EXPENSES AND PROFITS OF LIMITED PRICE VARIETY CHAINS IN 1936

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FOREWORD

With the publication, in this bulletin, of figures on the margins, expenses, and profits of limited price variety chains for 1936, the Harvard Business School marks the sixth consecutive year of its surveys of this type of retail distribution and the seventh for which figures have been gathered. The School, through the Bureau of Business Research, began its studies of distribution costs for various types of independent retailers and wholesalers as far back as 1913. In 1920 these studies were extended to department stores, and in 1929 their scope was enlarged to embrace several kinds of chain store enterprise.

The School's purposes in carrying on this work have not changed since its inception. They are (1) to obtain factual knowledge and to develop generalized conclusions for use in teaching, especially in the courses in Marketing, Sales Management, and Retail Distribution; (2) to build up a large body of detailed knowledge on the behavior of distribution costs; (3) to furnish business executives with standard gauges of margin, expense, and profit in particular types of distributive enterprise for their use in budgeting expenses and otherwise seeking to improve efficiency of operation; and (4) to help promote a better understanding on the part of the public of the functions and costs of distribution.

Although there is now much more information generally available on distribution costs than was the case in earlier years, there is plenty of evidence that the need for knowing and understanding distribution costs is, if anything, more urgent than ever. During most of the years spanned by the Bureau's work, the expense of distribution has continued to rise relative to the cost of production; and although a goodly number of reasons can be adduced to account for this changing disposition of the consumer's dollar, the fact remains that opportunities to augment the real spending power of consumers and improve the standard of living must increasingly be sought in the area of distribution. Furthermore, the success which has thus far attended the efforts of pressure groups to enact restrictive legislation generally designed to hamper the activities of various types of distributors betokens widespread ignorance and confusion among the general public in regard to the functions and costs of marketing and their relation to the economic organization.

Like its immediate predecessors, this particular study of the chain variety business has been financed by the Limited Price Variety Stores Association; and the Bureau wishes to acknowledge to the Association and to its president, Dr. Paul H. Nystrom, appreciation both for financial support and for interest in the development of the study.

The Bureau also greatly appreciates the interest and coöperation of the individual companies which submitted their figures for use in this study. 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 study was conducted by the Bureau of Business Research under the general direction of Assistant Professor Carl N. Schmalz. Miss Rose Winisky was immediately responsible for the detailed statistical work.

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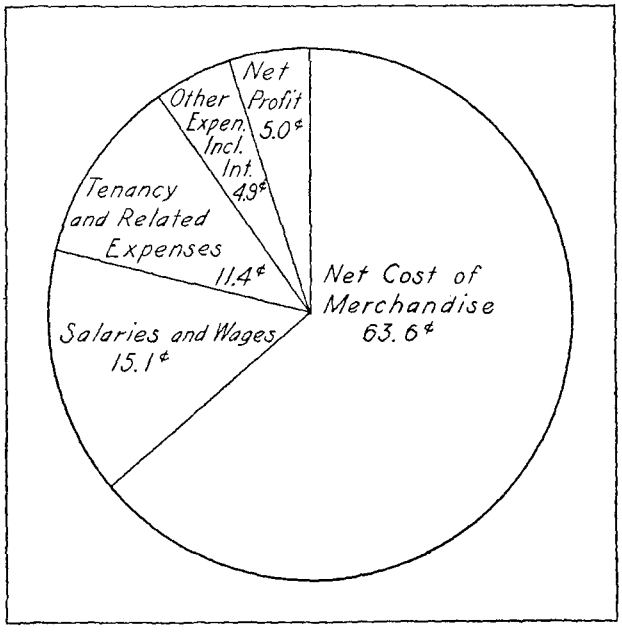
SUMMARY AND APPRAISAL

In 1936, a year of generally active business and moderately rising retail prices, 33 limited price variety chains (that is, chains of 5-, 10-, and 25-cent, and to-a-dollar stores) reported to the Bureau of Business Research figures showing an increase in sales volume and an improvement in profit performance over 1935. These 33 companies, representing more than 92% of this type of business in the United States, made aggregate sales of $815,000,000 in 5,138 stores, an advance of $71,000,000 over the preceding year. The cost of the merchandise sold was $518,000,000; thus approximately 63.5 cents of the consumer's dollar spent over the counter in chain variety stores was required to cover the cost of goods to the chain. To this cost there had to be added a total cost of doing business (including interest on invested capital) of $256,000,000, or 31.5 cents out of the consumer's dollar. The total of merchandise and operating costs thus reached a figure of $774,000,000, leaving about $40,000,000 as net profit in the narrow economic sense, the equivalent of about 5 cents out of the consumer's dollar, or 5 mills out of each dime spent over the counter of variety chain stores. This disposition of the consumer's dollar received by these 33 variety chains is shown graphically on this page.

Chart 1. Disposition of the Consumer's Dollar Spent in Chain Variety Stores: 1936



The total net income of these companies also included $8,000,000 net profit from real estate operations, nearly $13,000,000 as a bookkeeping item for interest on their net investment, and other net revenue to an amount of nearly $4,000,000. This total of $25,000,000, when added to the net profit of $40,000,000, made a total net gain before income taxes of $65,000,000, or approximately 8% of net sales. When measured in relation to invested capital, this net gain amounted to a return of approximately 16%.

No Rapid Expansion in Number of Stores

The development of chain store enterprises in the United States frequently has been characterized by a rapid rate of increase in number of stores. In this respect, the variety chain business perhaps has not given so spectacular a performance as some other types of chains. Nevertheless, seven large companies in this field augmented their number of outlets from 2,100 to 3,700 over the seven years from 1924 through 1931. In the years following 1931, the rate of expansion slowed down notably; and the 33 companies reporting for 1936 opened a net number of only 83 stores during that year, an increase of merely 1.6% over the 5,055 stores operated in 1935.

Perhaps business in general is not yet sufficiently far away from the experience of the depression years for a spirited rate of expansion to be resumed; but it is quite possible that the variety chain business has now passed the stage where any very rapid growth in number of stores is likely. If this sup-

position is true, it may turn out to have an important bearing on margins, expenses, and profits in the future. When a chain store enterprise is enlarging its number of units and at the same time increasing its average sales per store, the expense rate tends to fall. If, however, an increase in the number of stores is accompanied by a decline in the average sales per store, then there is likely to be a mixed effect on the total cost of doing business; while some of the general overhead expense may continue to drop in ratio to sales, the fixed expenses of the stores themselves will tend to advance. But if the number of outlets stands at a substantially unchanged figure, then the total sales volume of a concern tends to be influenced chiefly by fluctuations in general business conditions and by the accompanying changes in the price level. In such situations, the experience of some other types of retail distributors, notably department stores, suggests that difficulty is likely to be encountered in keeping the expense rate down; it will inevitably rise in periods of depression, and no great headway is likely to be made in reducing it during periods of prosperity.

If programs of marked expansion are not likely to be resumed in the variety chain business, this situation may also possibly have a bearing on the fortunes of this type of distributive enterprise in the next depression. In the light of the severity and length of the last depression, the limited price variety chain business turned in a really brilliant record, but it would not be wholly safe to conclude on that account that such immunity will always persist. Department stores were relatively unscathed by the business downturn in 1921; but they were much more seriously affected in 1930–1932, and some observers have contended that this vulnerability developed because they had settled into a position of greater maturity. The comparatively better showing of variety chains during the years when business was at a low ebb was partly attributable to the attraction of their low fixed price limits during a period when purchasing power was on the decline, and partly in consequence of the continued expansion in number of stores which gave their sales substantial impetus during the early years of the depression.

There is another important aspect to this matter of expansion, and that is its bearing on the management problems of individual companies. It is not in the cards for any type of business to continue a pronounced rate of physical growth indefinitely. There is apparently a sort of natural law governing the growth of business enterprises which brings them all sooner or later into a period of maturity; and for meeting the critical problems of such a period companies which have grown rapidly seem often to be less well equipped than those whose growth has been less spectacular. In the variety chain business, some concerns have been able to keep their expense rates down by reason of their rapid growth. These companies, as soon as the expansion is halted, are likely to find difficulty in keeping their operating cost ratios under control. Other enterprises with a much less notable speed of growth have been developing the necessary control of expense through management policies and procedures, and it is such enterprises which are likely to find themselves in the stronger position when the period of maturity arrives.

Total Sales above 1929 Level

For a group of 16 identical variety chains, total sales in 1936 were substantially above the 1929 level, but the average sales per store were still very considerably below the 1929 figure. Comparing the two most recent years, the aggregate sales increase of the 33 companies for 1936 was from $744,000,000 to $815,000,000, and the increase in average sales per store was from $148,000 to $159,000. The advance of approximately 9.5% in the sales of limited price variety chains may be compared with the estimate of the Department of Commerce of an increase of 14.5% in retail sales generally in the United States in 1936 and with the increase of 12% reported by the Federal Reserve Banks for the department store business. Variety chains, therefore, did not share in increasing consumer expenditures in 1936 to quite the same extent as did some other types of retail enterprise. This development is by no means an unusual one. In a period of business recovery, as consumers begin to spend with somewhat more freedom, many of them are likely to "trade up" on some purchases, shifting their patronage from the low-price variety chains to stores selling higher-price merchandise.

Slight Increase in Gross Margin

Contrary to the expectation expressed in last year's report, the rate of gross margin in the variety chain business advanced fractionally in 1936, from 36.25% to 36.43% of net sales. This was a very small increase, but it was nevertheless a reversal of the trend shown in the previous year. As indicated in the summarized figures in Table 1, variety chains

since 1933 have placed their gross margin on a new higher level, presumably as a means of meeting the advance in the expense rate which, occurring in the years of poor business, pushed the figures into a higher bracket, especially from 1932 on. Such an effort to restore and maintain a normal net profit differential over a higher level of operating costs is understandable. As an additional reason for higher gross margin, there is also to be borne in mind, of course, the higher toll which is now levied on business income by the Federal and State Governments.

Perhaps it is significant that in 1936 the gross margin percentage obtained by department stores likewise increased, from 35.8% to 36.5%,[1] a considerably larger increase than that exhibited by the variety chains. But the department store in the United States is predominantly a service and prestige type of retail organization; whereas variety chains, in the past at least, have not sought to make their appeal on these bases, but rather have relied on their low prices to draw customers. The question, therefore, inevitably presents itself whether these concerns will be able to maintain their gross margins on the 1933–1936 level without leaving an opening for competitors to accomplish something comparable to the present onslaught of the super markets on the grocery chains. Chains in general are thought of as low-margin types of retail distribution; but as remarked in some of the Bureau's previous surveys, the gross margin required by limited price variety chains has for several years been fully as high as that of department stores.

It is not to be supposed, of course, that all variety chains have equally high gross margins. In fact, as shown in Table 6, there was a wide range in the gross margin rates of individual companies. And it is true that at present the concerns with the high gross margins are generally those which make the best profits. Nevertheless, the average is high for a chain store type of enterprise. For the future, manifestly, much depends on what can be done with the expense rate.

Slight Decrease in Total Expense

The aggregate total expense of $256,000,000 for the 33 companies represented an increase in dollars over 1935, but a small decline in percentage from 31.74% to 31.46%. This was a smaller decrease than that obtaining in department stores in 1936, namely from 35.8% to 34.9%;[2] but it is to be remembered that department stores achieved a larger increase

[1] Unpublished general average figures of the Bureau of Business Research.

[2] Unpublished general average figures of the Bureau of Business Research.

Table 1. Summarized Figures for 16 Identical Variety Chains: 1929, 1931–1936

(Aggregate Net Sales = 100%)

Items	1929	1931	1932	1933	1934	1935	1936
Aggregate Number of Stores	1,627	2,138	2,241	2,246	2,279	2,325	2,368
Aggregate Net Sales (in thousands)	$360,900	$363,328	$327,191	$337,663	$379,379	$397,465	$436,536
Average Net Sales per Chain (in thousands)	$22,556	$22,708	$20,449	$21,134§	$23,690§	$24,842	$27,284
Average Sales per Store (in thousands)	$222	$170	$146	$151§	$166§	$171	$184
GROSS MARGIN	32.69%	32.19%	31.49%	35.61%	34.97%	34.47%	35.02%
Salaries and Wages	12.97%	13.10%	13.02%	13.89%	14.37%	14.18%	14.11%
Occupancy Costs	8.81	11.40	13.11	12.43	11.29	10.92	10.51
All Other Expense including Interest	4.99	4.92	5.22	5.39	5.29	5.27	5.36
TOTAL EXPENSE including Interest	26.77%	29.42%	31.35%	31.71%	30.95%	30.37%	29.98%
NET PROFIT OR LOSS	5.92%	2.77%	0.14%	3.90%	4.02%	4.10%	5.04%
Net Other Income (including interest on net worth)	2.67	2.80	3.23	2.96	2.93	3.04	2.96
NET GAIN before Income Taxes:							
Percentage of Net Sales	8.59%	5.63%	3.37%	6.86%	6.95%	7.14%	8.00%
Percentage of Net Worth	20.03‡	10.67	5.74	11.63	12.52‡	12.74‡	14.97‡
Rate of Stock-turn (times a year) Based on Beginning and Ending Inventories	5.22	5.31	5.11	4.85	4.98	5.03	5.12

‡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.

in sales volume than did variety chains. As Table 1 shows, the cost of doing business among limited price variety chains reached a high point in 1933, and since then has been gradually working back toward the 1931 level, a position still well above the 1929 rate. The summarized per store figures in Table 2, nevertheless, are not wholly reassuring in regard to the future movement of the expense rate. It appears that, unless sales per store increase more rapidly than in 1936, it will be difficult to keep the expense rate moving downward. Salaries and wages and occupancy costs (including tenancy costs, light, water and power, and depreciation in fixtures and equipment) are the two chief outlays, together constituting more than 80% of total expense; and in dollar amounts per store both these classes of expense marched forward vigorously in 1936.

Over and above the inferences to be drawn from the figures for 1936, current developments in regard to wages and hours of work suggest that it will be difficult in 1937 for variety chains, as well as for many other types of enterprises, to get the average expense rate below the 1936 figures. For some businesses certainly, any substantial increase in wage rates over existing levels will pose a difficult problem. Logically there are only three outcomes in such a situation: (1) the additional share of the output gained by the improved bargaining strength of labor reduces the return on capital to or below a bare minimum; (2) methods are found of increasing the productivity of labor so that the increased output will support the higher wage rate; (3) price inflation takes place on a scale which renders the wage increase illusory. The first of these outcomes offers little hope for future progress, though at any particular time there are always some companies which are in a better position to accept a curtailment of returns on capital than others, a condition which, as suggested by the figures in this report, probably characterizes some variety chains. The third possible outcome leaves the ultimate situation worse than before. Hence the second of the three answers is the only one which promises any real progress; it is this, indeed, which has been responsible in the past for most of the advances in the standard of living. The problem of increasing the sales productivity of employees in retail business is a difficult one. Selling, even in a 5- and 10-cent store, is a personal and not a mechanical function; and, unable to enlist the potent aid of the machine, management is hard pressed to discover new combinations of capital and organization that will enlarge the per capita output. Nevertheless, this is the direction in which merchants must steadily apply their ingenuity.

The Problem of Price Limits

The problem of price limits in the variety chain business today is in the minds of many executives. Interest has been focused on this question partly as a result of the decision of the F. W. Woolworth Company to stock merchandise at prices well above its former limits. All companies operating on the basis of fixed price limits, however, are inevitably confronted with certain merchandising problems as a result of changes in the price level. When prices are falling, it is natural that concerns with fixed prices should take new items of merchandise into their lines. At a later date, when the price level reverses its trend after demand has been established for these articles, a limited price organization has to face the issue whether to drop these goods as their rising costs gradually make it impossible to

Table 2. Summarized per Store Figures for 16 Identical Variety Chains: 1929, 1931–1936

Items	1929	1931	1932	1933	1934	1935	1936
Average Sales per Store	$221,819	$169,938	$146,002	$150,552	$166,318	$170,953	$184,348
GROSS MARGIN	$72,513	$54,703	$45,976	$53,612	$58,161	$58,927	$64,559
Salaries and Wages	$28,770	$22,262	$19,009	$20,912	$23,900	$24,241	$26,012
Occupancy Costs	19,542	19,373	19,141	18,714	18,777	18,668	19,374
All Other Expense including Interest	11,069	8,361	7,622	8,114	8,798	9,009	9,882
TOTAL EXPENSE including Interest	$59,381	$49,996	$45,772	$47,740	$51,475	$51,918	$55,268
NET PROFIT OR LOSS	$13,132	$4,707	$204	$5,872	$6,686	$7,009	$9,291
Net Other Income (including interest on net worth)	5,922	4,860	4,716	4,456	4,873	5,197	5,457
NET GAIN before Income Taxes	$19,054	$9,567	$4,920	$10,328	$11,559	$12,206	$14,748

sell them at a profit within the company's fixed price limits, or whether to make numerous exceptions to these limits in order to retain items for which patronage has been developed. The eventual result of such exceptions, of course, is an upward shift in the company's price limits.

