



*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

## Historic, archived document

Do not assume content reflects current  
scientific knowledge, policies, or practices.



281.9  
A983E Reserve

COMPARISON OF COST STRUCTURES OF FOOD STORES  
AND EATING AND DRINKING PLACES

TRI-AGENCY READING ROOM

MAR 24 1972

500 12th St., SW, Room 505  
Washington D. C. 20250

MARKETING ECONOMICS DIVISION  
ECONOMIC RESEARCH SERVICE  
U.S. DEPARTMENT OF AGRICULTURE

Reprinted From  
The Marketing and Transportation Situation  
August 1970

ERS-455



## COMPARISON OF COST STRUCTURES OF FOOD STORES AND EATING AND DRINKING PLACES

Terry L. Crawford and Leland W. Southard  
Marketing Economics Division

ABSTRACT: Eating and drinking places have increased their dollar share of the total food market. They have a gross margin estimated at  $2\frac{1}{2}$  times that of food stores. Although gross margins for the two differ greatly because of the kinds of functions and services performed, individual operating expenses as a share of gross margin are similar. Labor, the largest expense, accounts for slightly over 40 percent of the gross margin of both type of businesses. Operating expenses as a proportion of sales tend to be lower for larger firms, indicating higher profit ratios.

KEY WORDS: Food stores, eating places, marketing costs and margins.

Eating and drinking places have increased their dollar share of the total food market. In 1969, sales of eating and drinking places were 43 percent greater than in 1963. Food stores sales increased 28 percent for the same period. <sup>1/</sup> Much of the growth in sales, especially for eating places, was due to price increases.

Food stores and eating and drinking places have greatly different margins and costs. Costs are affected by a variety of factors--type of service offered, size of firm, and legal form of organization. These factors are analyzed in this article.

Large food stores and large eating places, mainly corporate firms, are increasing their share of the total food market. This change in size and type of firm creates a need for information to evaluate cost structures which affect food marketing costs and consumer food expenditures. Most research on food costs and

margins has concentrated on the at-home market for food. <sup>2/</sup> Cost data for both eating and drinking places and food stores are available from the Internal Revenue Service, Source Book of the Statistics of Income.

The IRS data permit analysis of differences and trends in operating costs per dollar of sales for food stores and eating and drinking places. <sup>3/</sup> The most recent data available are for 1967. In addition, an analysis is possible of the difference in cost structures by size of firm and legal organization. Data by size of firm are limited to corporate businesses. The primary disadvantage of these data is that labor costs are not published for corporations. Thus, estimates have been made for comparison with labor costs of non-corporate firms. <sup>4/</sup>

<sup>1/</sup> U.S. Dept. Commerce, Survey of Current Business, March 1965 and 1970.

<sup>2/</sup> See, for example, Food from Farmer to Consumer, National Commission on Food Marketing, June 1966 and Operating Results of Food Chains, Cornell University, Ithaca, N.Y. (annual).

<sup>3/</sup> The definition of food stores and eating and drinking places in this article is the same as the IRS Standard Enterprise Classification System. It uses the firms' primary source of business receipts to classify type of business. Therefore, the data include costs and revenue data from other enterprises for diversified firms.

<sup>4/</sup> Estimates made from Employment and Earnings, Bureau of Labor Statistics.

Table 10.--Operating expenses and profit as a share of sales and gross margin, for eating places and food stores, 1967

Item	Eating and Drinking Places		Food Stores	
	Percent of Sales	Percent of gross margin	Percent of Sales	Percent of gross margin
Net profit .....	6.2	11.9	2.6	12.5
Capital cost .....	7.5	14.5	2.8	11.5
Interest (net) .....	.7	1.3	.6	.8
Depreciation .....	2.8	5.3	1.0	4.8
Rent (net) .....	4.0	7.9	1.2	5.9
Other operating expenses <sup>1/</sup> .....	16.4	31.6	7.2	35.2
Labor .....	21.8	42.0	8.4	40.8
Cost of goods sold .....	48.1	----	79.0	----
Total .....	100.0	100.0	100.0	100.0

<sup>1/</sup> Includes such costs as advertising, utilities, supplies, taxes, repairs, and bad debts.

