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**OPERATING RESULTS OF
DEPARTMENT AND SPECIALTY STORES
IN 1939**

BY
MALCOLM P. McNAIR



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**HARVARD UNIVERSITY
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DEPARTMENT AND SPECIALTY STORES IN 1939

BY

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HARVARD UNIVERSITY
GRADUATE SCHOOL OF BUSINESS ADMINISTRATION

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FOREWORD

In this bulletin, the Bureau of Business Research reports on the margins, expenses, and profits of department stores and departmentized specialty stores for 1939, the twentieth consecutive year for which such a study has been made. This analysis is based on 521 reports from companies operating 657 stores, with total store net sales in 1939 of \$1,725,149,000. It is estimated that this figure constitutes approximately a 38% sample of the total sales of retail establishments of these types; that is, department stores and departmentized specialty stores in the United States in 1939.

The bulletin this year follows closely the pattern of the 1938 report, except that certain tables have been moved from the appendix to the main sections in order that they may be more readily usable. The first section presents a summary of the 1939 results, traces the major trends in department store operating ratios over the past 11 years, discusses some of the economic background of the department store business, and exhibits the 1939 figures arranged in the modified form of income statement approved by the directors of the National Retail Dry Goods Association. The second section offers data for department stores in 10 sales volume classifications, ranging from less than \$150,000 to over \$20,000,000. Appropriate tables and comments cover the topics of sales, profits, gross margin, expenses by natural divisions and functional groups, pay roll, personnel data, real estate costs, credit costs, and goal figures. A new feature of the report this year is a classification of operating results by size of city within each of several volume groups, permitting an appraisal of the relative importance of the size-of-city factor and the volume-of-sales factor in their effect on operating ratios. The third section of the bulletin, reporting the results of departmentized specialty stores in 1939, parallels broadly the arrangement of the department store section, but the figures reported are substantially less complete.

The accounting and statistical work on this 1939 survey was supervised by Miss Rose Winisky under the direction of Miss Elizabeth A. Burnham. The bulletin was written by Professor Malcolm P. McNair.

On the occasion of the twentieth anniversary of the beginning of this cooperative research program on distribution costs, the Harvard Business School, of which the Bureau is a part, desires to express its cordial appreciation both of the financial support from the National Retail Dry Goods Association, which has made these studies possible, and of the interested cooperation of the Controllers' Congress, which has helped so much to enhance the scope and usefulness of the reports. At the same time, the School wishes to acknowledge its very great indebtedness to the hundreds of individual companies who, over these years, have been willing to assist the School in its educational and research program by making the detailed reports on which these surveys are based.

On this occasion, also, some personal notes perhaps are not out of place. In 1920, when the Harvard Business School first undertook these studies of department store operating results in cooperation with the National Retail Dry Goods Association, Professor Melvin T. Copeland was director of the Bureau of Business Research; and it was

at his initiative that the pleasant association of the School was begun with Lew Hahn, Carlos B. Clark, Jay Iglauer, Ernest Katz, David Moeser, and other department store "stalwarts", whose names are known throughout the field of retail distribution. Subsequently, Professor Copeland withdrew from the Bureau to devote his attention to teaching and other forms of research and was succeeded by Professor Malcolm P. McNair, to whose continued interest in the study of distribution costs this bulletin offers testimony. The active directorship of the Bureau was assumed by Professor Carl N. Schmalz in 1929, who continued in that post until his resignation in the autumn of 1939 to join the staff of R. H. Stearns Company as controller.

Although in the meantime the School's circle of friends in the department store and specialty store business has widened enormously, it is a source of gratification to the School and the Bureau that through all the changes which 20 years normally bring, the association with the original group of men who were active in the councils of the National Retail Dry Goods Association and the Controllers' Congress when these studies began has continued to be active, stimulating, and fruitful.

HOWARD T. LEWIS,
Director of Research.

