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OPERATING RESULTS OF
DEPARTMENT AND SPECIALTY STORES
IN 1940

BY

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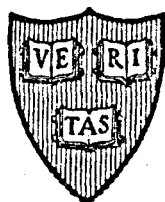
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BY

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FOREWORD

The problems of the retailer during these months of National Emergency are many and difficult. Probably the most important is that in which the government is seeking cooperation — the prevention or control of inflation. Control of retail prices in a period of rising national income and curtailed merchandise output calls for wisdom and foresight.

It is essential that the basic facts of retailing be understood not only by merchants but by the general public. So far as the price structure is related to cost it rests on two bases, the cost incurred to produce the merchandise and the cost incurred to distribute it. Planning price policy, therefore, presupposes a knowledge of production and distribution costs.

For the past twenty-one years the Harvard Bureau of Business Research has compiled average operating data for department and specialty stores of various sizes. The report herewith presented summarizes briefly the typical operating results for the period 1929 to date and provides in addition detailed figures for ten groups of department stores and seven groups of specialty stores covering the year 1940. The present-day operating advantages and disadvantages associated with small and large volume are discussed. Continuing the program established in prior studies, expenses are broken down by natural and functional categories and control figures such as mark-downs and stock-turn are included.

The operating statistics have been selected and arranged chiefly with a view to facilitating their use for purposes of comparison and control by the executives of individual concerns. While this is the primary use to which the bulletin is devoted, its potential value to the trade as a whole is probably of greater importance. The figures provide a clear and authoritative statement of the costs of the complex service that the stores render to the public, and they measure the efficiency with which the task is performed. In a period of economic and political tension it is particularly desirable that such definite standards should be available.

The original data for the bulletin were received from 519 companies operating 696 stores, with a total net sales of \$1,802,600,000. It is estimated that this figure represents approximately 38% of the total sales of all department stores and departmentized specialty apparel stores in the United States in 1940.

This study was made possible both by the generous cooperation of the executives of numerous individual concerns and by the financial support of the National Retail Dry Goods Association, which has met the cost of these surveys for the past 21 years. As usual, the advice and assistance of the officers of the Controllers' Congress were most helpful.

The accounting and statistical work on the 1940 survey was supervised by Miss Rose Winisky under the direction of Miss Elizabeth A. Burnham. The bulletin was written by Professor Malcolm P. McNair.

CLYDE O. RUGGLES,
Director of Research.

BOSTON, MASSACHUSETTS
May, 1941

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Chart 1. Department Store Expenses and Profit: 1940
(with 1939 and 1938 percentages for comparison)

Items	1940		1939 ¹	1938 ¹
	Aggregate Dollar Figures for 429 Firms Operating 554 Stores	1940 Net Sales = 100%	1939 Net Sales = 100%	1938 Net Sales = 100%
<i>The chief source of revenue for the stores, of course, was</i> Net Sales	\$1,542,885,483	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	\$973,150,998	63.1%	63.2%	63.75%
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	\$271,491,069	17.6%	17.8%	18.25%
Comprising salaries, wages, and bonuses of all employees, including executives, but excluding pensions and pay roll taxes;				
Real Estate Costs	\$68,906,692	4.45%	4.7%	4.95%
Including rentals, taxes, and insurance paid on leased real estate; as well as taxes, insurance, depreciation, and interest on owned real estate;				
Advertising	\$53,356,056	3.45%	3.6%	3.75%
Taxes	\$18,424,672	1.2%	1.25%	1.3%
Not including taxes on real estate, or Federal income taxes, but embracing other taxes imposed by national, state, and local governments;				
Supplies and Service Purchased	\$49,872,085	3.25%	3.2%	3.1%
Including electric power, steam, and delivery service bought;				
All Other Expense (including interest)	\$89,006,459	5.75%	5.85%	6.05%
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	\$1,524,208,031	98.8%	99.6%	101.15%
After meeting these costs, there remained a				
Net Profit	\$18,677,452	1.2%	0.4%	L. 1.15%
Which constituted the net profit from merchandising operations.				
<i>In addition, the stores received</i> Sundry or Other Revenue, Net	\$56,664,039	3.7%	3.5%	3.8%
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	\$75,341,491	4.9%	3.9%	2.65%
This was the earnings of these firms before Federal income taxes.				

