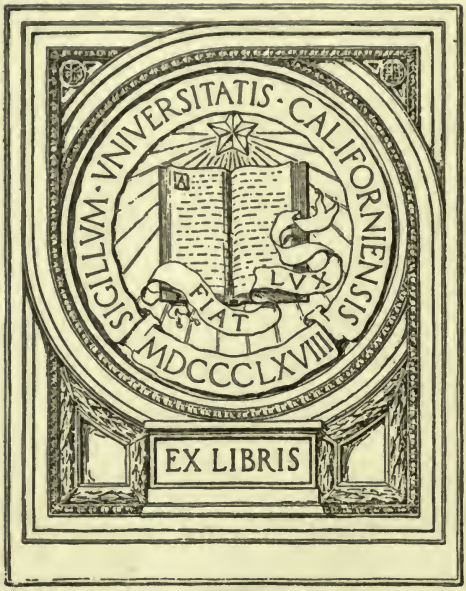

PUBLICATION OF THE GRADUATE SCHOOL OF BUSINESS ADMINISTRATION, HARVARD UNIVERSITY

VOL. VI, NO. 7 CAMBRIDGE, MASS. NOVEMBER, 1920

BULLETIN NO. 23
BUREAU OF BUSINESS RESEARCH

Operating Expenses in Retail Jewelry Stores in 1919

PRICE $1.00

CAMBRIDGE
HARVARD UNIVERSITY PRESS
1920

BULLETINS OF THE BUREAU OF BUSINESS RESEARCH

1. Object and History of the Bureau, with Some Preliminary Figures on the Retailing of Shoes — Out of Print
2. Harvard System of Accounts for Shoe Retailers — 50 cents
3. Harvard System of Accounts for Retail Grocers — 50 cents
4. Depreciation in the Retail Shoe Business — 50 cents
5. Expenses in Operating Retail Grocery Stores—1914 — Out of Print
6. Harvard System of Accounts for Shoe Wholesalers — 50 cents
7. Harvard System of Stock-keeping for Shoe Retailers — 50 cents
8. Operating Accounts for Wholesale Grocers — $1.00
9. Operating Expenses in the Wholesale Grocery Business—1916 — 50 cents
10. Management Problems in Retail Shoe Stores—1913–17 — 50 cents
11. System of Operating Accounts for Hardware Retailers — 50 cents
12. Operating Expenses in Retail Hardware Stores—1917–18 — 50 cents
13. Management Problems in Retail Grocery Stores—1918 — $1.00
14. Methods of Paying Salesmen and Operating Expenses in the Wholesale Grocery Business in 1918 — $1.00
15. Operating Accounts for Retail Jewelry Stores — $1.00
16. Operating Accounts for Retail Drug Stores — $1.00
17. International Comparisons of Prices of Cotton Cloth, January 1919 to March 1920 — $1.00
18. Operating Expenses in Retail Grocery Stores in 1919 — $1.00
19. Operating Expenses in the Wholesale Grocery Business in 1919 — $1.00
20. Operating Expenses in Retail Shoe Stores in 1919 — $1.00
21. Operating Expenses in Retail Hardware Stores in 1919 — $1.00
22. Operating Expenses in Retail Drug Stores in 1919 — $1.00
23. Operating Expenses in Retail Jewelry Stores in 1919 — $1.00

BULLETIN NO. 23
BUREAU OF BUSINESS RESEARCH

Operating Expenses in Retail Jewelry Stores in 1919

CAMBRIDGE
HARVARD UNIVERSITY PRESS
1920

PRINTED AT THE HARVARD UNIVERSITY PRESS
CAMBRIDGE, MASS., U.S.A.

OPERATING EXPENSES IN RETAIL JEWELRY STORES IN 1919

INTRODUCTION

WHAT part of each dollar received in a retail jewelry store is required to cover the expense of doing business? How much merchandise does each individual salesman sell annually? How often does stock turn over during a year? What is the effect of stock-turn upon expense? Any retail jeweler can readily obtain the answers to these and many similar questions from his books, provided he keeps a satisfactory set of accounts. Although his profit and loss statement shows at once whether his business is increasing year by year or falling behind and also the effect of changing conditions upon his expenses, he also needs to know whether he is operating as economically as other dealers in the same line of business. He can secure guidance in managing his store, in addition to the information furnished by his own accounts, if he is able accurately to compare his expenses with the expenses of other retailers operating a business similar to his own for the same period of time under like conditions. Chronic weak spots, the points at which his expenses are above the average, are thus brought to light so that he can direct his attention to the opportunities for economy.