Boston, Massachusetts
May, 1940

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Chart 1. Department Store Expenses and Profit: 1939

(with 1938 and 1937 percentages for comparison)

Items	1939		1938 ¹	1937 ¹
	Aggregate Dollar Figures for 428 Firms Operating 512 Stores	1939 Net Sales = 100%	1938 Net Sales = 100%	1937 Net Sales = 100%
<i>The chief source of revenue for these stores, of course, was</i>				
Net Sales	\$1,490,776,107	100.0%	100.0%	100.0%
<i>A primary charge against this revenue, and the largest single expenditure, was represented by</i>				
Total Merchandise Cost	\$941,694,656	63.2%	63.75%	63.7%
Which included the cost of merchandise purchased for resale delivered at the stores, less trade and cash discounts; the production costs of goods manufactured by the store; alteration and workroom costs, net; plus or minus the amounts taken from, or added to, inventories during the year.				
<i>Other costs which had to be met were those for operating the stores, as follows:</i>				
Total Pay Roll	\$265,666,944	17.8%	18.25%	17.85%
Comprising salaries, wages, and bonuses of all employees including executives, but excluding pensions and pay roll taxes;				
Real Estate Costs	\$70,116,076	4.7%	4.95%	4.5%
Including rentals, taxes, and insurance paid on leased real estate; as well as taxes, insurance, depreciation, and interest on owned real estate;				
Advertising	\$53,765,758	3.6%	3.75%	3.6%
Taxes	\$18,479,067	1.25%	1.3%	1.05%
Not including taxes on real estate, or Federal income taxes, but embracing other taxes imposed by national, state, and local governments;				
Supplies and Services Purchased	\$47,889,767	3.2%	3.1%	3.0%
Including electric power, steam, and delivery service bought;				
All Other Expense (including interest)	\$87,587,920	5.85%	6.05%	5.85%
The charge for interest being 6% of the average value of accounts receivable, merchandise inventory, fixtures, and equipment. (A corresponding charge on real estate was included in real estate costs. These charges for interest were made whether the capital invested in the respective assets was owned or borrowed.)				
<i>Thus, for merchandise and store operation combined, these stores experienced a</i>				
Total Cost of	\$1,485,200,188	99.6%	101.15%	99.55%
After meeting these costs, there remained a				
Net Profit	\$5,575,919	0.4%	Loss 1.15%	0.45%
Which constituted the net profit from merchandising operations.				
<i>In addition, the stores received</i>				
Sundry or Other Revenue, Net	\$52,623,042	3.5%	3.8%	3.7%
Including net profits from leased and manufacturing departments, carrying charges on installment accounts, and other incidental receipts not part of merchandising revenues; any net profit or loss on real estate, whether used in the business or not; and an amount equivalent to the excess of interest charged as expense over interest actually paid (less interest received).				
<i>And, therefore,</i>				
Total Net Business Profit Amounted to	\$58,198,961	3.9%	2.65%	4.15%
This was the earnings of these firms before Federal income taxes.				

¹Data for 1938 are based on aggregate dollar figures for 430 firms with net sales of \$1,450,595,863, and operating 547 stores; data for 1937 are based on aggregate dollar figures for 458 firms with net sales of \$1,547,897,414, and operating 532 stores.

APPENDIX

Materials

The information and conclusions contained in this bulletin are based on profit and loss statements, balance sheets, and other materials received on 549 separate schedules covering the operations of more than 726 stores in 1939. Of these 549 schedules, 18 arrived too late to be used, and 10 were not complete or were in such form that they could not be made comparable with the data for the other stores. As a result, the common figures published in this bulletin are based on 521 statements.

The form on which the cooperating stores reported their figures and other information was developed by the Bureau out of its experience in conducting 19 preceding studies for this trade, and from contact with store executives. Copies of the form may be secured by writing to the Bureau.

Size of Sample

The total store sales volume of the 549 firms which sent reports was slightly less than \$1,787,000,000, and the total store sales (including leased department sales) of the 521 firms for which data were actually used in setting common figures was \$1,725,150,000.

It is estimated that this latter amount is more than 38% of the total sales of department and specialty stores in the United States in 1939. According to the Census of Business: 1935, Retail Distribution, Preliminary United States Summary (October, 1936), page 15, the sales of department stores and women's ready-to-wear specialty stores in 1935 were in excess of \$3,874,000,000. On the basis of the Federal Reserve Board's index, sales of department stores in 1939 amounted to roughly 115.5% of their sales in 1935, so that the figure for 1939 corresponding to the total above was about \$4,475,000,000. The sales of the 521 firms for which data actually were used in this study amount to somewhat more than 38% of \$4,475,000,000.

