.95	10.60
All Other Expense including Interest	5.24	5.29	5.45	5.50	5.38	5.39
TOTAL EXPENSE including Interest	26.72%	29.37%	31.12%	31.41%	30.70%	30.17%
NET PROFIT OR LOSS	5.99%	2.85%	0.36%	4.25%	4.31%	4.31%
Net Other Income (including interest on Net Worth)	2.62	2.98	3.13	2.81	2.77	2.91
NET GAIN before Income Taxes:						
Percentage of Net Sales	8.61%	5.83%	3.40%	7.06%	7.08%	7.22%
Percentage of Net Worth	20.19%	11.02%	5.85%	11.92%	12.69%	12.80%
Stock-turn (times a year, based on beginning and ending inventories)	5.28	5.24	5.14	4.89	5.00	5.03

All but three expense categories, namely, salaries and wages, tenancy costs, and sales taxes, rose more than sales; in consequence, the fall in the total expense percentage must be ascribed entirely to these three items. Examination of the per store dollar figures shows that there was an actual increase in salaries and wages paid but that the increase was less than the increase in sales. The increase in salaries and wages per store in 1935 is substantial, although perhaps not conclusive, evidence that the end of the N.R.A. in the middle of 1935 was not followed by any substantial downward revision either in wage rates or in the number of employees.

An examination of the causes of the decline in the average tenancy costs per store provides some useful information. Obviously, in a trade which is expanding the number of stores operated, such a reduction may come about either because new stores involve lower tenancy charges than the average of existing stores or because adjustments are made with respect to old stores. In the aggregate, tenancy costs rose from \$40,847,000 in 1934 to \$41,428,000 in 1935, an increase of \$581,000. The number of stores operated advanced by 46 between the same years. Thus, tenancy costs per store decreased from \$18,340 to \$18,213. But it should be noted that, for the sake of comparability from year to year in the face of a change in accounting methods, costs for light, water and power, and depreciation charges have been joined with tenancy costs. For 1934 and 1935, these three items can be segregated.

Tenancy costs proper rose from \$33,518,000 to \$34,311,000, expenditures for light, water and power advanced from \$3,896,000 to \$4,057,000, and depreciation charges declined from \$3,433,000 to \$3,060,000. Expressed in the more significant form of per store figures, tenancy costs increased from \$15,040 to \$15,086, light, water and power costs rose from \$1,759 to \$1,787, and depreciation charges were cut from \$1,541 to \$1,340. The entire reduction in total tenancy costs shown in Table 3 lies in the reduction in depreciation charges. It is fair to say, therefore, that the decline in tenancy costs was due to adjustments with regard to existing stores rather than the leasing of new stores at rates more favorable than the average for old stores.

The reason for the decline shown in sales taxes is relatively clear. According to the Bureau's procedure, there is included in operating expenses only that portion of the total tax due from the chains on their sales not collected by them from their customers. In 1933 and 1934, when many state sales taxes were adopted, variety chains had not perfected methods of collecting sales taxes from customers and in consequence were forced to make substantial payments from their own treasuries. By 1935, improved operating methods served to reduce substantially the burden borne by the companies.

Income Taxes Represented 1.09% of Sales

In the current bulletin, the Bureau presents for the first time an average figure for state and federal income taxes in relation to sales. For 25 chains, such charges

Table 3. Summarized Per Store Figures for 15 Identical Variety Chains: 1929, 1931-1935

Items	1929	1931	1932	1933	1934	1935
Average Sales per Store	\$222,645	\$171,130	\$146,809	\$151,515	\$167,488	\$171,821
GROSS MARGIN.....	\$72,827	\$55,138	\$46,216	\$54,030	\$58,638	\$59,244
Salaries and Wages.....	\$28,944	\$22,401	\$19,085	\$21,030	\$24,068	\$24,364
Tenancy Costs (including Light, Water, Power, and Depreciation).....	18,880	18,807	18,601	18,227	18,340	18,213
All Other Expense including Interest.....	11,667	9,953	8,001	8,334	9,011	9,262
TOTAL EXPENSE including Interest.....	\$59,491	\$50,261	\$45,687	\$47,591	\$51,419	\$51,839
NET PROFIT OR LOSS.....	\$13,336	\$4,877	\$529	\$6,439	\$7,219	\$7,405
Net Other Income (including interest on Net Worth).....	5,833	5,100	4,595	4,258	4,639	5,000
NET GAIN before Income Taxes.....	\$19,169	\$9,977	\$5,124	\$10,697	\$11,858	\$12,405

amounted to \$7,993,503, or 1.09% of the sales of these firms. This amount represented 14.17% of the aggregate net gain or earnings from all sources of these chains. Coupled with sales taxes of 0.17% of sales not collected from customers, and with other taxes, not including taxes on real estate, of 0.47% of sales, the tax burden of these 25 variety chains in 1935 amounted to \$12,733,198, or 1.73% of sales.

Chains With 25 Cent Limit Had Highest Profit Rates

The reporting variety chains have been classified in three groups on the basis of the character of the business done. These figures are summarized in Table 4 and

Table 4. Summarized Figures for 21 Chains Classified According to Type of Store Operated: 1935
(Medians¹; Net Sales = 100%)

Items	Price Range 5¢ to 25¢ Low Average Sale (Group A)	Price Range Up to \$1 Low Average Sale (Group B)	Price Range Up to \$1 High Average Sale (Group C)
GROSS MARGIN.....	36.85%	35.73%	33.18%
Salaries and Wages.....	16.26%	16.25%	14.46%
Tenancy Costs.....	9.02	6.32	7.22
TOTAL EXPENSE including Interest.....	33.49%	31.32%	30.28%
NET PROFIT OR LOSS.....	4.92%	4.74%	2.15%
Net Other Income (including interest on Net Worth)...	3.67	1.89	1.80
NET GAIN:			
Percentage of Net Sales..	8.71%	6.50%	2.96%
Percentage of Net Worth..	12.04%	19.68%	13.05%

¹ All the medians were set independently; therefore the sum of the individual items does not necessarily equal the total.

confirm emphatically the contrasts among the groups noted in earlier bulletins. Group C firms, those with a \$1 upper price limit, a relatively high average sale, and a greater proportion of their business done in apparel and accessories, had distinctly lower gross margin and expense rates than either of the other two groups. Since their advantage in the total expense rate was considerably less than their disadvantage in gross margin, profits in relation to sales were very much lower than profits of the chains with a 25 cent limit and a low average transaction.

Large Firms Gained on Small Firms Profitwise

In the bulletin reporting on results for 1934, considerable attention was devoted to the fact that, in contrast to the findings in earlier years, the small variety chains had net profits as a percentage of sales very close to those of the largest chains. The suggestion was advanced that the small chains, which were concentrated in small communities, had benefited from the rapid rise in farm income to a greater extent than the large chains. In 1935, there was a return to the condition existing prior to 1934, that is, the large chains had net profit rates distinctly higher than those of the smaller organizations. It seems fair to conclude, therefore, that the normal relationship was disturbed in 1934 by some factor. The most likely explanation lies in the estimate that farm income expanded more rapidly in 1934 than did national income as a whole.

The net profit advantage of the large firms did not result from higher gross margins but from lower expense in relation to sales. Personnel costs as a percentage of sales constituted the primary reason for the lower total expenses of the large chains, for the small firms had decidedly lower tenancy costs.

Bulk of Expenses Incurred in Stores

Typically, expenses incurred by variety chains in their stores were very much larger than those incurred in the operation of central organizations. For firms with sales of \$500,000 to \$10,000,000, central organization costs represented but one-seventh of total costs before interest, while for chains with sales of \$10,000,000 to \$100,000,000 they absorbed but one-ninth of total operating expenses before interest. Of these two groups of chains, the latter had distinctly lower administrative and general expenses in relation to sales than did the

former. Indeed, more than half the advantage in total operating expense which the larger concerns enjoyed derived from the advantage in central office costs.

Compensation of officers, executives, buyers, and superintendents of the smaller chains amounted to 1.82% of sales while the remuneration of individuals in these positions in the larger concerns represented 0.97% of sales. In this connection, it is of interest that payments to store managers in 1935 were more than twice as high a percentage of sales as the sum of all payments to central office executives.

OPERATING RESULTS FOR 1935

Bureau Sample Estimated at 90% of Total Trade. Operating figures for 1935 were received by the Bureau from 30 variety chains which had in operation at the end of the year 4,974 stores and secured aggregate sales of \$742,000,000. As this bulletin is being written, the Department of Commerce has not yet released national totals for 1935 derived from the retail census, so it is impossible to state exactly what proportion of the total business done by variety chains is represented by the Bureau statements. Using the census figures for 1933,¹ however, it is possible to estimate the representativeness of the Bureau sample. In 1933, the Census Bureau listed 93 variety chains operating 5,344 units and securing sales of \$621,000,000. One large national chain included by the Harvard Bureau among the variety chains was classified otherwise by the Census Bureau. With the addition of this firm, the aggregate sales volume of variety chains in 1933 was \$698,000,000. On the basis of the reports published monthly by the Bureau of Foreign and Domestic Commerce, it is estimated that aggregate sales by variety chains increased 12% between 1933 and 1935. On this basis, total sales of variety chains in 1935 were approximately \$782,000,000. After excluding the sales volume of three chains operating exclusively in Canada, the Bureau received reports covering sales of \$734,000,000. This represents more than 90% of the estimated aggregate sales volume of variety chains in the United States.

Of the 30 concerns which reported to the Bureau for 1935, four operating 34 stores and securing aggregate sales of \$777,000 had not reported in 1934; on the other hand, four companies, operating 26 stores in which they secured sales of \$713,000, and which were represented in the 1934 study, did not report for 1935. The largest of these latter firms, however, which secured more than half the sales of the four, was absorbed during the year by a chain which did report to the Bureau. It is clear, therefore, that the sample was essentially the same in 1935 as it was in 1934.

Characteristics of Reporting Chains

The 30 variety chains which reported to the Bureau included 12 with sales of less than \$500,000, 9 with sales between \$500,000 and \$10,000,000, 7 with sales between \$10,000,000 and \$100,000,000, and 2 with sales in excess of \$100,000,000. If the firms are classified according to

¹ United States Bureau of the Census, *Retail Distribution*, Vol. I, United States Summary 1933 (Washington, May, 1935), page 30.

the number of stores operated, there were 9 which had less than 10 stores, 8 which had 10 to 50 stores, 11 with 50 to 500 stores, and 2 with more than 500 stores.

Small Increase in Number of Stores Operated. Twenty-seven chains provided information on the opening and closing of stores. During the year 1935, there was a net increase of 87 in the number of stores operated by these chains. The firms opened 112 stores and closed 25. Ten firms opened no new stores and 17 firms closed no stores, while eight firms made absolutely no change in the number of stores. A few firms were expanding much more actively than were the remainder. Four chains accounted for a net increase of 64 stores. Although the net increase in the number of stores in 1935 was somewhat larger than it was in 1934, it is clear that the variety chain trade has not returned to anything like the rate of expansion characteristic of the years 1926 to 1931.

Largest Volume in Apparel and Accessories. In 1935, apparel and accessories, including men's, women's, and children's wear, dry goods, notions, and domestics represented the largest division of the sales of the 16 firms which were able to provide data on sales by merchandise lines. Next in importance came hardware, electrical supplies, crockery, and glassware. The percentages for the various classifications are shown in Table 5.

Table 5. Sales by Merchandise Lines for 16 Variety Chains: 1935
(Aggregate Net Sales = 100%)

Apparel and Accessories, Dry Goods, Notions, and Domestics.....	38.75%
Hardware, Electrical Supplies, Crockery, and Glassware.....	15.09
Toys, Games, Books, and Stationery.....	11.86
Drugs and Toiletries.....	9.68
Miscellaneous.....	8.15
Confectionery and Nuts.....	7.95
Soda Fountains, Luncheonettes, and Restaurants	6.49
Jewelry.....	2.03

These percentages have been derived on the basis of aggregate dollar figures for all 16 firms combined. There are notable differences, however, among individual variety chains as to the relative emphasis placed on particular lines of merchandise. Changes from year to year in the relative importance of the different classes of merchandise have been comparatively slight.

Variety Chains Buy from Manufacturers. Information with regard to the proportion of their merchandise purchased directly from manufacturers was supplied by 21 firms. Characteristically, variety chains deal directly with producers or importers and rely very little upon the services of wholesalers or other middlemen. Of the 21 chains, 11 reported that 90% or more of their merchandise was purchased directly from manufacturers, and only 2 firms indicated that less than 70% was secured in this manner. These two firms were small concerns and purchased more than half their merchandise from wholesalers or other middlemen.

The policy of dealing directly with producers has not been accompanied by extensive warehousing. Of the 22 firms which gave information on this point, only 3 reported that more than half their merchandise passed through a central warehouse. Typically less than 10% of the merchandise did not move directly from manufacturers to the individual stores. It is necessary to keep in mind, however, that these figures refer only to the operation of a central warehouse and that many variety chains operate extensive storerooms at the individual stores in which it is possible for them to maintain a substantial reserve supply.

Two Types of Averages Presented

Aside from their use in educational institutions, the figures presented in the Bureau's study of chain stores are designed to serve two purposes: (1) to present to the public a picture of what happens to the consumer's dollar spent in the stores of limited price variety chains; and (2) to provide for business executives yardsticks against which the operations of a particular business may be measured. In accordance with these two objectives, two types of averages are presented in this bulletin, as they have been in earlier studies of various types of chains. The first type of average percentage is obtained simply by dividing the total dollars reported by the firms for a particular item—say, salaries and wages—by the total dollar sales of the same firms. Throughout the bulletin these percentages are called aggregates. The second type of average presented is the median. The median is computed by dividing the dollar figures for a particular item for a particular firm by the dollar sales for that particular firm, and by then arranging the resulting percentages in order from the highest to the lowest and selecting the middle percentage. It is obvious that the major difference between these two types of averages lies in the fact that the first type is weighted very heavily by the figures for the large concerns, whereas the latter gives equal weight to the results of each firm. The first type of average is most useful when it is desired to examine the trade

from the point of view of the general public or the consumer. On the other hand, the executive who wishes to measure the results of his own company quite probably is thinking in terms of one management unit as compared with a number of other similar management units. Accordingly, for this purpose the median determined after giving equal weight to the results of each management unit is most useful. In this bulletin, no median figures are shown for all 30 firms together. As is indicated in this bulletin, confirming the findings of earlier years there are major differences in margin, expense, and profit percentages among firms of different size and among firms with different price limits and average transaction. The executive wishing to compare the results of his own firm with those of other firms in the trade naturally would select the group which has characteristics most nearly corresponding to those of his own organization. For this reason, in the tables in which the figures are classified on various bases, the medians are emphasized.