The Harvard Bureau of Business Research began a study of operating expenses in the retail jewelry trade in the summer of 1919.[1] This investigation was undertaken at the request of

[1] The Harvard Bureau of Business Research was established in 1911 by the Graduate School of Business Administration, Harvard University, because there was a lack of reliable information for the use of the School. Since that time it has been engaged in the scientific study of many business problems. Although problems in factory management

the American National Retail Jewelers' Association. It has been carried on with the coöperation of its members, and the cost has been met by funds provided by the Association. Reports also have been received from numerous jewelers who are not members of the Association.

As in the other businesses studied, the first step necessary in the jewelry work was to develop a system of operating accounts for retail jewelers which would make it possible to compare the expense figures of different stores. This was essential because it was found that seldom did two merchants include the same expenses under any particular account. For example, "selling expense" in one store meant only the wages of employees engaged exclusively in selling goods; in another it included also wages paid to repair men, part or all of the proprietor's salary, and cost of boxes, flannel bags, and wrappings. One merchant, who owned the building in which his store was located, charged his business with a reasonable rental for the space occupied; a similar store a block away had no item of rent in its expense account. A retailer in Arizona included in his operating expenses a salary for himself, while another in New Jersey did not charge the business with compensation for his services.

It was obvious that no comparable figures could be obtained from the trade until a common basis had been established by means of standardized definitions of accounts. To provide for this need, Bulletin No. 15, "Operating Accounts

and in labor relations are now under investigation, the Bureau has given particular attention to studies of the expense of marketing goods and to methods of store management. Detailed investigations have been made of the retail shoe, grocery, hardware, and drug trades, and of the wholesale grocery business. While the primary object of the Bureau has been to gather facts regarding business practice as the basis for instruction in the School, the results of its research have always been made available, without divulging the details of any individual report, to business men who have assisted in the work by furnishing specific information and expense figures from their own experience.

for Retail Jewelry Stores," was published by the Bureau in December, 1919. This bulletin was the result of a careful study by the Bureau of the accounting requirements of the retail jewelry business, as indicated by the experience of representative jewelers. In its essential features, this accounting system was similar to the systems developed by the Bureau for other trades — systems which have been in practical, every-day use in both large and small stores for several years.

The accounting system defines in detail exactly what items of receipts and expenditures are included in each account. It shows how to summarize these accounts for the year on a specially prepared profit and loss statement. For the use of dealers who, for one reason or another, are not prepared to keep double-entry books, there is also provided a system of record sheets which keeps separate the various sales, merchandise, and expense accounts. The store already having a satisfactory accounting system can readily adjust its figures to the standard profit and loss sheet. This profit and loss sheet was used as the basis upon which reports were collected from the trade. Blank forms of the standard sheet were sent out in February, 1920, to 3826 representative jewelers throughout the country with a circular letter explaining briefly the object of the work and asking for the coöperation of the trade.

As a result of this circularizing and of personal calls by representatives of the Bureau, reports were received from two hundred fifty-one jewelers located in forty-three states. A preliminary survey based upon these statements is presented in this bulletin. While the figures given here are believed to be approximately correct, it is expected that next year a larger number of jewelers will be prepared to coöperate with the Bureau, so that when the data for 1920 are brought together a more comprehensive and accurate analysis can be made.

One of the chief obstacles encountered was the difficulty of getting separate figures for repair accounts. In order to ob-

tain figures for comparison and also for purposes of management, it is essential that separate accounts be kept by a retail jeweler for merchandise operations as distinguished from a manufacturing department or repairs of watches, clocks, and jewelry. In the merchandise department the store management problems are those of buying and selling goods. In the repair department, in contrast, expert service is rendered and the compensation for the skill and time of the artisan is the major expense. The repair department is more in the nature of manufacturing than of merchandising. In the repair department the jeweler sells the proficiency and service of his shop, instead of an article of merchandise from his shelves which he has previously bought from a wholesaler or manufacturer. Since the results of these two departments' operations are not fairly comparable, the Bureau's accounting system makes careful provision for a separation of accounts. Many jewelers, however, have made no distinction on their books between these radically different departments of their stores. So many of the reports received were of this nature that it was necessary to make a primary classification between stores in which repairing and engraving receipts and expenses were kept separate from merchandise operations and those in which they were not. One hundred retail jewelers who recognized this distinction sent in profit and loss statements which were used in tabulations, while one hundred thirteen reports were received from jewelers who did not keep their repair department accounts separate and thirty-eight reports could not be adjusted for inclusion in either group.