Classification of Reports By Kind of Store

In classifying the reports, the first step was to separate those for department stores from those for specialty stores. The Bureau defined a department store as one handling a number of lines of merchandise, including yard goods and, usually, home furnishings. As a rule, these stores were subdivided into departments for operating purposes. Specialty stores were defined as stores specializing in women's

wearing apparel, often handling such accessories as costume jewelry, bags, and toilet goods, but generally not handling either yard goods or home furnishings, and for the most part operated by means of a departmental form of organization similar to that of department stores.

By Sales Volume

Having divided the reports into two major groups by kind of store, the next step was to classify the reports in each group by total store net sales volume. In this work, consolidated reports for a main store and its branches were classified according to the main store's volume, but consolidated reports for groups of stores more or less similar in volume and not strictly in the relationship of a main store and branches were classified according to sales per store.

This resulted in ten volume groups for department stores and seven volume groups for specialty stores. The limits of the volume groups for department stores have remained unchanged since the 1929 study, and they dovetail with the group limits used in earlier years. Of course, there has been considerable change in the firms assigned to the several groups in recent years owing to changes in sales. Moreover, since the groups were established this year on the basis of total store net sales rather than on the basis of net sales in owned departments only, as in earlier years, the classification of some firms has been affected.

Common Figures

In this bulletin common figures and goal figures are given for each of the several volume groups, except where the data received imposed limitations.

The term "common figure" is used by the Bureau to mean the most representative figure in any series or array. It is the figure around which the percentages from all the individual reports in a group tend to concentrate. It is determined partly by the median, that is, the middle figure when the items are arranged in order of magnitude; and partly by the interquartile average, which is the arithmetic average of the middle half of the figures. The lowest and highest figures, respectively, of those occurring in the middle half of the series mark the interquartile range. The common figure is selected partly by judgment based on inspection of the data and partly by means of computed averages. It is

designed to reflect the typical or representative performance.

The common figures published in this bulletin and in earlier bulletins have represented the experience of *the typical store* in either a limited group of stores or the entire body of reporting stores. All the common figures for department and specialty stores published prior to 1932 were compiled by assigning equal influence or weight to the experience of each reporting firm regardless of size. In preparing the department store figures for Table 1, however, the Bureau has averaged the common figures established by the familiar method for each of a number of sales volume groups by weighting them according to the *aggregate* sales of the stores reporting for the respective groups. This procedure has given results approaching those which would have been secured if it had been practicable to arrive at the aggregate dollar sales and the aggregate dollar figure for each other aspect of performance for all stores reporting, and then to figure the various ratios and percentages from these aggregates. Thus, the department store figures in Table 1, instead of representing the experience of the typical or average store, represent the experience of the trade as a whole.

For the past three years it has been possible to prepare, also, average percentages for all reporting department stores based directly on the aggregate dollar amounts entered by these firms for several of the items in the profit and loss statement. These figures are presented in Chart 1.

Goal Figures

Goal figures depict the typical results for a number of the most profitable firms in the respective volume groups. These goal figures are intended to be used much as common figures for the "most profitable" stores might be used, but they are not here referred to as "common figures" because, owing to the small number of reports on which they have been based, it was necessary in setting them to use judgment to a somewhat greater degree than is customary in establishing the regular "common figures".

Transactions

In arriving at the figures for average sale, the Bureau used only the reports for firms which gave the number of gross sales transactions; gross sales transactions being understood to mean the number of sales transactions or sales checks which produced total gross sales, without additions or deductions for returns or credit transactions. In arriving at the common figures for average gross sale, the gross

sales for each firm reporting the data were divided by the total number of gross sales transactions.

Definitions of Major Items

Net sales, as used throughout this bulletin, represents the real volume of business done (in owned departments only). This figure is computed by deducting from gross sales the amount of merchandise returned by customers and the allowances granted to customers.

Gross margin is net sales less total merchandise costs (net). The Bureau defines total merchandise costs (net) as the sum of three factors: (a) the difference in merchandise inventories at the beginning and end of the year; (b) purchases of merchandise at net cost delivered at the store or warehouse, that is, after cash discounts received have been deducted and after inward freight, express, and truckage have been added; and (c) alteration and workroom costs, net (costs less receipts from customers).