There is also the further consideration that variety chains which are not increasing their sales volume through expansion in number of outlets need to give their attention to ways and means of augmenting the average sales per store. It is natural that they should consider the possibility of selling goods at higher unit prices. To embark on a program of shifting some of the emphasis away from 5-, 10-, and 25-cent items in favor of merchandise retailing at 50 cents, 75 cents, $1, or higher, means foregoing some of the strong promotional appeal of low fixed price limits. It also means that the management has to meet many new problems of buying, merchandising, and sales promotion, and that some difficulties may be involved in successfully making the transition and shifting the thinking of executives to new types of merchandise and new prices. On the assumption, however, that the transitional difficulties can be overcome and that the attraction of a wider range of merchandise and prices will sufficiently offset the decrease in the effectiveness of the low fixed price appeal, what results can be looked for in the form of margin, expense, and profit?

On these points the findings of this study corroborate the results of the Bureau's earlier surveys and point rather definitely to the following conclusions:

(1) Gross margin will be lower. The more definite competition with other types of retailing and the greater possibility for comparison of values will operate to reduce the initial mark-up, while the more perishable character of some of the merchandise, i.e., the increased danger of fashion obsolescence, will increase the mark-downs.

(2) The total cost of doing business will tend to be lower as a percentage of sales. Although merchandise of low unit value is supposed to sell itself primarily on a display basis, there is a certain inescapable minimum of physical work involved in manning the counters, wrapping merchandise, and making change. Where the average unit of sale is very low, the percentage relationship of this inevitable minimum of work to the retail sales value is high. Somewhere above the point of the very low average sales transaction there is an optimum size of average sale, not so large as to run seriously into the need for more salesmanship and greater knowledge of merchandise and yet high enough to escape the disadvantage just mentioned. A management which can successfully achieve approximation of this point will be able to lower the expense rate.

(3) The net profit as a percentage of sales will probably be lower because the decrease in the total expense percentage will not be so great as the decline in gross margin. In other words, unless sales volume is substantially augmented, there will be a drop in the total dollars of net profit. The success of a policy of raising the price limit in variety chains will therefore depend principally upon the extent to which it is possible to increase sales volume by this means.

Bureau Figures Represent about 92% of Total Variety Chain Sales

The Bureau's information on the limited price variety chain business for 1936 was obtained from the reports of 33 variety chains operating 5,138 stores on the average during the year and making aggregate sales during the year of $815,000,000. From comparison with the total variety chain sales indicated by the published figures of the United States Bureau of Foreign and Domestic Commerce, it was apparent that the Harvard Bureau's sample of the limited price variety chain business for 1936 represented over 92% of the total.[1]

The 33 variety chains reporting to the Bureau for 1936 included five companies, with 90 stores and sales of $2,700,000, which had not reported for 1935. There were two companies, on the other hand, with 12 stores and sales of $268,000, which had reported for 1935 but failed to submit figures for 1936. There is, therefore, a difference in sales volume of less than ½ of 1% between the Bureau's sample of the variety chain business for 1936 and the sample for 1935.

Two Types of Averages — Aggregates and Medians

In accordance with the usage in earlier studies, this report presents two different kinds of averages, both percentages of net sales. One type of average percentage measures the relationship between the total dollar amount for the particular item, tenancy cost, for instance, reported by all the companies and the total dollar sales volume of all the companies. In this bulletin these percentages are referred to as aggregates. The other type of average is the median. In arriving at the median, it is necessary first to compute individual percentages for the particular item for each firm, for instance, for the relationship between each company's tenancy cost and its net sales. The next step is to arrange the individual percentages in order from the lowest to the highest. The percentage which appears in the middle of this array is the median. (See Table 6.) Because of the way in which they are obtained, the medians cannot be expected to "tie together"; that is, the median total expense percentage will not be the sum of the medians for the individual items of expense.

The medians, of course, give equal weight to each company, ignoring differences in sales volume, whereas the aggregates are weighted very heavily by the figures for the large companies. In view of the fact that large chain organizations obtain their high sales volume through a great number of widely scattered stores, the aggregate percentages sketch the better picture of the composite disposition of the sales dollar; or to look at it from the consumer's standpoint, they show more faithfully what happens to the consumer's nickels, dimes, and quarters spent over the counters of limited price chain variety stores. From the viewpoint of executives desiring to compare relative efficiency of operation, the other type of average, the median, is perhaps the more useful, since it treats each company as an individual unit of management. Both these types of averages are shown in Table 5 and in a majority of the other tables in this bulletin. Table 5, which presents the 1936 figures for all the 33 reporting chains, gives, in addition to the median, the range of the middle 50% of the individual percentages for each item. These middle range figures enable an executive to determine whether the outlay of his firm for a particular expense is in the middle half of the reported range of experience for all companies or whether it lies beyond these limits, either on the low side or on the high side.

Characteristics of the Companies Represented

Among the 33 variety chains reporting for 1936, 13 had sales of less than $500,000, 11 ranged in sales volume between $500,000 and $10,000,000, 7 were in the bracket between $10,000,000 and $100,000,000, and 2 companies had sales over $100,000,000. Classification on the basis of number of stores re-

[1] No direct comparison could be made, but with adjustments a reasonably accurate comparison was possible. To the total variety chain sales reported by the Census of Business for 1935 was added the percentage of increase in this type of business for the year 1936 indicated by the published figures of the Bureau of Foreign and Domestic Commerce. To this total there had to be added also the sales of one large national chain which the Harvard Bureau classifies as a variety chain but which is classified otherwise by the Census; then from the Bureau figure it was necessary to deduct the sales of five companies operating entirely in Canada.

Table 3. Sales by Merchandise Lines for 18 Variety Chains: 1936

(Aggregate Net Sales = 100%)

Apparel and Accessories, Dry Goods, Notions, and Domestics	39.71%
Hardware, Electrical Supplies, Crockery, and Glassware	14.71
Toys, Games, Books, and Stationery	11.92
Drugs and Toiletries	9.57
Miscellaneous	7.86
Confectionery and Nuts	7.66
Soda Fountains, Luncheonettes, and Restaurants	6.72
Jewelry	1.85

vealed 7 concerns with fewer than 10 stores each, 13 ranging from 10 to 50 stores each, 11 having between 50 and 500 stores, and 2 with more than 500 stores each. About 26% of the stores were in cities with population under 10,000, another 24% were in cities with population between 10,000 and 25,000, and about 20% were in cities with population between 25,000 and 100,000.

Over 50% of Sales in Apparel and Accessories and Household Wares. For 1936, 18 of the reporting companies, operating 4,721 stores, furnished information on sales by merchandise lines. These figures are shown in Table 3. By far the largest group was constituted of apparel and accessories for men, women, and children; dry goods; notions; and domestics. Next in importance came such household items as hardware, electrical supplies, crockery, and glassware. In order to measure any changing trends in the lines of merchandise handled by limited price variety chains, a tabulation of sales by lines was made for 13 identical companies for the four years 1933 through 1936. These 13 companies had 4,617 stores at the end of 1936. The results of this compilation, which are shown in Table 4, indicate a slight tendency for the leading classification, apparel and accessories, dry goods, notions, and domestics, to increase over this period; and the same is true of the soda fountain, luncheonette, and restaurant business. From 1934 through 1936, jewelry sales exhibited a rather substantial decline in proportion to other groups of merchandise.

Naturally the proportion of sales of the several groups of merchandise varies widely among the different concerns; those companies with a high average sales transaction, for instance, characteristically have a considerably higher percentage of sales in the apparel and accessories, dry goods, notions, and domestics classification than do those concerns with a relatively low average sales transaction.

Operating Figures for 1936

Change in Number of Stores, Sales, and Inventories. During 1936, the reporting chains showed a net increase in number of stores of 83, 114 stores being opened and 31 closed. Of the 33 chains, 22 opened some new stores; and among these 22 chains, 8 closed some stores and 14 closed no stores. Only one chain closed more stores than it opened during 1936. The other 11 chains neither opened nor closed stores during the year. The net number of stores opened in 1936 in comparison to the total number operated indicates that limited price variety chains were not, as a general rule, engaged in a program of rapid expansion during the year.

The total net sales of the 33 reporting companies were 9.5% higher in 1936 than in 1935, and it is interesting to note that the increase in their aggregate cost inventories between the beginning and end of the year 1936 was 9.7%. An examination, on the median basis, of the rate of sales increase in identical stores operated through the full years 1935 and 1936 revealed substantially the same figure as the over-all rate of increase; and an analysis of the change in inventory per store, also on the median basis, revealed practically no difference from the over-all increase in stocks. In other words, the increases in both the sales and stocks were spread over all the reporting companies with a

Table 4. Sales by Merchandise Lines for 13 Identical Firms: 1933–1936

(Aggregate Net Sales = 100%)

Items	1933	1934	1935	1936
Apparel and Accessories, Dry Goods, Notions, and Domestics	36.91%	38.29%	38.63%	39.62%
Hardware, Electrical Supplies, Crockery, and Glassware	14.93	15.24	15.09	14.71
Toys, Games, Books, and Stationery	12.26	11.70	11.88	11.95
Drugs and Toiletries	9.57	9.85	9.70	9.58
Miscellaneous	9.97	8.60	8.17	7.87
Confectionery and Nuts	8.08	7.93	7.97	7.68
Soda Fountains, Luncheonettes, and Restaurants	6.11	6.19	6.51	6.73
Jewelry	2.17	2.20	2.05	1.86

rather remarkable degree of uniformity rather than being confined to a few enterprises.

Gross Margin. The aggregate gross margin rate for limited price variety chains in 1936 was 36.43% of net sales. In other words, not quite 36½ cents out of the consumer's dollar was required, on the average, to cover operating expenses and profit. This ratio was fractionally higher than the corresponding figure for the 30 companies reporting for 1935. The median gross margin for 1936 was 34.24%, with half the figures lying between 32.37% and 36.11%. The fact that the median figure was lower than the aggregate figure indicates that the companies with larger sales volume were those which, in general, had higher rates of gross margin. The frequency distribution of the gross margin percentages for the 33 chains is shown in Table 6, where all the gross margin percentages are listed in order from lowest to highest.

In the computation of the gross margin figures all discounts and allowances were deducted from the cost of merchandise; and freight, express, postage, and truckage, the great bulk of which applied to incoming goods, were added to the cost of merchandise. These inward transportation charges, as indicated by the median figure in Table 5, characteristically amounted to about 2.4% of net sales. Consequently, if these charges had been treated as an expense rather than as a part of the cost of goods, the gross margin rate would have been higher by this amount.

Gross margin is, of course, affected by mark-downs and stock shortages. In the variety chain business it is not always possible to differentiate so accurately between mark-downs and stock shortages as is the case in department stores. Some mark-downs may not appear on the records, and price reductions which are not recorded show up at the end of the period as retail stock shortages. Consequently, the figure for total mark-downs and shortages is likely to be more significant than figures for mark-downs and shortages separately. Of the 33 reporting companies, 14 were able to give a figure for total mark-downs and shortages. For these companies the total ranged from less than 1% of sales to more than 4% of sales, the median figure being about 2.5% of sales. As might be expected, this figure is substantially lower than the typical total of mark-downs and shortages for some of the depression years when more numerous price reductions were necessary to keep pace with declining markets.

Total Expense. The 33 limited price variety chains in 1936 had a total cost of doing business amounting to $256,000,000, or approximately 31½ cents out of each dollar spent by consumers in stores of this type. Since this figure includes a charge for interest on the net worth of the business as well as for interest paid to outsiders, this total cost of doing business represents the long-run economic expense of operation. The median figure for total expense was lower than the aggregate figure, 29.82%, reflecting the fact that the largest chains in the group in general had higher percentage costs of doing business than did the smaller companies. Table 6 presents the complete array of total expense percentages from which the median figure was obtained. The entire range, as shown in this table, was from just under 26% of sales to over 37%. All these figures include interest on invested capital.

The aggregate total expense figure of 31.46% for the 33 companies in 1936 represents only a fractional decrease in operating costs from the preceding year, 3/10 of 1% of sales, to be exact. In view of the sales increase of approximately 9%, it is unfortunate that variety chains were not able to whittle a larger slice off their operating costs. Such percentage savings as were made appeared principally in salaries and wages and tenancy costs.

Net Profit and Net Gain. Because of the Bureau's practice of charging interest on investment as part of the cost of operation, it is necessary to differentiate between net profit or loss (in the narrow economic sense) and net gain, which is equivalent to the ordinary definition of "net business profit". The variety chain net profit, in the narrow sense, of roundly $40,000,000 in 1936 was just under 5% of net sales; that is to say, it amounted to about 5 mills out of each dime spent by the public in chain variety stores. The median figure was a little lower, 4.1%, indicating that smaller companies did not earn quite such good profits as did larger concerns. Table 6 presents the frequency distribution of net profit or loss figures from which the median was obtained. Four companies exhibited net losses. For the other 29 firms, net profit ranged from less than ½ of 1% of sales to over 9.5%. Whereas 88% of the reporting variety chains earned some net profit in 1936, in the case of department stores, as shown by the Bureau's study for the same year,[1] only 60% of the reporting firms earned a net profit in the narrow economic sense.

[1] Schmalz, Carl N., *Operating Results of Department and Specialty Stores in 1936* (Harvard Business School, Bureau of Business Research, Bulletin No. 104), p. 4.

Table 5. Operating Results for 33 Variety Chains: 1936

(Net Sales = 100%)

Items	Aggregate Figures		Median and Range Figures		
	Amounts (Dollar figures given in thousands)	Percentages Computed from the Combined Dollar Figures of the 33 Chains	Percentages Computed from the Figures in Each Chain Taken Individually		
			Median[1] Figures	One-half the Reported Figures, Centered on the Median, Lay between the Limits Listed Below	
Aggregate Number of Stores	5,138	....	....	....	....
Aggregate Net Sales	$814,905	100.00%	....	....	....
Average Net Sales per Chain	$24,694	....	....	....	....
Average Sales per Store	$159	....	....	....	....
Net Cost of Merchandise Sold	$518,053	63.57%	65.76%	63.89%	67.63%
GROSS MARGIN	296,852	36.43	34.24	32.37	36.11
Salaries and Wages	$123,453	15.15%	15.72%	14.24%	17.79%
Tenancy Costs	79,517	9.76	5.74	4.66	7.68
Light, Water, and Power	7,901	0.96	0.93	0.81	1.11
Depreciation of Fixtures and Equipment	5,616	0.69	0.80	0.64	1.09
Supplies	8,472	1.04	1.02	0.69	1.24
Advertising	1,486	0.18	0.32	0.13	0.71
Insurance (except on real estate)	3,655	0.45	0.47	0.35	0.66
Taxes (except on real estate or income):					
Sales	1,427	0.18	0.00	0.00	0.19
Unemployment and Old Age	1,296†	0.16†	0.15†	0.13	0.18
Other	3,524	0.43	0.50	0.40	0.62
Travelling	1,084	0.13	0.32	0.15	0.55
Miscellaneous Expense	5,918	0.73	1.31	0.70	1.56
Total Expense before Interest	$243,349	29.86%	28.46%	26.87%	31.18%
Total Interest	13,032	1.60	1.51	1.32	1.72
TOTAL EXPENSE including Interest	$256,381	31.46%	29.82%	28.25%	32.66%
NET PROFIT OR LOSS	$40,471	4.97%	4.13%	2.89%	5.07%
Net Profit or Loss from Real Estate Operations	$8,102	0.99%	0.12%	0.00%	0.40%
Interest on Net Worth (except on real estate, leaseholds, and goodwill)	12,940	1.59	1.35	1.19	1.54
Other Revenue, Net	3,841	0.47	0.01	0.00	0.11
Total Net Other Income	$24,883	3.05%	1.70%	1.37%	2.05%
NET GAIN before Income Taxes:	$65,354	....	....	....	....
Percentage of Net Sales	....	8.02%	5.91%	4.68%	8.16%
Percentage of Net Worth	....	16.04‡	18.42‡	14.50	26.68
Income Taxes for 1936	*	*	1.05%†	0.61%	1.58%
NET GAIN after Income Taxes:	*	....	....	....	....
Percentage of Net Sales	....	*	4.86%†	3.91%	6.28%
Percentage of Net Worth	....	*	14.17†	11.61	21.84
Rate of Stock-turn (times a year):					
Based on Beginning and Ending Inventories	....	4.75	4.38	3.50	4.84
Based on Monthly Inventories	....	4.63†	4.01†	3.14	4.66
Freight, Express, Postage, and Truckage	*	*	2.41%†	1.93%	3.63%
Percentage of Merchandise Purchased Direct from Manufacturer	....	....	85.00%†	70.00%	91.00%
Percentage of Merchandise Warehoused by Chain	....	....	11.75†	5.00	30.00
Distribution of Stores[2] among Cities with Populations of:					
Less than 10,000	1,188	26.09%	....	....	....
10,000–25,000	1,108	24.33	....	....	....
25,000–100,000	908	19.94	....	....	....
100,000–500,000	517	11.35	....	....	....
500,000 or more	833	18.29	....	....	....