The statements from jewelers who did not separate their repair accounts from their merchandise accounts were tabulated; individual percentages were worked out for each item of expense; and an attempt was made to prepare independent summaries. The analysis, however, showed that it was not practical to try to use these figures for any comparative pur-

poses. Since the price received for repair work was based primarily upon the cost of labor, only a small part of the expense representing supplies and materials used, the net sales figures for stores that did not separate their repair accounts could not properly be taken as a basis for percentages in determining the cost of handling merchandise. In such stores gross profit, the difference between the cost of goods sold and net sales, included the amount of repair receipts less the small cost for materials and supplies entered in merchandise inventories and purchases. Since the chief item of expense in repair work was for labor, amounting to approximately 50 % of the charge to the customer, the inclusion of this item in the wages of salesforce account made wages and total selling expense higher in percentage of net sales than they would have been if based on merchandise operations alone. The addition of this item also increased the ratio of total expense to net sales. On the other hand, each of the expenses not ordinarily affected by the repair accounts would have been larger in percentage of net sales, if net sales had not been increased by receipts from the repair department. Furthermore, the proportion of repair receipts included in net sales in these stores was unknown. For that reason no accurate allowance could be made for the effect of repair receipts in any one of these stores and to compare reports from a number of different stores each of which was affected by an unknown variable could give no worth-while results.

The figures used in this bulletin are based upon reports for the year 1919 received from one hundred stores. Each of these statements was adjusted, so far as possible, to the standard profit and loss form. On some of the reports, however, there were individual items that could not be used. For example, if no charges were shown for boxes, wrappings, and other selling expense, the figure for total selling expense was disregarded, because it was smaller than it should have been by the amount of such omission; and since this same amount was

probably included in miscellaneous expense the figure for that item, also, had to be omitted when the common figure for miscellaneous expense for all stores was determined. Total expense, however, was not changed by such inaccuracies in the distribution of expense. Inasmuch as the common figure for each item was determined independently from data that were in some cases incomplete there are a few apparent discrepancies between the totals and the sum of the common figures for the individual items. These discrepancies will be corrected in later summaries, when more and better figures are available.

The volume of sales handled by the one hundred stores from which comparable reports were received ranged from $5,000 to $887,000 during the year 1919; of the total number, forty-five had net sales of $50,000 or over during the year, and fifty-five had net sales less than $50,000 in 1919. The following table shows the grouping of these stores based upon the amount of business handled.

VOLUME OF BUSINESS

Net Sales, 1919	Number of Stores
Less than $10,000	3
$10,000–$19,999	16
$20,000–$29,999	15
$30,000–$39,999	11
$40,000–$49,999	10
$50,000–$59,999	7
$60,000–$69,999	2
$70,000–$79,999	3
$80,000–$89,999	2
$90,000–$99,999	4
$100,000 and over	27

In order to obtain approximate information on the distribution of sales among the various departments of a jewelry store, jewelry merchants were requested to give their estimated sales in each of several lines. Fifty stores that kept

their repairing and engraving accounts separate answered part or all of this question. An analysis of these replies indicated that in 1919 about 25 % of the sales in an average jewelry store were precious stones. Approximately 13 % of sales were in the silver department; 14 % were clocks and watches, and 26 % jewelry. Thirty stores reported an optical department, and in these stores 5 % of net sales were in that department. The remaining sales were scattered through a number of different classifications, not amounting to more than 4 % in any one case.

OPERATING EXPENSES

The following table gives the lowest, highest, and common figures, in percentage of net sales, for each item of expense for the year 1919 in the one hundred retail jewelry stores that separated their merchandise accounts from their repairing and engraving accounts. Net sales, that is gross receipts from sales of merchandise less returns and allowances to customers and the amount collected for excise tax, is taken as the basis, or as 100 %. According to sound accounting practice the 5 % Federal government excise tax on jewelry (sometimes called "war tax" or "sales tax") is not considered as an item of operating expense. In collecting this tax from the consumer the merchant acts as an agent of the government. Hence the Bureau has treated the excise tax as a direct deduction from gross sales, similar to returns and allowances.

Net sales, the basis for the percentages, includes both cash and charge sales and represents the real volume of business done. Each percentage is worked out independently. Thus the lowest percentages are not all from one store, but each is the lowest figure for that item found in any store. Similarly, the total for any group of expenses is not necessarily the sum of the items in that group, but rather the lowest total for that group of expenses shown by any one store. Likewise, in the case of the common figures, the sum of the common figures for

the items in any one group, for example selling expense, is not necessarily exactly the same as the common figure for total selling expense as worked out from the reports of all stores.

In the following table the highest and lowest figures will be of interest to retailers, but for comparative purposes the common figures are the most useful. In each case the common figure is the one around which figures from all stores tended to concentrate for that particular item. It is at the point of greatest density. This typical, most representative figure is known in statistical work as the mode and is determined by scientific methods which are not influenced by extreme high or low figures. It is the most reliable figure for purposes of comparison.