Operating Figures for 1935

Gross Margin. For 1935, out of \$742,000,000 which that part of the variety chain trade reporting to the Bureau took in over the counter, \$473,000,000 was paid for merchandise, leaving \$269,000,000 to cover operating expenses and profit. In other words, slightly more than 36 cents out of the average dollar spent in variety stores represented operating expenses and profit. In the computation of this figure for gross margin, all discounts and allowances have been deducted from the cost of merchandise, and freight, express, postage, and truckage have been added to the cost of merchandise. These transportation charges represented about 2½ cents of the consumer's dollar. However, if gross margin had been figured without the addition of transportation cost, it would have been approximately 39% of sales.

Gross margin rates are affected by many factors which need not be reviewed here. It may be helpful, however, in securing perspective to compare the gross margin of the limited price variety chains with that of some other retail trades. In 1935, department stores had gross margins ranging from 30.4% of sales for stores with sales of less than \$150,000 to 36.7% of sales for stores with sales of \$20,000,000 or more. In 1934, food chains secured a gross margin of 23.95% of sales, while department store chains averaged 28.29% of sales. In 1932, the most recent year for which figures are available, drug chains had a gross margin of 33.68% and shoe chains averaged 33.23% of sales. Without implying anything as to the significance of these comparisons, it is clear that the limited price variety chains are among the higher margin types of retail enterprise.

**Table 6. Operating Results for
30 Variety Chains: 1935**

Items	Aggregate Figures	
	Amounts (Dollar figures given in thousands)	Average Percentages Computed from the Combined Dollar Figures of the 30 Chains
Aggregate Number of Stores.....	4,974	....
Aggregate Net Sales.....	\$742,112	100.00%
Average Net Sales per Chain.....	\$24,737	....
Average Sales per Store.....	\$149	....
Net Inventory at Beginning of Year	\$98,547	13.28%
Net Purchases (plus freight, express, postage, and truckage, minus dis- counts and allowances).....	478,090	64.43
Net Cost of Merchandise Handled..	\$576,637	77.71%
Net Inventory at End of Year.....	103,572	13.90
Net Cost of Merchandise Sold.....	\$473,065	63.75%
GROSS MARGIN.....	269,047	36.25
Salaries and Wages.....	\$113,252	15.26%
Tenancy Costs.....	74,293	10.01
Light, Water, and Power.....	7,359	0.99
Depreciation of Fixtures and Equip.	4,909	0.66
Supplies.....	8,042	1.08
Advertising.....	1,427	0.19
Insurance (except on real estate)...	2,660	0.36
Taxes (except on real estate or in- come):		
Sales.....	1,289	0.17
Other.....	3,526	0.48
Travelling.....	956	0.13
Miscellaneous Expense.....	4,501	0.61
Total Expense before Interest.....	\$222,223	29.94%
Total Interest.....	13,373	1.80
TOTAL EXPENSE including Interest..	\$235,596	31.74%
NET PROFIT OR LOSS.....	\$33,451	4.51%
Net Profit or Loss from Real Estate Operations.....	\$7,681	1.04%
Interest on Net Worth (except real estate, leaseholds, and goodwill)..	13,364	1.80
Other Revenue, Net.....	2,162	0.29
Total Net Other Income.....	\$23,207	3.13%
NET GAIN before Income Taxes:...	\$56,658	....
Percentage of Net Sales.....	....	7.64%
Percentage of Net Worth.....	....	14.50†
Rate of Stock-turn (times a year):		
Based on Beginning and Ending Inventories.....	....	4.68
Based on Monthly Inventories...	....	4.37†
Distribution of Stores ¹ among Cities with Populations of:		
Less than 10,000.....	1,192	25.01%
10,000-25,000.....	1,230	25.80
25,000-100,000.....	973	20.41
100,000-500,000.....	533	11.18
500,000-1,000,000.....	282	5.92
1,000,000 or more.....	557	11.68
Total Stores.....	4,767	100.00%

† Figures for this item were not reported by all the firms in the group.

‡ Because of inadequate balance sheet data in the case of 2 chains, the figure for net gain as a percentage of net worth was based on the reports of 28 firms.

¹ Location of stores by size of city was reported by 27 of the 30 chains.

Total Expense. In 1935, the limited price variety chains expended \$236,000,000, or 31.7 cents of the consumer's dollar, for the cost of doing business. These figures include a charge for interest on the net worth invested in the business; thus they represent expense in the long-run economic sense.

Net Profit and Net Gain. Figures for both net profit and for net gain are presented because of the Bureau's practice of charging interest on the net worth of the business. Net profit of \$33,000,000, or 4.5 cents of the consumer's dollar, is profit over and above a charge for interest on the net worth of the business. Net gain, which is net profit in the usual business sense, is secured by adding to the above figure net profit or loss from real estate operations, interest on net worth, and other revenue, net. In 1935, these three items totaled \$23,000,000, or 3.1 cents of the average dollar spent by consumers in the stores of variety chains. Total net gain before state and federal income taxes amounted to \$56,000,000, or 7.6 cents of the consumer's dollar. When this net gain is related to the aggregate net worth of these firms, a figure of 14.5% results. In other words, in 1935 the aggregate business earnings from all sources of the 28 chains reporting the data amounted to 14.5% of the net capital invested by them.

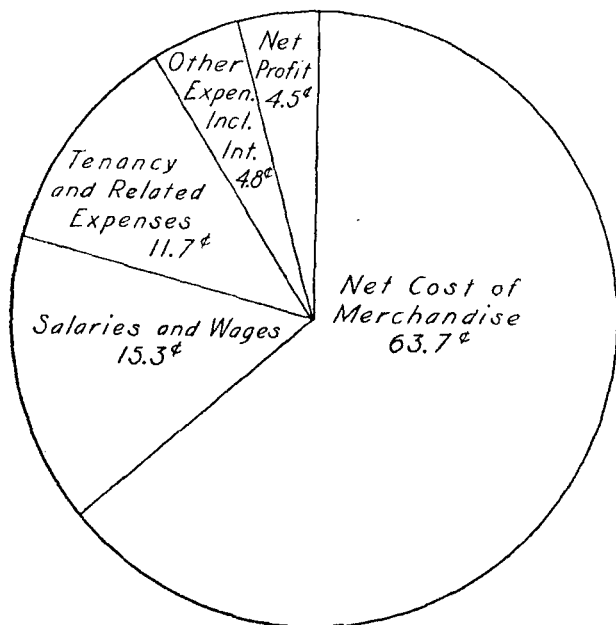
Individual Expense Items. Typically, concerns incur their largest expense for salaries and wages. In 1935, this category required \$113,000,000, or 15.3 cents of the average dollar. For tenancy costs, the variety chains expended about two-thirds as much as they did for salaries and wages, that is, about \$74,000,000. This sum represented 10.0 cents of the consumer's dollar. With other occupancy costs such as light, water and power, and depreciation of equipment considered together with tenancy costs, the sum amounted to 11.7 cents of the average dollar in 1935. Only two other items of expense, supplies and interest, amounted to as much as one cent of the typical dollar. Advertising, which bulks large for many types of firms, was of little importance to the variety chains. Total expenditures for this item amounted to slightly less than a million and a half dollars or 0.19 cents of the consumer's dollar.

Taxes. In 1935, taxes, as defined by the Bureau, amounted to \$4,815,000, or 0.65% of sales. This figure, however, omits the two most important types of taxes paid by the variety chains, namely, real estate taxes and income taxes. For the sake of comparability among firms with greatly differing policies as to the ownership of real estate and as to the type of lease used for leased property, the Bureau includes all payments such as taxes, insurance, and the like made in lieu of rent in the tenancy cost category. On the other hand, income taxes, being technically a distribution of profits, have been

omitted from the expense statement altogether. Thus, the Bureau's figures for net profit and for net gain both are before deductions for state and federal income taxes.

With the current increased interest in taxation, it has

Chart 1. Disposition of the Consumer's Dollar Spent in Chain Variety Stores: 1935



seemed desirable to provide more complete information on the tax burden borne by variety chains. The problem of disentangling real estate taxes from tenancy costs, however, has proved insuperable. It has been found possible, nevertheless, to add something to the information available on taxes by a study of income taxes.

Reporting firms were asked to include figures for state and federal taxes on income for 1935 and 25 chains with aggregate sales of \$734,523,921 complied with this request. For these firms, such tax payments amounted to \$7,993,503, or 1.09% of sales. Net gain of these 25 firms amounted to \$56,420,437, so that taxes on income represented 14.17% of the earnings before income taxes.

For these same 25 chains, sales taxes not collected from customers were \$1,253,694, or 0.17% of sales, and other taxes amounted to \$3,486,001, or 0.47% of sales. Thus, the sum of the taxes which the Bureau has been able to distinguish from other expense categories was \$12,733,198, which represented 1.73 cents of the average dollar spent by consumers in variety chain stores.

Rate of Stock-turn. The rate of stock-turn measures the number of times which the average inventory is sold. Based on an average of the inventory at the beginning and end of the year, the stock-turn rate of the 30 variety chains was 4.68 times. Using average monthly inventory, the rate was somewhat lower, 4.37 times, indicating that stocks on hand at the year end were lower than they averaged throughout the year.

In Table 7 are shown the ratios between inventories at the end of each month and sales in the following month. Many retailers have found these stock-sales ratios useful for internal control purposes because they apply only to a specific time and are not the result of averaging as is the stock-turn figure. Throughout most of the year, the ratio for the 18 chains combined fluctuated around three times, that is, enough merchandise was on hand to permit sales for three months at the rate of the first month. The only exception to this statement occurred in December, when Christmas business expanded sales to about twice the level of the average month.

Table 7. Monthly Sales and Inventories for 18 Variety Chains: 1935

Month	Average Sales per Store		Average Retail Inventory per Store		Ratio of Inventory for End of Preceding Month to Sales for Month
	Dollars	% of 1935 Average Month	Dollars	% of 1935 Average Month	
January.....	\$9,821	74.47%	\$34,532	90.84%	3.29
February.....	10,325	78.30	35,382	93.08	3.34
March.....	11,452	86.84	38,280	100.70	3.09
April.....	13,128	99.55	38,532	101.37	2.92
May.....	12,418	94.17	38,395	101.00	3.10
June.....	12,610	95.03	37,219	97.91	3.04
July.....	11,826	89.68	36,044	94.82	3.15
August.....	12,464	94.52	36,509	96.05	2.89
September.....	10,578	80.22	40,003	105.24	3.45
October.....	13,564	102.86	43,978	115.69	2.95
November.....	14,051	106.55	45,593	119.94	3.13
December.....	26,006	197.21	31,688	83.36	1.75

YEAR-TO-YEAR TRENDS

The Bureau began its studies of the limited price variety chain field with figures for the year 1929 and has gathered reports for each succeeding year with the exception of 1930. Accordingly, it is possible to present a picture of the effects on the operating results of variety chains of the changing conditions of the years following 1929. Moreover, a certain amount of information is available in regard to variety chain operations prior to that year. A group of seven important chains have published for many years figures for their annual sales, for the number of stores operated, and for inventories at the end of the year. A number of significant characteristics of the trade prior to 1929 may be found in these data.

Trends Prior to 1929

Chart 2 is designed to show the significant trends revealed by the published reports of seven chains operating 3,278 stores in 1929, in which they did an aggregate business of \$684,000,000. The four curves shown on the chart are the number of stores operated, the

aggregate net sales, the average sales per store, and the average inventory per store, all expressed as relatives of the 1932 figures. The chart covers the years from 1924 to 1935 inclusive.

The years from 1924 to 1929 witnessed a steady and rapid increase in the number of stores operated by these seven variety chains. The increase was from an average of 2,071 stores in 1924 to an average of 3,278 in 1929, about 58%. Similarly, the aggregate net sales of these firms rose steadily throughout the period. It is significant to note, however, that between 1927 and 1928 the rate of increase in number of stores outran the rate of increase in aggregate sales, with a resulting decline in the average sales per store. The levelling off and actual decline in average sales per store in large measure is a statistical indication of the commonly made observation that at about that period the variety chains, on the average, found it necessary to accept locations with less favorable sales possibilities.