*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 2 chains, the figure for net gain as a percentage of net worth was based on the reports of 31 firms.
[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 30 chains having 4,554 stores.

The net profit on the aggregate basis in 1936 was greater than in 1935 by about ½ of 1% of sales, reflecting both the slight increase in gross margin and the slight decrease in total expense.

The difference between net profit and net gain is represented by three items: net profit or loss on real estate operations, interest on net worth, and other revenue, net. For 1936 the aggregate of these three classifications was about 3% of sales. Hence, the aggregate net gain, before income taxes, of the 33 variety chains was 8% of sales, or 8 mills out of each dime spent over the counter in retail establishments of this type. The median figure, as may be noted from the frequency distribution in Table 6, was lower, 5.9% of net sales, again indicating the greater profitability which characterized the operations of the larger concerns. On the other hand, the aggregate figure for net gain as a percentage of net worth was 16.0% as against a median figure of 18.4%. This difference suggests that although the larger variety chains had higher earnings as a percentage of net sales than did smaller companies, their earnings in ratio to invested capital were not so favorable as those of a substantial number of the smaller concerns, it being remembered that the aggregate figures are weighted according to sales volume, whereas the median figures give equal weight to each individual company.

Table 6. Frequency Distribution of Important Operating Percentages for 33 Variety Chains: 1936

(Net Sales = 100%; medians in bold type)

Note: The percentages in each column are arranged in order of size and hence the percentages in each horizontal row are not figures for the same firm.

Gross Margin	Total Expense including Interest	Net Profit or Loss	Net Gain or Loss	Salaries and Wages
21.75%	25.82%	*L. 15.38%*	*L. 13.66%*	12.62%
29.59	26.02	*L. 2.17*	*L. 2.19*	12.79
30.28	26.49	*L. 2.01*	*L. 0.64*	13.50
30.99	26.75	*L. 0.62*	0.14	13.57
31.54	27.41	0.21	2.24	13.58
31.54	27.84	1.95	3.33	13.85
32.00	28.06	2.09	3.64	13.90
32.14	28.11	2.82	3.89	14.18
32.37	28.25	2.89	4.68	14.24
32.39	28.45	2.91	4.91	14.27
32.48	28.52	3.42	5.12	14.63
32.57	28.59	3.44	5.13	14.82
32.66	29.24	3.74	5.18	15.01
33.73	29.32	3.89	5.51	15.14
33.91	29.74	3.92	5.61	15.16
33.95	29.74	4.05	5.89	15.44
34.24 Median	**29.82** Median	**4.13** Median	**5.91** Median	**15.72** Median
34.29	29.90	4.16	6.29	16.16
34.80	30.05	4.17	6.31	16.26
34.82	30.51	4.42	6.32	16.61
34.96	31.04	4.50	6.69	16.61
35.16	31.76	4.55	7.54	16.79
35.52	32.04	4.79	7.85	16.97
35.92	32.29	4.90	7.86	17.72
36.11	32.66	5.07	8.15	17.79
36.75	33.01	5.89	8.26	18.06
36.94	33.86	6.21	8.42	18.83
37.10	34.20	6.71	8.66	19.21
37.33	34.42	6.71	9.35	19.84
38.52	34.59	7.86	9.85	21.74
38.55	35.15	8.47	9.91	21.75
39.27	37.13	9.14	10.49	22.33
40.99	37.25	9.70	10.67	22.37

Not all companies included a report of reserves for income taxes for 1936 in the data submitted to the Bureau. Consequently, no aggregate figures can be shown for net gain after income taxes. On the basis of median figures, such income taxes apparently amounted to about 1% of net sales, leaving approximately 4.9% of sales, or 14.2% of net worth, as the net gain after income tax. These figures were slightly better than the corresponding figures for 1935.

Salaries and Wages. The largest individual classification of expense for variety chains is, of course, salaries and wages. This figure in the aggregate for the 33 companies reporting for 1936 was $123,000,000, or approximately 15.2% of net sales, a decrease of about 1/10 of 1% from the preceding year. The salary and wage outlay in dollars was, of course, larger for 1936 than for 1935, the slight decrease in the percentage being attributable to the augmented sales volume. The median percentage figure was slightly higher than the aggregate, 15.7%. The complete frequency distribution presented in Table 6 reveals a wide range, from less than 13% to more than 22% of net sales.

In view of the fact that the salary and wage percentage dropped by only an insignificant fraction in 1936 in the face of a 9% increase in sales volume, and in view of the numerous wage advances which have been made during 1937, it seems quite likely that this classification of expense will require a larger part of the consumer's dollar during the current year.

Tenancy Costs. The aggregate figure for tenancy costs was nearly $80,000,000, about 9.8% of sales, the slight percentage decrease from the preceding year reflecting, of course, the higher sales volume in 1936. In this case, there is a very great difference between the aggregate figure and the median, the latter being only 5.7% of sales. Here again the explanation lies in the sharply higher percentage tenancy costs which were typical for the larger companies. When other occupancy costs, such as

Table 7. Monthly Sales and Inventories for 19 Variety Chains: 1936

Month	Average Sales per Store		Average End-of-Month Retail Inventory per Store		Ratio of Inventory for End of Preceding Month to Sales for Month
	Dollars	% of 1936 Average Month	Dollars	% of 1936 Average Month	
January	$9,592	66.54%	$34,451	88.49%	3.30
February	10,578	73.38	35,314	90.70	3.26
March	11,450	79.42	37,274	95.74	3.08
April	13,732	95.25	37,494	96.30	2.71
May	13,928	96.61	36,980	94.98	2.69
June	14,425	100.06	36,445	93.61	2.56
July	13,343	92.55	36,355	93.38	2.73
August	13,349	92.60	40,002	102.75	2.72
September	13,593	94.29	42,714	109.71	2.94
October	15,589	108.13	46,324	118.98	2.74
November	14,359	99.46	48,061	123.45	3.23
December	29,080	201.71	35,783	91.91	1.65

light, water, and power, and amortization of fixtures and equipment, were added to tenancy costs, the total was approximately 11.4 cents out of the average sales dollar. Thus salaries and wages and occupancy costs together accounted for over 80% of the cost of doing business in variety chains in 1936.

Other Expenses. The 33 variety chains used over $8,000,000 worth of supplies during the year, a figure equivalent to approximately 1% of sales. The only other expense item which amounted to as much as 1% of net sales was total interest (including interest on invested capital), 1.6% on the aggregate basis. Advertising, an important type of outlay for many retailers, is negligible in the variety chain business, the 1936 expenditure on this account amounting in the aggregate to less than 2/10 of 1% of sales. Here a higher median figure suggests that small variety chains make somewhat more use of advertising than do the large companies.

Taxes. The Bureau's tax classification omits real estate and income taxes, the former for the sake of proper comparability being included in tenancy costs, and the latter being regarded as a distribution of profits and hence not included in the expense statement at all. The remaining tax outlays are classified in three categories: sales taxes (including only such taxes of this type as are not specifically collected from customers); unemployment and old-age taxes; and other taxes, comprising special chain store taxes, taxes on store inventories or equipment, and licenses. As shown in Table 5, the aggregate figure for these three types of taxes in 1936 was approximately 0.8% of sales.

Manifestly, this figure falls far short of representing the entire tax burden borne by the variety chain business. The number of different policies with respect to the ownership of real estate, and the number of different types of lease arrangements make it impossible on the basis of existing information to disentangle real estate taxes from tenancy costs. It was, however, possible to obtain information on income taxes from all but six of the reporting companies. For these 27 chains, operating 4,944 stores, income taxes amounted to 1.61% of sales and to 19.96% of net gain before income taxes. Both these figures were higher than the corresponding figures for 1935. For these same chains, the other types of taxes previously referred to (with the exception of real estate taxes) brought the total up to 2.37% of sales, again a substantially higher figure than the corresponding total for the preceding year.

Rate of Stock-turn. Rate of stock-turn may be computed in two ways, either by dividing the net

Table 8. Stock-Sales Ratios: 1934–1936

Month	Ratio of Inventory for End of Preceding Month to Sales for Month		
	1934¶	1935¶	1936¶
January	3.31	3.29	3.30
February	3.30	3.34	3.26
March	2.54	3.09	3.08
April	3.10	2.92	2.71
May	2.93	3.10	2.69
June	2.97	3.04	2.56
July	3.39	3.15	2.73
August	2.95	2.89	2.72
September	2.98	3.45	2.94
October	2.85	2.95	2.74
November	3.08	3.13	3.23
December	1.69	1.75	1.65

¶ The ratios are based on the data for 17 chains in 1934; 18 chains in 1935; and 19 chains in 1936.

cost of merchandise sold by the average inventory at cost, or by dividing net sales by the average inventory at retail. Furthermore, the average inventory may be determined on the basis of stocks at the beginning and end of the year only, or it may be derived from the 12 monthly inventories. Not all companies were able to report monthly inventories. Consequently two figures are shown in Table 5, the principal difference between them being that the first one is based on an average of the beginning and ending inventories for the year, whereas the second one is based on the average monthly inventory. On the aggregate basis these two figures were 4.75 times and 4.63 times. The median figures were slightly lower. These stock-turn rates took into account all the stocks of goods owned by the companies, whether in stores or in warehouses.

Monthly Sales and Inventories. The annual rate of stock-turn portrays an average relationship throughout the year. For purposes of stock control it is necessary to watch the specific relationship of stock to sales from month to month. Table 7 shows monthly sales and inventories for 19 variety chains operating 2,424 stores at the end of 1936. There are given the average sales per store per month, the percentage relationship of each month's sales to those of the average month, the average retail inventory per store at the end of each month, the percentage relationship of this figure to that for the average month, and the ratio of inventory for the end of the preceding month to the sales for each month. As might be expected, December is the month of heaviest sales. In 1936, sales in December were twice as high as in the average month. Inventory was highest at the end of November and lowest at the end of January.

The ratio of inventory for the end of the preceding month to sales for the month, commonly known as the stock-sales ratio, was above three times in only four months out of the year; but only for December did it drop very far below this figure. Table 8 compares the monthly stock-sales ratios for 1936 with corresponding figures for the two preceding years. There was evident in 1936 a slight tendency for these ratios to be a little lower during the middle months of the year than had been the case in the two preceding years.

YEAR-TO-YEAR TRENDS

With the publication in this bulletin of figures for 1936, the Bureau now has consecutive data on variety chain operations for the six years beginning with 1931. A study was also made covering the year 1929, but no figures were collected for 1930. Changes over this period have been substantial, and to get a proper perspective on some of them it is needful to have in mind some features of the characteristic development of the variety chain business prior to 1929. Such data are available from published sources.

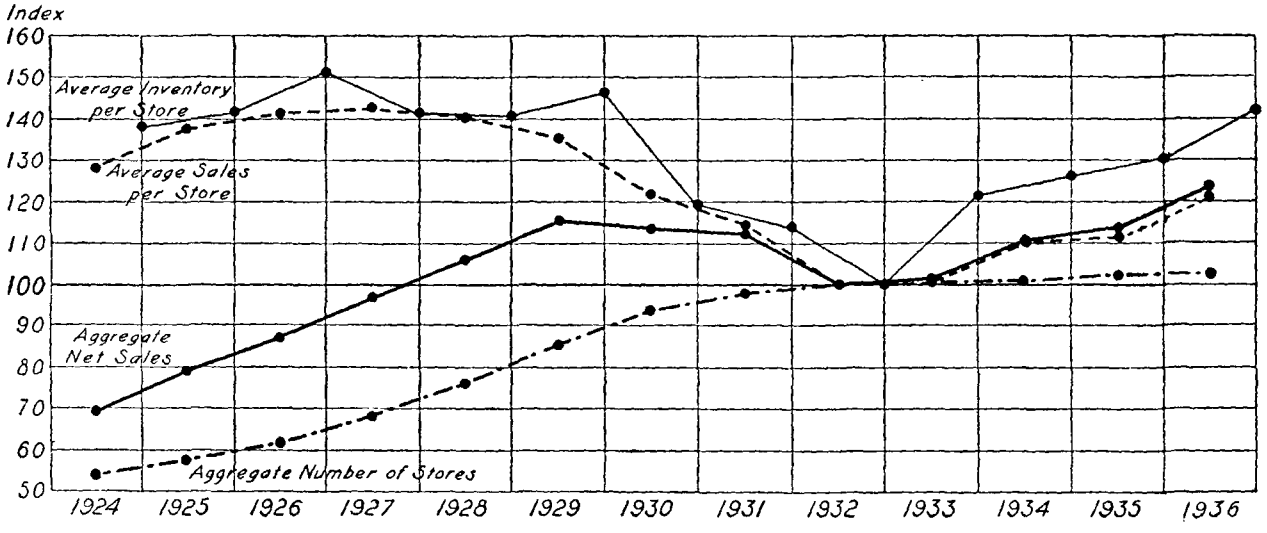
Long-run Trends in Sales, Number of Stores, and Inventories

Chart 2 adds another year's figures to the similar chart offered in the 1935 report. On the basis of published statements of seven large chains, it presents yearly index numbers, with 1932 as 100, for aggregate number of stores, aggregate net sales, average sales per store, and average cost inventory per store. This last figure, it should be noted, is taken as of the end of each year, whereas the other data in the chart are centered on the particular years. Beginning with 2,071 stores in 1924, these seven companies had 3,278 stores in 1929, 3,759 stores in 1931, and 3,950 stores in 1936. The rate of increase in the number of stores did not begin to level off appreciably until after 1931, a fact which accounts for the relatively slight decrease in aggregate net sales during the first two years of the depression. The total net sales of these seven companies reached a peak of $684,000,000 in 1929. After declining to a low of $593,000,000 in 1932, they rose to a new peak of $734,000,000 in 1936.

The decline in average sales per store and average inventory per store began well before the depression, but was greatly accentuated after 1929. From a peak of $220,000 in 1927, average sales per store dropped to $209,000 by 1929 and then went off sharply to $154,000 in 1932. In the meantime average cost inventory per store, from a high point of $27,000 at the end of 1926, dropped to $26,000 at the end of 1929 and to $18,000 at the end of 1932. From this low point, average inventory per store advanced sharply in 1933, a development no doubt closely associated with the rapid rise in prices during the latter half of that year. Average sales per store changed only slightly from 1932 to 1933, moved up briskly in 1934, changed little in 1935, and again advanced substantially in 1936, to a figure of $186,000, still remaining, however, at a point much below the peak attained in 1927.

Since the bottom of the depression, the rise in the average inventory per store has been substantially greater than the increase in average sales per store, the figure of $25,000 at the end of 1936 being

Chart 2. Sales and Inventories for 7 Variety Chains: 1924–1936



not far below the peak of $27,000 at the end of 1926. Between 1935 and 1936, however, the movement of these two indexes was substantially parallel.

With a small increase in the number of stores in 1935 and 1936, the index of aggregate net sales again began to pull away from the average sales per store. To the extent that these seven companies are typical of the limited price variety chain business, it seems probable, if a prediction may be hazarded, that the index of the aggregate number of stores will in the future rise at only a moderate rate and that the movements of the other three indexes on the chart will tend to remain very roughly parallel, being governed primarily by movements of the price level.

Trends in Depression and Recovery

For five years beginning with 1932 and ending with 1936, figures are available for 20 identical variety chains operating nearly 5,000 stores at the end of that period. Also, for the year 1929 and for the six years 1931 through 1936, figures are available for 16 identical companies having 2,368 stores at the end of 1936. Aggregate percentages for both these groups are shown in Tables 9 and 10.[1] Among the chains included in Table 9 whose

[1] Some of the figures in these tables exhibit slight changes from the corresponding tables presented by Stanley F. Teele, *Expenses and Profits of Limited Price Variety Chains in 1935* (Harvard Business School, Bureau of Business Research, Bulletin No. 103). These changes result from the recalculation of tenancy costs for one of the companies.

