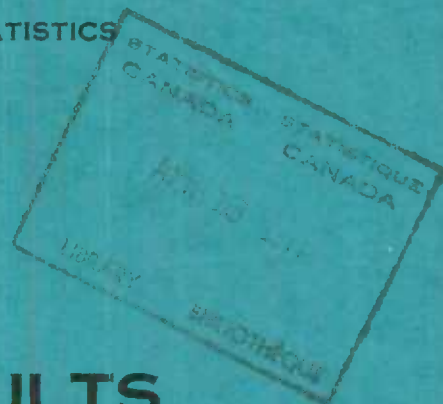


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OTTAWA, CANADA



OPERATING RESULTS

OF

RETAIL FILLING STATIONS

AND

GARAGES

1946

BULLETIN NO 6



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DEFINITIONS.....

NET SALES represent the real volume of business done. Allowances and discounts granted to customers and value of goods returned by customers are deducted from gross sales, but sales of meals or lunches provided employees and any goods withdrawn by the proprietor for personal use are included.

GROSS MARGIN is the difference between the cost of merchandise sold and the selling price. The cost of merchandise sold is calculated by adding the beginning inventory to net purchases and deducting the ending inventory.

OPERATING EXPENSES are the amounts paid out for any and all expenses incurred in the operation of a business, except the cost of merchandise. These include:

Salaries and wages - paid to employees before deduction of income taxes or unemployment insurance. Proprietors' salaries or withdrawals are included in Net Profit.

Advertising

Store supplies - used in the business during the year - wrapping paper, office supplies, gasoline and oil for delivery trucks.

Loss on bad debts - during the year - amount written off
Less debts which are recovered.

Taxes and Insurance - business, property and water taxes, licences including truck licences, and insurance premiums carried for the protection of the business. Income taxes and other taxes collected for remittance to governmental bodies are not included.

Rentals - monies paid for premises used only in the business.

Heat, light and power expenses - amount paid for these used during the year.

Repairs and maintenance - incurred for the purposes of keeping fixed store assets, including delivery equipment, operating efficiently.

Depreciation - allowances to cover decreases in the value of fixed store assets, including delivery equipment.

Occupancy expense - comprises taxes and insurance, rent, heat, light and power, repairs and maintenance, and depreciation.

Other expenses - telephone, telegraph, postage, bank charges, legal fees, collection and auditing fees, etc.

NET PROFIT is the difference between gross margin and total expenses, and includes proprietors' salaries and withdrawals.

STOCK TURNOVER is the number of times in a year that the merchandise is sold and replaced. The average of the beginning and year ending inventories is divided into the cost of merchandise.

DOMINION BUREAU OF STATISTICS
MERCHANDISING AND SERVICES STATISTICS
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OPERATING RESULTS OF FILLING STATIONS AND GARAGES

INTRODUCTION

The operating results of retail filling stations and garages in 1946 are presented in this report, which continues the series of bulletins published for 1944 and 1945. The survey is based upon operating statements contributed by a sample of firms throughout the country. The sample included only unincorporated independent filling stations and garages.

Results of the two types of business are grouped to provide a composite picture of the trade. Tables and charts illustrate, clarify and facilitate understanding of the text. It is hoped that operators, students, and others, will consult these reports as sources of reference and information.