Prior to 1929, the variety chains were successful in

Chart 2. Sales and Inventories for 7 Variety Chains: 1924-1935

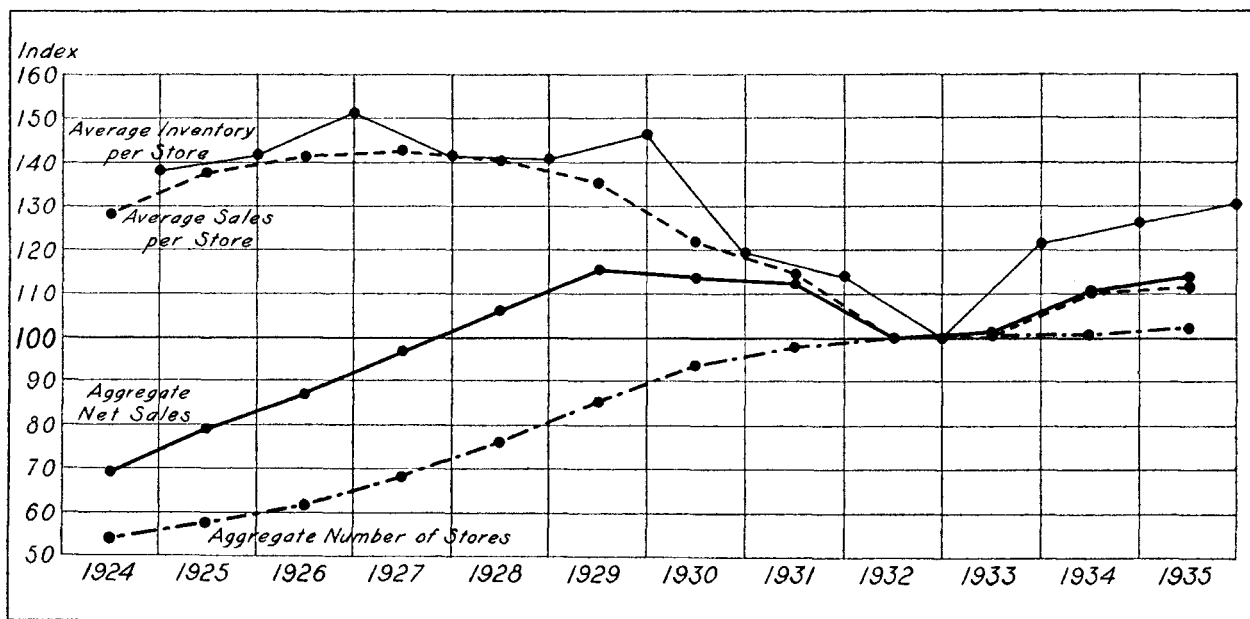


Table 8. Operating Results for 15 Identical Variety Chains: 1929, 1931-1935

Items	Aggregate Figures											
	Amounts (in thousands)						Average Percentages Computed from the Combined Dollar Figures					
	1929	1931	1932	1933	1934	1935	1929	1931	1932	1933	1934	1935
Aggregate Number of Stores	1,588	2,086	2,188	2,195	2,228	2,274	....	....	....	....	....	....
Aggregate Net Sales	\$353,560	\$356,977	\$321,218	\$332,098	\$373,164	\$390,721	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Average Net Sales per Chain	\$23,571	\$23,709	\$21,415	\$22,172§	\$24,878	\$26,048	....	....	....	....	....	....
Average Sales per Store	\$223	\$171	\$147	\$152§	\$167	\$172	....	....	....	....	....	....
Index of Change (1932 = 100%):												
Number of Stores per Chain	72.58	95.34	100.00	100.32	101.83	103.93	....	....	....	....	....	....
Net Sales per Chain	110.07	111.13	100.00	103.54	116.17	121.64	....	....	....	....	....	....
Average Sales per Store	151.66	116.57	100.00	103.21	114.09	117.04	....	....	....	....	....	....
Net Cost of Merchandise Sold	\$237,932	\$241,954	\$220,088	\$213,667	\$242,520	\$255,992	67.29%	67.78%	68.52%	64.34%	64.99%	65.52%
GROSS MARGIN	115,628	115,023	101,130	118,431	130,644	134,729	32.71	32.22	31.48	35.66	35.01	34.48
Salaries and Wages	\$45,963	\$46,735	\$41,754	\$46,101	\$53,610	\$55,410	13.00%	13.09%	13.00%	13.88%	14.37%	14.18%
Tenancy Costs				32,764	33,518	34,311				9.87	8.98	8.78
Light, Water, and Power				3,694	3,896	4,057				1.11	1.05	1.04
Depreciation of Fixtures and Equipment	29,982	39,231	40,706	3,490	3,433	3,060	8.48	10.99	12.67	1.05	0.92	0.78
Supplies	5,714	5,237	4,189	4,504	5,032	5,535	1.62	1.47	1.31	1.36	1.35	1.42
Advertising	707	848	964	912	1,024	1,201	0.20	0.24	0.30	0.28	0.28	0.31
Insurance (except on real estate)	1,262	1,131	1,385	1,342	1,538	1,620	0.36	0.32	0.43	0.40	0.41	0.41
Taxes (except on real estate or income):												
Sales				847	1,315	739				0.25	0.35	0.19
Other	964	1,251	1,363	1,468	1,729	1,978	0.27	0.35	0.42	0.44	0.46	0.51
Miscellaneous Expense including Travelling	3,829	3,585	3,513	3,017	2,962	3,165	1.08	1.00	1.09	0.91	0.79	0.81
Total Expense before Interest	\$88,421	\$98,018	\$93,874	\$98,139	\$108,057	\$111,076	25.01%	27.46%	29.22%	29.55%	28.96%	28.43%
Total Interest	6,038	6,835	6,109	6,189	6,507	6,808	1.71	1.91	1.90	1.86	1.74	1.74
TOTAL EXPENSE including Interest	\$94,459	\$104,853	\$99,983	\$104,328	\$114,564	\$117,884	26.72%	29.37%	31.12%	31.41%	30.70%	30.17%
NET PROFIT OR LOSS	\$21,169	\$10,170	\$1,147	\$14,103	\$16,080	\$16,845	5.99%	2.85%	0.36%	4.25%	4.31%	4.31%
Net Other Income (including interest on Net Worth)	9,274	10,631	10,073	9,327	10,354	11,350	2.62	2.98	3.13	2.81	2.77	2.91
NET GAIN before Income Taxes:	\$30,443	\$20,801	\$11,220	\$23,430	\$26,434	\$28,195	....	....	....	....	....	....
Percentage of Net Sales . . . . .	....	....	....	....	....	....	8.61%	5.83%	3.49%	7.06%	7.08%	7.22%
Percentage of Net Worth . . . . .	....	....	....	....	....	....	20.19‡	11.02	5.85	11.92	12.69‡	12.80‡
Rate of Stock-turn (times a year) based on average of inventories at the beginning and end of the year . . . . .	....	....	....	....	....	....	5.28	5.24	5.14	4.89	5.00	5.03

‡Because of inadequate balance sheet data in the case of one chain, the figure for net gain as a percentage of net worth was not based on the reports of all the chains in the group.
§The statement of one firm did not cover a full fiscal year. This average is adjusted to reflect the sales for the entire period.

Table 9. Operating Results for 21 Identical Variety Chains: 1932-1935

Items	Aggregate Figures							
	Amounts (in thousands)				Average Percentages Computed from the Combined Dollar Figures			
	1932	1933	1934	1935	1932	1933	1934	1935
Aggregate Number of Stores.....	4,696	4,740	4,787	4,875	.....	.....	.....	.....
Aggregate Net Sales.....	\$627,161	\$648,048	\$718,231	\$738,310	100.00%	100.00%	100.00%	100.00%
Average Net Sales per Chain.....	\$30,074	\$30,882	\$34,185	\$35,158	.....	.....	.....	.....
Average Sales per Store.....	\$134	\$137	\$150	\$151	.....	.....	.....	.....
Index of Change (1932 = 100):								
Number of Stores per Chain.....	100.00	100.94	101.94	103.81	.....	.....	.....	.....
Net Sales per Chain.....	100.00	102.69	113.67	116.90	.....	.....	.....	.....
Average Sales per Store.....	100.00	101.74	111.51	112.61	.....	.....	.....	.....
Net Cost of Merchandise Sold.....	\$415,017	\$405,757	\$453,968	\$470,450	66.17%	62.61%	63.21%	63.72%
GROSS MARGIN.....	212,144	242,291	264,263	267,860	33.83	37.39	36.79	36.28
Salaries and Wages.....	\$88,223	\$96,644	\$110,331	\$112,615	14.07%	14.91%	15.36%	15.25%
Tenancy Costs.....		71,531	72,811	74,972		11.04	10.14	10.03
Light, Water, and Power.....		6,700	6,939	7,318		1.03	0.96	0.99
Depreciation of Fixtures and Equip- ment.....	82,084	5,283	5,167	4,873	13.09	0.82	0.72	0.66
Supplies.....	6,348	6,657	7,437	8,010	1.01	1.03	1.04	1.09
Advertising.....	1,200	1,098	1,216	1,413	0.19	0.17	0.17	0.19
Insurance (except on real estate).....	2,225	2,217	2,545	2,648	0.35	0.34	0.35	0.36
Taxes (except on real estate or in- come):								
Sales.....		1,766	2,353	1,289		0.27	0.33	0.18
Other.....	2,807	2,939	2,982	3,495	0.45	0.45	0.42	0.47
Miscellaneous Expense including Trav- elling.....	6,037	4,718	4,557	5,382	0.96	0.73	0.63	0.73
Total Expense before Interest.....	\$188,924	\$199,553	\$216,338	\$221,115	30.12%	30.79%	30.12%	29.95%
Total Interest.....	11,947	12,217	12,921	13,315	1.91	1.89	1.80	1.80
TOTAL EXPENSE including Interest ..	\$200,871	\$211,770	\$229,259	\$234,430	32.03%	32.68%	31.92%	31.75%
NET PROFIT OR LOSS.....	\$11,273	\$30,521	\$35,004	\$33,430	1.80%	4.71%	4.87%	4.53%
Net Other Income (including interest on Net Worth).....	16,960	22,065	21,681	23,147	2.70	3.40	3.02	3.13
NET GAIN before Income Taxes:.....	\$28,233	\$52,586	\$56,685	\$56,577	.....	.....	.....	.....
Percentage of Net Sales.....	.....	.....	.....	.....	4.50%	8.11%	7.89%	7.66%
Percentage of Net Worth.....	.....	.....	.....	.....	8.02†	14.83	15.21†	14.51†
Rate of Stock-turn (times a year) based on average of inventories at the beginning and end of the year.	.....	.....	.....	.....	5.13	4.76	4.74	4.69

† Because of inadequate balance sheet data in the case of one chain, the figure for net gain as a percentage of net worth was not based on the reports of all the chains in the group.

‡ The figures for one firm did not cover a twelve month period. In computing this average allowance has been made for this fact.

maintaining a close relationship between sales per store and inventories per store. During a period of rapid expansion in the number of stores, this represents a real test of merchandising skill; inventories must be placed in new stores in a year in which full sales volume cannot be expected.

Although the years following 1929 are shown in Chart 2 for the sake of completeness, comments on trends during succeeding years have been drawn from the more detailed material shown in Tables 8 and 9.

Trends Since 1929

For the study of trends over a period of years, samples made up of identical firms are much to be preferred, since differences brought about by the inclusion or exclusion of a particular firm or firms in one or more years are thus avoided. Unfortunately, a few important variety chains did not report for the earlier years of the Bureau's study. For this reason, both Table 8 and Table 9 seem necessary. The former is made up of the operating figures for 15 identical variety chains which

have reported for each year of the study. The latter consists of the operating results of 21 variety chains which have reported for each year since 1932. The importance of the difference in these two samples may be emphasized by comparing the aggregate sales volume and aggregate number of stores of each group in 1935. The 15 chains included in Table 8 operated 2,274 stores in 1935 in which they secured a total volume of \$391,000,000; the 21 chains on which Table 9 is based operated 4,875 stores in 1935 and did a total business of \$738,000,000. Since such substantial differences in the size of the two samples exist, it is pertinent to ascertain whether gross margin, expense, and profit percentages for one group differ markedly from those of the other group.

Examination of the two tables reveals that there are distinct differences in many of the items, but that these differences remained consistent throughout the four years 1932-1935. For example, the gross margin percentages of the two groups were as follows:

Year	15 Chains	21 Chains
1932	31.48%	33.83%
1933	35.66	37.39
1934	35.01	36.79
1935	34.48	36.28

In each year, the gross margin percentage of the larger group of chains was higher than the percentage of the smaller group and from year to year changes occurred in the same direction and were of about the same relative magnitude. Similarly, a comparison of the percentages for total expense is as follows:

Year	15 Chains	21 Chains
1932	31.12%	32.03%
1933	31.41	32.68
1934	30.70	31.92
1935	30.17	31.75

Again, the percentages of the larger group were above those of the smaller group in each year, and the direction and magnitude of changes were essentially similar. The same pattern is shown even for individual expense items. The tabulation following compares first salaries and wages and second tenancy costs, including light, water, power, and depreciation.

Year	15 Chains	21 Chains	15 Chains	21 Chains
1932	13.00%	14.07%	12.67%	13.09%
1933	13.88	14.91	12.03	12.89
1934	14.37	15.36	10.95	11.82
1935	14.18	15.25	10.60	11.68

Since the operating percentages of the two groups clearly have remained close to the same relative position one to the other in the years since 1932, one is probably justified in assuming that if the figures for the larger group of firms were available for the years prior to 1932 they would show the same general changes as are shown by the figures for the smaller group of 15 chains. On this assumption, attention in this section is centered on the figures for the 15 chains which cover the entire period since 1929. The individual wishing the most accurate absolute level of total expense or a detailed expense item will naturally use the figures for the largest sample available appropriate for his purpose.

Trends in Number of Stores and Sales Volume Since 1929. Between 1929 and 1931, the 15 variety chains included in Table 8 established 498 new stores, an increase of 31%. Thereafter, growth in number of stores in the aggregate virtually stopped and has not yet been resumed on a substantial scale. Between 1932 and 1935, there was a net increase of 86 stores in the trade, or 3.9%. It must be borne in mind, however, that this is a net figure; the substantial increase in the number of stores of a few chains has been offset by the decline in the number of stores of other organizations. It remains fair to say, however, that relative to the years prior to 1932, the variety chain trade has done little more than maintain the *status quo* since that year.

Primarily as a result of the expansion in the number of stores during the early years of the depression, the aggregate sales of the variety chains declined only moderately between 1929 and 1932 and rose well above the 1929 level in 1934 and 1935. Aggregate sales of the 15 variety chains of \$391,000,000 in 1935 were a full 10% above the figure of \$354,000,000 recorded in 1929. Between 1934 and 1935, the improvement in sales volume was distinctly less than the increase between 1933 and 1934, 4.7% as compared with 12.4%.

Because of the increase in the number of stores operated between 1929 and 1931, a sounder measure of the impact of the depression on variety chains is the average sales per store. In 1929, the average sales volume of the individual variety chain unit was \$223,000. By 1932, average sales per store had fallen about one-third, to \$147,000. Since 1932, there has been a moderate increase in sales per store each year.

