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Twenty Years of Structure, Cost and Performance Changes in U.S. Food Chains

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Twenty Years of Structure, Cost and Performance Changes in U.S. Food Chains

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Twenty Years of Structure, Cost and Performance Changes in U.S. Food Chains

From modest beginnings a century ago, today's food distribution industry, and particularly food wholesaling and retailing, makes the largest relative contribution to Gross National Product and total employment among the major sectors comprising today's food system (Manchester 1984). This paper reports on the changes in three critical components of food chain retailing over the past two decades: structure, costs and financial performance.

Although numerous sources were used in developing this analysis, the principal point of reference for the main body of cost and performance changes is Cornell University's Operating Results of Food Chains. This annual report, initiated by the food industry itself over 20 years ago, documents virtually all major cost and financial performance indicators for a large national sample of food chains. The report has only been possible through the full support and generosity of the food retailing industry. To assure its uninterrupted success, as well as to allow for further improvements in the report, the continued cooperation of food industry members is vital.

CHANGES IN THE STRUCTURE OF RETAILING

Since the emergence of the first real food chains in the early 1930s the structure of the food retailing industry has undergone dramatic change. During the 1940s and early 1950s, for example, many of the small, relatively dispersed Mom and Pop stores converted to supermarkets or were absorbed by chain stores. By the 1960s, growth in food retailing had slowed markedly, since the most vulnerable independent stores had already exited the industry and the need for new supermarkets had largely been met. By 1963, although independent supermarkets still accounted for over 90 percent of all grocery stores, they only represented 59 percent of total industry sales (Table 1). Perhaps more significant, however, is that independents' share of total sales had been eroded to 44.2 percent by 1982 as a result of aggressive chain store procurement and merchandising strategies coupled with the advent of convenience stores. By 1982 food chain sales accounted for approximately 50 percent of all grocery store sales.

Table 1
Relative Importance of Chains Versus Independent
Grocery and Convenience Stores, 1963-1982

	% Tota	al Grocery S	% Total Grocery Store Sales				
Year	Chain	Ind.	Conv.	<u> Chain</u>	Ind.	Conv.	
	9.1	90.9	çau mas	41.1	58.9	1000 BAS	
1963 1967	12.2	87.8	an en	41.7	58.3	an e#	
1972 1977	19.3 11.9	80.7 71.0	17.1	48.9 46.8	51.1 48.6	4.5	
1982	11,3	64.8	23.9	49.8	44.2	6.0	

Source: Progressive Grocer (various years)

Table 2 reveals several key dimensions in the structural evolution of the U.S. food retailing industry. In the two decades between 1963 and 1982 the number of U.S. grocery stores with payroll has remained nearly stable, declining only approximately 2.6 percent over the entire period. Sales growth, however, has been far more dynamic. Real U.S. grocery store sales (in 1967 dollars) grew by approximately 52 percent between 1963 and 1982, from \$53.3 billion to \$81.1 billion. Thus, real sales per store during this period increased by approximately the same percentage as overall sales growth, 56 percent; and the gradually expanding population base of the 1960s and 1970s resulted in an increase in number of consumers per store by slightly more than 26 percent.

Table 2
Number of U.S. Grocery Store Establishments Real Sales, and Real Sales Per Establishment 1963-1982.

	1963	1967	1972	1977	1982
Establishments	132,129	128,675	128,115	126,635	128,494
Total Real Sales (\$000,000)	53,290	61,771	74,667	75,637	81,164
Population Per Establishment	1,426.6	1,534.9	1,633.7	1,735.7	1,801.6
Sales Per Estab- lishment (\$000)	403	480	583	597	632

Source: U.S. Dept. of Commerce, various years

One significant "structural" change over the last two decades has been in physical structure — average store size has dramatically increased since 1962 and, of course, it is no longer unusual for some new formats to fall in the 60,000, sq. ft. to 100,000 sq. ft. range. Regional differences are noteworthy, however. By 1983, for example, Northeastern food chains and supermarkets were, on average, smaller than their counterparts in other regions of the U.S. (Table 3). This trend has persisted over time and continues to hold for new stores constructed in 1985. Higher relative real estate, equipment and construction costs provide the major part of the rationale for smaller chains and supermarkets in the Northeast (Table 4).