Compiled from: Source Book of the Statistics of Income, 1967, Internal Revenue Service.

### Industry Cost and Profits

Cost and profits per dollar of sales for food stores and eating and drinking places are quite different largely due to the amount and types of services provided. However, individual costs and profit as a percentage of gross margin (difference between sales and costs of goods sold) are quite similar.

Sales Shares: The gross margin of eating places is about one-half of the sales dollar compared with one-fifth for food stores (fig. 3, table 10). Margins are higher in eating places than in food stores because more services are performed by eating places.

Cost of goods sold, mainly food purchased, is the largest share of the sales dollar for both eating places and food stores. Labor is the largest single operating expense.

Profits before taxes represented a larger share of sales in eating and drinking places than in food stores. In 1967, profits before taxes amounted to 6.2 percent of sales for eating and drinking places, compared with 2.6 percent for food stores.

Composition of Gross Margin: Labor costs account for slightly over 40 percent of the gross margin both of eating and drinking places and of food stores in 1967. Labor costs of eating and drinking places were held down, in part, by a lower average wage rate. Since 1967, wages of eating place workers have increased faster than those of food store workers due largely to recent coverage under minimum wage laws.

Capital costs for eating places were 14.5 percent of the gross margin compared with 11.5 percent for food stores. Rent expense, the largest



capital cost, accounts for most of this difference. All other costs, including advertising and promotion expense, account for about one-third of the gross margin. Data for corporate firms indicate that food store expenditures for advertising and promotion as a proportion of gross margin are double those of eating places. Profits as a percentage of gross margin were 11.9 percent for eating places and 12.5 percent for food stores.

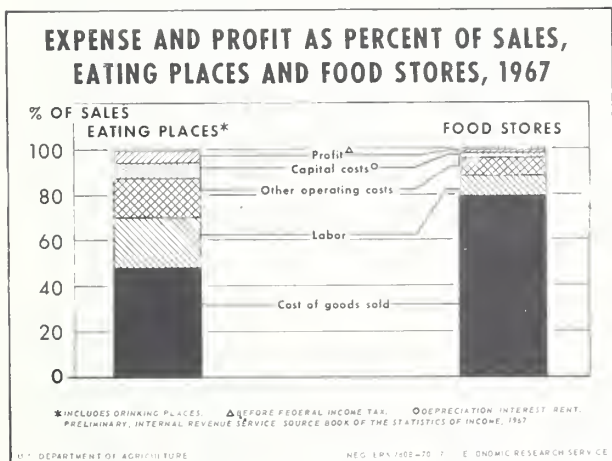


Figure 3

### Cost Structure by Legal Form of Organization, 1963-67

Cost structures for these 2 industries are associated with legal form of organization. This correlation is probably due, in part, to size and efficiency of various types of legal organizations.

**Eating Places:** Labor was the largest operating expense of corporate eating and drinking places averaging 28.1 percent of sales during 1963-67 (table 11). Other significant expenses included rent, taxes, and advertising. Costs of goods sold averaged 46.0 percent. Profits as a percent of sales increased substantially during the period from -0.9 percent in 1963 to 2.3 percent in 1967.

Most operating expenses for proprietorships and partnerships followed the same pattern as for corporate eating places. However, cost of goods sold was significantly higher for proprietorships. Profit increased during the period from a low of 7.6 percent of sales in 1963 to 9.1 percent in 1967.

Labor costs for proprietorships as a percent of sales were 11.3 percentage points lower than for corporations. This partly reflects use of unpaid family labor and lack of a charge for operator's labor. However, these factors result in a higher profit rate for the proprietors.

Cost of goods sold for partnerships was in between that of corporation and proprietorships at 48.7 percent of sales. Labor cost of partnerships was slightly higher than that of proprietorships. Labor costs of non corporate-firms were relatively low because most partners and proprietors were active in management and not directly compensated for their labor. Profits of partnerships averaged 11.0 percent of sales, highest of the 3 types of organizations.