OPERATING EXPENSES IN RETAIL JEWELRY STORES IN 1919 (REPAIRS SEPARATED)

Net Sales = 100%

	Lowest	Highest	Common
Wages of Salesforce	4.3 %	14.6 %	8.5 %
Advertising	..	12.3	2.0
Boxes, Wrappings, and Other Selling Expense	0.2	2.9	0.9
Total Selling Expense	6.6	20.8	11.6
Delivery Expense	..	1.0	0.3
Buying, Management, and Office Salaries	2.3	17.4	4.9
Office Supplies, Postage, and Other Management Expense	0.1	1.9	0.6
Total Buying and Management Expense	2.6	17.4	5.6
Rent	0.8	10.7	4.0
Heat, Light, and Power	0.1	1.6	0.6
Taxes (Except on buildings, income, and profits)	0.02	2.1	0.6
Insurance (Except on buildings)	0.04	1.4	0.6
Repairs of Store Equipment	0.02	1.8	0.5
Depreciation of Store Equipment	0.03	2.0	0.5
Total Interest	0.9	12.1	4.6
Total Fixed Charges and Upkeep Expense	4.2	22.2	11.6
Miscellaneous Expense	0.2	4.6	1.9
Losses from Bad Debts	..	2.4	0.3
Total Expense	17.9	50.5	32.3

Stores keeping separate repair accounts were divided into two groups, those with sales less than $50,000 and those with sales of $50,000 or more. Figures for the two groups were tabulated separately and common figures determined independently. When the stores were thus divided, however, the

number of reports for each group (fifty-five for small stores, forty-five for large stores) was so small that the common figures were not so reliable as when all the statements were considered together. Consequently, the returns from all stores keeping separate repair accounts were combined in the table on page 11. On some points reference will be made to comparative figures for large and small stores with the understanding that the figures are not so reliable as those for all stores combined. In every item the common figure for all stores lay between the common figures for large and for small stores. For example, total expense for small stores was 33.9 %, for large stores 30.2 %, and for both combined 32.3 %.

Total Expense

For the year 1919 total expense in the one hundred retail jewelry stores varied from 17.9 % to 50.5 % of net sales, with a common figure of 32.3 %. This figure for total expense includes all expenses that properly may be charged against the cost of operating a store. It represents the cost of doing business. Some items overlooked by many jewelers were salary of proprietor, rent where building was owned, depreciation of equipment, and interest on the net investment in the business. No statements were used in this final tabulation, however, which did not include all such expenses; all reports were adjusted to the standard profit and loss form. As the excise tax was in all cases deducted from gross sales, it was not included in operating expense. As noted above, the tendency was for total expense, in percentage of net sales, to be somewhat lower in large stores than in small ones.

Reports for 1919 showed that the retail jewelry business was more expensive to operate than any of the other businesses that the Bureau has studied. The common figure for total expense in retail drug stores in 1919 was 27.6 %; in retail shoe stores 24 %; in retail hardware stores 21 %; while in retail grocery stores the common figure was only 14.6 %. Some

of the reasons why the stores in other trades were able to operate with a smaller percentage of expense are brought out in the discussion of individual expense items.

Selling Expense

The heaviest single item in the expense of operating a retail jewelry store ordinarily is wages of salesforce. This includes wages and bonuses paid to salespersons, and a part of the wages of repair men and of the proprietor's or partners' salaries proportionate to the time spent by them in selling. The common figure in 1919 for wages of salesforce was 8.5 % of net sales, while the range was from 4.3 % to 14.6 %. From a separate tabulation it appeared that the large stores paid 1.5 % less, in percentage of net sales, for this item than was paid in the stores with annual sales less than $50,000 in 1919.

The Bureau found it almost a universal custom for jewelers to pay their salesforce on a regular wage basis, though a few supplemented wages with a bonus system. In one instance the entire salesforce was paid on a straight percentage-of-sales basis. Much difference of opinion was found as to the advisability of using the time of repair men for selling. The general practice seemed to be to have as few repair-department employees as possible located where they would be interrupted to wait upon customers. However, the Bureau received a report from one store in the Middle West doing an annual business of about $60,000 where the repair men were the only salesmen in the store. The proprietor asserted that by this arrangement his salesforce was never idle, waiting for customers, since there was always work to be done at the bench, and that, even though it necessitated a slightly larger repair force, it was more economical. He showed a reasonable profit on his repair department, and his estimated salesforce expense was 5.9 %.

It is important for every retail jeweler to know the average amount of merchandise sold annually by each salesperson.