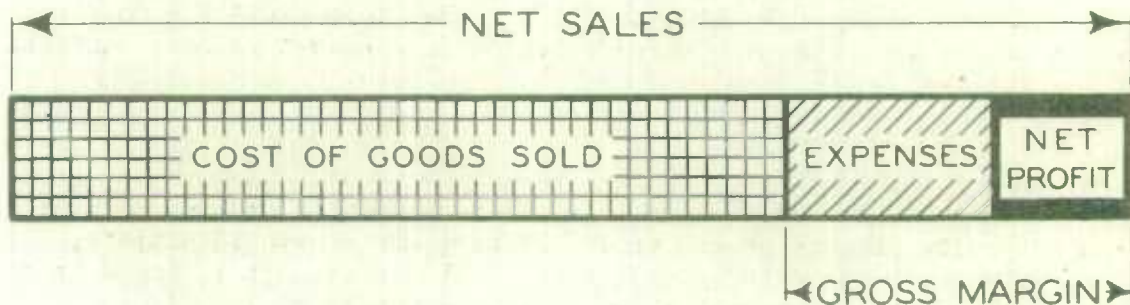
Once each year, at least, the operator must come to grips with the task of reviewing his operations, and calculating his expenses and profits. At the same time he may make plans for the coming months, applying his knowledge, experience, and personal observations to increase the efficiency of his business. This bulletin has been prepared for the purpose of augmenting the operator's experience with data which describe the operations of his own type and size of business.

Our studies do not attempt to deal with such matters as store layout, advertising display, and salesmanship, which may be called methods of operation. The emphasis here is upon operating results, comparisons of profit and loss statements and their component parts.

The necessity of maintaining some orderly system of book-keeping cannot be over-emphasized. If some method of current record keeping is not employed, it is difficult to compare individual operations with average experience as shown in this study. It is essential that the meanings of terms be checked in such comparisons. For this purpose a list of definitions has been inserted at the beginning of this bulletin.

The component parts of operating ratios are graphically portrayed in the following formula and bar chart:

$$\text{NET SALES} = \text{COST OF GOODS SOLD} + \text{GROSS MARGIN}$$



$$\text{GROSS MARGIN} = \text{EXPENSES} + \text{NET PROFIT}$$

HIGHLIGHTS AND SUMMARY IN 1946.....

- The increase in salary expense of filling stations and garages in recent years has been accompanied by somewhat lower net profit percentages for the year 1946.
- A considerable increase in dollar volume of sales in filling stations has occurred since 1944 and 1945 while garages averaged only slightly higher in 1946 than in the previous year.
- While net profit ratios dropped off slightly, the spurt in dollar volume of business transacted gave proprietors substantially greater returns in dollars.

FILLING STATIONS

1. In 1946, filling stations operated on an average gross margin of 18.2 per cent of net sales, slightly wider than the 1945 gross margin of 17.9 per cent and considerably better than the 16.5 per cent margin of 1944. Increased expenses, especially in salaries paid employees, more than balanced the gain in gross margin to leave a net profit of 6.7 per cent in 1946, a ratio lower than the two previous years. (See Table 1, page 6).
2. While no definite trend was evidenced in 1946 in the ratios of gross margin to net sales over the different size ranges, net profits decreased in percentage with volume of business. Reflecting the trend of salaries, total expense ratios increased with sales volume in both owned and rented stores. (See Table 3, page 12).

5. Filling stations operated from rented premises obtained wider gross margins than did those operating from owned premises. Salaries and occupancy expenses in rented businesses, however, were generally greater to offset the advantage in gross margin. (See Table 3, page 12).

TABLE 1. - OPERATING RESULTS OF FILLING STATIONS - 1944, 1945, 1946

Item	1944	1945	1946
Number of stations reporting	241	515	479
Average net sales \$	22,904	32,492	42,279
Gross margin	16.5	17.9	18.2
Operating expenses:			
Employees' salaries and wages	3.7	5.0	6.0
Advertising		0.2	0.2
Store supplies		0.7	0.7
Bad debts	3.5	0.1	0.1
Occupancy expense		3.7	3.4
All other expenses		1.1	1.1
Total operating expenses	9.2	10.8	11.5
Net profits before deduction of proprietors' salaries and income tax	7.3	7.1	6.7

(Items expressed as percentages of net sales)

GARAGES

1. Very little change took place in the gross margin ratio of the average garage in the group sampled between 1945 and 1946. The ratios were, 27.7 per cent in 1946, 27.9 in 1945, and 26.7 per cent in 1944. Salary expense increased in 1946 to net a reduced profit of 8.8 per cent compared with one of 9.3 per cent in 1945. (See Table 2, below).
2. The gross margin ratio was irregular in 1946 over the size classes shown. Net profits followed an even trend of decreasing ratio as volume of business expanded. Salaries were much greater proportionately in the larger stores and accounted for a trend in total expense ratio increasing with sales volume. (See Table 4, page 15).