Most of the variation in labor cost and profit among organizations disappears when profit and labor are combined. Corporations had a combined profit and labor cost of 29.8 percent, proprietorships 25.4 percent, and partnerships 28.9 percent of sales. Proprietorships' lower percentage reflects their lower margin per dollar of sales.

**Food Stores:** Corporate food stores had the lowest cost of goods sold (78.6 percent) of the 3 forms of organization but the largest margin (table 12). The larger margin is a reflection of vertically integrated marketing functions of wholesaling and food manufacturing. Proprietors had the highest cost of goods sold and therefore the lowest margin.

Depreciation, taxes, and rents were about the same for the 3 forms of organization. Interest expense, though rela-



Table 11.--Eating and Drinking Places: Operating expenses, cost of goods sold, and profit as a share of sales, by legal form of organization, 1963-67

Item	1963	1964	1965	1966	1967	Average
	- - - - -Percent- - - - -					
<u>Corporations</u>						
Operating expenses						
Depreciation .....	2.8	2.9	2.8	2.8	2.9	2.8
Advertising .....	1.0	1.2	1.1	1.1	1.3	1.2
Taxes .....	3.1	3.2	3.1	3.1	3.3	3.2
Rents .....	5.3	5.1	5.3	5.3	5.0	5.1
Interest .....	.6	.7	.7	.7	.6	.7
Repairs & bad debts ....	1.2	1.2	1.2	1.2	1.2	1.2
Labor (est.) .....	28.6	27.7	29.0	29.0	26.0	28.1
Other costs .....	11.7	10.4	9.5	8.6	11.4	10.0
Cost of goods sold .....	46.6	46.0	46.3	46.2	46.0	46.0
Net profit or loss (before taxes) .....	-.9	1.6	2.0	2.0	2.3	1.7
<u>Proprietorships</u>						
Operating expenses						
Depreciation .....	2.8	2.6	2.7	2.8	2.6	2.7
Taxes .....	3.0	3.1	3.2	3.3	3.4	3.2
Rents .....	3.6	4.2	3.8	3.8	3.5	3.7
Interest .....	.6	.6	.6	.7	.7	.7
Repairs & bad debts ....	1.2	1.2	1.1	1.2	1.2	1.1
Labor (est.) .....	16.9	16.7	16.9	16.9	16.8	16.8
Other costs .....	11.0	10.6	10.1	7.0	6.9	9.2
Cost of goods sold .....	53.3	52.6	53.0	55.3	55.8	54.0
Net profit or loss (before taxes) .....	7.6	8.4	8.6	9.0	9.1	8.6
<u>Partnerships</u>						
Operating expenses						
Depreciation .....	2.7	2.5	2.5	2.5	2.4	2.5
Taxes .....	3.3	3.2	3.2	3.4	3.4	3.3
Rents .....	2.9	3.0	3.2	2.8	3.4	3.0
Interest .....	.6	.6	.6	.6	.7	.6
Repairs & bad debts ....	1.2	1.2	1.1	1.1	1.1	1.2
Labor (est.) .....	18.0	18.2	17.9	17.8	18.4	17.9
Other costs .....	12.0	11.9	12.4	11.4	9.6	11.8
Cost of goods sold .....	48.8	48.8	48.6	49.7	48.3	48.7
Net profit or loss (before taxes) .....	10.5	10.6	10.5	10.7	12.7	11.0

Compiled from: Source Book of the Statistics of Income, Internal Revenue Service.

Table 12.--Food Stores: Operating expenses, cost of goods sold, and profit as a share of sales, by legal form of organization, 1963-67