Seventy-two retailers who kept separate merchandise and repair accounts submitted reports from which it was possible to determine this figure, with due allowance for the time of proprietor or partners spent in selling, for time of extra salespersons at Christmas, and for time spent by other employees in selling. The common figure for these stores was $18,000 average annual sales per salesperson, with a range from $7,000 to $34,000. There was a marked difference between large and small stores; $13,000 was the common figure for stores with annual net sales less than $50,000 as compared with $23,000 for stores doing a business of $50,000 or more yearly. Only one small store reported average annual sales per salesperson higher than the common figure for large stores, and only one large store fell below the common figure for small stores. This shows clearly why the larger firms effected a saving in salesforce expense even though they paid salesmen salaries that probably were higher than those prevailing in smaller stores. The Bureau found that, as a rule, the larger stores kept accurate records of sales per salesperson showing the total amount sold by each, month by month and year by year. Such a record indicated the relative efficiency of the various employees in the sales department, and thus served as a valuable guide when the management had occasion to consider salary increases or bonus payments. The proprietors of many stores who now have no accurate means of knowing the amount of goods sold by each employee may find such a record of value in suggesting means of increasing the efficiency of the salesforce, thereby cutting down the selling expense.

The Bureau found that wages of salesforce was practically the same percentage of net sales in the jewelry business as in the retail shoe trade, though higher by 2.3 % than the common figure found in hardware stores, 3.6 % more than in the retail grocery business, but 3.5 % less than the common figure for this item in retail drug stores.

Advertising expense ranged as high as 12.3 %, with a common figure of 2 %. Answers to the question on the distribution of advertising expense were received from one hundred ten stores, some of which did not keep repairing and engraving accounts separate. These replies indicated that newspapers were the medium most commonly employed by jewelers. All but five of those who did any advertising used newspapers; thirteen used nothing else. Commonly 80 % of the publicity expense of these stores went into this form of advertising. Forty-one of the stores reporting sent out circular letters to their customers; commonly 15 % of their advertising expenditure was used in this way. Only ten stores advertised in street cars and they used about 10 % of their total advertising appropriation for this purpose. Two stores, however, placed two-thirds of their advertising in this form. Other means of reaching the public were employed by eighty-two of the one hundred ten stores, but the proportion of their total advertising budget devoted to any one of these mediums was relatively small; 20 % of the total was the common figure for all the other forms of advertising combined.

Boxes, Wrappings, and Other Selling Expense

This was the only item for which the large stores in 1919 tended to spend slightly more than the smaller establishments. The common figure for all stores was 0.9 %.

Total Selling Expense

This expense includes payment for wages of salesforce, advertising, boxes, wrappings, and other selling expense. The 1919 range for total selling expense was from 6.6 % to 20.8 %, with a common figure of 11.6 %.

Buying and Management Expense

Total buying and management expense in 1919 amounted to approximately one-sixth the jeweler's total operating

expense. The common figure was 5.6 % of net sales—4.9 % for salaries of office force and executives, and 0.6 % for supplies, postage, and other office expense. Here again the large stores, as a rule, apparently operated to somewhat better advantage than shops having a smaller volume of business, the difference being a little over 1 %.

Fixed Charges and Upkeep Expense

Rent and interest are the two most important items in this group. The common figure for rent in 1919 was 4 % of net sales, for interest 4.6 %. Rent varied from 0.8 % to 10.7 %, and the range for total interest was from 0.9 % to 12.1 %. The reports showed rents higher in proportion to volume of business in the retail jewelry trade than was the case in other businesses that the Bureau has studied. This was to be expected for two reasons. In the first place, the jeweler's location frequently must be an expensive one. One jewelry store serves a much larger population or territory than does a grocery store with the result that the jewelry store must be more centrally located. This means higher rent. Then also jewelry requires relatively greater floor space than hardware, shoes, or groceries, since the stock carried is of wide variety and must have liberal display space in order to attract the attention of customers, many of whom come into the store with no definite idea of what they intend to buy.

A comparison of rent figures for 1919 in various retail trades showed 4 % for jewelry stores, 2.8 % for drug stores, 2.3 % for shoe stores, 1.7 % for hardware stores, and 1.1 % for grocery stores.

Rent expense, in percentage of net sales, was generally less in jewelry stores doing an annual business of $50,000 or over than in stores having an annual volume of sales below $50,000. To a certain extent this difference may be accounted for by the greater proportion of space devoted to the repair department in some of the small stores. Yet it is significant

that there was a distinct group of stores doing an annual business of more than $50,000 that spent only from 2% to 2.5% for rent. The firm reporting the lowest rent, however, 0.8% of net sales, was a small store located in a single room on an upper floor of an office building in a large city. This merchant did a big business in his small quarters by turning his stock 2.2 times per year.