Table 9. Operating Results for 20 Identical Variety Chains: 1932–1936

(Percentages Computed from the Aggregate Dollar Figures; Combined Net Sales = 100%)

Items	1932	1933	1934	1935	1936
Aggregate Number of Stores	4,687	4,731	4,788	4,866	4,949
Aggregate Net Sales	$627,009	$647,902	$718,060	$738,141	$808,132
Average Net Sales per Chain	$31,570§	$32,419§	$35,886§	$36,907	$40,407
Average Sales per Store	$135§	$137§	$150§	$152	$163
Index of Change (1932 = 100):					
Number of Stores per Chain	100.00	100.94	102.15	103.82	105.59
Net Sales per Chain	100.00	102.69	113.67	116.91	127.99
Average Sales per Store	100.00	101.73	111.27	112.61	121.22
Net Cost of Merchandise Sold	66.18%	62.61%	63.21%	63.72%	63.54%
Gross Margin	33.82	37.39	36.79	36.28	36.46
Salaries and Wages	14.07%	14.91%	15.36%	15.25%	15.14%
Tenancy Costs	13.21	11.23	10.30	10.19	9.79
Light, Water, and Power		1.03	0.97	0.99	0.97
Depreciation of Fixtures and Equipment		0.82	0.72	0.66	0.69
Supplies	1.01	1.03	1.04	1.09	1.04
Advertising	0.19	0.17	0.17	0.19	0.18
Insurance (except on real estate)	0.35	0.34	0.35	0.36	0.45
Taxes (except on real estate or income):					
Sales	0.45	0.27	0.33	0.18	0.18
Other[1]		0.45	0.42	0.47	0.59
Miscellaneous Expense including Travelling	1.06	0.73	0.63	0.73	0.85
Total Expense before Interest	30.34%	30.98%	30.29%	30.11%	29.88%
Total Interest	0.98	1.47	1.72	1.73	1.60
Total Expense including Interest	31.32%	32.45%	32.01%	31.84%	31.48%
Net Profit or Loss	2.50%	4.94%	4.78%	4.44%	4.98%
Net Other Income (including interest on net worth)	2.98	4.38	3.11	3.22	3.07
Net Gain before Income Taxes:					
Percentage of Net Sales	5.48%	9.32%	7.89%	7.66%	8.05%
Percentage of Net Worth	9.85	17.03	15.21‡	14.51‡	16.02‡
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	4.76

‡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.

[1] For 1936, unemployment and old age taxes have been included in this account.

figures were not available for the longer period covered by Table 10, are several large concerns with a large number of stores and with somewhat higher gross margin and total expense rates than those typical of the 16 companies. Aside from the variations thus introduced, the year-to-year changes shown in these two tables are substantially the same.

As regards changes in number of stores, aggregate sales volume, and average sales per store, these two tables corroborate the evidence in Chart 2 for the seven companies. In studying these two tables, therefore, attention should be given primarily to the movement of margins, expenses, and profits. In Table 11 these trends are shown in terms of average dollars per store for the 16 companies for 1929 and 1931 through 1936.

Gross Margin on a Higher Level from 1933 through 1936. In common with some other types of retail business, variety chains did not experience any severe decline in the percentage of gross margin during the depression years; and beginning in 1933 there was a notable advance in the proportion of the consumer's dollar retained by these companies to cover costs of operation and profits. This increase in the gross margin percentage amounted to as much as 3½% or 4% of sales. Following 1933, the gross margin ratio declined slightly in 1934, and 1935, but again turned upward in 1936, though not reaching so high a point as in 1933.

Table 10. Operating Results for 16 Identical Variety Chains: 1929, 1931–1936

(Percentages Computed from the Aggregate Dollar Figures; Combined Net Sales = 100%)

Items	1929	1931	1932	1933	1934	1935	1936
Aggregate Number of Stores	1,627	2,138	2,241	2,246	2,279	2,325	2,368
Aggregate Net Sales	$360,900	$363,328	$327,191	$337,663	$379,379	$397,465	$436,536
Average Net Sales per Chain	$22,556	$22,708	$20,449	$21,134§	$23,690§	$24,842	$27,284
Average Sales per Store	$222	$170	$146	$151§	$166§	$171	$184
Index of Change (1932 = 100):							
Number of Stores per Chain	72.60	95.40	100.00	100.22	101.70	103.75	105.67
Net Sales per Chain	110.30	111.04	100.00	103.35	115.85	121.48	133.42
Average Sales per Store	151.92	116.39	100.00	103.12	113.91	117.09	126.26
Net Cost of Merchandise Sold	67.31%	67.81%	68.51%	64.39%	65.03%	65.53%	64.98%
Gross Margin	32.69	32.19	31.49	35.61	34.97	34.47	35.02
Salaries and Wages	12.97%	13.10%	13.02%	13.89%	14.37%	14.18%	14.11%
Tenancy Costs	8.81	11.40	13.11	10.26	9.33	9.10	8.74
Light, Water, and Power				1.11	1.04	1.03	1.00
Depreciation of Fixtures and Equipment				1.06	0.92	0.79	0.77
Supplies	1.62	1.45	1.29	1.35	1.34	1.40	1.35
Advertising	0.21	0.24	0.31	0.28	0.28	0.31	0.27
Insurance (except on real estate)	0.36	0.32	0.44	0.41	0.42	0.42	0.37
Taxes (except on real estate or income):							
Sales	0.29	0.36	0.43	0.25	0.35	0.19	0.17
Other[1]				0.45	0.47	0.51	0.61
Miscellaneous Expense including Travelling	1.10	1.04	1.13	0.93	0.82	0.83	1.10
Total Expense before Interest	25.36%	27.91%	29.73%	29.99%	29.34%	28.76%	28.49%
Total Interest	1.41	1.51	1.62	1.72	1.61	1.61	1.49
Total Expense including Interest	26.77%	29.42%	31.35%	31.71%	30.95%	30.37%	29.98%
Net Profit or Loss	5.92%	2.77%	0.14%	3.90%	4.02%	4.10%	5.04%
Net Other Income (including interest on net worth)	2.67	2.86	3.23	2.96	2.93	3.04	2.96
Net Gain before Income Taxes:							
Percentage of Net Sales	8.59%	5.63%	3.37%	6.86%	6.95%	7.14%	8.00%
Percentage of Net Worth	20.03‡	10.67	5.74	11.63	12.52‡	12.74‡	14.97‡
Rate of Stock-turn (times a year) Based on Average of Inventories at the Beginning and End of the Year	5.22	5.31	5.11	4.85	4.98	5.03	5.12

‡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.

[1] For 1936, unemployment and old age taxes have been included in this account.

Part of the rise in gross margin in 1933 may have been attributable to the advance in prices, but in considerable degree the continued high spread between cost of goods and net sales must be attributed to managerial efforts to counteract the injurious effects on profit resulting from the sharply advancing expense rate.

Expenses Showed Little Decline after 1933. Under the impact of the depression, the expense percentage went up sharply in 1931 as compared with 1929, continued to climb in 1932, and reached its high point in 1933. In each of the three following years there were slight declines, but the total cost of business in 1936 was still requiring a larger percentage of sales than in 1931.

Some increase in the ratio of pay roll expense to sales was occasioned during the depression by the inability to adjust wage rates and organizations quickly to the drop in sales volume. A further increase was caused by the NRA in 1933 and 1934, and the insignificant declines in the percentage of pay roll expense in 1935 and 1936 indicate the continuation of a relatively close adjustment of wages to increasing sales in those years.

Tenancy costs and the other occupancy expenses, of course, advanced sharply with the drop in average sales per store during the depression, but in 1933 and the succeeding years the increase in sales per store began to move these occupancy expenses down somewhat in the percentage scale. Supply expense evidently was well under control by 1932, and thereafter was maintained in a fairly uniform relationship to sales volume. Some slight tendency towards an increased outlay for advertising apparently was reversed in 1936, and this type of expenditure remains negligible in the variety chain business. Taxes, needless to say, have increased substantially.

For the near future there is little probability that the expense rate will be greatly reduced. Continued increases in sales volume will naturally lower the percentage for occupancy expenses; but the current prospect is that advances in wage rates and decreases in hours, to say nothing of the possibility of increased taxation, are likely to absorb all the economies that can be effected elsewhere. If during the next few years the expense rate is likely to remain at or near the level that has prevailed for the last three or four years, it is clear that the new high rate of gross margin is needed if the variety chains are to maintain a net profit differential similar to that which existed in 1929 and earlier years.

Profit Showing Substantially as Good in 1936 as in

Table 11. Operating Results per Store for 16 Identical Variety Chains: 1929, 1931–1936

Items	1929	1931	1932	1933	1934	1935	1936
Average Sales per Store	$221,819	$169,938	$146,002	$150,552	$166,318	$170,953	$184,348
Net Cost of Merchandise Sold (including freight, express, postage, and truckage)	$149,306	$115,235	$100,026	$96,940	$108,157	$112,026	$119,789
GROSS MARGIN	72,513	54,703	45,976	53,612	58,161	58,927	64,559
Salaries and Wages	$28,770	$22,262	$19,009	$20,912	$23,900	$24,241	$26,012
Tenancy Costs				15,447	15,517	15,557	16,112
Light, Water, and Power	19,542	19,373	19,141	1,671	1,730	1,761	1,843
Depreciation of Fixtures and Equipment				1,596	1,530	1,350	1,419
Supplies	3,593	2,464	1,884	2,033	2,229	2,393	2,489
Advertising	466	408	453	422	466	530	498
Insurance (except on real estate)	799	544	642	617	698	718	682
Taxes (except on real estate or income):							
Sales	643	612	628	376	582	325	313
Other[1]				677	782	872	1,125
Miscellaneous Expense including Travelling	2,440	1,767	1,650	1,400	1,364	1,419	2,028
Total Expense before Interest	$56,253	$47,430	$43,407	$45,151	$48,798	$49,166	$52,521
Total Interest	3,128	2,566	2,365	2,589	2,677	2,752	2,747
TOTAL EXPENSE including Interest	$59,381	$49,996	$45,772	$47,740	$51,475	$51,918	$55,268
NET PROFIT OR LOSS	$13,132	$4,707	$204	$5,872	$6,686	$7,009	$9,291
Net Other Income (including interest on net worth)	5,922	4,860	4,716	4,456	4,873	5,197	5,457
NET GAIN before Income Taxes	$19,054	$9,567	$4,920	$10,328	$11,559	$12,206	$14,748

[1] For 1936, unemployment and old age taxes have been included in this account.

1929. Following the lift of gross margin in 1933, the percentage of net gain before income taxes jumped to roughly twice the level of the depression year 1932. Thereafter it edged up gradually to approximately 8% of sales in 1936, a figure which was only a little below the percentage net gain for 1929, and which, moreover, applied to a larger total volume of sales in 1936 than in 1929. The rate of return on net capital invested, however, was not so high in 1936 as in 1929, and it is to be borne in mind that the impact of income taxes against 1936 earnings was considerably greater.

Average Figures per Store Show Changes. Table 11 illustrates in terms of average dollars per store some of the principal changes which have occurred over the period. An average store of these 16 companies lost roughly $76,000 in annual sales volume between 1929 and 1932, but regained $38,000 of this loss by 1936. At the time, the annual gross margin for this average store fell from $72,000 in 1929 to $46,000 in 1932, and then during the following four years was pushed back to $64,000, a figure which represents a larger proportion of recovery than was achieved in sales. Total expense, including interest, for this average store was cut down from $59,000 in 1929 to $46,000 in 1932, and then worked back up to $55,000 in 1936. Salaries and wages fell from $29,000 to $19,000, but by 1936 had returned to $26,000. The occupancy costs, of course, were subject to much less fluctuation, varying only from a high of $19,500 in 1929 to a low of $18,600 in 1935, and lifting again to $19,300 in 1936, an increase which presumably reflects both an upward readjustment of rentals and also the operation of percentage lease arrangements.

Thus the average variety chain store in this group in 1936 had $38,000 less sales volume, $8,000 less gross margin, but only $4,000 less total expense than in 1929. In this average store the annual net gain, before income taxes, fell off from $19,000 to $5,000 between 1929 and 1932, and then recovered to $14,000 by the end of the fourth year following. And so by 1936 the average store in this group had regained 50% of its loss in annual sales volume during the depression; had recovered 70% of its loss in annual gross margin; had surrendered 70% of the reductions in annual expense achieved during the depression, so that its operating costs were only 7% lower in 1936 than in 1929; and had regained 69% of its loss in annual net business profits.

Changes in Financial Structure, 1932 through 1936

Periods of change in general business conditions trace their influence on balance sheets as well as on operating statements. In order to throw light on some of the changes in financial structure which have taken place since 1932, the Bureau compiled data from the balance sheets of 19 chains operating 4,836 stores in 1936 as compared with 4,578 stores in 1932. These figures on the relation of certain classes of assets to total assets are shown in Table 12 as relatives on the basis of 1932 as 100. There are two sets of these relatives, one computed on the aggregate basis, the other on the median basis, the first one, of course, being heavily weighted by the experience of the large chains.

During the period 1932–1936, the year 1934 was the one in which the total assets of these 19 chains exhibited the highest proportion of cash and United

Table 12. Change in Relation of Groups of Assets to Total Assets for 19 Variety Chains: 1932–1936

(1932 percentage = 100)

Items	Median Figures: Index Numbers Prepared from the Relatives Computed from the Percentages for Each Chain Individually					Aggregate Figures: Relatives Computed from the Percentages Based on the Combined Dollar Figures of the 19 Chains				
	1932	1933	1934	1935	1936	1932	1933	1934	1935	1936
Cash and United States Government Securities	100.00	141.21	158.07	143.97	131.57	100.00	131.96	152.82	136.46	129.47
Merchandise	100.00	107.05	108.02	108.58	117.64	100.00	115.38	114.47	115.06	121.17
Land and Buildings Used in Business†	100.00	95.27	92.94	93.87	93.90	100.00	95.01	96.37	107.49	108.51
Improvements to Leased Real Estate†	100.00	85.81	75.79	67.35	63.74	100.00	87.30	80.65	77.32	77.27
Fixtures and Equipment	100.00	85.05	75.23	77.67	77.06	100.00	87.72	82.04	82.64	83.24

†Data on land and buildings used in the business were reported by 12 chains; also, data on improvements to leased real estate were reported by 12 of the 19 chains.

States Government securities. Thereafter this condition of liquidity became less marked. The investment in merchandise increased in 1933 and again in 1936. Investment in land and buildings showed an increase in 1935 and 1936 when the figures were computed on the aggregate basis, but this increase did not appear on the median basis. This difference suggests that it was some of the large chains which in those years decided to increase their investment in land and buildings, while the other chains in the group typically maintained their investment in land and buildings at a lower proportion of total assets than in 1932. The relative investment in improvements to leased real estate, as well as in fixtures and equipment, decreased in the years following 1932.

As a result of these changes, total assets at the end of 1936 were divided as follows: inventory about 40%, cash and United States Government securities nearly 18%, fixtures and equipment 17%, improvements to leased real estate 12%, and land and buildings 11%; miscellaneous asset items constituted the remainder. These are median figures for the group of 19 chains. The aggregate figures, which more particularly measure the balance sheet condition of the larger companies, show lower percentages of assets in merchandise, in cash and United States Government securities, and in fixtures and equipment, and higher percentages in land and buildings and in improvements to leased real estate.

Balance sheets also were examined to determine whether there had been any increase in the investment per store during recent years. The figure for assets per store was obtained by dividing total assets (exclusive of investment in subsidiaries and similar items) by the number of stores operated. These figures were computed in the aggregate. On the basis of assets per store at the end of 1932 as 100, there was an increase at the end of 1933 to 110 and a further increase at the end of 1934 to 112. At the end of 1935 this ratio had decreased to 110.5, but at the end of 1936 it was 115, a new high point. These figures obviously reflect the fact that total assets during this period were rising more rapidly than total number of stores.

Ratio of Assets to Sales Shows Decline. The relation between total assets and sales also was calculated for each of the five years from 1932 through 1936. This is a ratio which in general reveals the relative efficiency of the use of capital in making sales, though obviously, for any one year, there are likely to be large differences in this ratio among individual concerns, depending on their policies with regard to ownership of real estate, improvements to leased real estate, and so on. Median and aggregate figures for the ratio of total assets to net sales were as follows:

Year	Median	Aggregate
1932	42%	60%
1933	42	60
1934	38	58
1935	38	57
1936	36	54

The aggregate figures are, of course, weighted according to the size of the companies. Hence the fact that total assets during these five years constituted a higher percentage of net sales on the aggregate basis than on the median basis simply means that the large chain variety companies as a rule employed more capital in relation to sales volume than did the smaller concerns; presumably many of the big companies had proportionally larger investments in real estate and other fixed assets. Both the median and the aggregate percentages in the above compilation show a decline over the period. In other words, sales were increasing more rapidly than were total assets. Inasmuch as 1932, the bottom year of the depression, was taken as the starting point, this change may be regarded as entirely cyclical in character; when business improves, the same capital suffices to make larger sales. A long-run analysis of the relationship of capital investment to sales volume in the chain variety business might well show a different trend.