Item	1963	1964	1965	1966	1967	Average
	<u>Percent</u>					
<u>Corporations</u>						
Operating expenses						
Depreciation .....	1.0	1.0	1.0	1.0	1.0	1.0
Advertising .....	1.3	1.3	1.3	1.3	1.2	1.3
Taxes .....	1.1	1.0	1.0	1.0	1.0	1.0
Rents .....	1.5	1.5	1.5	1.5	1.5	1.5
Interest .....	.1	.1	.2	.2	.2	.2
Repairs & bad debts ..	.4	.4	.4	.4	.4	.4
Labor (est.) .....	10.0	9.6	9.8	9.7	9.7	9.7
Other costs .....	4.2	4.9	4.4	5.0	4.9	4.8
Cost of goods sold .....	78.9	78.5	78.8	78.5	78.6	78.6
Net profit or loss						
(before taxes) .....	1.5	1.7	1.6	1.4	1.5	1.5
<u>Proprietorships</u>						
Operating expenses						
Depreciation .....	1.1	1.1	1.1	1.1	1.1	1.1
Taxes .....	1.1	1.2	1.2	1.3	1.4	1.2
Rents .....	1.1	1.2	1.2	1.1	1.1	1.1
Interest .....	.2	.3	.3	.3	.3	.3
Repairs & bad debts ..	.5	.5	.5	.5	.5	.5
Labor (est.) .....	4.9	5.4	5.2	5.2	5.5	5.3
Other costs .....	4.6	4.6	4.7	3.7	4.4	4.3
Cost of goods sold .....	81.8	80.7	80.9	81.8	81.0	81.3
Net profit or loss						
(before taxes) .....	4.7	5.0	4.9	5.0	4.7	4.9
<u>Partnerships</u>						
Operating expenses						
Depreciation .....	1.0	1.0	.9	.9	.9	.9
Taxes .....	1.1	1.2	1.2	1.3	1.2	1.2
Rents .....	.8	.9	.9	.8	1.0	.9
Interest .....	.2	.2	.2	.2	.2	.2
Repairs & bad debts ..	.4	.4	.4	.4	.4	.4
Labor (est.) .....	5.8	6.2	6.3	6.2	6.2	6.2
Other costs .....	5.2	5.6	5.7	5.3	5.4	5.4
Cost of goods sold .....	80.7	79.3	79.2	79.8	79.2	79.6
Net profit or loss						
(before taxes) .....	4.8	5.2	5.2	5.1	5.5	5.2

Compiled from: Source Book of the Statistics of Income, Internal Revenue Service.

Table 13.--Corporate eating places: Operating expenses, cost of sales, and profit as a share of sales, by asset size of firm, 1963-67 average

Item	Asset size of firm					
	All	\$50,000	\$51,000	\$101,000	\$501,000	Over
	firms <sup>1/</sup>	and	to	to	to	\$1 million
	under	\$100,000	\$500,000	\$1 million	\$1 million	\$1 million
	-Percent-					
Operating expenses						
Interest .....	.7	.4	.6	.8	1.2	.7
Repairs, bad debts						
& contributions .....	1.2	1.2	1.2	1.3	1.2	1.2
Rent .....	5.1	5.6	4.8	4.4	3.7	6.3
Taxes .....	3.2	3.6	3.3	3.1	3.1	2.9
Depreciation .....	2.8	2.3	2.8	3.1	3.4	2.9
Advertising .....	1.2	.8	1.3	1.3	1.3	1.1
Fringe benefits .....	.3	.1	.2	.4	.4	.6
Compensation of						
officers .....	4.2	6.7	5.2	3.7	2.5	.9
Other <sup>2/</sup> .....	33.5	31.7	34.3	36.0	35.8	30.7
Cost of sales and						
operation .....	45.8	47.5	44.5	43.4	44.1	49.1
Profit (before taxes) ..	2.0	.1	1.8	2.5	3.3	3.6

<sup>1/</sup> Data differ slightly from data shown in table 11 due to the inclusion of firms with zero assets and sampling differences.

<sup>2/</sup> Includes labor.

Source: Internal Revenue Service, Source Book of the Statistics of Income.

tively small, was twice as much for proprietorships and partnerships as for corporations.

As in the case of eating places, corporate food stores had higher labor cost than proprietorship or partnerships. Corporate food stores' labor cost was 9.7 percent of sales, proprietors 5.3 percent, and partnerships 6.2 percent. Differences in cost are probably due to nonwage operators and family labor, and lower wage scales for the noncorporate stores.