**Table 10. Operating Results per Store for 15 Identical Variety Chains:
1929, 1931-1935**

Items	1929	1931	1932	1933	1934	1935
Average Sales per Store	\$222,645	\$171,130	\$146,809	\$151,515	\$167,488	\$171,821
Net Cost of Merchandise Sold (including freight, express, postage, and truckage)	\$149,818	\$115,992	\$100,593	\$97,485	\$108,850	\$112,577
GROSS MARGIN	72,827	55,138	46,216	54,030	58,638	59,244
Salaries and Wages	\$28,944	\$22,401	\$19,085	\$21,030	\$24,068	\$24,364
Tenancy Costs	18,880	18,807	18,601	14,954	15,040	15,086
Light, Water, and Power				1,682	1,759	1,787
Depreciation of Fixtures and Equipment				1,591	1,541	1,340
Supplies				3,607	2,515	1,923	2,061	2,261	2,440
Advertising	445	411	441	424	469	533
Insurance (except on real estate)	802	548	631	606	687	795
Taxes (except on real estate or income):						
Sales	601	599	617	379	586	326
Other				667	771	876
Miscellaneous Expense including Travelling	2,405	1,711	1,600	1,379	1,323	1,392
Total Expense before Interest	\$55,684	\$46,992	\$42,898	\$44,773	\$48,505	\$48,849
Total Interest	3,807	3,269	2,789	2,818	2,914	2,990
TOTAL EXPENSE including Interest	\$59,491	\$50,261	\$45,687	\$47,591	\$51,419	\$51,839
NET PROFIT OR LOSS	\$13,336	\$4,877	\$529	\$6,439	\$7,219	\$7,405
Net Other Income (including interest on Net Worth)	5,833	5,100	4,595	4,258	4,639	5,000
NET GAIN before Income Taxes	\$19,169	\$9,977	\$5,124	\$10,697	\$11,858	\$12,405

reaching a figure of \$172,000 in 1935, still far below the average for 1929. In all comparisons of changes in sales volume over this period, it is essential to bear in mind the influence of price changes. It is certain that a part, and probably a very substantial part, of the decline in the average sales per store of the variety chains is explained by the fall in prices. Unfortunately, it is difficult to estimate to what extent price changes are responsible for changes in the sales volume of variety chains. There is no index of retail prices available which applies specifically to variety chain merchandise in the same way that the Fairchild Index applies to department store merchandise. Indeed, the problem of constructing such an index would be extremely difficult because of the definite policies of many of the variety chains of holding to fixed prices and varying quantities and/or qualities sold at those prices.

Slow Decline in Gross Margin in Recent Years. Because of the sharp advance in prices and the actual and prospective increases in operating costs, gross margin rates in 1933 showed a sharp advance from the 1932 level and were definitely higher than for any earlier year for which the Bureau has records. In 1934 and again in 1935, there were moderate declines in the gross margin percentages. In part, these declines undoubtedly

reflected the absence of gains made possible by the sharp advance in prices in 1933; during 1934 and 1935 average prices of manufactured goods were relatively stable. In addition, the decline in gross margin may well have been the result of the chains, competing aggressively, passing on to customers the advantage of small declines in expense rates derived primarily from increasing sales. From the standpoint of the trade as a whole, the decline in the gross margin rate, as long as it does not outstrip the fall in the expense rate, represents a thoroughly healthy development.

Total Expense Rate Still Well Above 1929 Level. From 1929 to 1933, there was a steady advance in the proportion of sales required for operating expenses including interest. Whereas total expense amounted to 26.72% of sales in 1929, the figure stood at 31.41% of sales in 1933. From this high point, there was a moderate decline in 1934 and 1935 to 30.70% and 30.17% respectively. The rise in the expense rate between 1929 and 1933 reflected the combination of a decline in aggregate dollar sales and an increase in aggregate dollar expenses. Expenditures which totaled \$94,000,000 in 1929 had expanded to \$104,000,000 in 1933; whereas sales stood at \$332,000,000 as compared with \$354,000,000 in the earlier year. On the other hand, the moderate decline in the expense rate since 1933 has

not been brought about by a combination of higher sales and lower dollar expenses. Aggregate dollar expenses have mounted materially since 1933, and the lower expense percentage reflects only the slightly more rapid increase in aggregate sales.

A more accurate appraisal of trends in expenses may be made on the basis of per store figures. In Table 10, the aggregate figures of Table 8 have been translated into averages per store. These data show that the variety chains made substantial reductions in total expense per store during the early years of the depression and that aggregate expenses increased only because of the addition of new stores. Since the low point of total expense per store of \$45,687 in 1932, there has been an advance to \$51,839 in 1935. The rise between 1934 and 1935 amounted to but \$420.

Great Stability in Net Profit Rates in Recent Years. In 1933, 1934, and 1935, the net profit and net gain percentages for the 15 variety chains showed remarkably little variation. Between 1929 and 1932, there was a sharp decline in earnings rates, but there was an immediate recovery in 1933 to a level somewhat below that of 1929, and this level has been maintained since 1933. Net gain, which includes non-merchandising income as well as interest on the net worth of the business, exhibits the same pattern, whether expressed as a percentage of net sales or as a percentage of net worth.

Salary Percentage Above That of 1929. Throughout the early years of the depression, variety chains reduced their expenditures for salaries and wages in almost exact proportion to the decline in aggregate sales. In 1933 and 1934, however, personnel costs rose more rapidly than sales volume, with a resulting increase in percentage expense. The influence of the wage and hour provisions of the Retail Code may be clearly seen. In 1935, salaries and wages per store increased further, indicating that the ending of the N.I.R.A. by the Supreme Court was not followed by widespread reductions in wage rates or in the number of employees. Since the increase in sales in 1935 was somewhat greater than the increase in salary and wage payments, percentage pay roll costs declined slightly, but remained definitely above the level of 1929.

Tenancy Costs Show Steady Decline Since 1932. For the sake of maintaining comparability, tenancy costs, expenditures for light, water and power, and depreciation charges have been combined in Table 8. These items represented a total of nearly \$30,000,000 in 1929 and \$41,000,000 in 1935. The increase, however, was entirely the result of the addition of new stores, since

the average per store in 1929 was \$18,900 and in 1935 was \$18,213. It is highly instructive to examine the figures for tenancy costs per store over the period. The variety chains, because of long-term leases, found it extremely difficult to reduce expenditures for tenancy costs per store as sales declined; conversely, costs remained relatively unchanged during the period of advancing sales after 1932. The following figures for tenancy costs per store indeed reflect a genuine fixed expense: 1929, \$18,880; 1931, \$18,807; 1932, \$18,601; 1933, \$18,227; 1934, \$18,340; 1935, \$18,213. It follows, therefore, that the wide fluctuations in tenancy costs as a percentage of sales, from 8.48% in 1929 up to 12.67% in 1932 and down to 10.60% in 1935, mirror very closely the fluctuations in sales per store.

For the last three years of the period, tenancy costs have been broken down to show light, water and power expense, depreciation charges, and tenancy costs proper separately. Examination of these figures indicates that between 1934 and 1935 tenancy costs proper, and light, water and power expense increased in the aggregate while depreciation charges were cut by more than 10%. On a per store basis, the decline in total tenancy and related expenses was entirely the result of the reduction in depreciation charges; each of the other two components rose.

Slight Tendency Toward More Advertising. Advertising expenditures by variety chains have been consistently smaller in relation to sales than is true for most types of retailers. Traditionally, the variety chain has depended primarily on location and display as methods of sales promotion. Several large chains consistently did no advertising of any kind. Indeed, most of the advertising done by variety chains until recently was by firms with an upper limit of \$1 dealing in a substantial proportion of apparel items. In 1934, and particularly in 1935, however, there has been an increase, small in amount yet large relative to the past, in the expenditure for advertising. The increase shows up clearly in the per store figures given in Table 10. Presumably, the greater interest in advertising is related to the increase in emphasis on merchandise above the nickel and dime price range. This presumption is supported by a tabulation of advertising expenditures during the last four years which shows that those firms with an upper limit of 25 cents consistently did virtually no advertising; on the other hand, the chains with an upper limit of \$1 and a relatively low average sale increased their advertising appropriations from an average figure of 0.22% of sales in 1932 to an average of 0.46% of sales in 1935.

EFFECTS OF DIFFERENCES IN TYPES OF BUSINESS ON OPERATING RESULTS

Although the firms upon which this study is based have been restricted to a particular class, that is, variety chains with limited prices, there are a number of distinct differences among the chains with respect to the type of business done. These differences relate primarily to the price limit in force and the type of merchandise which the price limit permits the firm to carry.

To appraise the effect upon operating results of these differences, the Bureau early classified the limited price variety chains in three groups. Group A firms have a 25 cent upper limit, an average sale of 17½ cents, and on the average, secure but 32% of their aggregate volume in dry goods, notions, domestics, apparel and accessories. Group B firms have an upper price limit of \$1, but an average sale of 24 cents sufficiently near the average sale of Group A chains to suggest that the bulk of the business is done in the small items typical of Group A. Group C chains also have an upper price limit of \$1, but an average sale of 30 cents. These chains secure nearly 55% of their aggregate sales in dry goods, notions, domestics, apparel and accessories.

Figures for the 21 variety chains which it was possible to classify on this basis are shown in Table 11. The relationships among the three groups with respect to gross margin, net profit, and the individual items of expense remain unchanged from previous years. The differences among the groups persist regardless of changes in general business activity.

Net Profit Lowest for Group C Firms. The chains with a \$1 limit, a fairly high average sale, and more than half their volume in dry goods and apparel, had a notably lower rate of net profit than either of the other two groups. When total net other income is added to net profit, the disparity becomes even greater. Only when net gain is measured against net worth rather than net sales do the Group C firms compare reasonably well with the other two groups. In this connection, it may be noted that the Group A firms had a materially higher profit from real estate operations than either Group B or Group C. This difference implies substantially larger real estate operations requiring greater investment in fixed assets, which investment is reflected in the lower rate of return on the net worth.

Group A Chains Had Higher Margin Rates. The chains which had a 25 cent limit and an average sale of 17½

cents had decidedly higher gross margin rates than either of the other two groups. Two factors bearing on gross margin should be pointed out. Mark-downs and shortages were distinctly lower for the Group A firms than for either of the other two groups. Indeed, the decline in gross margin rates from Group A to Group C was paralleled by an advance from Group A to Group C in mark-downs and shortages. Undoubtedly, the higher mark-downs and shortages of the Group C firms derived from the larger proportion of their business done in apparel and dry goods.

A second factor bearing on gross margin is found in the figures for freight, express, postage, and truckage. The Bureau, as has been noted, follows the policy of treating this item as an element in the cost of goods sold. This procedure naturally makes gross margin lower by the amount of these transportation charges than it otherwise would be. As is shown in Table 11, Group A firms expended relatively less for freight, express, postage, and truckage than did either of the other two groups. It seems probable that this difference is not so much related to the type of business done but to the fact that the stores of the Group A firms were more heavily concentrated in large communities than were those of the other two groups. Presumably, these larger communities in the aggregate were located nearer to sources of supply than were the other towns. The two items, mark-downs and shortages, and freight, express, postage, and truckage, tend to bring the gross margin figures closer together for Groups B and C, but do not entirely eliminate the differences. These remaining differences in gross margin appear to grow out of differences in the type of business done.

Total Expense Highest for Group A Firms. Group A firms in addition to having the highest rates of gross margin also had the highest rate of total expense, but differences among the groups as to the expense rate were not sufficient to destroy the advantage in net profit typical of the Group A firms. Contrasts among the groups in individual items of expense followed closely the pattern found in earlier years. Salaries and wages and tenancy costs were markedly higher for the Group A firms than for the Group C firms. The Group A concerns continued to do no advertising and the Group C firms expended less than 1% of sales for this purpose.

Table 11. Operating Results for 21 Variety Chains Classified According to Type of Store Operated: 1935
(Net Sales = 100%)

Items	Median ¹ Figures			Average Figures		
	Percentages Computed from the Figures of Each Chain Taken Individually			Percentages Computed from the Combined Dollar Figures of the Chains in Each Type-of-Store Group		
	Type of Store			Type of Store		
	Price Range 5¢ to 25¢ Low Average Sale (Group A)	Price Range Up to \$1 Low Average Sale (Group B)	Price Range Up to \$1 High Average Sale (Group C)	Price Range 5¢ to 25¢ Low Average Sale (Group A)	Price Range Up to \$1 Low Average Sale (Group B)	Price Range Up to \$1 High Average Sale (Group C)
Number of Chains.....	.....	.....	.....	4	6	11
Aggregate Number of Stores.....	.....	.....	.....	3,000	435	1,454
Aggregate Net Sales.....	.....	.....	.....	\$484,331,660	\$56,396,466	\$108,770,353
Average Sales per Store.....	\$164,283	\$47,973	\$86,340	\$161,443	\$129,647	\$136,706
Net Cost of Merchandise Sold(including freight, express, postage, and truckage).....	63.15%	64.27%	66.82%	62.03%	64.17%	67.78%
GROSS MARGIN.....	36.85	35.73	33.18	37.97	35.83	32.22
Salaries and Wages.....	16.26%	16.25%	14.46%	16.00%	15.05%	13.50%
Tenancy Costs.....	9.02	6.32	7.22	10.88	8.20	8.47
Light, Water, and Power.....	1.06	0.90	1.16	0.95	0.94	1.11
Depreciation of Fixtures and Equipment.....	0.87	0.70	0.86	0.63	0.64	0.75
Supplies.....	1.22	1.02	0.91	1.14	0.81	1.03
Advertising.....	0.00	0.45	0.33	0.00	0.46	0.58
Insurance (except on real estate).....	0.35	0.58	0.54	0.26	0.55	0.53
Taxes (except on real estate or income):						
Sales.....	0.21	0.00	0.00	0.19	0.28	0.09
Other.....	0.61	0.52	0.42	0.52	0.26	0.42
Travelling.....	0.09	0.30	0.23	0.09	0.14	0.21
Miscellaneous Expense.....	0.47	1.42	1.28	0.31	1.34	1.13
Total Expense before Interest.....	31.73%	29.53%	29.33%	30.97%	28.73%	27.82%
Total Interest.....	1.95	1.80	1.61	1.95	1.67	1.48
TOTAL EXPENSE including Interest.....	33.49%	31.32%	30.28%	32.92%	30.40%	29.30%
NET PROFIT OR LOSS.....	4.92%	4.74%	2.15%	5.05%	5.43%	2.92%
Net Profit or Loss from Real Estate Operations Interest on Net Worth (except on real estate, leaseholds, and goodwill).....	1.32%	0.14%	0.20%	1.39%	0.29%	0.39%
Other Revenue, Net.....	2.06	1.50	1.41	2.04	1.31	1.36
Total Net Other Income.....	0.12	0.04	0.22	0.21	0.30	0.51
NET GAIN before Income Taxes:						
Percentage of Net Sales.....	8.71%	6.50%	2.96%	8.69%	7.33%	5.18%
Percentage of Net Worth.....	12.04†	19.68	13.05	13.73†	22.49	15.81
Income Taxes for 1935.....	1.20%†	1.18%	0.63%†	*	1.22%	*
NET GAIN after Income Taxes:						
Percentage of Net Sales.....	7.47%†	5.23%	3.24%†	*	6.11%	*
Percentage of Net Worth.....	10.50†	15.81	11.98†	*	18.73	*
Rate of Stock-turn (times a year):						
Based on Beginning and Ending Inventories.....	4.19	4.10	4.81	4.39	5.64	5.26
Based on Monthly Inventories.....	3.82†	3.33	4.33†	4.24†	4.46	4.51†
Mark-downs and Shortages.....	1.26%†	2.12%†	3.48%†	*	*	*
Freight, Express, Postage, and Truckage.....	1.95%†	3.70%†	2.23%†	*	*	*
Percentage of Merchandise Purchased Direct from Manufacturer.....	90.00%	*	80.00%†	.....	.....	.....
Percentage of Merchandise Warehoused by Chain.....	8.50	*	15.50†	.....	.....	.....
Average Sale.....	17.5¢	24.0¢†	30.0¢†	.....	.....	.....
Distribution of Stores ² among Cities with Populations of:						
Less than 10,000.....	.....	.....	.....	16.99%	50.78%	31.00%
10,000-25,000.....	.....	.....	.....	26.91	14.32	27.38
25,000-100,000.....	.....	.....	.....	21.59	11.20	21.54
100,000-500,000.....	.....	.....	.....	12.36	6.77	10.56
500,000-1,000,000.....	.....	.....	.....	6.62	7.93	4.52
1,000,000 or more.....	.....	.....	.....	15.53	9.90	5.00
Total Stores.....	.....	.....	.....	100.00%	100.00%	100.00%