FACTORS AFFECTING MARGIN AND EXPENSE

There is a natural desire on the part of both retail executives and students of distribution in analyzing the results of such a study as this to be able to say with some certainty what are the conditions most favorable to success, that is, what conditions have favorable or unfavorable effects on gross margin and on the important items of expense. Do large companies, for instance, regularly have the advantage over small concerns? Does the size of cities in which stores are situated have any bearing on margin and expense? Are companies with stores located predominantly in one part of the country more successful than enterprises operating principally in other regions? Is the rate of stock-turn a significant factor? How are margin and expense affected by the type of merchandise handled and the amount of the average sales transaction?

It must immediately be admitted that several important factors which may frequently affect margins, expenses, and profits are bound to elude any efforts at classification: for instance, differences in abilities, skills, policies, and methods of management; special local or temporary circumstances affecting particular companies; or, finally, the element of pure chance, which, in the present state of business knowledge, can never be excluded from consideration. Granting readily that such factors as these will inevitably influence the figures and at the same time defy classification, one may, nevertheless, proceed on the basis of the criteria suggested above to segregate various groups of companies for purposes of comparison. This means groupings on the basis of size of companies, average sales per store, rate of stock-turn, amount of average sales transaction, size of cities, and geographical location. At once the difficulty arises that it is not possible with only 33 reports to isolate the effects of any one of these sets of conditions. The different rate of salary and wage expense appearing for large companies, for instance, may actually be attributable not to the factor of size of company, but to the factor of size of city, or to the factor of type of merchandise.

Consequently, in this section there are presented comparisons on a number of different bases followed by a summary of the various ways in which the significant figures, gross margin, total expense, net profit and net gain, salaries and wages, and tenancy costs, apparently were affected by these several sets of conditions. Both median and aggregate figures are given in these comparisons, but the former are to be regarded as the more important, since they weight equally the experience of each firm as a management unit.

Bases of Comparison

Difference in Size of Companies. The size of a concern may be measured either by total dollar volume of sales or by number of stores. Table 13 presents a comparison on the first of these bases, the three groups being made up of 13 variety chains with sales under $500,000, 11 chains with sales of $500,000 to $10,000,000, and 7 chains with sales of $10,000,000 to $100,000,000. Two large chains were omitted from this comparison because their size would have required classification in a separate group by themselves, a procedure which, of course, would have had the effect of revealing confidential figures.

In Table 14 the 31 variety chains, the same two large concerns being omitted, are grouped on the basis of number of stores, 7 with fewer than 10 stores each, 13 with from 10 to 50 stores, and 11 with 50 to 500 stores.

Difference in Size of Average Store. Another measure of size is that of the average sales per store. In Table 15 are given figures for three groups of companies, 9 with average sales per store under $30,000, 14 with average sales per store ranging from $30,000 to $100,000, and 8 with average sales per store of $100,000 or more. To preserve comparability with Tables 13 and 14, the same two large companies were again omitted.

Difference in Rate of Stock-turn. For many types of retail business the rate of stock-turn has customarily been regarded as a significant index of managerial efficiency, and particularly in the chain store field rapidity of stock-turn has commonly been cited as one of the cardinal sources of advantage. In Table 16, all 33 of the reporting companies are classified on the basis of their stock-turn rates in 1936. Eight companies turned their stock fewer than 3.5 times annually, 10 companies had stock-turn rates between 3.5 and 4.5 times, and 15 con-

Table 13. Operating Results for 31 Variety Chains Classified According to Volume of Sales: 1936

(Net Sales = 100%)

Items	Median[1] Figures — Percentages Computed from the Figures of Each Chain Taken Individually — Net Sales Volume			Aggregate Figures — Percentages Computed from the Combined Dollar Figures of the Chains in Each Sales Volume Group — 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	....	....	....	13	11	7
Average Sales per Store	$29,680	$52,901	$207,481	$30,982	$60,642	$190,739
Index of Change (1936/1935):						
Number of Stores per Chain	107.69	103.33†	101.28	....	....	....
Net Sales per Chain	122.38	115.92	111.50	....	....	....
Average Sales per Store	108.52	108.74†	109.74	....	....	....
Net Cost of Merchandise Sold (including freight, express, postage, and truckage)	67.43%	65.04%	65.76%	66.11%	65.29%	66.64%
GROSS MARGIN	32.57	34.96	34.24	33.89	34.71	33.36
Salaries and Wages	16.79%	16.26%	13.85%	17.43%	16.08%	13.50%
Tenancy Costs	4.66	5.72	8.20	4.83	6.75	8.07
Light, Water, and Power	0.93	0.89	1.11	0.92	1.01	1.01
Depreciation of Fixtures and Equipment	0.84	1.09	0.71	1.06	1.08	0.79
Supplies	1.07	0.99	1.01	1.05	1.05	0.97
Advertising	0.71	0.19	0.32	0.53	0.29	0.40
Insurance (except on real estate)	0.48	0.44	0.47	0.53	0.51	0.50
Taxes (except on real estate or income):						
Sales	0.00	0.00	0.15	0.14	0.05	0.15
Unemployment and Old Age	0.16†	0.18†	0.14	0.08†	0.11†	0.15
Other	0.60	0.50	0.45	0.54	0.57	0.44
Travelling	0.57	0.31	0.14	0.67	0.28	0.18
Miscellaneous Expense	1.41	1.31	1.33	1.19	1.42	1.10
Total Expense before Interest	28.52%	27.55%	28.25%	28.97%	29.20%	27.26%
Total Interest	1.54	1.41	1.36	1.66	1.44	1.50
TOTAL EXPENSE including Interest	30.05%	29.24%	29.74%	30.63%	30.64%	28.76%
NET PROFIT OR LOSS	2.82%	3.74%	4.42%	3.26%	4.07%	4.60%
Net Profit or Loss from Real Estate Operations	0.00%	0.17%	0.49%	0.05%	0.38%	0.33%
Interest on Net Worth (except on real estate, leaseholds, and goodwill)	1.40	1.35	1.34	1.46	1.14	1.47
Other Revenue, Net	0.00	0.00	0.21	*L. 0.05*	0.00	0.99
Total Net Other Income	1.45%	1.55%	2.05%	1.46%	1.52%	2.79%
NET GAIN before Income Taxes:						
Percentage of Net Sales	4.91%	5.18%	7.54%	4.72%	5.59%	7.39%
Percentage of Net Worth	17.54‡	17.28‡	22.61	17.88‡	19.73‡	16.93
Income Taxes for 1936	0.54%†	1.05%†	1.54%	*	*	1.56%
NET GAIN after Income Taxes:						
Percentage of Net Sales	2.92%†	4.69%†	5.62%	*	*	5.83%
Percentage of Net Worth	15.27†	13.36†	16.87	*	*	13.37
Rate of Stock-turn (times a year):						
Based on Beginning and Ending Inventories	3.58	4.56	4.71	3.40	4.16	5.08
Based on Monthly Inventories	3.08†	4.01†	4.34	3.05†	3.86†	4.65
Freight, Express, Postage, and Truckage	3.08%†	2.69%†	2.41%	*	*	2.83%
Percentage of Merchandise:						
Purchased Direct from Manufacturer	80.00%†	80.00%†	92.00%†	....	....	....
Warehoused by Chain	33.50†	17.50†	7.05†	....	....	....
Distribution of Stores[2] among Cities with Populations of:						
Less than 10,000	....	....	....	84.76%	63.91%	24.33%
10,000–25,000	....	....	....	4.76	18.23	25.55
25,000–100,000	....	....	....	0.00	7.00	24.11
100,000–500,000	....	....	....	5.71	3.13	13.15
500,000 or more	....	....	....	4.77	7.73	12.86

*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 12 and 10 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 105 stores, by all the chains in the second group, and by 6 chains in the third group having 1,377 stores.

Table 14. Operating Results for 31 Variety Chains Classified According to Number of Stores: 1936

(Net Sales = 100%)

Items	Median[1] Figures — Percentages Computed from the Figures of Each Chain Taken Individually — Number of Stores			Aggregate Figures — Percentages Computed from the Combined Dollar Figures of the Chains in Each Number-of-Stores Group — 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	....	....	....	7	13	11
Average Sales per Store	$26,371	$36,497	$143,986	$31,685	$50,350	$171,173
Index of Change (1936/1935):						
Number of Stores per Chain	100.00	107.79†	102.13	....	....	....
Net Sales per Chain	117.65	119.77	111.50	....	....	....
Average Sales per Store	108.52	113.57†	108.59	....	....	....
Net Cost of Merchandise Sold (including freight, express, postage, and truckage)	67.61%	66.27%	65.71%	67.36%	66.63%	66.52%
GROSS MARGIN	32.39	33.73	34.29	32.64	33.37	33.48
Salaries and Wages	16.79%	15.72%	14.27%	17.30%	16.11%	13.66%
Tenancy Costs	3.38	5.36	7.43	3.76	5.77	8.03
Light, Water, and Power	0.97	0.81	1.03	0.96	0.98	1.01
Depreciation of Fixtures and Equipment	0.84	0.92	0.79	1.12	1.02	0.81
Supplies	0.98	1.06	1.01	0.89	0.98	0.98
Advertising	0.75	0.33	0.19	0.73	0.50	0.38
Insurance (except on real estate)	0.41	0.48	0.47	0.51	0.51	0.49
Taxes (except on real estate or income):						
Sales	0.00	0.00	0.12	0.09	0.06	0.15
Unemployment and Old Age	0.71	0.14†	0.16†	0.64	0.10†	0.14†
Other		0.50	0.49		0.54	0.45
Travelling	0.47	0.53	0.23	0.54	0.35	0.18
Miscellaneous Expense	1.56	0.92	1.36	1.61	1.11	1.13
Total Expense before Interest	28.36%	28.50%	28.38%	28.15%	28.03%	27.41%
Total Interest	1.54	1.53	1.41	1.72	1.41	1.50
TOTAL EXPENSE including interest	29.90%	29.32%	29.74%	29.87%	29.44%	28.91%
NET PROFIT OR LOSS	4.05%	3.42%	4.17%	2.77%	3.93%	4.57%
Net Profit or Loss from Real Estate Operations	0.03%	0.08%	0.27%	0.07%	0.23%	0.34%
Interest on Net Worth (except on real estate, leaseholds, and goodwill)	1.42	1.37	1.34	1.47	1.38	1.44
Other Revenue, Net	0.00	0.00	0.20	*L. 0.14*	*L. 0.10*	0.94
Total Net Other Income	1.56%	1.38%	1.97%	1.40%	1.51%	2.72%
NET GAIN before Income Taxes:						
Percentage of Net Sales	5.61%	5.12%	6.34%	4.17%	5.44%	7.29%
Percentage of Net Worth	20.58	17.28‡	20.52‡	16.28	20.36‡	17.00‡
Income Taxes for 1936	0.29%†	0.64%†	1.49%†	*	*	*
NET GAIN after Income Taxes:						
Percentage of Net Sales	2.41%†	3.91%†	5.60%†	*	*	*
Percentage of Net Worth	9.67†	14.17†	15.75†	*	*	*
Rate of Stock-turn (times a year):						
Based on Beginning and Ending Inventories	3.58	4.56	4.68	3.27	4.36	5.00
Based on Monthly Inventories	3.49†	*	4.31†	3.13†	*	4.60†
Freight, Express, Postage, and Truckage	3.64%†	2.04%†	2.46%†	*	*	*
Percentage of Merchandise:						
Purchased Direct from Manufacturer	50.00%†	80.00%†	93.50%†	....	....	....
Warehoused by Chain	*	38.50†	8.85†	....	....	....
Distribution of Stores[2] among Cities with Populations of:						
Less than 10,000	....	....	....	92.31%	67.18%	32.03%
10,000–25,000	....	....	....	0.00	16.60	24.10
25,000–100,000	....	....	....	0.00	5.03	20.83
100,000–500,000	....	....	....	7.69	1.54	11.43
500,000 or more	....	....	....	0.00	9.65	11.61

*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 12 and 10 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 all 7 chains in the first group, by 11 chains in the second group having 259 stores, and by 10 chains in the third group having more than 1,700 stores.

Table 15. Operating Results for 31 Variety Chains Classified According to Average Sales per Store: 1936

(Net Sales = 100%)

Items	Median[1] Figures — Percentages Computed from the Figures of Each Chain Taken Individually — Sales per Store			Aggregate Figures — Percentages Computed from the Combined Dollar Figures of the Chains in Each Sales-per-Store Group — Sales per Store		
	Less than $30,000	$30,000–$100,000	$100,000 or More	Less than $30,000	$30,000–$100,000	$100,000 or More
Number of Chains	....	....	....	9	14	8
Average Sales per Store	$23,754	$45,718	$202,687	$25,245	$65,998	$201,054
Index of Change (1936/1935):						
Number of Stores per Chain	107.03†	101.58	103.01	....	....	....
Net Sales per Chain	118.23	116.78	111.85	....	....	....
Average Sales per Chain	101.35†	113.57	108.23	....	....	....
Net Cost of Merchandise Sold (including freight, express, postage, and truckage)	66.27%	65.44%	66.07%	63.24%	65.43%	66.70%
GROSS MARGIN	33.73	34.56	33.93	36.76	34.57	33.30
Salaries and Wages	19.21%	16.39%	13.72%	19.71%	16.16%	13.39%
Tenancy Costs	5.04	5.22	8.21	5.15	6.43	8.15
Light, Water, and Power	0.92	0.91	1.09	0.89	1.08	1.00
Depreciation of Fixtures and Equipment	0.80	0.88	0.85	1.22	0.86	0.81
Supplies	1.15	1.09	0.91	0.89	1.23	0.95
Advertising	0.42	0.26	0.33	0.33	0.12	0.42
Insurance (except on real estate)	0.84	0.38	0.56	0.69	0.44	0.50
Taxes (except on real estate or income):						
Sales	0.00	0.00	0.12	0.04	0.11	0.15
Unemployment and Old Age	0.49	0.18†	0.14†	0.56	0.16†	0.14†
Other		0.61	0.48		0.55	0.44
Travelling	0.58	0.33	0.15	0.61	0.37	0.16
Miscellaneous Expense	1.41	1.23	1.42	1.52	1.26	1.11
Total Expense before Interest	32.04%	27.96%	27.70%	31.61%	28.77%	27.22%
Total Interest	1.85	1.45	1.44	2.18	1.32	1.51
TOTAL EXPENSE including Interest	33.01%	29.28%	29.17%	33.79%	30.09%	28.73%
NET PROFIT OR LOSS	1.95%	4.33%	4.15%	2.97%	4.48%	4.57%
Net Profit or Loss from Real Estate Operations	0.00%	0.09%	0.51%	0.04%	0.21%	0.35%
Interest on Net Worth (except on real estate, leaseholds, and goodwill)	1.38	1.28	1.34	2.01	1.24	1.46
Other Revenue, Net	0.00	0.01	0.20	*L. 0.06*	0.06	1.02
Total Net Other Income	1.72%	1.42%	2.04%	1.99%	1.51%	2.83%
NET GAIN before Income Taxes:						
Percentage of Net Sales	3.33%	5.56%	6.94%	4.96%	5.99%	7.40%
Percentage of Net Worth	13.28	25.66‡	18.46	14.57	25.05‡	16.61
Income Taxes for 1936	0.36%†	0.99%†	1.49%	*	*	1.60%
NET GAIN after Income Taxes:						
Percentage of Net Sales	1.88%†	5.13%†	5.24%	*	*	5.80%
Percentage of Net Worth	5.55†	21.93†	14.91	*	*	13.03
Rate of Stock-turn (times a year):						
Based on Beginning and Ending Inventories	2.72	4.36	4.78	2.86	4.35	5.10
Based on Monthly Inventories	*	3.93†	4.47	*	4.01†	4.67
Freight, Express, Postage, and Truckage	2.81%†	2.69%†	2.39%†	*	*	*
Percentage of Merchandise:						
Purchased Direct from Manufacturer	50.00%†	80.00%†	93.50%†	....	....	....
Warehoused by Chain	2.50†	30.00†	8.00†	....	....	....
Distribution of Stores[2] among Cities with Populations of:						
Less than 10,000	....	....	....	88.08%	57.48%	21.83%
10,000–25,000	....	....	....	5.96	21.18	25.24
25,000–100,000	....	....	....	0.66	9.35	25.09
100,000–500,000	....	....	....	3.97	3.58	14.20
500,000 or more	....	....	....	1.33	8.41	13.64

*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 two chains in the second group, the figure for net gain as a percentage of net worth was based on the reports of 12 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 8 chains in the first group having 151 stores, by 13 chains in the second group having 642 stores, and by 7 chains in the third group having 1,232 stores.