TABLE 2. - OPERATING RESULTS OF GARAGES - 1944, 1945, 1946

Item	1944	1945	1946
Number of garages reporting	165	240	287
Average net sales \$	25,769	34,525	36,136
Gross margin	26.7	27.9	27.7
Operating expenses:			
Employees' salaries and wages	9.1	10.0	10.9
Advertising		0.3	0.3
Store supplies	8.6	1.0	1.1
Bad debts		0.2	0.3
Occupancy expense		5.1	4.6
All other expenses		2.0	1.7
Total operating expenses	17.7	18.6	18.9
Net profits before deduction of proprietors' salaries and income tax	9.0	9.3	8.8

(Items expressed as percentages of net sales)

OPERATIONS OF FILLING STATIONS AND GARAGES.

GROSS MARGIN AND NET PROFIT

Gross margins in filling stations, while less than the 1938 ratio, have increased moderately since 1941 to a ratio 18.2 per cent of net sales in 1946. Net profits were highest in 1944 and in the post-war period seem to be reverting to the pre-war levels. Garages have disclosed much the same trend in operations. Gross margins were greater in 1946 than in 1944 but were still below the 1938 level. Net profit ratios have decreased from the higher levels obtained in 1944 and 1945. Because of the greater service factor, garages operated on wider margins than did filling stations - 27.7 per cent and 18.2 per cent respectively.

GROSS MARGIN AND NET PROFIT - 1938, 1941, 1944, 1945, 1946

Year	FILLING STATIONS		GARAGES	
	Gross Margin	Net Profit	Gross Margin	Net Profit
1938	21.6	6.2	33.1	5.7
1941	16.9	6.6	(not available)	
1944	16.5	7.3	26.7	9.0
1945	17.9	7.1	27.9	9.3
1946	18.2	6.7	27.7	6.8

AVERAGE SALES, STOCK-SALES RATIOS, STOCK TURNOVER:

The average net sales of filling stations increased considerably from \$27,141 in 1938 to \$42,279 in 1946. The greatest change took place between 1944 and 1946 where the cause was no doubt partly due to the termination of gasoline and tire rationing. Garages on the other hand, were more moderate in sales growth.

Because of the nature of the main commodity handled, filling stations effected a quick turnover of merchandise - 26.3 times per year as compared to a rate of 11.4 times in garages. Coupled with the accelerated turnover rate, inventories on hand in filling stations at the beginning or end of any year at no time exceeded 4.0 per cent of net sales during the year. The stock held by garages ranged between 5.6 and 7.7 per cent of annual net sales over the years on which such information is available.

AVERAGE SALES, STOCK-SALES RATIOS, STOCK TURNOVER -

1938, 1941, 1944, 1945, 1946

Year	FILLING STATIONS				GARAGES			
	Average net sales	Inventory % of net sales		Stock turn-over	Average net sales	Inventory % of net sales		Stock turn-over
		Begin-ning	End-ing			Begin-ning	End-ing	
1938	\$ 27,141	3.6	3.6	21.8	\$ 25,798	6.6	6.7	9.9
1941	29,704	2.7	3.1	28.9	(not available)			
1944	22,904	2.9	3.2	27.5	25,769	6.8	7.7	10.1
1945	32,492	3.2	3.9	23.1	34,525	5.7	6.9	11.4
1946	42,279	2.8	3.4	26.3	36,136	5.6	7.1	11.4

GENERAL DISCUSSION, TABLES AND CHARTS.