*Data not available.

†Figures for this item were not reported by all the firms in the group.

‡Because of inadequate balance sheet data in the case of one firm in Group A, the figure for net gain as a percentage of net worth was based on the reports of three chains.

1 All the medians were set independently; therefore the sum of the individual items does not necessarily equal the total.

2 Location of stores by size of city was reported by all the chains in Group A, 5 chains in Group B having 384 stores, and by 10 chains in Group C having 1,439 stores.

INFLUENCE OF SIZE ON OPERATING RESULTS

Throughout the Bureau's studies of retail trades, the influence of the size of the organization on its operating percentages has been prominent. For retail enterprises operating a number of stores, both the size of the concern as a whole and the average size of the individual units appear to be significant factors causing differences in operating percentages. Accordingly, in this section comparisons are presented for firms classified on the basis of the size of the organization as a whole, while in the following section the influence on operating results of differences in the average sales per store is examined.

In Table 12 are shown the figures for 28 variety chains classified in three groups as follows: 12 with sales per chain of less than \$500,000; 9 with sales per chain of \$500,000 to \$10,000,000; and 7 with sales per chain of \$10,000,000 to \$100,000,000. Similarly, in Table 13 are shown the results of the same 28 firms classified according to the number of stores operated as follows: 9 with less than 10 stores; 8 with 10 to 50 stores; and 11 with 50 to 500 stores. In order that confidential data should not be revealed, the statements of the two largest chains were not used in preparing these tables. The small firms on both bases of classification had their units concentrated in communities of less than 10,000 population in contrast to the situation existing among the larger chains; and, as would be expected in view of this fact, had average sales per store materially lower than either the medium-size or the large firms.

As may be seen from an inspection of Tables 12 and 13, there were in general relatively few inconsistencies between the comparisons on the basis of aggregate sales and the comparisons on the basis of number of stores. Certain contrasts seem of outstanding importance.

(1) The large firms secured net profits distinctly larger in relation to sales than did either the small or medium-size chains. This represents a change from 1934, in which year the small firms had net profit rates not materially lower than those of the large concerns. In the bulletin reporting on results for 1934, it was noted that the least favorable showing was made by the chains of medium size. There is some slight indication of the same situation in the 1935 figures, but it is by no means as pronounced as it was in the earlier years.

(2) The net gain percentages resulting from adding non-merchandising income and deducting income taxes show a pattern similar to that of net profit. The large

firms were distinctly more profitable than the organizations of small or medium size.

(3) The greater profits of the large organizations typically did not derive from higher gross margin rates. There was relatively little difference among the several groups in gross margin as a percentage of sales. Since the tables indicate that the large firms had lower mark-downs and shortages and lower expenditures for freight, express, postage, and truckage, two factors influencing the gross margin rate, it is probable that there was a greater disparity among the groups in the initial mark-up than in the gross margin figures, and that the large chains placed a lower initial mark-up on their merchandise than did the smaller organizations.

(4) The large chains typically secured their advantage in net profits through lower expense rates. This represents a return to the conditions which apparently existed prior to 1934. In that year, the expense rates of the small firms and the large firms were almost identical.

(5) The most important single expense item is salaries and wages. A substantial part of the advantage in total expense enjoyed by the large firms was achieved by economies in this item. It is probable that this advantage may be explained on two grounds. In the first place, large sales in the aggregate tend to reduce percentage expenditures for executive and other central office personnel. Second, the firms large in the aggregate were also large on the basis of average sales per store; and large sales per store, because they permit more effective use of personnel, tend to bring about a lower pay roll percentage.

(6) Expenditures by the large firms for tenancy costs were very decidedly higher in relation to sales than similar expenditures by the other two groups. It seems probable that the higher costs were caused more by the type of business done and by the size of the community in which the stores were located than by the size of the organization in the aggregate.

(7) Interest charges on both owned and borrowed capital did not differ markedly among the groups, although the figures for the small firms were slightly higher than for the other groups. A similarity in interest charges is somewhat surprising in view of the notably faster rate of stock-turn secured by the large chains. The smaller inventories in relation to sales required by the large firms apparently were offset by a greater investment in fixed assets relative to sales.

Table 12. Operating Results for 28 Variety Chains
Classified According to Volume of Sales: 1935

(Net Sales = 100%)

Items	Median ¹ Figures			Average Figures		
	Percentages Computed from the Figures of Each Chain Taken Individually			Percentages Computed from the Combined Dollar Figures of the Chains in Each Sales Volume Group		
	Net Sales Volume			Net Sales Volume		
	Less than \$500,000	\$500,000-\$10,000,000	\$10,000,000-\$100,000,000	Less than \$500,000	\$500,000-\$10,000,000	\$10,000,000-\$100,000,000
Number of Chains.....	....	....	....	12	9	7
Average Sales per Store.....	\$25,490	\$53,666	\$196,542	\$26,975	\$60,587	\$175,316
Net Cost of Merchandise Sold (including freight, express, postage, and truckage).....	66.09%	66.30%	66.10%	65.57%	66.00%	67.34%
GROSS MARGIN.....	33.91	33.70	33.90	34.43	34.00	32.66
Salaries and Wages.....	17.91%	16.52%	14.04%	17.54%	16.37%	13.49%
Tenancy Costs.....	4.89	6.43	8.25	4.91	7.42	8.10
Light, Water, and Power.....	1.02	0.95	1.16	0.98	1.11	1.06
Depreciation of Fixtures and Equipment.....	0.97	1.04	0.73	1.05	1.08	0.77
Supplies.....	0.87	0.91	0.91	0.97	1.03	0.99
Advertising.....	0.72	0.33	0.26	0.52	0.33	0.42
Insurance (except on real estate).....	0.49	0.48	0.55	0.57	0.53	0.54
Taxes (except on real estate or income):						
Sales.....	0.00	0.00	0.16	0.15	0.15	0.15
Other.....	0.57	0.61	0.38	0.55	0.59	0.43
Travelling.....	0.55	0.26	0.13	0.74	0.29	0.16
Miscellaneous Expense.....	0.95	1.08	1.30	1.51	1.15	1.05
Total Expense before Interest.....	29.88%	29.61%	27.78%	29.49%	30.05%	27.16%
Total Interest.....	1.70	1.63	1.61	1.66	1.67	1.62
TOTAL EXPENSE including Interest.....	31.42%	30.85%	29.45%	31.15%	31.72%	28.78%
NET PROFIT OR LOSS.....	2.41%	1.57%	4.35%	3.28%	2.28%	3.88%
Net Profit or Loss from Real Estate Operations						
Interest on Net Worth (except on real estate, leaseholds, and goodwill).....	0.05%	0.14%	0.34%	0.06%	0.34%	0.68%
Other Revenue, Net.....	1.39	1.33	1.41	1.39	1.18	1.58
Total Net Other Income.....	0.01	0.02	0.23	0.02	0.15	0.36
NET GAIN before Income Taxes:						
Percentage of Net Sales.....	3.50%	2.92%	6.60%	4.75%	3.95%	6.50%
Percentage of Net Worth.....	12.17†	10.56†	17.15	17.14†	13.37†	14.13
Income Taxes for 1935.....	0.39%†	0.68%†	0.96%	*	*	0.92%
NET GAIN after Income Taxes:						
Percentage of Net Sales.....	2.84%†	2.28%†	5.85%	*	*	5.58%
Percentage of Net Worth.....	10.48†	6.22†	14.17	*	*	12.13
Rate of Stock-turn (times a year):						
Based on Beginning and Ending Inventories	3.60	4.33	5.01	3.48	4.18	5.05
Based on Monthly Inventories.....	*	4.06†	4.23	*	3.77†	4.33
Mark-downs and Shortages.....	3.18%†	4.14%†	2.44%†	*	*	*
Freight, Express, Postage, and Truckage.....	3.44%†	*	2.42%	*	*	2.85%
Percentage of Merchandise Purchased Direct from Manufacturer.....	70.00%†	90.00%†	*	....	....	....
Percentage of Merchandise Warehoused by Chain.....	35.00†	17.80†	6.00%†	....	....	....
Distribution of Stores ² among Cities with Populations of:						
Less than 10,000.....	....	....	....	87.21%	54.47%	28.20%
10,000-25,000.....	....	....	....	4.65	22.07	27.59
25,000-100,000.....	....	....	....	0.00	9.78	21.86
100,000-500,000.....	....	....	....	2.33	4.75	11.29
500,000-1,000,000.....	....	....	....	4.65	5.86	4.11
1,000,000 or more.....	....	....	....	1.16	3.07	6.95
Total Stores.....	....	....	....	100.00%	100.00%	100.00%

*Data not available.

†Figures for this item were not reported by all the firms in the group.

‡Because of inadequate balance sheet data in the case of one chain in the first group and of one chain in the second group, the figures for net gain as a percentage of net worth were based on the reports of eleven and eight chains, respectively.

¹All the medians were set independently; therefore the sum of the individual items does not necessarily equal the total.

²Location of stores by size of city was reported by 11 chains in the first group having 86 stores, by 7 chains in the second group having 358 stores, and by all the chains in the third group.

Table 13. Operating Results for 28 Variety Chains
Classified According to Number of Stores: 1935

(Net Sales = 100%)

Items	Median ¹ Figures			Average Figures		
	Percentages Computed from the Figures of Each Chain Taken Individually			Percentages Computed from the Combined Dollar Figures of the Chains in Each Number-of-Stores Group		
	Number of Stores			Number of Stores		
	Less than 10 Stores	10-50 Stores	50-500 Stores	Less than 10 Stores	10-50 Stores	50-500 Stores
Number of Chains.....	....	....	....	9	8	11
Average Sales per Store.....	\$25,247	\$43,191	\$132,236	\$29,059	\$55,051	\$158,285
Net Cost of Merchandise Sold (including freight, express, postage, and truckage).....	66.64%	66.58%	66.09%	66.27%	67.67%	67.22%
GROSS MARGIN.....	33.36	33.42	33.91	33.73	32.33	32.78
Salaries and Wages.....	17.78%	16.59%	14.46%	17.06%	16.31%	13.65%
Tenancy Costs.....	4.12	5.87	7.56	4.73	6.40	8.09
Light, Water, and Power.....	1.04	1.02	1.02	0.98	1.25	1.06
Depreciation of Fixtures and Equipment.....	1.12	0.84	0.76	1.28	0.88	0.79
Supplies.....	0.85	1.02	0.91	0.90	1.02	0.99
Advertising.....	0.82	0.32	0.24	0.69	0.53	0.41
Insurance (except on real estate).....	0.48	0.49	0.55	0.56	0.51	0.54
Taxes (except on real estate or income):						
Sales.....	0.00	0.00	0.10	0.10	0.08	0.15
Other.....	0.69	0.57	0.54	0.56	0.57	0.44
Travelling.....	0.53	0.31	0.23	0.87	0.29	0.17
Miscellaneous Expense.....	0.98	0.92	1.30	1.71	0.99	1.06
Total Expense before Interest.....	30.17%	28.88%	27.88%	29.44%	28.92%	27.35%
Total Interest.....	1.79	1.66	1.61	1.66	1.56	1.62
TOTAL EXPENSE including Interest.....	31.56%	30.33%	29.48%	31.10%	30.48%	28.97%
NET PROFIT OR LOSS.....	2.15%	2.19%	3.70%	2.63%	1.85%	3.81%
Net Profit or Loss from Real Estate Operations						
Interest on Net Worth (except on real estate, leaseholds, and goodwill).....	0.09%	0.14%	0.32%	0.07%	0.22%	0.66%
Other Revenue, Net.....	1.62	1.39	1.38	1.40	1.54	1.55
Total Net Other Income.....	0.02	0.02	0.18	0.03	0.22	0.35
NET GAIN before Income Taxes:						
Percentage of Net Sales.....	1.79%	1.50%	2.08%	1.50%	1.98%	2.56%
Percentage of Net Worth.....	2.91%	3.90%	6.12%	4.13%	3.83%	6.37%
Income Taxes for 1935.....	12.17	13.04†	15.94†	16.64	12.36†	14.13†
NET GAIN after Income Taxes:						
Percentage of Net Sales.....	0.39%†	0.69%†	0.90%†	*	*	*
Percentage of Net Worth.....	2.84%†	3.22%†	5.57%†	*	*	*
Rate of Stock-turn (times a year):						
Based on Beginning and Ending Inventories.....	10.48†	8.97†	13.45†	*	*	*
Based on Monthly Inventories.....	3.87	4.32	4.66	3.41	4.24	4.99
Mark-downs and Shortages.....	*	4.07%†	2.68%†	*	*	*
Freight, Express, Postage, and Truckage.....	*	4.00	4.00	*	*	4.29
Percentage of Merchandise Purchased Direct from Manufacturer.....	2.80%	2.91%	2.47%†	2.91%	*	*
Percentage of Merchandise Warehoused by Chain.....	70.00%†	85.00%†	91.50%†	....	....	....
Distribution of Stores ² among Cities with Populations of:	12.50†	32.50†	6.25†	....	....	....
Less than 10,000.....	....	....	....	90.00%	61.83%	31.30%
10,000-25,000.....	....	....	....	0.00	19.09	27.01
25,000-100,000.....	....	....	....	0.00	7.63	20.38
100,000-500,000.....	....	....	....	3.33	1.53	10.63
500,000-1,000,000.....	....	....	....	6.67	9.16	4.05
1,000,000 or more.....	....	....	....	0.00	0.76	6.63
Total Stores.....	....	....	....	100.00%	100.00%	100.00%

*Data not available.