Profit rates varied by organization. Corporate stores averaged 1.5 percent profit per dollar of sale, proprietorships, 4.8 percent, and partnerships 5.2 percent.

As in the case of eating and drinking places, most of the variation in labor cost and profit disappears when the two are combined because of the way operator's labor is allocated in noncorporate firms. The combination of labor and profit accounted for 11.2 percent of sales for corporate stores, 10.2 percent for proprietorships, and 11.4 percent for partnerships.

#### Cost Structure of Corporations by Firm Size

In this analysis, several costs are classified differently. Two breakouts of cost are presented in tables 13 and 14 that were not shown in previous tables. Fringe benefit expense is shown

Table 14.--Corporate food stores: Operating expenses, cost of sales, and profit as a share of sales, by asset size of firm, 1963-67 average

Item	Asset size of firm					
	All	\$100,000	\$101,000	\$501,000	\$5 million	Over
	firms <sup>1/</sup>	and	to	to	to	\$50 million
	under	\$500,000	\$5 million	\$50 million		
	Percent					
Operating expenses						
Interest.....	.2	.2	.2	.2	.2	.1
Repairs, bad debts & contributions.....	.4	.4	.4	.4	.5	.3
Rent.....	1.5	1.9	1.4	1.5	1.8	1.4
Taxes.....	1.0	1.3	.9	.9	1.0	1.0
Depreciation.....	1.0	1.0	.8	.8	1.1	1.1
Advertising.....	1.3	.9	1.2	1.3	1.2	1.4
Fringe benefits.....	.4	.1	.2	.3	.4	.6
Compensation of officers.....	.6	3.4	1.3	.6	.3	.1
Other <sup>2/</sup> .....	13.4	12.9	12.3	12.8	14.1	14.1
Cost of sales and operation.....	78.6	77.6	80.1	80.0	77.8	77.9
Profit (before taxes)....	1.6	.3	1.2	1.2	1.6	2.0

<sup>1/</sup> Data differ slightly from data shown in table 12 due to the inclusion of firms with zero assets and sampling differences.

<sup>2/</sup> Includes labor.

Source: Internal Revenue Service, Source Book of the Statistics of Income.

but labor cost is included in other expense. Compensation of corporate officers is also shown separately. Also, cost of sales and operation differs from cost of goods sold by including a minor labor cost associated with the purchase of goods for resale.

**Eating Places:** Profits were most closely associated with asset size. Profits per dollar of sales increased with size. Profits varied from 0.1 percent of sales for small firms to 3.6 percent for large firms (table 13).

Fringe benefit, depreciations, interest, and advertising expense as a percent of sales tended to increase with size. However, rent expense, taxes and

compensation of officers tended to decline with firm size. Compensation of officers, for example, averaged 6.7 percent for the smallest firms compared with 0.9 percent for the largest firms.

Cost of sales and operation were smallest for the medium size firms and highest for large firms. Partial explanation for this is there are few economies of scale in purchase of cost of goods sold, but other economies of scale exist and larger firms tend to be volume oriented. This volume orientation, accompanied by lower margin due to lower unit prices and limited buying leverage, increases the cost of sales and operation.

Table 15.--Corporate eating places: Selected measures of size and efficiency,  
by size of firm, average 1963-67

Item	Asset size of firm					
	All	\$50,000	\$51,000	\$101,000	\$501,000	Over
	firms	and	to	to	to	\$1 million
		under	\$100,000	\$500,000	\$1 million	\$1 million
	<u>Number</u>					
Firms.....	1/49,512	31,776	8,620	7,062	414	211
	<u>Dollars</u>					
Average assets.....	76,390	19,510	70,430	186,680	675,330	4,537,320
Average sales.....	188,010	73,940	201,890	408,770	1,158,450	8,341,680
Sales per dollar of assets.....	2.46	3.79	2.87	2.19	1.72	1.84
Sales per dollar of inventory.....	39.56	44.58	47.39	50.42	37.41	23.21

1/ Includes firms with no assets.