¹ Data for 1939 are based on aggregate dollar figures for 428 firms with net sales of \$1,490,776,107, and operating 512 stores; data for 1938 are based on aggregate dollar figures for 430 firms with net sales of \$1,459,595,863, and operating 547 stores. There is always some change from year to year in the identity of the reporting firms. In making comparisons of the data for 1939 and 1940, it will be well to note that 377, or 88%, of the 429 firms reporting for 1940 also submitted figures for the preceding year.

APPENDIX

Materials

The information and conclusions contained in this bulletin are based on profit and loss statements, balance sheets, and other materials received on 558 separate schedules covering the operations of more than 736 stores in 1940. Of these 558 schedules, 17 arrived too late to be used, and 22 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 519 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 20 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 558 firms which sent reports was slightly more than \$1,890,000,000, and the total store sales (including leased department sales) of the 519 firms for which data were actually used in setting common figures was \$1,802,600,000.

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 1940. According to the Census of Business: 1939, Retail Distribution, Preliminary United States Summary, the sales of department stores and women's ready-to-wear specialty stores (including independents and chains) in 1939 were in excess of \$4,460,000,000. On the basis of the Federal Reserve Board's index, sales of department stores in 1940 amounted to roughly 104.9% of their sales in 1939, so that the figure for 1940 corresponding to the total above was about \$4,680,000,000. The sales of the 519 firms for which data actually were used in this study amount to somewhat more than 38% of \$4,680,000,000.

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. 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.

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 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 for 1939 and 1940 were established 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.

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 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 method described above 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 four 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 and expense statements. Figures for the past three years are presented in Chart 1.

Goal Figures

Goal figures depict the typical results for 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 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 gross 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. The average gross sale results from dividing gross sales by the total number of gross sales transactions.

Definitions of Major Items

Net sales, as used throughout this bulletin, represents the 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: 1940." 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 profitableness 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 interest at 6% on such part of the capital used in the business as represents 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 nonmerchandising 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. These are discussed below.

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 improvements and leasehold valuation; in addition, it includes taxes, interest, insurance, and depreciation on owned real estate.¹ Thus, the

¹ In the case of 34 firms with sales of \$2,000,000 or more in 1940, 90% of the real estate used was owned. Total real estate costs, amounting to 4.25% of net sales for these firms, com-

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 include expenditures or charges on equipment.

Interest

Interest includes interest at 6%² on the following assets: 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. 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 here.

Pay Roll

Largely as a result of the Federal and state social security legislation, the Controllers' Congress, in February, 1936, recommended that pensions and retirement allowances, unemployment insurance privately provided, and supper money be included in unclassified, rather than in pay roll. The Bureau adopted these revisions in the

prised: rent paid, 0.15%; taxes, 0.90%; interest, 2.35%; insurance, 0.05%; and depreciation, 0.80%.

² The use of the 6% rate in 1940 may have resulted in the overstatement of interest expense, particularly for large firms. Data on interest rates on borrowed capital reported by a few department stores serve as a basis for the median figures given below:

TABLE A. INTEREST RATES ON BORROWED CAPITAL: 1940

Department Stores with Net Sales (in thousands):	Short-Term Loans		Long-Term Loans	
	Number of Reporting Firms	Rate	Number of Reporting Firms	Rate
Less than \$150	13	6%	8	5½%
\$150-300	17	5	8	5
\$300-500	16	5	9	5
\$500-750	20	5	14	4½
\$750-1,000	12	4	9	5
\$1,000-2,000	23	3½	9	5
\$2,000-4,000	24	3	14	4
\$4,000-10,000	25	1½	20	4
\$10,000-20,000	10	1½	8	4
\$20,000 or more	8	1½	5	3

Controllers' Congress classifications and, as a result, introduced some lack of comparability between the figures for pay roll and unclassified for 1936 through 1940, 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.

Stock-turn

The stock-turn figures given in this report, based upon beginning and ending inventories, were computed by dividing total merchandise costs (net) as defined under gross margin on page 38 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 text.

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:

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

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:

$$\frac{37.0 + 0.7 + 7.15 - 3.05}{100.0 + 7.15} = \frac{41.8}{107.15} = 39.0$$

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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