Table 16. Operating Results for 33 Variety Chains Classified According to Rate of Stock-turn: 1936

(Net Sales = 100%)

Items	Median[1] Figures — Percentages Computed from the Figures of Each Chain Taken Individually — Rate of Stock-turn			Aggregate Figures — Percentages Computed from the Combined Dollar Figures of the Chains in Each Stock-turn Group — Rate of Stock-turn		
	Less than 3.5 Times	3.5–4.5 Times	4.5 Times or More	Less than 3.5 Times	3.5–4.5 Times	4.5 Times or More
Number of Chains	....	....	....	8	10	15
Aggregate Number of Stores	....	....	....	142	2,498	2,498
Aggregate Net Sales	....	....	....	$4,309,876	$390,295,061	$420,300,684
Average Net Sales per Chain	....	....	....	$538,735	$39,029,506	$28,020,046
Average Sales per Store	$26,640	$52,636	$106,322	$30,351	$156,243	$168,255
Index of Change (1936/1935):						
Number of Stores per Chain	100.00	101.93	103.90†	....	....	....
Net Sales per Chain	117.94	111.00	113.16	....	....	....
Average Sales per Store	110.00	107.69	109.34†	....	....	....
Net Cost of Merchandise Sold (including freight, express, postage, and truckage)	66.80%	65.11%	65.76%	63.85%	62.57%	64.50%
Gross Margin	33.20	34.89	34.24	36.15	37.43	35.50
Salaries and Wages	18.50%	16.79%	14.27%	19.80%	16.05%	14.26%
Tenancy Costs	5.22	4.87	7.37	5.06	10.65	8.97
Light, Water, and Power	0.93	0.99	0.90	0.90	0.91	1.03
Depreciation of Fixtures and Equipment	0.82	0.95	0.71	1.23	0.64	0.73
Supplies	0.09	1.13	0.99	0.83	0.76	1.30
Advertising	0.49	0 17	0.33	0.40	0.01	0.34
Insurance (except on real estate)	0.79	0.39	0.45	0.75	0.53	0.37
Taxes (except on real estate or income):						
Sales	0.00	0.15	0.09	0.00	0.19	0.16
Unemployment and Old Age	0.68	0.18	0.14†	0.68	0.17	0.15†
Other		0.58	0.49		0.41	0.46
Travelling	0.54	0.33	0.23	0.48	0.10	0.16
Miscellaneous Expense	1.17	1.46	1.25	1.50	0.38	1.04
Total Expense before Interest	31.52%	28.44%	28.25%	31.03%	30.80%	28.97%
Total Interest	1.82	1.50	1.35	2.15	1.80	1.41
Total Expense including Interest	33.18%	29.98%	29.32%	33.78%	32.60%	30.38%
Net Profit or Loss	2.32%	4.93%	4.42%	2.37%	4.83%	5.12%
Net Profit or Loss from Real Estate Operations	0.03%	0.03%	0.40%	0.08%	1.04%	0.96%
Interest on Net Worth (except on real estate, leaseholds, and goodwill)	1.53	1.39	1.31	1.99	1.82	1.37
Other Revenue, Net	0.00	0.02	0.09	*L.* 0.05	0.08	0.28
Total Net Other Income	1.71%	1.50%	1.92%	2.02%	3.54%	2.61%
Net Gain before Income Taxes:						
Percentage of Net Sales	4.12%	8.01%	6.29%	4.39%	8.37%	7.73%
Percentage of Net Worth	13.89	20.58‡	21.99‡	12.49	15.07‡	17.18‡
Income Taxes for 1936	0.50%†	1.59%†	1.25%†	*	*	*
Net Gain after Income Taxes:						
Percentage of Net Sales	2.83%†	6.24%†	5.22%†	*	*	*
Percentage of Net Worth	12.30†	16.22†	16.03†	*	*	*
Rate of Stock-turn (times a year):						
Based on Beginning and Ending Inventories	2.72	4.06	4.95	2.62	4.31	5.28
Based on Monthly Inventories	*	3.88†	4.66†	*	4.14†	4.78†
Freight, Express, Postage, and Truckage	4.34%†	3.36%†	2.18%†	*	*	*
Percentage of Merchandise:						
Purchased Direct from Manufacturer	*	80.00%†	87.50%†	....	....	....
Warehoused by Chain	*	11.60†	10.00†	....	....	....
Distribution of Stores[2] among Cities with Populations of:						
Less than 10,000	....	....	....	88.64%	26.39%	21.71%
10,000–25,000	....	....	....	8.33	26.27	23.13
25,000–100,000	....	....	....	0.00	15.96	25.80
100,000–500,000	....	....	....	3.03	10.77	12.56
500,000 or more	....	....	....	0.00	20.61	16.80

*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 of one chain in the third group, the figures for net gain as a percentage of net worth were based on the reports of 9 and 14 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 7 chains in the first group having 132 stores, by all the chains in the second group, and by 13 chains in the third group having 2,054 stores.

cerns turned their stock 4.5 times or more during the year.

Differences in Amount of Average Sale. The problem of price limits has long excited much interest among executives in variety chains. From the beginning some companies carried their limits up to $1, or even beyond in the case of some types of merchandise; on the other hand, a few concerns have adhered staunchly throughout their history to the initial 5-, 10-, and 25-cent concept. But there are a number of concerns which, especially during the years following the upturn of prices in 1933, have tended to lift the upper limits of their price range. The very nature of the limited price variety chain business makes it inevitable that price policies should also be merchandise policies. Chains which place their reliance chiefly on nickel and dime business obviously cannot handle so large a proportion of items in the classification of apparel and dry goods as do companies with price limits running up to $1 or beyond. A grouping of variety chains on the basis of the amount of their average sales transaction thus becomes also a grouping on the basis of relative proportions of kinds of goods handled. The figures in Table 17 show the contrast with respect to lines of merchandise between the companies with an average sale under 20 cents and the companies with an average sale of 30 cents or more. For the latter group, apparel and accessories, dry goods, notions, and domestics were a much higher percentage of sales, while every other classification was lower than for the former group.

Table 17. Sales by Merchandise Lines According to Size of Average Sale: 1936

(Aggregate Net Sales = 100%)

Items	Average Sale	
	Less than 20 Cents	30 Cents or More
Number of Chains Reporting Data	6	10
Number of Stores	3,064	1,450
Apparel and Accessories, Dry Goods, Notions, and Domestics	33.42%	54.40%
Hardware, Electrical Supplies, Crockery, and Glassware	15.03	13.62
Toys, Games, Books, and Stationery	14.17	6.50
Drugs and Toiletries	11.10	5.87
Miscellaneous	8.67	6.53
Confectionery and Nuts	8.17	6.06
Soda Fountains, Luncheonettes, and Restaurants	7.53	5.15
Jewelry	1.91	1.87
	100.00%	100.00%

Not all the reporting companies were in a position to give figures on the breakdown of sales by lines or to make good estimates of the amount of their average sales transaction. For 17 organizations with 4,522 stores, enough information was available to permit classification into two groups, one comprising six chains with an average sale under 20 cents and the other comprising 11 chains with an average sale of 30 cents or more. There were too few companies in the middle group to permit the compilation of any reliable figures. For these two groups both median and aggregate figures on operating results for 1936 are shown in Table 18.

Differences in Size of Cities. On an average, about 50% of the stores of the reporting companies were situated in cities with population under 25,000, and in some instances this proportion was much higher. There were very few companies with a high proportion of stores in cities with population over 100,000. For purposes of comparison, two groups were established, one consisting of 22 chains with 60% or more of their stores located in cities under 25,000, and the other of seven chains with 50% or more of their stores in cities over 25,000. Separate figures for each of these groups appear in Table 19. These 29 concerns included all the large chains.

Differences in Regional Location. Table 20 is based on the geographical breakdown. Five of the reporting companies were situated entirely in Canada. Among those whose operations were confined principally to the United States, the most significant line of division seemed to be between the organizations having a predominant number of stores in the urban and industrial northeastern and northern central states embraced in Regions 1, 2, and 3, and those having a great majority of their stores outside this area. Consequently, Table 20 compares figures for 11 companies in this latter group with those for 10 companies in the former group. One large national chain was not included in this comparison because of lack of complete information as to the exact location of its stores.

How Figures Were Affected by These Factors

On the basis of the seven breakdowns just described, two additional tables were prepared (Tables 21 and 22), the first showing medians and the second aggregates. These tables bring together for each of the principal ratios all the variations shown in the several breakdowns. The following observations are based on them, considerable allowance being made in some instances for uncertainty

Table 18. Operating Results for 17 Variety Chains Classified According to Average Sale: 1936

(Net Sales = 100%)

Items	Median[1] Figures — Percentages Computed from the Figures of Each Chain Taken Individually		Aggregate Figures — Percentages Computed from the Combined Dollar Figures of the Chains in Each Average Sale Group	
	Average Sale		Average Sale	
	Less than 20 Cents	30 Cents or More	Less than 20 Cents	30 Cents or More
Number of Chains	....	....	6	11
Aggregate Number of Stores	....	....	3,064	1,458
Aggregate Net Sales	....	....	$526,895,160	$217,067,530
Average Net Sales per Chain	....	....	$87,815,860	$19,733,412
Average Sales per Store	....	....	$171,963	$148,880
Net Cost of Merchandise Sold (including freight, express, postage, and truckage)	63.57%	67.52%	62.23%	66.75%
GROSS MARGIN	36.43	32.48	37.77	33.25
Salaries and Wages	16.07%	14.27%	15.80%	13.56%
Tenancy Costs	7.19	7.37	10.65	8.27
Light, Water, and Power	0.95	1.11	0.96	1.04
Depreciation of Fixtures and Equipment	0.85	0.98	0.65	0.80
Supplies	1.15	1.09	1.09	1.01
Advertising	0.04	0.32	0.00	0.53
Insurance (except on real estate)	0.48	0.61	0.43	0.53
Taxes (except on real estate or income):				
Sales	0.20	0.00	0.20	0.09
Unemployment and Old Age	0.18†	0.14†	0.17†	0.14†
Other	0.49	0.50	0.42	0.49
Travelling	0.08	0.25	0.08	0.22
Miscellaneous Expense	1.10	1.33	0.48	1.11
Total Expense before Interest	29.77%	28.46%	30.93%	27.79%
Total Interest	1.51	1.32	1.71	1.38
TOTAL EXPENSE including Interest	31.28%	29.74%	32.64%	29.17%
NET PROFIT OR LOSS	5.48%	3.89%	5.13%	4.08%
Net Profit or Loss from Real Estate Operations	0.16%	0.12%	1.27%	0.43%
Interest on Net Worth (except on real estate, leaseholds, and goodwill)	1.56	1.38	1.75	1.32
Other Revenue, Net	0.06	0.10	0.52	0.41
Total Net Other Income	2.50%	1.74%	3.54%	2.16%
NET GAIN before Income Taxes:				
Percentage of Net Sales	8.54%	5.13%	8.67%	6.24%
Percentage of Net Worth	16.83‡	18.42	14.46‡	19.62
Income Taxes for 1936	1.59%†	1.05%†	*	*
NET GAIN after Income Taxes:				
Percentage of Net Sales	6.83%†	4.67%†	*	*
Percentage of Net Worth	13.66†	14.62†	*	*
Rate of Stock-turn (times a year):				
Based on Beginning and Ending Inventories	4.36	4.71	4.52	5.14
Based on Monthly Inventories	3.93†	4.31†	4.50†	4.72†
Freight, Express, Postage, and Truckage	1.97%†	2.04%†	*	*
Percentage of Merchandise:				
Purchased Direct from Manufacturer	87.50%	87.50%†	....	....
Warehoused by Chain	11.60	17.50†	....	....
Average Sale	18.0¢†	31.0¢†	....	....
Distribution of Stores[2] among Cities with Populations of:				
Less than 10,000	....	....	18.25%	25.45%
10,000–25,000	....	....	26.45	25.93
25,000–100,000	....	....	20.95	24.75
100,000–500,000	....	....	12.20	12.87
500,000 or more	....	....	22.15	11.00

* 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 the first group, the figure for net gain as a percentage of net worth was based on the reports of five 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 the first group and by 10 chains in the second group having 1,018 stores.

as to which factors were really the cause of the differences.

Gross Margin. There was a definite indication that gross margin was distinctly lower for the companies with the average sale transaction above 30 cents. In other words, those enterprises making a relatively high proportion of their sales in apparel and dry goods had lower gross margins than did the companies specializing in nickel and dime business. This evidence corroborates the findings in several previous studies of the Bureau;[1] and there is no need to repeat here the conclusions drawn in earlier bulletins as to the reasons for this difference, beyond the bare statement that low unit price and lack of either the urge or the opportunity for close comparison of merchandise go far towards explaining the high gross margins on nickel and dime business. This reasoning manifestly does not exclude the influence of deliberate policies on the part of some organizations; neither does it serve to account for one or two companies whose results are an apparent exception to the general rule.

There is some evidence, particularly on the median basis, that gross margin in 1936 was lower for the small companies, both those with small dollar sales volume and those with small numbers of stores. No consistent relationship was traceable between size of city and gross margin, but there was a tendency for the gross margin percentage to be higher in Regions 1, 2, and 3 than in the southern and western parts of the United States, although this difference may also have been related to differences in the size of the average sales transaction.

Freight, Express, Postage, and Truckage. It is appropriate to consider transportation costs on incoming merchandise along with gross margin. The Bureau follows the normal accounting practice in considering these charges to be part of the cost of merchandise rather than an expense of doing business. Consequently, higher charges for the carriage of incoming goods operate to diminish gross margin, since the latter is the differential between the realized net sales and the net cost of merchandise sold.

These transportation costs on incoming merchandise were clearly higher for the small chains. Since small chains usually have low average sales per store and since many shipments are customarily made direct to stores, it may well be that the average size of shipment was lower for these chains. Perhaps a more important explanation, however, is that a majority of the chains with fewer than 10 stores were situated outside Regions 1, 2, and 3.

[1] See, for instance, Teele, Stanley F., *Expenses and Profits of Variety Chains in 1933* (Harvard Business School, Bureau of Business Research, Bulletin No. 95), pp. 19–22.

Table 19. Operating Figures for 29 Variety Chains Classified According to the Population of the Cities in Which Their Stores Were Located: 1936

Items	Median[1] Figures		Aggregate Figures	
	60% or More of Stores in Cities of Less than 25,000	50% or More of Stores in Cities of 25,000 or More	60% or More of Stores in Cities of Less than 25,000	50% or More of Stores in Cities of 25,000 or More
Number of Chains	....	....	22	7
Number of Stores	....	....	967	3,636
Aggregate Net Sales	....	....	$85,807,655	$672,305,477
GROSS MARGIN	34.56%	33.91%	35.25%	36.77%
Salaries and Wages	16.61%	13.85%	15.72%	15.16%
Tenancy Costs	5.06	8.46	6.43	10.30
All Other Expense including Interest	7.87	7.19	7.10	6.41
TOTAL EXPENSE including Interest	29.53%	32.04%	29.25%	31.87%
NET PROFIT OR LOSS	3.97%	4.17%	6.00%	4.90%
Net Other Income (including interest on net worth)	1.56	3.35	1.80	3.31
NET GAIN before Income Taxes	5.76%	7.85%	7.80%	8.21%
Freight, Express, Postage, and Truckage	2.58%†	1.92%†	*	*

*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.

Curiously enough, merchandise transportation charges were also higher for the companies with low stock-turn rates. Offhand, this relationship seems to be contrary to the normal expectation, since it might logically be thought that companies with fast turnover would be those buying and shipping in small quantities and hence incurring higher proportional transportation costs. Since the evidence clearly contradicts this hypothesis, the conclusion is indicated that there is no particular relationship between the rate of stock-turn and the carriage cost on incoming goods but that the small chains tend both to have low stock-turn rates and high merchandise transportation costs.

The companies with a majority of their stores in small cities also had higher costs on this score, and the same is true to an even more marked degree of the companies having a great majority of their outlets situated in the South and West, a situation for which the explanation presumably must be sought in terms of distance from wholesale markets and distance between stores.