1. FILLING STATIONS

Filling stations are engaged principally in selling gasoline and oil, accessories, tires, and tubes. To remain in this classification, repairs cannot form more than 25 per cent of net sales and gasoline and oil must account for 75 per cent of total merchandise sales. The results of 479 independent unincorporated filling stations were used in this study. When classified by size of business and occupancy, there were too few establishments in owned premises with net sales over \$100,000 and in rented premises with sales less than \$10,000 to warrant publication.

Trends by Size of Business (Table 3, page 12)

Gross margins in both owned and rented filling stations in 1946 fluctuated between close limits over the size categories shown - from 17.1 to 18.7 per cent of net sales with no definite trend. Net profits in owned stations ranged from 10.9 per cent in the smallest size to 6.9 in the largest and from 9.9 to 4.2 per cent in rented establishments, decreasing in ratio with business volume.

The trend of total expenses, increasing in ratio with volume of sales, reflected the pattern of salaries which, on the average, accounted for half the amount of the total. Inventories, while relatively small when compared to other kinds of business, were in greater dollar volume at the end of 1946 than at the beginning. The rate of stock turnover ranged from 13.4 times in the smallest size filling station to 47.4 times per year in the businesses whose sales were over \$100,000.

OPERATING RESULTS OF RETAIL FILLING STATIONS

GROSS MARGIN=NET PROFIT + SALARIES + OTHER EXPENSES

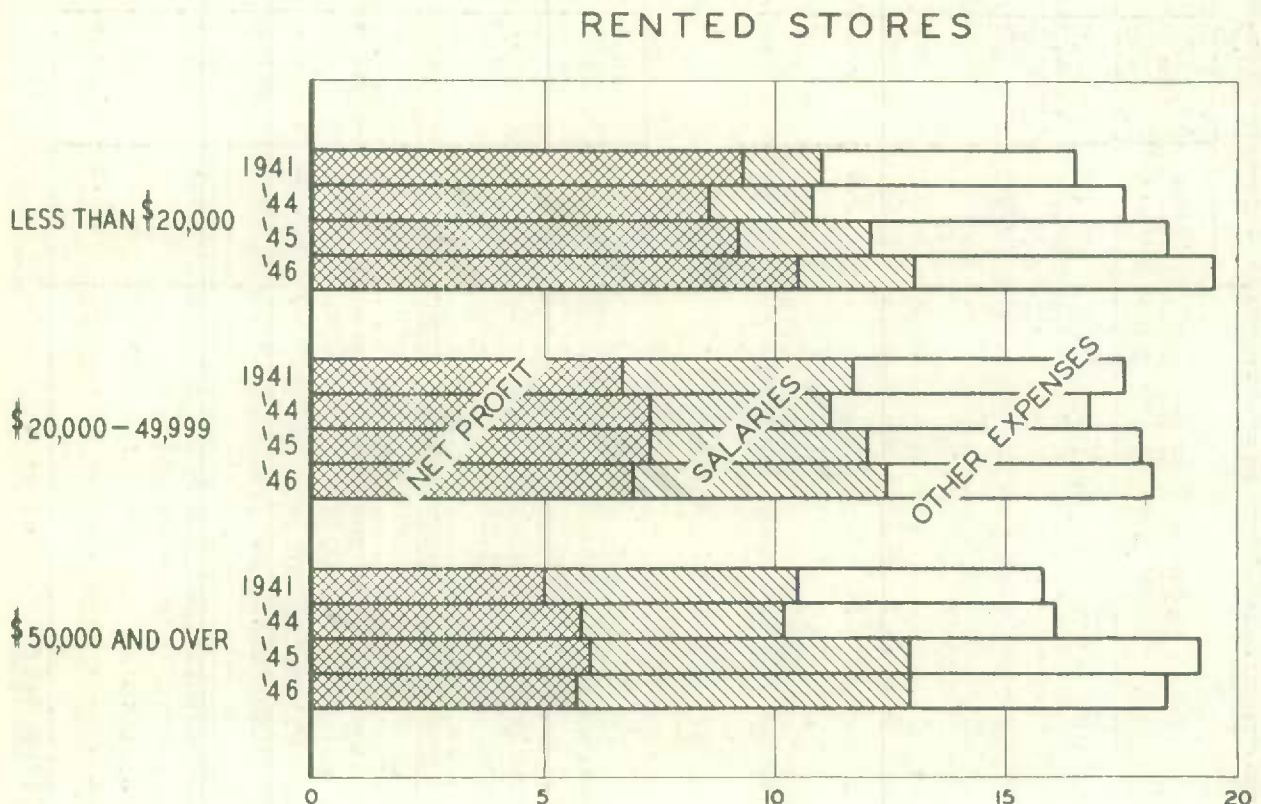
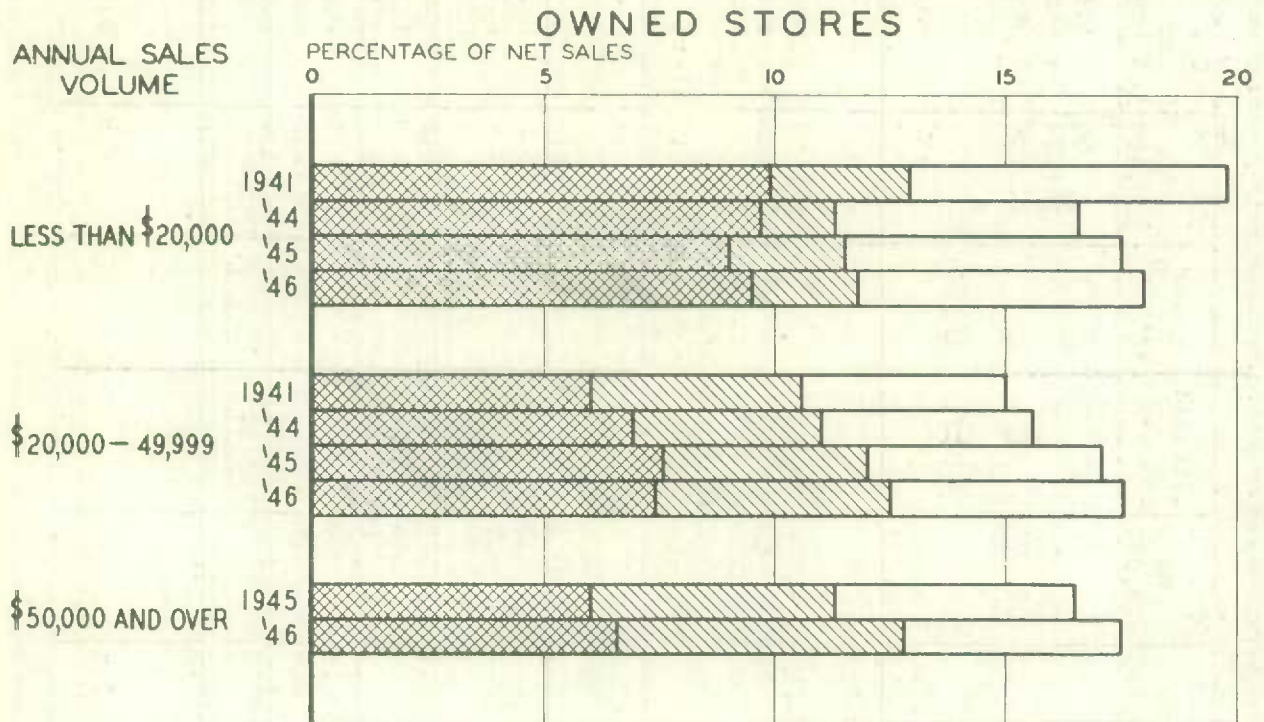


Table 3.--Filling Stations - Operating Results Classified According to Amount
of Annual Sales and Occupancy Basis, Canada, 1946