†Figures for this item were not reported by all the firms in the group.

‡Because of inadequate balance sheet data in the case of one chain in the second group and one chain in the third group, the figures for net gain as a percentage of net worth were based on the reports of seven and ten chains, respectively.

¹All the medians were set independently; therefore the sum of the individual items does not necessarily equal the total.

²Location of stores by size of city was reported by all 9 chains in the first group, by 6 chains in the second group having 131 stores, and by 10 chains in the third group having more than 2,000 stores.

INFLUENCE OF AVERAGE SALES PER STORE AND SIZE OF CITY

Differences in operating figures among variety chains are brought about not only by differences in the size of the organizations as a whole but also by differences in the size of the individual units. Among the variety chains which reported to the Bureau for 1935, there were 13 which had average sales per store below \$40,000, 9 which had average sales per store between \$40,000 and \$125,000, and 6 which had average sales per store of more than \$125,000. Typically, the average sales per store of the last group were approximately eight times the average of the first group. The chains with small volume per store were concentrated in the smaller communities, particularly in the south and west. Typically, they purchased a somewhat smaller proportion of their merchandise directly from manufacturers and did substantially more warehousing than the chains with larger sales per store. Operating results of the chains classified in this manner are shown in Table 14.

A second factor closely allied to that of sales per store is the size of community in which the stores are located. On the average, the chains with small sales per store were concentrated in small communities, as is shown in Table 14. A number of chains, however, operate stores in communities of all sizes. To make a clear cut picture, therefore, there are compared in Table 15 the figures of eight chains which had 90% or more of their stores in cities of less than 10,000, and none in cities of 25,000 or more, with those of five chains which had 50% or more of their stores in cities of 25,000 or more. The small town firms were distinctly smaller in aggregate size and the individual units had sales of but \$29,063 per store compared with \$207,031 per store for the concerns in larger communities. Chains concentrated in small communities did somewhat less direct purchasing from manufacturers and somewhat more warehousing than did the firms in larger cities.

The contrasts in the operating figures of the several groups of firms classified in these ways show almost no differences from those discovered in earlier studies and thus emphasize the apparently permanent character of the differences. Extended comment, therefore,

appears unnecessary and attention is directed only to the most important contrasts:

(1) Gross margin clearly was higher for the small town chains than for those in larger cities.

(2) On the other hand, both the comparison on the basis of size of city and on the basis of average sales per store show a higher total expense rate for the smaller firms.

(3) As a result of higher total expenses, net profit and net gain figures, both as a percentage of net sales and as a percentage of net worth, were definitely lower for the small chains. In this connection, it is of interest to observe that the spread between the profit rates of the firms with small sales per store and those with large sales per store was distinctly greater than was the case in 1934. Moreover, the net profit rates shown in Table 15 for small town and large city chains represent a complete reversal from the 1934 situation. In that year, the small town chains typically had higher net profit rates than the chains concentrated in larger communities. In 1935, what appears to be the more normal condition of higher profit rates for the latter group returned. These facts seem to confirm the hypothesis advanced in the 1934 bulletin to the effect that the excellent showing of the small chains in 1934 resulted primarily from the more rapid rate of increase in farm income compared with national income as a whole.

(4) A definite criss-cross relationship appears between expenditures for salaries and wages and tenancy costs. The smaller firms had notably higher pay roll expense and decidedly lower tenancy costs in relation to sales than did the larger chains. These contrasts appear entirely reasonable. The possibilities for sales volume in the small community are clearly limited, yet a store has certain minimum personnel requirements. In spite of the lower wage rates customary in small communities, personnel costs were high relative to sales because the limited sales potentialities prevented the most effective use of personnel. Conversely, the limited sales potentialities restrict the competition for locations, with a consequent low figure for tenancy costs in relation to sales.

Table 14. Operating Results for 28 Variety Chains
Classified According to Average Sales per Store: 1935

(Net Sales = 100%)

Items	Median ¹ Figures			Average Figures		
	Percentages Computed from the Figures of Each Chain Taken Individually			Percentages Computed from the Combined Dollar Figures of the Chains in Each Sales-per-Store Group		
	Sales per Store			Sales per Store		
	Less than \$40,000	\$40,000-\$125,000	\$125,000 or More	Less than \$40,000	\$40,000-\$125,000	\$125,000 or More
Number of Chains.....	....	....	....	13	9	6
Average Sales per Store.....	\$25,247	\$58,468	\$201,787	\$26,930	\$83,610	\$220,056
Net Cost of Merchandise Sold (including freight, express, postage, and truckage).....	66.05%	66.82%	66.20%	63.73%	66.57%	67.50%
GROSS MARGIN.....	33.95	33.18	33.80	36.27	33.43	32.50
Salaries and Wages.....	18.03%	15.51%	13.89%	20.64%	14.78%	13.27%
Tenancy Costs.....	5.61	6.97	8.71	5.47	7.56	8.22
Light, Water, and Power.....	0.99	1.16	1.00	0.95	1.18	1.03
Depreciation of Fixtures and Equipment.....	1.04	0.81	0.71	1.11	0.83	0.78
Supplies.....	0.83	1.17	0.92	0.83	0.75	1.07
Advertising.....	0.57	0.24	0.34	0.35	0.24	0.48
Insurance (except on real estate).....	0.50	0.48	0.59	0.65	0.53	0.54
Taxes (except on real estate or income):						
Sales.....	0.00	0.00	0.13	0.19	0.14	0.15
Other.....	0.55	0.65	0.37	0.60	0.51	0.42
Travelling.....	0.56	0.26	0.13	0.64	0.24	0.15
Miscellaneous Expense.....	0.91	1.08	1.42	1.40	1.21	1.01
Total Expense before Interest.....	30.52%	27.78%	28.61%	32.83%	27.97%	27.12%
Total Interest.....	1.70	1.61	1.60	1.04	1.68	1.60
TOTAL EXPENSE including Interest.....	31.87%	29.48%	30.10%	34.77%	29.65%	28.72%
NET PROFIT OR LOSS.....	0.84%	3.15%	3.76%	1.50%	3.78%	3.78%
Net Profit or Loss from Real Estate Operations						
Interest on Net Worth (except on real estate, leaseholds, and goodwill).....	0.03%	0.14%	0.43%	0.11%	0.50%	0.70%
Other Revenue, Net.....	1.39	1.41	1.36	1.83	1.41	1.59
Total Net Other Income.....	0.00	0.06	0.23	0.01	0.24	0.38
NET GAIN before Income Taxes:	1.54%	1.93%	1.94%	1.95%	2.15%	2.67%
Percentage of Net Sales.....	2.91%	5.65%	6.47%	3.45%	5.93%	6.45%
Percentage of Net Worth.....	9.94	15.80†	15.10	9.51	17.25†	13.48
Income Taxes for 1935.....	0.38%†	0.78%†	1.00%	*	*	0.93%
NET GAIN after Income Taxes:						
Percentage of Net Sales.....	2.17%†	5.28%†	5.48%	*	*	5.52%
Percentage of Net Worth.....	6.02†	14.53†	12.71	*	*	11.52
Rate of Stock-turn (times a year):						
Based on Beginning and Ending Inventories	3.32	4.37	5.22	3.41	4.55	5.14
Based on Monthly Inventories.....	2.41†	3.70†	4.61	2.58†	3.67†	4.53
Mark-downs and Shortages.....	3.99%†	3.29%†	2.91%†	*	*	*
Freight, Express, Postage, and Truckage.....	2.86%†	2.98%†	1.91%†	*	*	*
Percentage of Merchandise Purchased Direct from Manufacturer.....	70.00%†	82.50%†	93.00%†	....	....	....
Percentage of Merchandise Warehoused by Chain.....	42.50†	8.30†	6.25	....	....	....
Distribution of Stores ² among Cities with Populations of:						
Less than 10,000.....	....	....	....	89.83%	44.91%	20.75%
10,000-25,000.....	....	....	....	4.24	29.38	25.10
25,000-100,000.....	....	....	....	0.00	13.01	25.06
100,000-500,000.....	....	....	....	1.69	5.04	14.69
500,000-1,000,000.....	....	....	....	3.39	3.57	5.22
1,000,000 or more.....	....	....	....	0.85	4.09	8.28
Total Stores.....	....	....	....	100.00%	100.00%	100.00%

*Data not available. †Figures for this item were not reported by all the firms in the group.

‡Because of inadequate balance sheet data in the case of one chain in the first group and one chain in the second group, the figures for net gain as a percentage of net worth were based on the reports of twelve and eight chains, respectively.

¹ All the medians were set independently; therefore the sum of the individual items does not necessarily equal the total.

² Location of stores by size of city was reported by 11 chains in the first group having 118 stores, by 8 chains in the second group having 953 stores, and by all 6 chains in the third group.

**Table 15. Operating Results for 13 Variety Chains
Classified According to the Population of the Cities in Which
Their Stores Were Located: 1935**
(Net Sales = 100%)

Items	Median ¹ Figures		Average Figures	
	Percentages Computed from the Figures of Each Chain Taken Individually		Percentages Computed from the Combined Dollar Figures of the Chains in Each Population Group	
	Percentage Distribution of Stores per Chain by Size of City		Percentage Distribution of Stores per Chain by Size of City	
	90% or More of Stores in Cities of Less than 10,000 and None in Cities of 25,000 or More	50% or More of Stores in Cities of 25,000 or More	90% or More of Stores in Cities of Less than 10,000 and None in Cities of 25,000 or More	50% or More of Stores in Cities of 25,000 or More
Number of Chains.....	.....	.....	8	5
Aggregate Number of Stores.....	.....	.....	139	945
Average Sales per Store.....	\$29,063	\$207,031	\$28,638	\$230,862
Net Cost of Merchandise Sold (including freight, express, postage, and truckage).....	65.48%	68.24%	63.13%	68.01%
GROSS MARGIN.....	34.52	31.76	36.87	31.99
Salaries and Wages.....	18.35%	13.70%	21.71%	12.99%
Tenancy Costs.....	3.95	8.50	5.29	8.25
Light, Water, and Power.....	0.90	1.31	0.91	1.08
Depreciation of Fixtures and Equipment.....	1.08	0.73	1.10	0.79
Supplies.....	0.82	1.17	0.79	1.13
Advertising.....	0.80	0.26	0.41	0.46
Insurance (except on real estate).....	0.48	0.55	0.63	0.54
Taxes (except on real estate or income):				
Sales.....	0.00	0.10	0.19	0.14
Other.....	0.70	0.38	0.66	0.43
Travelling.....	0.50	0.13	0.49	0.15
Miscellaneous Expense.....	1.15	1.47	1.38	0.95
Total Expense before Interest.....	30.35%	29.33%	33.56%	26.91%
Total Interest.....	1.81	1.41	2.04	1.59
TOTAL EXPENSE including Interest.....	31.72%	30.74%	35.60%	28.50%
NET PROFIT OR LOSS.....	1.76%	3.17%	1.27%	3.49%
Net Profit or Loss from Real Estate Operations.....	0.09%	0.03%	0.14%	0.72%
Interest on Net Worth (except on real estate, leaseholds, and goodwill).....	1.85	1.34	2.03	1.65
Other Revenue, Net.....	0.00	0.22	0.01	0.41
Total Net Other Income.....	1.95%	1.80%	2.18%	2.78%
NET GAIN before Income Taxes:				
Percentage of Net Sales.....	3.53%	5.94%	3.45%	6.27%
Percentage of Net Worth.....	11.98	13.05	9.60	12.43
Income Taxes for 1935.....	0.63%†	0.96%	*	0.89%
NET GAIN after Income Taxes:				
Percentage of Net Sales.....	2.90%†	4.91%	*	5.38%
Percentage of Net Worth.....	8.35†	11.24	*	10.67
Rate of Stock-turn (times a year):				
Based on Beginning and Ending Inventories.....	3.88	5.01	3.48	5.12
Based on Monthly Inventories.....	*	4.42	*	4.56
Mark-downs and Shortages.....	*	3.22%†	*	*
Freight, Express, Postage, and Truckage.....	2.91%†	2.17%†	*	*
Percentage of Merchandise Purchased Direct from Manufacturer.....	75.00%†	90.00%†	.....	.....
Percentage of Merchandise Warehoused by Chain.....	12.50†	6.00	.....	.....
Distribution of Stores ² among Cities with Populations of:				
Less than 10,000.....	.....	.....	98.70%	13.75%
10,000-25,000.....	.....	.....	1.30	24.97
25,000-100,000.....	.....	.....	0.00	29.28
100,000-500,000.....	.....	.....	0.00	16.68
500,000-1,000,000.....	.....	.....	0.00	5.14
1,000,000 or more.....	.....	.....	0.00	10.18
Total Stores.....	.....	.....	100.00%	100.00%

*Data not available.