Total Expense. There was no indication that the total expense rate was greatly affected by the size of chain (see Tables 21 and 22). The median figures in the breakdowns according to both volume of sales and number of stores reveal little variation, although it is true, as shown in the aggregate figures, that a few of the large concerns in the groups with sales between $10,000,000 and $100,000,000 and with number of stores ranging between 50 and 500 had lower expense rates in 1936 than did smaller companies. More significance apparently attaches to the factor of sales per store, the total expense rate being distinctly higher for the concerns making average annual sales of less than $30,000 per store. On the surface, the influence of the stock-turn rate on total expense in 1936 apparently ran according to the conventional expectation; the companies with the more rapid turnover exhibited generally lower expense ratios. Examination of the chief expense classifications, however, shows that the principal advantage of the firms in the high stock-turn group lay in salaries and wages, a type of outlay not generally considered to be affected particularly by the speed of merchandise turnover. Consequently, the explanation both of the high stock-turn rate and of the low salary and wage figure is quite likely to be found in the higher average sales per store characteristic of this group.

Concerns with a lower average sales check had characteristically higher costs of doing business, although there were one or two individual exceptions to this rule. This evidence, added to that of earlier studies, strengthens the conclusion that, from the standpoint of store operating expense, the

Table 20. Operating Figures for 26 Variety Chains Classified According to the Region in Which Their Stores Were Located: 1936

Items	Median[1] Figures			Aggregate Figures		
	90% or More of Stores Located Outside Regions 1, 2, and 3§	70% or More of Stores Located in Regions 1, 2, and 3§	Canadian Firms	90% or More of Stores Located Outside Regions 1, 2, and 3§	70% or More of Stores Located in Regions 1, 2, and 3§	Canadian Firms
Number of Chains	....	....	....	11	10	5
Number of Stores	....	....	....	483	1,575	133
Aggregate Net Sales	....	....	....	$95,764,721	$307,912,376	$10,998,765
GROSS MARGIN	32.66%	35.37%	33.73%	31.95%	36.01%	33.61%
Salaries and Wages	16.79%	15.09%	14.82%	13.30%	14.24%	14.06%
Tenancy Costs	4.41	6.24	6.41	7.17	9.33	8.24
All Other Expense including Interest	8.98	7.10	8.09	7.23	7.05	7.86
TOTAL EXPENSE including Interest	29.24%	29.32%	30.51%	27.70%	30.62%	30.16%
NET PROFIT OR LOSS	4.05%	4.70%	2.82%	4.25%	5.39%	3.45%
Net Other Income (including interest on net worth)	1.65	2.00	1.37	4.25	2.70	1.55
NET GAIN before Income Taxes	6.31%	6.73%	4.91%	8.50%	8.09%	5.00%
Freight, Express, Postage, and Truckage	4.27%†	2.05%†	1.21%†	*	*	*

*Data not available. †Figures for this item were not reported by all the firms in the group.
§Regions 1, 2, and 3 include New England, New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan, and Wisconsin.
[1] All the medians were set independently; therefore the sum of the individual items does not necessarily equal the total.

optimum size of average sales transaction lies somewhere above the low point commonly associated with nickel and dime business. To maintain a low expense rate in conjunction with an average sales check of 15 cents or 16 cents apparently requires exceptional ability of management.

Size of city clearly exercises some influence on the expense rate: the larger the city the higher the expense, the chief difference lying in tenancy costs. These results are somewhat different from those obtained in some of the Bureau's earlier studies of the variety chain business, partly because of a change in classification made for the purpose of enlarging the sample of companies having a majority of their stores in cities under 25,000. It is true that some of the enterprises with 90% or more of their stores in towns and cities under 10,000 exhibited relatively high expense rates; but the general evidence is that the highest expense rates tended to be at the other end of the population scale.

In spite of the differences which appeared when companies were grouped on the basis of size of city, the geographical breakdown did not reveal any significant variations in the median expense rate. The low aggregate expense figure for the companies with 90% or more of their stores outside the northeastern and north central regions of the United States was influenced by two or three large chains in that group.

Net Profit and Net Gain. Earnings were clearly better for the larger variety chains in 1936. They were likewise greater for the companies with higher average sales per store. The normally expected relationship of stock-turn to profits also appeared, more ample earnings being reported by the concerns with faster turnover rates. In spite of their

Table 21. Summary of Operating Results for Variety Chains Classified on Various Bases: 1936

(Median[1] Figures; Net Sales = 100%)

Classifications	Number of Chains	Gross Margin	Total Expense	Salaries and Wages	Tenancy Costs	Net Profit or Loss	Net Gain or Loss	Freight, Express, Postage, and Truckage
Volume of Sales:								
Less than $500,000	13	32.57%	30.05%	16.79%	4.66%	2.82%	4.91%	3.08%†
$500,000–$10,000,000	11	34.96	29.24	16.26	5.72	3.74	5.18	2.69†
$10,000,000–$100,000,000	7	34.24	29.74	13.85	8.20	4.42	5.74	2.41
Number of Stores:								
Less than 10 Stores	7	32.39%	29.90%	16.79%	3.38%	4.05%	5.61%	3.64%†
10–50 Stores	13	33.73	29.32	15.72	5.36	3.42	5.12	2.04†
50–500 Stores	11	34.29	29.74	14.27	7.43	4.17	6.34	2.46†
Average Sales per Store:								
Less than $30,000	9	33.73%	33.01%	19.21%	5.04%	1.95%	3.33%	2.81%†
$30,000–$100,000	14	34.56	29.28	16.39	5.22	4.33	5.56	2.69†
$100,000 or More	8	33.93	29.17	13.72	8.21	4.15	6.94	2.39†
Rate of Stock-turn:								
Less than 3.5 Times	8	33.20%	33.18%	18.50%	5.22%	2.32%	4.12%	4.34%†
3.5–4.5 Times	10	34.89	29.98	16.79	4.87	4.93	8.01	3.36†
4.5 Times or More	15	34.24	29.32	14.27	7.37	4.42	6.29	2.18†
Average Sale:								
Less than 20 Cents	6	36.43%	31.28%	16.07%	7.19%	5.48%	8.54%	1.97%†
30 Cents or More	11	32.48	29.74	14.27	7.37	3.89	5.13	2.04†
Population:								
60% or More of Stores in Cities of Less than 25,000	22	34.56%	29.53%	16.61%	5.06%	3.97%	5.76%	2.58%†
50% or More of Stores in Cities of 25,000 or More	7	33.91	32.04	13.85	8.46	4.17	7.85	1.92†
Location of Stores:								
90% or More Located Outside Regions 1, 2, and 3*	11	32.66%	29.24%	16.79%	4.41%	4.05%	6.31%	4.27%†
70% or More Located in Regions 1, 2, and 3*	10	35.37	29.32	15.09	6.24	4.70	6.73	2.05†
Canada	5	33.73	30.51	14.82	6.41	2.82	4.91	1.21†

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

*Regions 1, 2, and 3 include New England, New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan, and Wisconsin.

[1] All the medians were set independently; therefore the several percentages for gross margin, total expense, and net profit will show no exact arithmetical relationship.

higher expenses, the companies with a low average sales check, that is, those emphasizing the 5-, 10-, and 15-cent prices, achieved better profits because of their greater gross margins. It was also the enterprises with 50% or more of their stores in cities over 25,000 which had the higher percentage of net gain; but classification on a geographical basis failed to disclose any pronounced differences in earnings.

In short, the proper prescription for profit in the variety chain business in 1936 evidently was to have a chain with large sales volume, large number of stores, high average sales volume per store, fast stock-turn, low average amount of sales transaction, and stores located predominantly in cities above the smallest population groups.

Salaries and Wages and Tenancy Costs. Salaries and wages and tenancy costs together constitute a very large part of the total cost of doing business. Furthermore, these two categories of expense under several sets of circumstances apparently are involved in complementary relationships, the one being high when the other is low and vice versa. Therefore it is appropriate to consider them together. Total pay roll as a percentage of sales was high for the companies with low sales volume, small number of stores, low average sales per store, low stock-turn rates, low average amount of sales transaction, and locations predominantly in towns and cities under 25,000. These variations were quite stable, being shown by both the median and the aggregate figures. With respect to geographical location, no important differences appeared.

Total pay roll in the variety chain business reflects primarily differences in salaries and wages in the stores; and these, of course, depend in large degree on the output of the personnel as measured in dollar sales. As indicated in Table 23, in 1936 the chains with the largest volume achieved approximately a 1% advantage in store pay roll over the medium-size chains, presumably, in part at least, because their average sales per store were substantially greater than the sales per store of the

Table 22. Summary of Operating Results for Variety Chains Classified on Various Bases: 1936

(Aggregate Figures; Net Sales = 100%)

Classifications	Number of Chains	Gross Margin	Total Expense	Salaries and Wages	Tenancy Costs	Net Profit or Loss	Net Gain or Loss
Volume of Sales:							
Less than $500,000	13	33.89%	30.63%	17.43%	4.83%	3.26%	4.72%
$500,000–$10,000,000	11	34.71	30.64	16.08	6.75	4.07	5.59
$10,000,000–$100,000,000	7	33.36	28.76	13.50	8.07	4.60	7.39
Number of Stores:							
Less than 10 Stores	7	32.64%	29.87%	17.30%	3.76%	2.77%	4.17%
10–50 Stores	13	33.37	20.44	16.11	5.77	3.93	5.44
50–500 Stores	11	33.48	28.91	13.66	8.03	4.57	7.29
Average Sales per Store:							
Less than $30,000	9	36.76%	33.79%	19.71%	5.15%	2.97%	4.96%
$30,000–$100,000	14	34.57	30.09	16.16	6.43	4.48	5.99
$100,000 or More	8	33.30	28.73	13.39	8.15	4.57	7.40
Rate of Stock-turn:							
Less than 3.5 Times	8	36.15%	33.78%	19.80%	5.06%	2.37%	4.39%
3.5–4.5 Times	10	37.43	32.60	16.05	10.65	4.83	8.37
4.5 Times or More	15	35.50	30.38	14.26	8.97	5.12	7.73
Average Sale:							
Less than 20 Cents	6	37.77%	32.64%	15.80%	10.65%	5.13%	8.67%
30 Cents or More	11	33.25	29.17	13.56	8.27	4.08	6.24
Population:							
60% or More of Stores in Cities of Less than 25,000	22	35.25%	29.25%	15.72%	6.43%	6.00%	7.80%
50% or More of Stores in Cities of 25,000 or More	7	36.77	31.87	15.16	10.30	4.90	8.21
Location of Stores:							
90% or More Located Outside Regions 1, 2, and 3*	11	31.95%	27.70%	13.30%	7.17%	4.25%	8.50%
70% or More Located in Regions 1, 2, and 3*	10	36.01	30.62	14.24	9.33	5.39	8.09
Canada	5	33.61	30.16	14.06	8.24	3.45	5.00

*Regions 1, 2, and 3 include New England, New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan, and Wisconsin.
Note: Aggregate figures for freight, express, postage, and truckage are not available.

medium-size chains. In this year the large chains likewise exhibited an advantage, amounting to slightly more than 1% of sales, in the administrative and general salary and wage account; this advantage, however, was probably attributable almost wholly to the large sales volume of these companies.

Tenancy costs as a rule were highest as a percentage of sales for the chains with large sales volume, large number of stores, high average sales per store, high rates of stock-turn, and 50% or more of their stores in cities over 25,000. The differences under all five of these sets of conditions were precisely the opposite of those appearing in the case of salaries and wages. Obviously stores in favorable locations in larger cities have an opportunity to obtain greater sales volume than stores in small cities. This relatively large sales volume makes possible a more constant rate of sales output on the part of employees, and hence tends to keep down the pay roll expense percentage. On the other hand, the superior profit possibilities of such sites tend under competitive conditions to make the rental values absorb a considerable part, if not all, of the advantages in pay roll expense.

The apparent relation indicated between the rate of stock-turn and the percentage for tenancy costs is contrary to normal expectation. Ordinarily it seems reasonable to assume that, other things being equal, concerns with high stock-turn rates will enjoy low ratios for such items of overhead expense as rentals. Evidently in this situation other things are not equal. The controlling factors presumably are size of store and size of city, these factors being to a considerable extent responsible for the high rate of stock movement, to which, in turn, no great causal significance can be attached.

On the median basis, tenancy costs were slightly higher for the concerns with average sales transactions of 30 cents or more, but on the aggregate basis a much higher tenancy cost appeared for the companies with an average sales check below 20 cents. Examination of the individual statements indicated clearly that there were two or three large concerns with low average sales transactions whose results weighted the aggregate figures heavily. These companies obtained relatively high sales per store in 1936, had a majority of their stores in cities over 25,000, and had high tenancy costs.

It was not surprising to find that tenancy cost percentages for the companies with 70% or more of their stores in the northeastern and northern central areas of the United States were definitely higher than those of the concerns with 90% or more of their stores in the South and West.

THE RELATION OF STORE EXPENSE TO OVERHEAD EXPENSE

The character of much of the current agitation against chain stores suggests that the public in general fails to understand the place which chains occupy in the field of distribution and the marketing functions which they perform. One possible reason for this lack of understanding lies in the fact that outwardly a chain store looks like any other retail establishment and the public does not see the behind-the-scenes organization dealing with the problems of merchandising, buying, and administration. Not only does this organization make it possible for the stores to function effectively, but it is here that some of the principal chain store savings are accomplished, because it is by means of this behind-the-scenes organization of chain stores that the gap between the manufacturer and the retail outlet is bridged more economically and with less lost motion than is possible by means of some of the more roundabout, though perhaps to many people more familiar, channels of distribution.

In order to examine the operating costs of these distributive functions of chain stores with which the public does not come into immediate contact, the Bureau has for several years classified the expenses of reporting chains, wherever possible, into two divisions: store expense, and administrative and general expense. Such a classification of expenses for 16 variety chains on both the median and the aggregate basis is shown in Table 23 for two groups, one with sales between $500,000 and $10,000,000, and the other with sales between $10,000,000 and $100,000,000. Not all companies were able to report figures definitely segregated into these two divisions of expenses.

Store Expenses Make Up Bulk of Operating Costs. For both groups of firms, the total store expense was much larger than the total administrative and general expense. The immediate function of retail store operation required about 24% of sales. The administrative and general expenses, covering all the behind-the-scenes activities and embracing the cost of those distributive functions performed by chains which are broadly the equivalent of wholesale operations, required only from 3% to 5% of sales. Here were included all the salaries of officers, merchandisers, and buyers, the salaries and wages of superintendents and field operatives, and the compensation of office personnel and warehouse employees, as well as all the other costs connected with headquarters operation, supervision, and general management. The explanation of the relatively low ratio which the total of these administrative and general expenses bears to sales is to be found principally in three connected sets of conditions: (1) stores are supplied with their needs on a regular routine basis, without the necessity for expensive and wasteful "selling" contacts; (2) substantially the entire business of each store is concentrated with its own headquarters, and with designated sources of supply, instead of being spread over a large number of unrelated channels; (3) the decisions of executives, merchandisers, and buyers in each instance relate to such substantial quantities of merchandise that the expense per unit is low.

Although total store expense was about the same for the chains with sales between $500,000 and $10,000,000 as it was for those with sales between $10,000,000 and $100,000,000, the usual reverse relationship appeared between salaries and wages and tenancy costs, the pay roll expense, including the salaries and bonuses of store managers, being higher for small chains, and the tenancy costs being higher for the large chains. The difference in pay roll expense for the smallest chains was occasioned by the high percentage of sales required for store managers' salaries and bonuses, 3.83% as compared with 2.17%. This difference corroborates the findings of the 1935 report. Unquestionably the explanation is to be found in the much lower sales per store of the smaller companies. Clearly a store manager could be paid three times as much in a store making sales of $200,000 a year as a manager in a store with sales of $55,000, and still the percentage of managerial expense would be lower in the larger store.