Item	OWNED STORES					RENTED STORES				
	Under \$10,000	\$10,000 to \$19,999	\$20,000 to \$49,999	\$50,000 to \$99,999	\$100,000 and Over	Under \$10,000	\$10,000 to \$19,999	\$20,000 to \$49,999	\$50,000 to \$99,999	\$100,000 and Over
Number of stations reporting.....	20	46	90	31			32	146	89	15
Average net sales	7,538	18,511	32,034	68,268			16,054	34,663	68,579	136,606
Average cost of goods sold	6,214	12,702	26,387	56,576			13,054	28,369	55,770	111,995
Average inventory beginning of year	408	911	1,195	2,040	SAMPLE	SAMPLE	680	957	1,441	2,061
Average inventory end of year ...	521	965	1,519	2,611			723	1,154	1,786	2,663
Stock turnover (times per year) ...	13.4	13.5	19.4	24.3			18.6	26.9	34.6	47.4
Average net profits	820	1,428	2,380	4,706			1,595	2,379	4,255	5,689
Number of working proprietors	21	50	99	40			35	164	105	16

PROFIT AND LOSS DATA
(Items Expressed as Percentages of Net Sales)

Cross margin	17.6	18.1	17.6	17.1			18.7	18.2	18.7	18.0
Operating expenses:										
Employees' salaries and wages ...	0.2	2.7	5.1	5.7			2.6	5.5	6.9	8.1
Advertising	0.1	0.2	0.2	0.3			0.2	0.2	0.3	0.2
Store supplies	1.2	1.0	0.6	0.7			0.6	0.7	0.6	0.5
Bad debts	0.2	0.1	0.1	0.1	TOO	TOO	0.1	0.1	0.1	(a)
Taxes and insurance	0.8	1.0	0.7	0.6			0.6	0.5	0.5	0.6
Rent	-	-	-	-			1.9	1.8	1.8	2.3
Light, heat, and power	1.5	1.4	0.9	0.6			1.1	0.8	0.6	0.5
Repairs and maintenance	1.0	0.8	0.7	0.4			0.4	0.3	0.3	0.3
Depreciation	0.8	0.9	0.7	0.5			0.3	0.4	0.3	0.3
All other expenses	0.9	0.8	1.2	1.3			1.0	1.0	1.1	1.0
Total operating expenses	6.7	8.9	10.2	10.2	SMALL	SMALL	8.8	11.3	12.5	13.8
Net profits before deduction of proprietors' salaries and income tax	10.9	9.2	7.4	6.9			9.9	6.9	6.2	4.2

(a) Less than 0.05 per cent.

2. GARAGES

Garages used in this survey are those whose total sales comprise more than 50 per cent merchandise sales, and excludes those "service" garages where receipts from repair work predominate. Dealer garages (selling motor vehicles) are also excluded from this study.

Usable reports were received from 287 such garages. When these were classified according to size of business and occupancy, there were too few, both owned and rented, in the size class of \$100,000 sales and over and in rented garages with sales less than \$10,000 to allow presentation of results as representative of the size and occupancy group.

Trends by Size of Business (See Table 4, page 15)