Further comparison showed that in cities of over 50,000 population the common figure for rent was 4.1% of net sales, while in cities and towns having less than 50,000 inhabitants it was 3.4%.

Total interest includes interest on capital-owned as well as interest on capital-borrowed. In arriving at the cost of doing business total interest is an important figure to consider. The Bureau found many cases in the jewelry trade, as in other businesses, where the owner was satisfied with the returns from his store until an analysis of his profit and loss statement showed that he had not figured interest on his investment as a part of his expense, and that, as a matter of fact, his net return from the store was less than he would have received in interest had he invested the same amount of capital in reliable securities. It is, moreover, obviously impossible to compare the expense figures of a firm doing business on its own capital with those of a firm that has to borrow much of its money from a bank, unless interest is computed on the total amount invested in the business regardless of whether it was borrowed or owned by the proprietor or partners. Hence, for those reports that gave no figures for interest on capital-owned, the Bureau computed interest at the local rate on the net worth of the business, as determined from the balance sheet figures submitted by the retailer. This amount was added to expense as one of the fixed charges. The inclusion of interest on capital-owned as an expense had no effect, of course, on the final net return to the owner, since the same amount was credited back to the business through the Interest

and Rentals Earned account. The common figure for total interest, 4.6% of net sales, was somewhat higher than that found in other trades studied. This difference may be attributed to the relatively greater investment required to finance a jewelry store, the highly seasonal nature of sales, and the slower rate of stock-turn.

Miscellaneous Expense

In 1919 this item, which includes all expenses not otherwise accounted for, varied from 0.2% to 4.6%, with a common figure of 1.9%. The Bureau found that many jewelers had in the past lumped practically all their expenses under this heading, with the result that they were unable to determine just where their money was going and thus were not in a position to stop the small leaks which, combined, sometimes resulted in a net loss for the year. These retailers found it increasingly difficult to make out an income tax statement which was acceptable to the government. Under the Bureau's classification miscellaneous expense is kept relatively small and economies in the individual expense items can be more easily introduced.

Losses from Bad Debts

This account showed 0.3% as a common figure, with a range as high as 2.4%.

STOCK–TURN

Cost of merchandise sold divided by average inventory of merchandise gives the rate at which stock has been turned during the year. It would be desirable to have monthly figures from which to determine the average inventory, but, since this is possible only in stores which maintain perpetual inventories, an approximate average was obtained from the inventories of merchandise at the beginning and end of the year. The common figure for stock-turn in retail jewelry

stores in 1919 was 1.1 times a year, which is considerably lower than the common figures in other trades studied by the Bureau. For retail shoe, hardware, drug, and grocery stores, the average stock-turn in 1919 was, respectively, 1.8, 2.1, 2.3, and 8.3 times a year.

In the stores in which the rate of stock-turn was high, total expense ordinarily tended to be less, in percentage of net sales, than in stores that had a low rate of stock-turn. Total interest, particularly, was closely related to stock-turn. With the rapidity of turnover increased by careful buying and management, less capital ordinarily was required to operate a store, and hence a smaller expense incurred for interest. The following table gives the common figures for interest for stores with high, average, and low rates of stock-turn.

Stock-turn	Common figure for interest
Below 0.9 times a year	5.9 % of net sales
0.9 to 1.3 times a year	4.5 " " "
1.3 times a year and over	3.3 " " "

The store which reported the lowest stock-turn in 1919, 0.3 times, had the heaviest charge for interest, 12.1 %.

A high rate of stock-turn was somewhat more general among stores with a large volume of business than among small stores. Nevertheless, this should not be taken as indicating any inherent reason why a large store could more readily secure a high rate of stock-turn, for there was a distinct group of large stores with a stock-turn of only 0.8 times a year, and, on the other hand, there was an equally marked group of small stores with a stock-turn of 1.5 times. With more attention to buying and to the management of their businesses, many proprietors of small jewelry stores should be able to increase their rates of stock-turn, decrease their expenses, and obtain more satisfactory net profits.

PROFIT

Gross profit is the difference between cost of goods sold and net sales. In 1919 it varied from 20.1 % to 56.6 % of net sales, with a common figure of 40.1 %. This gross profit was equivalent to 66.8 % on the cost of goods sold, and did not include the 5 % Federal excise tax on selling price.

Net profit is the amount that remains after all expenses, including salary of proprietor, rent of the store whether owned or leased, and interest both on owned and borrowed capital, have been deducted from gross profit. It is the reward the proprietor receives for assuming the risks of carrying on the business and especially for exercising good judgment in the management of the business. It is not a return upon investment for that is covered by interest on capital, which is included in expense.