Administrative and General Expenses Lower for Large Chains. Both the median and the aggregate figures in Table 23 show that administrative and general expense was a distinctly lower percentage of sales for the large chains than for the smaller ones. In accordance with the experience of practically all types of business, the executive salaries, including those of buyers and superintendents, constituted a lower ratio of sales for the large com-

Table 23. Store Expense, General Overhead Expense, and Total Expense for 16 Variety Chains Classified According to Volume of Sales: 1936

(Net Sales = 100%)

Items	Median[1] Figures — Percentages Computed from the Figures of Each Chain Taken Individually — Net Sales Volume		Aggregate Figures — Percentages Computed from the Combined Dollar Figures of the Chains in Each Sales Volume Group — 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	....	....	9	7
Average Sales per Store	$54,109	$207,481	$67,813	$190,739
Store Expense:				
Salaries and Wages:				
Store Managers' Salaries and Bonuses	3.83%†	2.17%†	*	*
Selling Salaries and Commissions	9.05†	9.82	*	*
All Other Store Salaries				
Total (subtotal)	(12.88)	(11.95)	12.51%	11.41%
Tenancy Costs	5.51	8.12	6.67	7.92
Light, Water, and Power	0.86	1.10	1.02	0.99
Depreciation of Fixtures and Equipment	1.03	0.70	1.03	0.77
Supplies	0.96	0.90	0.94	0.84
Advertising	0.27	0.32	0.30	0.40
Insurance (except on real estate)	0.44†	0.47	0.42†	0.48
Taxes (except on real estate or income):				
Sales	0.00	0.15	0.05	0.15
Other[2]	0.52	0.38	0.55	0.43
Miscellaneous Expense:				
Communication	0.11†	0.09†	*	*
Unclassified (including Professional Services)	0.64	0.78	*	*
Total (subtotal)	(0.73)	(0.84)	0.87	0.76
Total Store Expense before Interest	23.29%	24.18%	24.36%	24.15%
Administrative and General:				
Salaries and Wages:				
Officers, Executives, Buyers, and Superintendents	1.85%†	0.99%	*	1.04%
Office, Supervisors, and Others	0.61†	1.01	*	1.06
Total (subtotal)	(3.27)	(1.96)	3.24%	(2.10)
Tenancy Costs	0.19	0.10	0.16	0.15
Light, Water, and Power	0.01†	0.01	0.01†	0.02
Depreciation of Fixtures and Equipment	0.05	0.02	0.05	0.02
Supplies	0.13	0.14	0.14	0.13
Insurance (except on real estate)	0.05	0.02	0.08	0.01
Taxes (except on real estate or income)	0.11†	0.13	0.14†	0.16
Travelling	0.28	0.14	0.26	0.18
Miscellaneous Expense:				
Communication	0.12†	0.08†	*	*
Professional Services	0.10	0.12†	*	*
Unclassified	0.22	0.18	*	*
Total (subtotal)	(0.50)	(0.37)	0.52	0.34
Total Administrative and General Expense	4.72%	2.96%	4.60%	3.11%
Total Expense:				
Salaries and Wages	15.72%	13.85%	15.75%	13.51%
Tenancy Costs	5.72	8.20	6.83	8.07
Light, Water, and Power	0.89	1.11	1.03	1.01
Depreciation of Fixtures and Equipment	1.09	0.71	1.08	0.79
Supplies	1.09	1.01	1.08	0.97
Advertising	0.27	0.32	0.30	0.40
Insurance	0.44	0.47	0.50	0.49
Taxes (except on real estate or income):				
Sales	0.00	0.15	0.05	0.15
Other	0.64	0.58	0.69	0.59
Travelling	0.28	0.14	0.26	0.18
Miscellaneous Expense:				
Communication	0.23†	0.17†	*	*
Unclassified (including Professional Services)	1.12	1.10	*	*
Total (subtotal)	(1.31)	(1.33)	1.39	1.10
Total Expense before Interest	27.55%	28.25%	28.96%	27.26%
Rate of Stock-turn (times a year):				
Based on Beginning and Ending Inventories	4.56	4.71	4.30	5.08
Based on Monthly Inventories	4.01†	4.34	4.01†	4.65
Percentage of Merchandise Warehoused by Chain	25.00%†	7.05%†	....	....

* 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] Unemployment and old age taxes have been included with other taxes.

panies than for the smaller concerns.[1] This same characteristic relation of administrative expense to sales volume appears, for instance, in department stores where, in 1936, the total administrative and general expense was 8.3% of net sales for companies with sales of $300,000 to $500,000, as compared with 6.8% for companies with sales over $20,000,000.[2]

It is interesting to note in passing that for both groups of variety chains the salaries of officers, buyers, superintendents, and other executive personnel were a much lower percentage of sales than the salaries of store managers.

Pay roll for office employees and other non-executive workers at headquarters was higher for the large companies than for the smaller chains. To some extent this difference undoubtedly reflects a failure in precise comparability between these two classifications of central office personnel. In other words, in the firms with sales volume between $500,000 and $10,000,000, some of the men in the executive classification undoubtedly perform tasks which in the general offices of chains with sales between $10,000,000 and $100,000,000 are delegated to individuals who are clearly in the non-executive classification. Nevertheless, the very substantial difference in the pay roll total under the administrative and general classification still remains in favor of the larger concerns.

Differences in overhead expenses other than pay roll were almost negligible in their effect on the total administrative and general expense of these two groups of chains, though it is interesting to observe that both travelling and communication costs also required a much lower percentage of sales for the large chains.

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[1] On the general subject of compensation of retail executives, see Baker, John Calhoun, *The Compensation of Executive Officers of Retail Companies: 1928–1935* (Harvard Business School, Division of Research, Business Research Studies, No. 17, March, 1937).

[2] Schmalz, Carl N., *Operating Results of Department and Specialty Stores in 1936* (Harvard Business School, Bureau of Business Research, Bulletin No. 104) Table 2, p. 7.

RELATIVE PROFIT PERFORMANCE

In addition to using average figures such as those in this bulletin for comparative purposes to measure their company's performance against the typical results of the trade as a whole, or for small groups of closely comparable firms, many chain store executives desire to take the additional step of setting up attainable standards of performance, or goals, in an effort to surpass previous accomplishments. With this purpose in mind, they are particularly interested in the typical figures for the concerns earning the highest rates of net profit. Table 24 presents segregated figures for the nine most profitable companies among the 33 reporting for 1936. Profitability was, in each instance, measured on the basis of net profit (in the narrow economic sense) as a percentage of net sales. Both aggregate and median figures are presented in this table, and, to facilitate comparison, the corresponding figures for all 33 concerns are repeated from Table 5. This particular comparison is one for which the median figures are undoubtedly more useful than the aggregates, since the median gives the same weight to the experience of each firm as a unit of management.

The nine best-profit companies increased their sales in 1936 by a larger percentage than did the group as a whole. These companies included some of the larger enterprises among the limited price variety chains, but it is to be noted that their average sales per store were no greater than the general average for all 33 concerns. On the basis of the median figures, the advantage of these nine chains with the highest rates of net profit lay almost equally in their higher gross margins and in their lower percentages for total expense. The aggregate figures show the entire advantage of these nine concerns to lie in the area of gross margin, their aggregate total expense percentage actually being greater than that of the entire group of 33 companies; but this marked discrepancy between the aggregate figures and the median figures stems entirely from certain peculiarities in the margin and expense situations of two or three large chains. From a budgetary standpoint, the median figures afford a better guide for executives desiring to establish attainable goals.

Again, on the median basis, the nine most profitable companies had somewhat higher salaries and wages in ratio to sales, but enjoyed lower occupancy expenses to an almost exactly offsetting degree. They exhibited economies in expense for supplies, for insurance, and for the miscellaneous classification. Their rate of expenditure for advertising, it may be surprising to observe, was only half that of the entire group of 33 chains. Neither in rapidity of stock-turn nor in the percentage outlay on account of merchandise transportation costs did the nine companies appear to have any salient advantage. The distribution of their stores among the several different classifications of cities on the basis of population was very nearly the same as the general distribution for all 33 organizations.

Consistency of Earning Power

The foregoing comparison, of course, relates only to one year and it is interesting to speculate whether all these nine most profitable chains in 1936 will also appear in a similar group of outstanding concerns in 1937. On this question of relative consistency of earning power as it relates to past years some light is afforded by the figures previously referred to for the 16 identical concerns reporting for 1929 and for 1931 through 1936, as well as those for the 20 identical companies which submitted figures for the years 1932 through 1936.

Table 25 presents the ranking for each year on the basis of net profit percentages of the 16 variety chains which reported to the Bureau for 1929 and 1931–1936, inclusive. For convenient reference these companies are separated into three groups: the first five in profit ranking in 1929, the second five in that year, and the last six in the same year. Then the figures as read across the table horizontally for the succeeding years represent the positions of these same firms on the relative profit scale. Thus, Firm A, holding first position in 1929, was third in 1931, fifth in 1932, and so on.

Since the period covered is a relatively long one, and particularly since these years witnessed the most severe cyclical fluctuations which business has experienced in modern times, it is not surprising that the figures in this table reveal little consistency in the ranking on earning power. None of the first five companies in 1929 was among the first five in

Table 24. Operating Results and Goal Figures for Variety Chains: 1936

(Net Sales = 100%)

Items	Median[1] Figures		Aggregate Figures	
	Percentages Computed from the Figures of Each Chain Taken Individually		Percentages Computed from the Combined Dollar Figures of the Chains in Each Group	
	Median Figures for All 33 Chains	Median Figures for 9 Chains with Highest Rates of Net Profit	Average Figures for All 33 Chains	Average Figures for 9 Chains with Highest Rates of Net Profit
Aggregate Number of Stores	....	....	5,138	3,046
Aggregate Net Sales (in thousands)	....	....	$814,905	$479,054
Average Net Sales per Chain (in thousands)	....	....	$24,694	$53,228
Average Sales per Store (in thousands)	....	....	$159	$157
Index of Change (1936/1935):				
Number of Stores per Chain	101.85†	101.63†	....	....
Net Sales per Chain	114.74	120.25	....	....
Average Sales per Store	108.56†	113.13†	....	....
Net Cost of Merchandise Sold (including freight, express, postage, and truckage)	65.76%	64.08%	63.57%	61.28%
GROSS MARGIN	34.24	35.92	36.43	38.72
Salaries and Wages	15.72%	16.61%	15.15%	16.27%
Tenancy Costs	5.74	5.04	9.76	10.88
Light, Water, and Power	0.93	0.86	0.96	0.91
Depreciation of Fixtures and Equipment	0.80	0.70	0.69	0.58
Supplies	1.02	0.89	1.04	1.06
Advertising	0.32	0.15	0.18	0.06
Insurance (except on real estate)	0.47	0.31	0.45	0.40
Taxes (except on real estate or income):				
Sales	0.00	0.20	0.18	0.20
Unemployment and Old Age	0.15†	0.17†	0.16†	0.17†
Other	0.50	0.49	0.43	0.42
Travelling	0.32	0.28	0.13	0.10
Miscellaneous Expense	1.31	0.75	0.73	0.45
Total Expense before Interest	28.46%	26.87%	29.86%	31.50%
Total Interest	1.51	1.47	1.60	1.64
TOTAL EXPENSE including Interest	29.82%	28.25%	31.46%	33.14%
NET PROFIT OR LOSS	4.13%	6.71%	4.97%	5.58%
Net Profit or Loss from Real Estate Operations	0.12%	0.22%	0.99%	1.49%
Interest on Net Worth (except on real estate, leaseholds, and goodwill)	1.35	1.35	1.59	1.66
Other Revenue, Net	0.01	0.01	0.47	0.10
Total Net Other Income	1.70%	1.55%	3.05%	3.25%
NET GAIN before Income Taxes:				
Percentage of Net Sales	5.91%	9.35%	8.02%	8.83%
Percentage of Net Worth	18.42‡	31.00	16.04‡	16.25
Income Taxes for 1936	1.05%†	1.86%†	*	*
NET GAIN after Income Taxes:				
Percentage of Net Sales	4.86%†	7.49%†	*	*
Percentage of Net Worth	14.17†	23.21†	*	*
Rate of Stock-turn (times a year):				
Based on Beginning and Ending Inventories	4.38	4.34	4.75	4.63
Based on Monthly Inventories	4.01†	3.93†	4.63†	4.73†
Freight, Express, Postage, and Truckage	2.41%†	2.23%†	*	*
Distribution of Stores[2] among Cities with Populations of:				
Less than 10,000	....	....	26.09%	24.02%
10,000–25,000	....	....	24.33	24.15
25,000–100,000	....	....	19.94	19.08
100,000–500,000	....	....	11.35	11.07
500,000 or more	....	....	18.29	21.68

*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 two chains, the figure for net gain as a percentage of net worth was based on the reports of 31 firms.
[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 30 of the 33 chains having 4,554 stores.

Table 25. Sixteen Variety Chains Ranked According to Rates of Net Profit or Loss: 1929, 1931–1936

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

Firm	Rank						
	1929	1931	1932	1933	1934	1935	1936
A	1	3	5	10	8	7	6
B	2	2	4	8	7	6	10
C	3	11	10	14	9	9	7
D	4	1	3	3	10	10	12
E	5	7	13	13	11	15	15
F	6	13	12	9	14	13	9
G	7	8	7	7	6	3	2
H	8	15	14	16	16	14	14
I	9	6	8	11	13	11	11
J	10	4	6	12	12	16	13
K	11	5	2	2	1	1	3
L	12	14	15	4	5	8	8
M	13	12	11	5	4	2	1
N	14	9	9	6	2	5	5
O	15	10	1	1	3	4	4
P	16	16	16	15	15	12	16

1936, one of them had dropped to the middle group, and four to the lowest group. At the other end of the scale, two of the last six firms in 1929 were among the first five in 1936, only one having remained in the lowest group. Just one company maintained the same ranking for four years of the seven, but in those years that company occupied the lowest position. Only three other concerns maintained the same ranking for as many as three years out of the seven. Of the middle group in 1929, only one remained in that group in 1936, one of these concerns had dropped to the lowest group, and three had risen to the first group. Only one company over the period varied as little as four positions in rank, no other firm varied under six positions, and nine companies varied ten or more places.

The similar figures in Table 26 for 20 companies for the years 1932 through 1936 exhibit slightly greater stability in profit ranking. For convenience, these 20 companies are arranged in four groups of five each on the basis of their 1932 showing. Two of the five firms in the first group in 1932 remained in that group in 1936; but only one of the

Table 26. Twenty Variety Chains Ranked According to Rates of Net Profit or Loss: 1932–1936

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

Firm	Rank				
	1932	1933	1934	1935	1936
A	1	3	6	5	7
B	2	1	3	4	3
C	3	2	1	1	4
D	4	4	12	13	15
E	5	9	8	7	13
F	6	11	10	8	6
G	7	15	15	19	16
H	8	8	7	3	2
I	9	13	9	11	11
J	10	12	16	14	14
K	11	14	14	12	12
L	12	7	2	6	5
M	13	17	11	10	8
N	14	6	4	2	1
O	15	10	17	16	10
P	16	16	13	18	18
Q	17	19	20	17	17
R	18	5	5	9	9
S	19	18	18	15	19
T	20	20	19	20	20

five in the second group was in the corresponding group in 1936, and the same was true of the third group. In the lowest group, however, four out of five remained in the same group in 1936. Conceivably these figures may be taken as suggesting a slightly greater degree of stability at both ends of the earning scale than in the middle. Among these 20 companies, there was one firm which varied only one position during the five years, and there were four others which varied only three positions, but there was no firm which maintained the same position for more than two years consecutively.

Again it must be considered that these were years of disturbed business conditions, 1932 being the low year (for retailing at least) of the whole depression period, and 1933 and 1934 being years of only intermittent and halting recovery. Conceivably, in a more tranquil period somewhat greater consistency of individual earning power might characterize the variety chain business.

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, 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. One change in the definition of the account for the 1936 study should be noted. Pensions, included in the salaries and wages item in past studies, are considered as miscellaneous expense in the present report.

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 1936 differs in two respects from that for 1929, 1931, and 1932, but is the same as that obtaining in 1933, 1934, and 1935. 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 the bulletins for 1929, 1931, and 1932, allowance 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 as sundry revenue, net.

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. For a chain which, either directly or through a subsidiary real estate corporation, owns 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.

Taxes. The tax account includes all tax expense except real estate taxes, included under tenancy costs, and federal and state taxes on net income, treated as a deduction from net gain. Where state or municipal taxes on sales or gross income are not collected directly from customers but are absorbed by the chain as expense, such cost is included under sales taxes, a subdivision of the tax account. Another sub-classification of the tax account, new in this year's study, comprises payments for unemployment and old age taxes made in compliance with the Social Security Act. Other tax expense includes special chain taxes, licenses, taxes on equipment and merchandise inventory, corporate taxes, the federal capital stock tax, and other taxes not specifically mentioned elsewhere.

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 5, where the gross margin is reported as 36.43%, this means that the aggregate gross margins of the 33 reporting chains bore that percentage relationship to the aggregate net sales of those chains. Such aggregate figures manifestly are weighted according to sales volume. The reasons for using such figures were explained in some detail in the Bureau's report on variety chains for 1931.[1] These average figures based on dollar 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 5, where the gross margin is stated as 34.24%, this means that when the gross margin percentages for the chains were arranged in order from the smallest to the largest, 34.24% 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.

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[1] McNair, Malcolm P., *Expenses and Profits of Variety Chains in 1931 Compared with 1929* (Harvard Business School, Bureau of Business Research, Bulletin No. 89), p. 5.