Table 16.--Corporate food stores: Selected measures of size and efficiency,  
by size of firm, average 1963-67

Item	Asset size of firm					
	All	\$100,000	\$101,000	\$501,000	\$5 million	Over
	firms	and	to	to	to	\$50 million
		under	\$500,000	\$5 million	\$50 million	\$50 million
	<u>Number</u>					
Firms.....	1/20,577	13,217	5,580	964	101	22
	<u>Dollars</u>					
Average assets....	395,200	34,600	211,100	1,182,200	13,726,600	180,214,600
Average sales....	2,103,410	227,320	1,332,800	6,633,250	64,486,100	881,883,860
Sales per dollar of assets.....	5.32	6.57	6.31	5.61	4.70	4.89
Sales per dollar of inventory....	16.72	22.37	22.98	20.51	14.42	14.21

1/ Includes firms with no assets.

Compiled from: Source Book of the Statistics of Income, Internal Revenue Service.



Food Stores: Food stores, like eating places, showed a mixed pattern for most costs with respect to firm size (table 14). Operating expenses as a percentage of sales were generally lowest for the medium size firms. Size categories were selected to represent very small stores, a small superette, single to 10 store chain, moderately large chain, and large chain (representing the top 20 chains).

Profit as a percentage of sales increased with firm size. Profits ranged from 0.3 to 2.0 percent of sales. This is the same pattern as exhibited for eating places.

Advertising expenses for food stores increased with firm size, from 0.9 percent of sales for small firms to 1.4 percent for the largest firms. Fringe benefits also increased with size from 0.1 to 0.6 percent of sales. However, compensation of officers declined with size of firm from 3.4 percent for small firms to 0.1 percent for large firms.

Cost of sales and operation by firm size varied within a narrow range, 78 to 80 percent of sales. Large firms tend to have a slightly lower cost of sales and operation than smaller firms, probably due to economies of large scale buying. This results in a higher profit per dollar of sales.

#### Selected Characteristics and Performance Indicators

There was an average of 49,512 firms classed as corporate eating places during 1963-67 (table 15). Two-thirds were in the smallest size. Only 1 percent of the firms fell in the 2 largest categories. Distribution of sales was significantly different from the distribution of firms. Small firms accounted for 22 percent of the sales; the 2 largest size groups accounted for 37 percent.

Sales per dollar of assets declined as the size of firm increased. Small firms, which may use more labor relative to capital than larger firms, averaged twice the sales per dollar of asset as the largest firms.

Another measure of efficiency in the use of capital is sales per dollar of inventory. Medium sized eating and drinking places had the highest sales per dollar of inventory and more than double that of large firms.

Corporate food stores accounted for two-thirds of total food sales in 1967. Most corporate stores had assets of \$100,000 or less (table 16). However, these firms accounted for only 7 percent of corporate food store sales. The largest firms comprised less than 1 percent of all firms, but accounted for three-fifths of the corporate food sales.

Sales per dollar of assets for food stores trended downward in relation to increasing firm size from \$6.57 for small firms to \$4.70 for the next to largest firms.

Sales per dollar of inventory, or inventory turnover, were highest for the small firms. Sales per dollar of inventory averaged \$22.37 for small firms but only \$14.21 for large firms. The lower turnover for the large firms reflects the handling of more high-margin and slower moving items.

#### Future Trends

The future cost structure for food stores and eating places will primarily be influenced by consumer choice and competition between food stores and eating places. There appears to be intense competition developing for fast food service. It seems reasonable that cost structures will become more similar as competition intensifies.

In recent years, many food stores have added delicatessen shops, bake shops, and snack bars to compete more effectively with eating places for the consumer dollar. In most instances, this probably increases food store labor costs and gross margins. In the meantime, eating places have been using greater quantities of quick prepared foods and switching to fast food service in an attempt to hold down labor cost and be price competitive.

Cost structures indicate that food store and eating places will continue to be more sensitive to cost of goods sold and labor cost than to other costs. Food stores are continuing to integrate into wholesaling and food processing in an attempt to hold down cost of goods sold.

Many eating places have gone to fast food service and limited menus to hold down food and labor costs. Wage rates that are increasing faster for employees of eating places than for food store employees are emphasizing the need for this strategy.