The highest net profit reported was 22.6 %, while the common figure was 7.6 % of net sales. This common figure was 1.3 % higher, in percentage of net sales, than the common figure in the retail drug trade in 1919, 1.8 % higher than in hardware stores, 5.6 % higher than in retail grocery stores, but 1.4 % lower than in the case of shoe retailers. Ten stores reported a net loss from store operation for the year. In several of these stores the losses were due apparently to excessively high expenses. In others an analysis of the profit and loss statements showed that the percentages for gross profit were considerably below the common figure. This seemed to indicate that in such cases the probable direct cause of loss was the jeweler's ignorance of how much it cost him to handle merchandise, or how to place an adequate mark-up on his goods. It is quite possible that some of these jewelers figured their total expense on selling price, added a net profit, and applied the resulting percentage to the *cost* of new goods as mark-up. To take a specific example, one store showed a total expense of 33 % of net sales. The proprietor evidently thought he should

make about 12 % net profit and placed a 45 % mark-up on his merchandise. He had figured his total expense, however, as a percentage of net sales and then had used the same percentage applied to the *cost* price of new goods in figuring his mark-up. Since he failed to realize that 45 % added to cost is only 31 % of the resulting selling price, he was actually losing 2 % on every sale. Transposed into dollars and cents, this meant that if an article cost this jeweler $69.00 and he marked it up 45 % on the cost, the selling price was $100.00 and his mark-up of $31.00 was only 31 % of the selling price. Hence, if his operating expenses were 33 % of net sales, he had a loss of $2.00 on this sale. Gross profit and operating expenses must both be figured on the same basis in order to secure a proper guide for determining mark-up and for showing the need for economy in operating expenses.

REPAIRING AND ENGRAVING

Taking total receipts from repairing and engraving as a basis, or as 100 %, the Bureau found that the common figure for total expense in this department was 71.1 % of receipts, which left a net profit of 28.9 %. The tendency seemed to be for small stores to show a somewhat higher net profit from repairing and engraving than large stores. Salaries and wages of repair men showed a common figure of 49.9 % of total repair department receipts.

Although these figures indicate a high net profit from the operation of this department it must be remembered that no expense for fixed charges and no buying and management expense were charged against it. The Bureau recognized this difficulty when the accounting system for retail jewelers was first drawn up, but at the same time it realized that it would be inadvisable to publish a more complicated system. The allocation of buying and management expenses and of fixed charges and upkeep expenses between the merchandise de-

partment and the repair department would have called for a greater refinement of accounting practice than the average jeweler was then prepared to undertake. Though the desirability of such a division of expense was obvious, the Bureau felt that, for the time being at least, it was better to charge repairing and engraving only with direct expenses and such proportions of salaries of proprietors and employees, based upon time spent in that work, as could readily be determined from the records of the average jeweler. There is a distinct difference in functions, operations, and costs between store and shop, so that it is essential that separate accounts be kept for the two in so far as that is practical. The Bureau believes that the degree of separation which it has made is entirely feasible even for the smallest stores.

An analysis of the reports showed that receipts from repairing and engraving departments in 1919 averaged between 14 % and 15 % of receipts from the sales of merchandise. By combining net receipts as well as net profits from both departments — merchandise and repairing and engraving — the Bureau found that the common figure for combined net profit to jewelers from the sale of merchandise and from the repair department was 10 % of total combined receipts.

A number of the jewelers who were operating their merchandise departments at a loss had repair department profits large enough to offset their loss on merchandise, thus enabling them to show some profit for the year on the combined net return from store and shop.

CASH DISCOUNTS

Seventy-seven jewelry stores whose expense figures were used in the tabulations reported cash discounts taken. The common figure for this item was 2.3 % of the cost of merchandise purchased, ranging from 0.7 % to 5.1 %. In approximately one-quarter of these stores cash discounts taken were between 0.7 % and 1.7 % of purchases; in one-half they were

between 1.8% and 3.4%; and in one-quarter between 3.5% and 5.1%. These figures seem to indicate that many jewelers, both large and small, did not take full advantage of this opportunity for decreasing their costs. A cash discount not taken increases the cost of merchandise and correspondingly reduces profits. It usually is of advantage to a merchant to borrow money from a bank, if necessary, in order to take advantage of cash discounts on purchases. For example, money borrowed by a retailer for three months even at 8% per annum requires an interest payment of only 2%. If the retailer borrows at this rate to take advantage of a 4% cash discount offered by a manufacturer or wholesaler, he saves 2% on the net cost of his purchases. Even if he is unable to take up his note until the end of six months, he is still as well off as if he had failed to take the discount when offered.