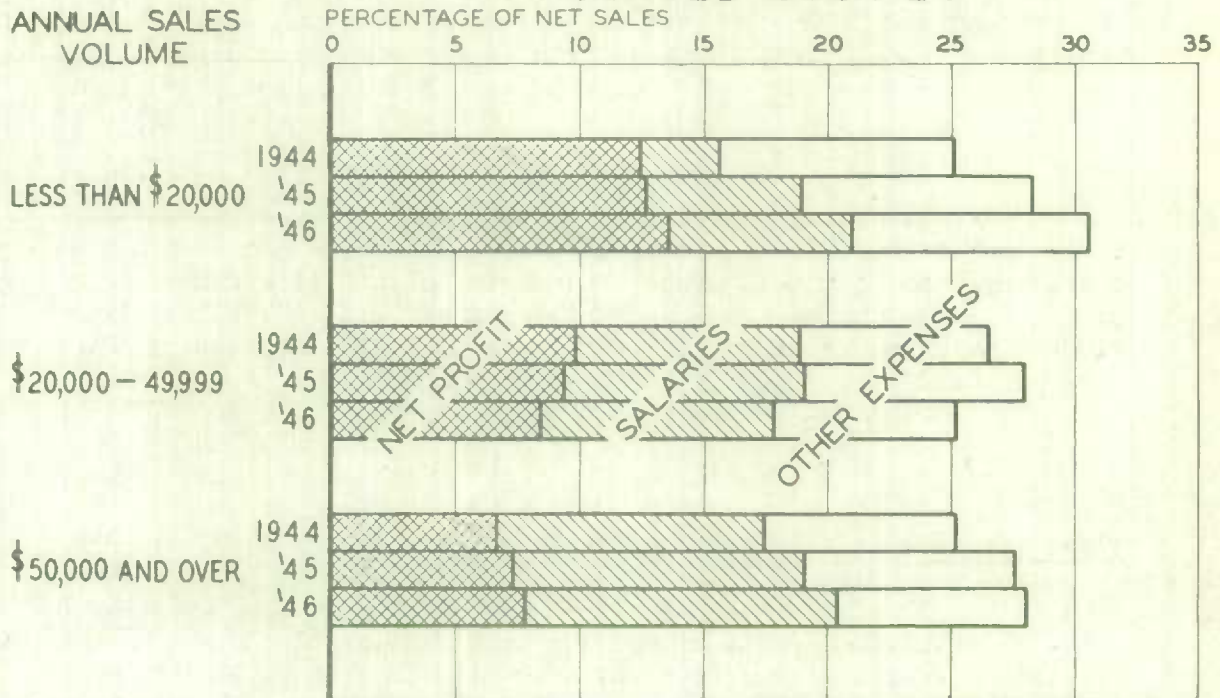
A varying amount of service work, within the limits prescribed for this classification, no doubt accounted for some of the irregularity in the trend in gross margin over the different size categories. Net profit ratios were more consistent in trend, decreasing with greater sales volume. Due to a certain amount of service work, salaries paid to employees in garages were greater in ratio to net sales than most other retail businesses. They ranged from 5.9 per cent in the smallest size garage to 12.8 per cent in the largest. Total expenses were naturally affected by this large salary expense and followed the same trend, increasing in ratio with sales volume.

Stocks on hand at the end of the year exceeded in dollar volume those held at the beginning in each size and occupancy class. The rate of turnover increased from 4.9 times in the smallest size class to 18.5 times per year in the largest size garage.