†Figures for this item were not reported by all the firms in the group.

¹ All the medians were set independently; therefore the sum of the individual items does not necessarily equal the total.

² Detailed location of stores by size of city was reported by seven of the eight chains in the first group.

THE RELATION OF STORE EXPENSE TO OVERHEAD EXPENSE

A primary characteristic of the typical chain store organization is the division of the responsibility for the performance of the various retail functions between the field personnel (store managers, assistants, and their staffs) and the central office executives. Among limited price variety chains, the individual store managers typically are assigned a substantial amount of authority over the operations of their own stores; but the major responsibility for policy making and planning, for buying and merchandising, for accounting and control procedures, rests on the central office organization.

Since the Bureau began its studies in this field, it has sought to present data showing the relative costs of operating the stores which the public sees and the behind-the-store organization which causes the stores to function effectively. Each year more complete and detailed reports have been received from the co-operating chains so that in the current bulletin it is possible to include a reasonably satisfactory measure of typical costs of operation of stores and of central offices.

In Table 16 are shown medians and aggregate averages for the expenses of 15 variety chains divided between store expenses and administrative and general expenses. All of the firms with sales of \$10,000,000 to \$100,000,000, and eight of the nine chains with sales of \$500,000 to \$10,000,000 included in the current study, reported their expenses in sufficient detail to warrant their inclusion in Table 16. Small firms with sales of less than \$500,000 typically do not operate with sufficient specialization of personnel to justify the maintenance of accounting records broken down in this fashion.

Store Expenses Much Larger Than Overhead Expenses. Among limited price variety chains, store expenses account for a very much larger proportion of total costs than do administrative and general expenses. Indeed, among firms with sales of \$500,000 to \$10,000,000, expenditures for administration amount to no more than one-seventh of total costs before interest, while among firms with sales of \$10,000,000 to \$100,000,000 they are but one-ninth of the total. It is of interest to note in this connection that this division of expenses between stores and the central organization closely parallels that found among department store chains. Although the total expense rate of department

store chains is notably lower than the total expense rate of limited price variety chains, administrative functions absorb about one-seventh of the total operating costs before interest.¹

It is also of interest to observe that there were but slight changes between 1934 and 1935 in the relationship of administrative expense to total expense. Firms with sales of \$500,000 to \$10,000,000 typically incurred about 14.0% of total expense in their administrative functions in both 1934 and 1935; similarly, chains with sales of \$10,000,000 to \$100,000,000 expended 11% of total operating costs in their central offices in 1934 and in 1935.

Administrative Expense Rate Lower for Large Chains. In theory, a major advantage from a cost standpoint of retail operations on a large scale is the economy in the use of executive personnel. Large sales volume permits the employment of highly competent executives at substantial salaries while, at the same time, those salaries represent a very small proportion of the business done. This theory finds confirmation in the figures for limited price variety chains for 1935. The total administrative expenses of the chains with sales of \$10,000,000 to \$100,000,000 were distinctly lower in relation to sales than were those of the smaller concerns. Indeed, more than half the advantage in the total expense rate which the large firms enjoyed resulted from lower administrative costs.

It is instructive to pursue the difference somewhat further. The middle section of Table 16 shows in detail the administrative and general expenditures of the two groups of chains. Examination of this section indicates clearly the source of the advantage of the large organizations, economy in salaries and wages. Although there are some very large differences in expenditures relative to sales for supplies and for travelling, salaries and wages bulk so large in the total that differences in pay roll costs constitute the primary advantage held by the large chains.

Salaries paid to officers, executives, buyers, and superintendents by the smaller chains typically amounted to 1.82% of sales; payments to individuals occupying similar positions for the larger firms typically were 0.97% of sales. On the other hand, the personnel

¹ Harvard Bureau of Business Research Bulletin No. 101, *Operating Results of Department Store Chains and Department Store Ownership Groups: 1929, 1931-1934*. Table 14, page 49.

Table 16. Store Expense, General Overhead Expense, and Total Expense for 15 Variety Chains Classified According to Volume of Sales: 1935

(Net Sales = 100%)

Items	Median ¹ Figures		Average Figures	
	Percentages Computed from the Figures of Each Chain Taken Individually		Percentages Computed from the Combined Dollar Figures of the Chains in Each Sales Volume Group	
	Net Sales Volume		Net Sales Volume	
	\$500,000- \$10,000,000	\$10,000,000- \$100,000,000	\$500,000- \$10,000,000	\$10,000,000- \$100,000,000
Number of Chains.....	.....	.....	8	7
Average Sales per Store.....	\$56,067	\$106,542	\$66,586	\$175,316
Store Expense:				
Salaries and Wages:				
Store Managers' Salaries and Bonuses.....	3.68%†	2.08%†	*	*
Selling Salaries and Commissions.....			*	*
All Other Store Salaries.....	9.03†	10.02†		
Total (subtotal).....	(13.61)	(12.40)	12.81%	11.51%
Tenancy Costs.....	6.71	8.17	7.38	7.96
Light, Water, and Power.....	0.95	1.15	1.11	1.04
Depreciation of Fixtures and Equipment.....	0.93	0.72	1.03	0.75
Supplies.....	0.86	0.77	0.86	0.86
Advertising.....	0.36	0.26	0.34	0.42
Insurance (except on real estate).....	0.47†	0.54	0.42†	0.53
Taxes (except on real estate or income):				
Sales.....	0.00	0.16	0.16	0.15
Other.....	0.50	0.32	0.51	0.32
Miscellaneous Expense:				
Communication.....	0.10†	0.09†	*	*
Unclassified (including Professional Services).....	0.60	0.62	*	*
Total (subtotal).....	(0.69)	(0.70)	0.72	0.64
Total Store Expense before Interest.....	24.55%	24.46%	25.34%	24.18%
Administrative and General:				
Salaries and Wages:				
Officers, Executives, Buyers, and Superintendents.....	1.82%†	0.97%	*	1.04%
Office, Supervisors, and Others.....	0.65†	0.86	*	0.94
Total (subtotal).....	(2.83)	(2.06)	3.09%	(1.98)
Tenancy Costs.....	0.13	0.10	0.14	0.14
Light, Water, and Power.....	0.01†	0.01	0.01†	0.02
Depreciation of Fixtures and Equipment.....	0.04	0.02	0.05	0.02
Supplies.....	0.19	0.10	0.19	0.13
Insurance (except on real estate).....	0.04	0.02†	0.09	0.01†
Taxes (except on real estate or income).....	0.13†	0.14	0.08†	0.11
Travelling.....	0.25	0.13	0.28	0.16
Miscellaneous Expense:				
Communication.....	0.13†	0.09	*	*
Professional Services.....	0.08†	0.11†	*	*
Unclassified.....	0.20	0.24	*	*
Total (subtotal).....	(0.34)	(0.39)	0.37	0.41
Total Administrative and General Expense.....	4.08%	3.20%	4.30%	2.98%
Total Expense:				
Salaries and Wages.....	16.02%	14.04%	15.90%	13.49%
Tenancy Costs.....	6.83	8.25	7.52	8.10
Light, Water, and Power.....	0.97	1.16	1.12	1.06
Depreciation of Fixtures and Equipment.....	0.96	0.73	1.08	0.77
Supplies.....	1.04	0.91	1.05	0.99
Advertising.....	0.36	0.26	0.34	0.42
Insurance.....	0.48	0.55	0.51	0.54
Taxes (except on real estate or income):				
Sales.....	0.00	0.16	0.16	0.15
Other.....	0.63	0.38	0.59	0.43
Travelling.....	0.25	0.13	0.28	0.16
Miscellaneous Expense:				
Communication.....	0.23†	0.17†	*	*
Unclassified (including Professional Services).....	0.90†	0.96†	*	*
Total (subtotal).....	(1.00)	(1.30)	1.09	1.05
Total Expense before Interest.....	28.90%	27.78%	29.64%	27.16%
Rate of Stock-turn (times a year):				
Based on Beginning and Ending Inventories.....	4.35	5.01	4.29	5.05
Based on Monthly Inventories.....	4.42†	4.23	3.89†	4.33
Percentage of Merchandise Warehoused by Chain.....	17.80%†	6.00%†	.....	.....

*Data not available.

†Figures for this item were not reported by all the firms in the group.

¹ All the medians were set independently; therefore the sum of the individual items does not necessarily equal the total.

costs of the larger firms for the lower ranks of central office workers represented a somewhat higher percentage of sales than did those of the smaller concerns, 0.86% as compared with 0.65%. Since it is not impossible that the limits between the two classifications, officers, executives, buyers, and superintendents on the one hand, and office staff, supervisors, and others on the other hand, were not interpreted in exactly the same manner by all chains, too much weight should not be placed on these components of the total administrative salary item. The figures for total salaries and wages of administrative personnel do show clearly a distinct advantage for the larger chains.

Store Managers' Salaries Bulk Large in Total. Among limited price variety chains, the individual store manager is a highly important unit in the management machine. No matter how thoroughly a variety chain may carry out a policy of centralized operation, the manager of a variety chain store, in contrast to the manager of a store in a drug or grocery chain, has a substantial amount of authority over the operations of his own store. It is significant, therefore, to observe that payments to store managers by variety chains in 1935 typically were larger than the sum of all salary and wage payments to officers, executives, buyers, superintendents, super-

visors, and central office clerical workers. Not uncommonly the compensation of store managers includes both salary and a bonus determined by the results of the individual store. Unfortunately, the Bureau was not able to secure data on these two items separately, so the percentages shown in Table 16 represent total compensation to store managers.

That store managers' compensation absorbed a lower percentage of sales for the larger firms than for the smaller chains is indicated by the figures in Table 16. A lower salary scale among the larger firms appears distinctly unlikely, and a more reasonable explanation is available. The average sales per store of the large chains were about $3\frac{1}{2}$ times that of the smaller firms. As has been noted in the discussion of the influence of the average sales per store on operating results, relatively large volume in the individual unit apparently results in lower personnel costs in relation to sales. Thus, the aggregate dollar compensation of the manager of a typical unit of the large chains with sales of \$196,000 could be two or three times that of the manager of a typical unit of the smaller chains with sales of \$56,000 and the large chains would still show a lower average expenditure for managerial compensation in relation to sales.

GOAL FIGURES

Throughout this bulletin, the emphasis has been placed on the typical or average operating figures for variety chains. But executives and students of business are interested not only in average performance but also in better than average performance. Accordingly, figures have been prepared making possible the comparison of the operating percentages of the more profitable firms in each of three size classes with the average figures for all firms in each class. Thus, in Table 17, the figures for the three most profitable chains with fewer than 10 stores are segregated from those of all chains of that size, and so on. In a sense, the average figures for these most profitable chains may be thought of as attainable goals.

As has been found true in previous studies, the goal firms in all size groups had larger average sales per store, higher gross margins, and lower total expense rates than did the chains as a whole. One notable difference from 1934 appears, however. In that year, the highest rate of net profit was recorded by the goal firms among the small chains. In 1935 this was not the case, the goal firms among the chains with 50 to 500 stores reporting the highest net profit rate.

Among the chains having less than 10 stores, the three most profitable enterprises secured a gross margin of 35.02% of sales and had total expense including interest of 30.12% of sales as compared with figures of 33.73% and 31.10%, respectively, for the group as a whole. Thus, of the advantage in the net profit rate of the most profitable firms of 2.27% of sales, a higher gross margin rate contributed 1.29% of sales and a lower expense rate contributed 0.98% of sales. The most important single expense category for which the three most profitable chains had a lower figure was tenancy costs. Personnel costs required a somewhat larger proportion of sales among the three most profitable concerns than for the group as a whole.

In the case of the most profitable chains among those with 10 to 50 stores, a similar joint contribution to the higher profit percentage was made by gross margin and total expense. The three most profitable firms earned at the rate of 3.71% of sales as compared with 1.85% of sales for all chains in the size class. Of the resulting difference of 1.86% of sales, a higher gross margin provided 1.06% of sales and a lower expense rate 0.80% of sales.

In contrast to the situation among the smaller firms, however, the expense category which showed the greatest difference between average and goal firms was salaries and wages. The three most profitable chains paid out 1.35% of sales less to meet their pay roll than did the group as a whole. On the other hand, the goal firms had only a modest advantage in tenancy costs.

In the group having between 50 and 500 stores, the difference between the net profit percentages of the most profitable chains and of the group as a whole was distinctly smaller than it was in the two groups of smaller chains. The net profit advantage of 1.24% of sales was fairly evenly divided between a higher gross margin and a lower expense rate, 0.69% of sales occurring from the former and 0.55% of sales from the latter.

Profitability Over a Period of Years

Profit as a percentage of sales is not the sole or even the primary measure of success in business. The total of dollars earned is the final test for a given period from a material standpoint at least. If, using the same investment a business enterprise succeeds in increasing its aggregate dollar profits over a period of years, the owner or owners of the business have cause for congratulation even if the larger dollar profits represent a lower percentage of sales than they once did. Nevertheless, the net profit expressed as a percentage of sales remains a highly useful measure, and one which readily permits year-to-year comparisons.

During the last few years, the managers of business enterprises have been confronted with a multitude of perplexing and swiftly changing problems. Individual companies have worked out individual solutions to these problems; some solutions have been adequate, and others inadequate. In the bulletin reporting on results for 1934, it was considered pertinent to inquire into the consistency with which individual variety chains overcame the changing problems which developed between 1929 and 1934. The same effort, in somewhat expanded form, has been made in the current study.

In Table 18 the 15 variety chains which reported to the Bureau for 1929, 1931, 1932, 1933, 1934, and 1935 are ranked for each year according to their net profits as a percentage of sales. Thus, in 1929, Firm A had the highest rate of net profit, in 1931 was third in net profit rate, in 1932 fourth, and so on.