INVENTORIES

In the retail jewelry stores reporting to the Bureau, inventories at the end of the 1919–20 fiscal year showed an average increase of 34.5% over the beginning of the year. Whether this was due entirely to the rise in prices of merchandise purchased, or partly to that and partly to rapid growth and expansion in these stores, the Bureau could not determine in the absence of index prices for the jewelry trade such as are published by the government for food stuffs and some other staple commodities. It seems probable that both factors contributed to the result.

It is worth noting that whereas the average increase in inventories in the jewelry business was 34.5% in 1919, the average increase in retail shoe store inventories amounted to 32.4%, and inventories in retail grocery stores showed an average increase of only 13.1%, in retail hardware stores 8.7%, and in retail drug stores 5.6%.

FINANCIAL FIGURES

From the financial statements for the past fiscal year included in the reports received from eighty-nine jewelers whose expense figures were used in the tabulations, the Bureau worked out comparisons of the ratio of current assets to current liabilities. In 3 % of these stores current assets and current liabilities were approximately equal; in 17 % assets were over forty per cent greater than current liabilities but not twice as great; in 20 % the ratio was from 2 to 2.9; 14 % showed current assets 3 to 3.9 times as large as current liabilities; and in 46 % of the stores current assets were more than 4 times as large as current liabilities. Evidently the large majority of these stores were in a fairly strong financial position.

The relation of accounts and notes receivable to average monthly sales also was worked out. About half the stores reporting closed their books between the first and the fifteenth of January, at which time their receivables were naturally heavier than would have been shown at a subsequent date. In 27 % of these stores the amount outstanding in accounts with customers was smaller than average monthly sales; in 34 % the ratio was from 1 to 1.9; and in 39 % receivables were from 2 to 10 times as large as average monthly sales. The remaining half of the stores reporting closed their books at times other than the first of the year. Of this group 43 % reported accounts and notes receivable less than average monthly sales; 34 % had receivables larger than average monthly sales but not twice as large; and in 23 % of these stores they were more than twice average monthly sales. The heavy peak load of December trade was evident.

In this connection a study also was made of the amount of credit business handled by jewelry stores. The table given below shows the grouping of stores according to proportion of

credit sales, from the strictly cash stores to one store which reported 95 % of its sales as charge accounts.

Percentage of Credit Sales to Total Sales	Number of Stores
Strictly cash business	3
Less than 10 %	14
10–19	17
20–29	13
30–39	8
40–49	10
50–59	5
60–69	5
70–79	3
80 and over	1

Two stores each doing a business of over $50,000 reported credit sales less than 10 % of their total sales, but the average volume of sales in stores doing 90 % or more cash business was about $25,000. On the other hand, three small stores reported credit sales in excess of 50 % of total business, though the average volume of annual business handled in stores where charge sales amounted to at least one-half of the total sales was something over $180,000. The Bureau found that the common figure for per cent of total sales carried on charge accounts was 35 % in stores doing an annual business of $50,000 or more as compared with 15 % in stores having a smaller volume of sales.

Further tabulations showed that when accounts and notes receivable were less than average monthly sales, total interest and losses from bad debts were somewhat lower than in stores where accounts and notes receivable were more than average monthly sales. This comparison was based upon figures of all stores reporting accounts and notes receivable, regardless of when their books were closed. The combined saving on the interest and bad debt items in stores with a low ratio of receivables to monthly sales amounted to approximately 0.9 % of net sales.

Ratios were also worked out to show the relation of accounts and notes payable to average monthly purchases. Here again, since about half the stores reporting closed their books at the first of the year when payables were heavy,[1] the reports were divided into two groups. It was found that of the stores that closed their books at other times than the first of the year 16 % reported accounts and notes payable less than average monthly purchases; in 25 % the ratio was between 1 and 1.9; in 10 % it was from 2 to 2.9; and in 49 % of these stores payables were more than three times monthly purchases. Of the stores which closed their books between the 1st and the 15th of January only 7 % reported accounts and notes payable less than average monthly purchases; 23 % showed a ratio of 1 to 1.9; 18% had payables from 2 to 2.9 times as large as monthly purchases; and more than half of these stores (52 %) owed for three or more times as much as they usually purchased per month. Even though a considerably larger proportion of the stores in the former group had accounts and notes payable amounting to less than their average monthly purchases, yet the number carrying payables more than three times as great as average monthly purchases was not materially less, 49 % as compared with 52 %. It was evident from these figures that wholesalers and manufacturers were financing the retail trade to a heavy extent, while, as shown above, the retailers in turn were carrying many long-time charge accounts with customers.

[1] The credit terms given in the wholesale jewelry business are explained in the *Federal Reserve Bulletin*, October, 1920, pp. 1032–1033.