OPERATING RESULTS OF RETAIL GARAGES

GROSS MARGIN=NET PROFIT + SALARIES + OTHER EXPENSES

OWNED STORES



RENTED STORES

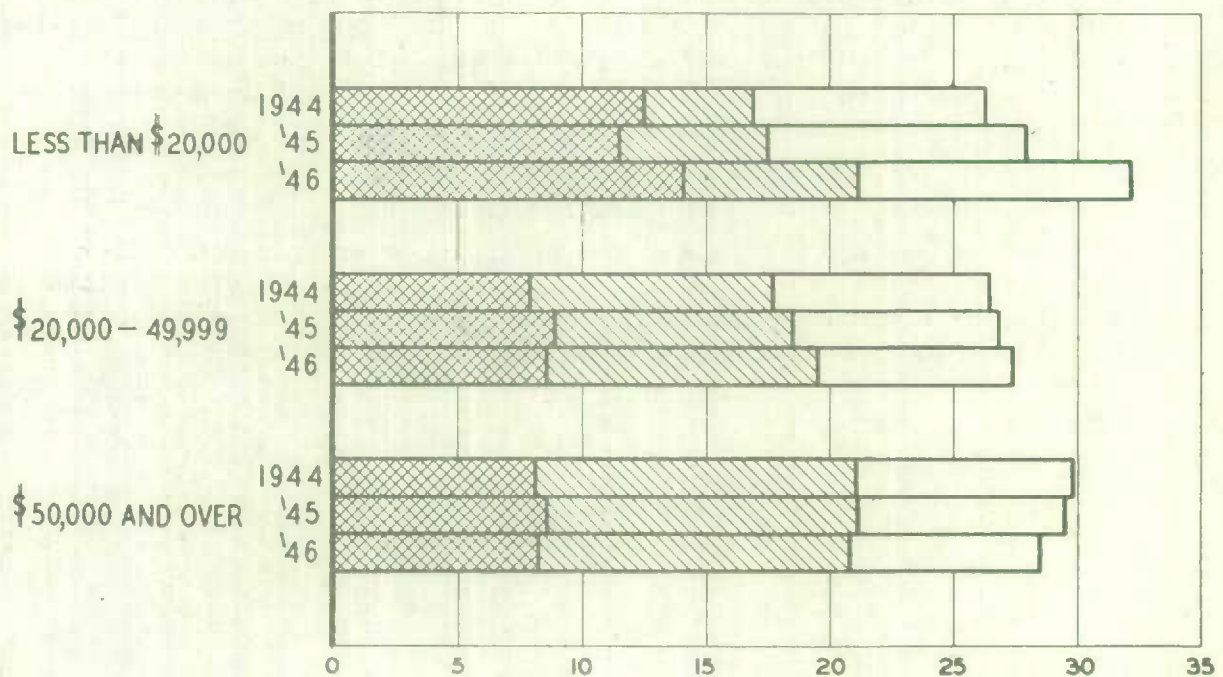


Table 4.--Garages - Operating Results Classified According to Amount
of Annual Sales and Occupancy Basis, Canada, 1946

Item	OWNED STORES				RENTED STORES			
	Under \$10,000	\$10,000 to \$19,999	\$20,000 to \$49,999	\$50,000 to \$99,999	Under \$10,000	\$10,000 to \$19,999	\$20,000 to \$49,999	\$50,000 to \$99,999
Number of garages reporting	30	47	78	24		13	56	28
Average net sales \$	6,851	14,747	31,400	68,046		14,575	34,454	67,165
Average cost of goods sold \$	4,410	10,464	23,472	48,858		9,880	25,021	48,165
Average inventory beginning of year ... \$	809	1,282	2,212	3,968	SAMPLE	1,156	1,649	2,328
Average inventory end of year \$	979	1,608	2,672	4,546		1,666	2,157	2,878
Stock turnover (times per year)	4.9	7.2	9.6	11.5		7.0	13.1	18.5
Average net profits \$	1,270	1,780	2,643	4,896		2,049	2,975	5,880
Number of working proprietors	34	54	92	32		14	70	41

PROFIT AND LOSS DATA
(Items Expressed as Percentages of Net Sales)

Gross margin	35.6	29.0	25.2	28.2		32.2	27.4	28.5
Operating expenses:								
Employees' salaries and wages	5.9	7.8	9.4	12.8		7.1	10.9	12.0
Advertising	0.4	0.2	0.2	0.2		0.1	0.3	0.3
Store supplies	1.8	1.4	1.1	0.9		1.1	1.1	1.0
Bad debts	0.4	0.4	0.2	0.3	TOO	0.3	0.2	0.3
Taxes and insurance	1.6	1.2	1.1	1.1		1.0	0.8	0.9
Rent	-	-	-	-		2.9	1.6	1.7
Light, heat, and power	2.5	1.5	1.1	1.0		1.3	1.0	1.0
Repairs and maintenance	1.5	1.3	0.9	0.8		1.2	0.5	0.6
Depreciation	1.6	1.6	1.2	1.2		1.2	0.8	0.6
All other expenses	1.4	1.6	1.6	1.8		1.9	1.6	1.4
Total operating expenses	17.1	17.0	16.8	20.1	SAMPLE	18.1	18.8	19.8
Net profits before deduction of proprie- tors' salaries and income tax	18.5	12.0	8.4	8.1		14.1	8.6	8.7

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