Table 17. Average Operating Results and Goal Figures for Variety Chains
Classified According to Number of Stores: 1935

(Aggregate Net Sales = 100%)

Items	Number of Stores					
	Less than 10		10-50		50-500	
	Average Figures	Goal Figures	Average Figures	Goal Figures	Average Figures	Goal Figures
	9 Chains	Average Figures for 3 Chains with Highest Rates of Net Profit	8 Chains	Average Figures for 3 Chains with Highest Rates of Net Profit	11 Chains	Average Figures for 5 Chains with Highest Rates of Net Profit
Average Sales per Store	\$29,059	\$31,815	\$55,051	\$75,039	\$158,285	\$185,199
Net Cost of Merchandise Sold (including freight, express, postage, and truckage).....	66.27%	64.98%	67.67%	66.61%	67.22%	66.53%
GROSS MARGIN	33.73	35.02	32.33	33.39	32.78	33.47
Salaries and Wages	17.06%	17.57%	16.31%	14.96%	13.65%	13.94%
Tenancy Costs	4.73	4.10	6.49	6.20	8.09	7.41
Light, Water, and Power	0.98	0.97	1.25	1.53	1.06	1.01
Depreciation of Fixtures and Equipment	1.28	1.05	0.88	0.84	0.79	0.84
Supplies	0.90	0.99	1.02	1.23	0.99	0.92
Advertising	0.69	0.75	0.53	0.76	0.41	0.19
Insurance (except on real estate)	0.56	0.39	0.51	0.56	0.54	0.55
Taxes (except on real estate or income):						
Sales	0.10	0.23	0.08	0.06	0.15	0.19
Other	0.56	0.54	0.57	0.44	0.44	0.48
Travelling	0.87	1.95	0.29	0.27	0.17	0.13
Miscellaneous Expense	1.71		0.99	1.19	1.06	0.96
Total Expense before Interest	29.44%	28.54%	28.92%	28.04%	27.35%	26.62%
Total Interest	1.66	1.58	1.56	1.64	1.62	1.80
TOTAL EXPENSE including Interest	31.10%	30.12%	30.48%	29.68%	28.97%	28.42%
NET PROFIT OR LOSS	2.63%	4.90%	1.85%	3.71%	3.81%	5.05%
Net Profit or Loss from Real Estate Operations	0.07%	0.10%	0.22%	0.33%	0.66%	0.96%
Interest on Net Worth (except on real estate, leaseholds, and goodwill)	1.40	1.41	1.54	1.59	1.55	1.80
Other Revenue, Net	0.03	0.03	0.22	0.42	0.35	0.16
Total Net Other Income	1.50%	1.54%	1.98%	2.34%	2.56%	2.92%
NET GAIN before Income Taxes:						
Percentage of Net Sales	4.13%	6.44%	3.83%	6.05%	6.37%	7.97%
Percentage of Net Worth	16.64	24.72	12.36 [‡]	17.82 [‡]	14.13 [‡]	13.51
Income Taxes for 1935	*	*	*	*	*	1.16%
NET GAIN after Income Taxes:						
Percentage of Net Sales	*	*	*	*	*	6.81%
Percentage of Net Worth	*	*	*	*	*	11.55
Rate of Stock-turn (times a year):						
Based on Beginning and Ending Inventories	3.41	3.97	4.24	4.35	4.99	4.71
Based on Monthly Inventories	*	*	*	*	4.29	4.08
Freight, Express, Postage, and Truckage	2.91%	3.26%	*	*	*	3.40%
Distribution of Stores ¹ among Cities with Popu- lations of:						
Less than 10,000	90.00%	100.00%	61.83%	*	31.30%	35.45%
10,000-25,000	0.00	0.00	19.09	*	27.01	26.47
25,000-100,000	0.00	0.00	7.63	*	20.38	17.72
100,000-500,000	3.33	0.00	1.53	*	10.63	8.74
500,000-1,000,000	6.67	0.00	9.16	*	4.05	3.95
1,000,000 or more	0.00	0.00	0.76	*	6.63	7.67
Total Stores	100.00%	100.00%	100.00%	*	100.00%	100.00%

*Data not available.

[‡]Because of inadequate balance sheet data in the case of one chain in the second group, the average and goal figures for net gain as a percentage of net worth were based on the reports of seven and two chains, respectively. Likewise, the average figure for this account in the third group was based on the reports of ten of the eleven chains in the group.

¹ Location of stores by size of city was reported by all nine chains in the first group, by six chains in the second group including but one goal firm, and by ten chains in the last group including the five goal chains.

Inspection of this table yields a number of interesting points:

(1) Of the five firms which were top ranking in 1929, not one occupied as high a position in 1935; indeed not one was among the upper third of the firms. On the other hand, each of the five firms which had high ranking in 1929 retained in 1935 the same relationship to the four other chains which held high rank in 1929.

Table 18. Fifteen Variety Chains Ranked According to Rates of Net Profit or Loss: 1929, 1931-1935

(Rank of 1 indicates highest profit percentage reported for year)

Firm	Rank					
	1929	1931	1932	1933	1934	1935
A	1	3	4	6	7	6
B	2	2	5	9	8	7
C	3	11	10	14	9	9
D	4	1	3	3	10	10
E	5	7	13	13	11	14
F	6	13	12	10	14	13
G	7	8	7	8	6	3
H	8	6	8	11	13	11
I	9	4	6	12	12	15
J	10	5	2	2	1	1
K	11	14	14	4	5	8
L	12	12	11	5	4	2
M	13	9	9	7	2	5
N	14	10	1	1	3	4
O	15	15	15	15	15	12

(2) The five firms which reported the lowest profit rates in 1929 all had improved their positions by 1935, several substantially.

(3) No firm was in the same position in 1935 that it held in 1929 and only three firms showed a change as small as three places in ranking. Thus, it is clear that there was but very limited stability in the profit position held by particular firms in the years from 1929 to 1935.

Table 19. Twenty-one Variety Chains Ranked According to Rates of Net Profit or Loss: 1932-1935

(Rank of 1 indicates highest profit percentage reported for year)

Firm	Rank			
	1932	1933	1934	1935
A	1	3	6	5
B	2	1	3	4
C	3	2	1	1
D	4	4	13	14
E	5	7	8	7
F	6	10	9	8
G	7	15	16	20
H	8	9	7	3
I	9	13	10	11
J	10	12	17	15
K	11	14	15	13
L	12	8	2	6
M	13	18	11	10
N	14	6	4	2
O	15	11	18	17
P	16	16	14	19
Q	17	17	12	12
R	18	20	21	18
S	19	5	5	9
T	20	19	19	16
U	21	21	20	21

Profit Ranking of 21 Chains: 1932-1935. In Table 19 is shown a similar ranking of a somewhat larger number of variety chains for which reports were available for each year from 1932 to 1935. These years include the low point of the depression for variety chains and three years of recovery. During this shorter period, somewhat more stability in ranking is evident than was the case with the data in Table 18. For instance, Firms B, C, E, F, I, K, R, and U held very close to the same rank throughout the period. Three of the five top rank firms in 1932 were still among the first five in 1935; similarly, four of the six concerns with the poorest records in 1932 were in the lowest group in 1935.

EXPLANATORY NOTES

The Bureau follows certain accounting and statistical procedures for the purpose of obtaining comparability among reports from individual firms and for the purpose of making the published figures as representative as possible. The more important of these procedures in their application to this study are covered in the following explanatory notes:

Base of Percentages. All percentages in this bulletin, unless otherwise indicated, are based on net sales as 100%.

Gross Margin. The term "gross margin" is increasingly used in preference to "gross profit". It represents the amount remaining after the deduction of net cost of goods sold from net sales. Net cost of goods sold is billed or invoice cost of goods sold, plus any processing taxes, less cash discounts taken and allowances received, plus transportation charges, and plus proper charges for merchandise depreciation and stock shortages. The treatment of transportation charges as part of the merchandise cost makes the gross margin figure lower by the amount of such charges than it otherwise would be.

Transportation Charges. Variety chains ordinarily do not undertake extensive warehousing operations; most of their merchandise is shipped directly from manufacturers to stores. For this trade, therefore, all transportation charges are considered as part of the cost of merchandise, following the generally accepted accounting practice in other fields of retail business.

Salaries and Wages. The salary and wage classification embraces all items of pay roll expense both in stores and in the central organizations, including the compensation of chief executives.

Tenancy Costs. Tenancy costs comprise all expenses on property used in the business. They therefore cover, in the case of leased property, not only rentals paid but other payments made in lieu of rent, such as taxes, insurance, repairs, and amortization of leaseholds. Charges on owned real estate included in this account comprise taxes, insurance, repairs, and depreciation on owned real estate, plus a fair charge for interest on equity in land, buildings, and improvements, as well as interest actually paid on mortgages. The definition of the tenancy cost account for 1935 differs in two respects from that for 1929, 1931, and 1932, but is the same as that obtaining in 1933 and 1934. Charges for amortization of major improvements on leased property, formerly

combined with charges for depreciation on fixtures and equipment, have been allocated to the tenancy cost item. Also, since many of the firms lease stores for which heat is provided by the landlords, the cost of heat has been included with other real estate charges in order to assure comparability. In making comparisons between the figures given in this bulletin and those given in bulletins for 1929, 1931, and 1932, allowances should be made for this change in definition.

Interest. In order to obtain comparability between businesses using different methods of financing, interest at the rate of 6% on the average net worth exclusive of real estate, leaseholds, and goodwill is considered as an expense, as well as interest actually paid other than mortgage interest. Interest computed on real estate equity and mortgage interest are considered as tenancy expense. From the sum of the actual interest payments and the interest on owned capital is deducted the amount of interest and dividends received.

Total Expense Including Interest. Total expense including interest is the complete cost of doing business, comprising, in addition to the usual outlays, salaries of executives, proprietors, and partners; rental charges for owned real estate; and interest on owned capital.

Net Profit. The above procedure with respect to interest leads to a narrow definition of net profit as a theoretically residual sum over and above a customary interest return on invested capital.

Net Other Income. Net other income has three component parts: profit or loss from real estate operations; interest on net worth other than real estate; and other revenue, net. In the first of these are included net profit or loss on owned real estate not used in the business, interest previously charged as expense on the investment in owned real estate used in the business, profit or loss on real estate which has been sublet, and profit or loss of any subsidiary real estate holding companies. Under interest on net worth is credited back the interest at 6% on the average net worth excluding real estate, previously included as an operating expense in arriving at the net profit on merchandising operations. Miscellaneous revenue, including among other items such receipts as dividends from manufacturing and/or foreign subsidiaries, commissions from leased sections, and income from weighing machines and telephones, is considered under sundry revenue, net.

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Net Gain. To arrive at the final net gain or net business profit, net other income is added to the net profit. Therefore the net gain figure, while not affording, from a statistical standpoint, so valid an interchain comparison as the net profit figure, may be taken as roughly approximate to net business profit in the commonly understood sense. Net gain is expressed both as a percentage of net sales and as a percentage of the average net worth. The use of the average net worth as a base for this figure introduces the complication of differing policies in regard to real estate. Where a chain owns, either directly or through a subsidiary real estate corporation, many of the stores operated, the total average net worth is large in proportion to the net sales volume, and as a result the rate of return on invested capital is low as compared with that for a chain owning little or no real estate.

Sales Taxes. During 1935, sales taxes, as distinct from license taxes, were in effect in 24 states and in some cities for part or all of the period. The tax rates and provisions governing collection differed in these several states and municipalities. In certain cases it was ruled that the taxes should be passed on directly to the consumer in the form of additional charges, whereas in other cases no such provision was made, the tax being levied either at a flat rate or at a graduated rate upon the total sales volume.

In its schedule, the Bureau asked for data not only on the payments made by the chains but also on the collections made from customers. The collections were deducted from net sales and only the net amount paid by the chains was charged as an expense item.

Rate of Stock-turn. The rate of stock-turn, or rapidity of merchandise turnover, is calculated by dividing the cost of merchandise sold by the average inventory at cost. For chain enterprises the average inventory includes merchandise both in stores and in warehouses. Stock-turn figures of two types have been computed: the first rate, available for all chains, is based on the average of the beginning and ending inventories; and the second rate, available for part of the chains only, is based on the average of 12 monthly inventories.

Aggregates and Averages. Some of the figures included in this report are averages based on aggregate dollar figures. Thus, for instance, in the second column of Table 6, where the gross margin is reported as 36.25%, this means that the aggregate gross margins of the 30 reporting chains bore that percentage relationship to the aggregate net sales of those chains. Such average

figures manifestly are weighted unequally. The reasons for using such figures are given in some detail in the Bureau's report for 1931.¹ These average figures based on aggregates obviously do not afford a good year-to-year comparison unless only identical firms are used, since the averages are substantially affected by the omission or addition of one or two large firms.

Median Figures. Many of the other data presented in this report consist of median figures. These figures are based on percentages computed for each firm in the group individually. Such figures, therefore, give equal weight to each chain, irrespective of sales volume and number of stores. The median is the middle figure in an array of percentages listed in order from the smallest to the largest. Thus, in column 3 of Table 11, where the gross margin is stated as 33.18%, this means that when the gross margin percentages for the chains were arranged in order from the smallest to the largest, 33.18% was the percentage which stood at the mid-point. In the interpretation of the median figures it should be noted that because of their statistical nature the medians for the individual items of expense ordinarily will not add to the median total expense, and the median net profit as a rule will not correspond precisely to the difference between the median gross margin and the median total expense.

Classification of Expense. Expenses are classified on the usual so-called "natural" basis as follows: salaries and wages; tenancy costs; light, water, and power; depreciation of fixtures and equipment; supplies; advertising; insurance; taxes; travelling; miscellaneous expense; and interest. Miscellaneous expense includes communication, professional services, reopening expense, and unclassified expense. Such a classification indicates the type of expenditure, but does not indicate for what part of the business the expenditure was incurred. Therefore, for the firms reporting sufficiently detailed figures, average percentages are presented also for expenses subdivided according to a roughly functional classification into "store" expense and "administrative, general, and all other" expense.

Goal Figures. So-called "goal" figures (following department store usage) are presented for chains of different sizes. These figures are based on the operations of the most profitable firms in each group. They are offered as standards of operating efficiency.

¹Harvard Business School, Bureau of Business Research, Bulletin No. 89, *Expenses and Profits of Variety Chains in 1931 Compared with 1929*, page 5.