Total expense, according to the Bureau's definition, includes not only actual expenditures and regular charges, such as those for depreciation, but also charges for interest at 6% on investment in plant and equipment used, in merchandise inventory, and in accounts receivable, regardless of the source of the capital invested in these various assets or the rates paid on any capital borrowed. Also, total expense includes charges for the salaries of proprietors, active partners, and chief executives, whether or not they actually were paid. Salaries of inactive partners are considered as deductions from net gain. Total expense, therefore, represents the true long-run economic cost of conducting the merchandising or trading operations of the reporting stores.

Some of the charges which are included in total expense according to the Bureau's classification are discussed later in this Appendix. Detailed definitions of all the items are included in the Bureau's pamphlet, "Explanation of Schedule for Department and Specialty Stores: 1939". Readers who wish more information should write to the Bureau.

Net profit, as the Bureau uses the term, is the amount which remains after deducting total expense from gross margin; or, stated differently, it is the amount which remains after deducting total cost, the sum of total merchandise costs (net) and total expense as defined above, from net sales. Thus net profit is the profit after charges for capital, including that invested in real estate, and for management. It reflects the efficiency of a firm in the conduct of its merchandising operations and the profitability of a concern as a merchandising enterprise.

This figure, however, is *not* the net business profit *before interest on owned capital* which many business men customarily look upon as net profit and which the Bureau calls net gain. Net profit, as defined by the Bureau, affords a better basis for comparing the results of different firms and a more accurate index of operating efficiency than net gain.

Net other income includes any net profit or loss on real estate operations after charging interest at 6% on the average depreciated value of real estate used; interest at 6% on such part of the capital used in the business as represented the firm's equity, including the equity in real estate; and, as regards borrowed capital used in the business, any difference between interest at 6% and interest actually paid. These interest credits are made to offset imputed interest charged as expense. In addition, net other income includes the amount of interest actually received, receipts from leased departments, and net income from any non-merchandising operations.

Net gain before Federal tax on income is the total of net profit and net other income. It is the net earnings including return on investment after considering all miscellaneous income or deductions other than Federal income taxes. Net gain is the figure which many merchants, bankers, and accountants have in mind when they speak of net profit, net business profit, or net earnings. In using the net gain figures, allowance must be made for the desired rate of return on invested capital. The Bureau's treatment of cash discounts and interest in no way affects the net gain figure.

Classification of Expense

The Bureau's classification of expense agrees substantially with that set up by the Controllers' Congress of the National Retail Dry Goods Association in its Expense Manual published in 1928, and revised in 1937. There are, however, three important differences, those in the handling of (a) rentals and related items, (b) interest, and (c) professional services.

Real Estate Costs

In order to secure as great a degree of comparability as possible between the figures for firms owning their real estate and the figures for firms leasing all or part of their real estate, the Bureau's classification includes no item for rentals but has, instead, an item called "real estate costs." *Real estate costs* includes (for properties used in the business *only*) rentals, taxes, and insurance paid on leased real estate plus depreciation on leasehold valuation; in addition it includes taxes, interest, insurance, depreciation, and any other landlord charges, except

repairs, on owned real estate. Thus, the figures given in this bulletin for taxes, interest, insurance, and depreciation do not represent the *total* expenditures or charges for these items. They exclude all expenditures or charges related to real estate, but they include the respective expenditures or charges on equipment.

Interest

Interest includes interest at 6%¹ on the average merchandise inventory, the average amount of accounts receivable outstanding, and the average investment in equipment. Interest on the average investment in real estate is included in real estate costs. In all four cases, average asset figures were used in computing interest charges. Interest paid on borrowed capital and interest received were not considered in arriving at the interest charges in the expense statement, but were considered in arriving at net other income.

Professional Services

Professional services includes expenses, memberships, dues, and fees for buying or research organizations, and for domestic and foreign buying offices. In order to secure comparability between firms that own their offices and those which use the services of other agencies, tenancy charges on buying offices are included in professional services rather than in real estate costs. The central office expense for stores in ownership groups also is included in professional services.

Pay Roll

Largely as a result of the federal and state social security legislation, the Controllers' Congress, in February, 1936, made several changes in the handling of pensions and retirement allowances, unemployment insurance privately provided, and supper money. Since February, 1936, expenses for these items have been included in unclassified, rather than in pay roll. In making the 1936 study, the Bureau adopted these revisions in the Controllers' Congress classifications and, as a result, introduced some lack of comparability between the figures for

¹There has been some discussion of the advisability of changing the rate used in computing interest on invested capital periodically to reflect changes in the cost of money. In the decision to hold to the 6% rate there have been two compelling arguments: (1) that if the 6% rate were abandoned there would be no general agreement upon a method for choosing the rate to be substituted; and (2) that, since the rate is used in arriving at an imputed charge, on the whole it is more important to use a fixed rate year after year than to attempt to find the correct rate for each year and thus to force users of the figures to make a separate set of mental adjustments in interpreting each year's data.

pay roll and classified for 1936 through 1939, on the one hand, and those for earlier years.

Taxes

Taxes do not include taxes on real estate, which are included in real estate costs, or Federal income taxes; but do include pay roll taxes and such taxes on sales or gross income as the stores were unable to collect directly from their customers, and hence were forced to absorb as expense.

Stock-turn

The stock-turn figures given in this report and based upon beginning and ending inventories were computed by dividing total merchandise costs (net) as defined under gross margin on page 32 by the average inventory as shown by the profit and loss statement; that is, at cost. The stock-turn figures based on average monthly inventories were computed through the use of cost or retail inventory figures, whichever were furnished, total merchandise costs or net sales being used as dividends.

Undoubtedly the rate of stock-turn based on monthly inventories provides a more reliable index of the turnover of physical merchandise than does the rate of stock-turn based on beginning and ending inventories; but since the figures computed on the latter basis are somewhat more representative, from the standpoint of the number of firms reporting the necessary data, they usually are the ones mentioned in the next.

Initial Mark-up

Of the other items given in the tables, initial mark-up requires special explanation. The figures for initial mark-up were not based on initial mark-up percentages reported by, or computed for, the individual firms; but rather were prepared through the use of the common figures for gross margin, alteration and workroom costs, total retail reductions, and cash discounts received.

In calculating the percentage of mark-up, of course, the original retail value before retail reductions had to be secured. For this purpose the figure 100%, representing net sales, plus the common figure for total retail reductions as a percentage of net sales, was taken as original retail value expressed in terms of net sales. To secure the percentage of initial mark-up on invoice cost delivered, this original retail value was divided into the sum of the common figures for gross margin, alteration and workroom costs, and total retail reductions, less the amount of cash discounts received, all expressed as percentages of net sales. This dividend represented

the difference between original retail price of merchandise sold and delivered invoice cost of merchandise sold expressed as percentages of net sales.

This definition may be put into the form of an equation as follows, all figures to the right of the equality sign being percentages of net sales:

$$\text{Initial Mark-up (on invoice cost delivered)} = \frac{\text{Gross Margin} + \text{Alteration and Workroom Costs} + \text{Total Retail Reductions} - \text{Cash Discounts Received}}{100 + \text{Total Retail Reductions}}$$

Using figures for department stores with \$4,000,000 to \$10,000,000 sales from Table 4, the computation of the rate of initial mark-up based on invoice cost delivered is as follows:

$$\frac{36.8 + 0.8 + 7.3 - 3.1}{100.0 + 7.3} = \frac{41.8}{107.3} = 39.0$$

Leased Departments

This year the Bureau continued its attempt to eliminate the effects of leased departments so that its common figures might reflect the operations of owned departments only, and so that the figures for different stores would be essentially comparable regardless of differences in practice regarding leasing. The cooperating stores were asked to report the sales of their leased departments, the amount of commissions or rentals received from lessees, and the portion of the stores' indirect expenses properly chargeable to leased departments. It was indicated that the sales of leased departments should be excluded from sales; that direct expenses paid by the stores for the account of lessees should be excluded from expense; and that the indirect expenses chargeable to leased sections similarly should be excluded. The amounts of gain or loss from leased department operations were included in other income.

In many instances, the reporting firms made all these adjustments and thus practically eliminated the effects of their leased department operations. Where the firms themselves did not do this, and where the sales of leased departments amounted to 10% or more of total sales, the Bureau made the appropriate adjustments. Where this could not be done, and where leased department sales amounted to 10% or more of total sales, the percentages which were most likely to be distorted by leased section operations (real estate costs, supplies, service purchased, total expense, net profit, and other income) were considered not comparable and were not used in arriving at the common figures published in this bulletin. In the few cases where all expenses apparently were distorted as a result of leased department operations, the entire statement was omitted.

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