¹ Establishments with payroll

Table 3 Average Size of Food Stores, 1983

Region	<u>Chainstores</u> 1	Supermarkets All Stores ²	New Stores ³
	- Sq	puare Feet Per Store -	
Northeast Midwest South West	18,079 22,850 20,724 22,244	17,889 27,690 32,851 21,491	34,127 37,722 41,206 42,471

Sources:

1_{Cornell University (1984)}

²Includes both chains and independents; FMI (1984a)

³Includes both chains and independents; FMI (1984b)

Table 4
Selected New Store Expenses by Region, 1983

Region	Building	Store Equipment Fixtures & Decorations	Total Construction	Total Rent
		- Average Costs Per	Square Foot -	
Northeast Midwest South West	\$37.61 28.11 31.94 28.22	\$33.83 24.78 30.17 23.12	\$70.88 54.48 62.38 57.26	\$5.19 3.45 5.01 4.66
U.S. average ¹	31.47	27.98	61.25	4.58

Source: FMI, 1983 Facts About New Store Development.

 $l_{\mbox{Unweighted}}$ average.

CHANGES IN THE COSTS OF RETAILING

This section identifies the major operating costs of food chains, traces their movements over the past twenty years, and offers reasons to explain costs differences over time.

Total Operating Expenses: Labor Dominant

Grocery retailing has been and continues to be labor intensive. On average, in 1984 payroll constituted over half of total U.S. food chain operating expenses (Table 5). For remaining expense categories, payroll is followed in importance by property rentals (real estate and physical property only), services purchased (eg, hired hauling, laundry service, and

Table 5
Major Food Chain Operating Expenses as a Percent of Sales and as a Percent of Total Operating Expenses, 1983-84.

Item	% of Sales	% of Expenses
Payroll Property Rentals Services Purchased Utilities Unclassified Insurance Taxes & Licenses All Other	13.11 1.43 1.34 1.33 1.28 1.06 1.06 2.67	56.3 6.1 5.8 5.7 5.5 4.6 4.6 12.4
Total Expenses	23.28	100.0

Source: Cornell University, Operating Results of Food Chains, 1983-84.

lincludes: supplies, communications, travel, promotional activities, professional services, donations, equipment rentals, depreciation and amortization, repairs, net interest and credits and allowances.

pest control), utilities, and unclassified (items not specifically assigned to other natural divisions of expense). The contribution for each of these latter items ranges from approximately 5.5 percent to 6.1 percent of total operating expenses (Table 5).

Total operating expenses for all food chains have risen 10 percent since their 1965-66 two-year average of 20.65 percent of sales to 22.79 percent of sales in the 1983-84 two-year average (Table 6). By far, the expense category most responsible for this increase is payroll; it has steadily increased from 10.41 percent of sales in 1964-65 to 13.12 percent in 1983-84, a 2.71 percentage point rise.

Table 6
Operating Expenses of Food Chains as a Percent of Sales, U.S. Average, 1965-1984.

						Change 65	to 184
Thrown	1965-66 Average	1970	1975	1980	1983-84 Average	Percentage Point	Percent Change
Payroll Surplies Utilities Communications Travel Services Purchased Pronotional Activities Professional Services Constions Insurance Taxes & Licenses Property Rentals Equipment Rentals Depr. & Amort. Repairs Unclassified Credits & Allow. Net Interest	10.41 .96 .80 .07 .10 1.27 1.54 .05 .03 .44 .86 1.83 .09 .97 .53 .66	10.54 .91 .70 .07 .10 1.35 1.42 .05 .02 .54 .92 1.50 .10 .81	11.71 1.12 .94 .09 .09 1.21 .51 .08 .01 .70 .92 1.37 .17 .64 .92 70 .22	12.39 1.06 1.04 .07 .09 1.20 .35 .07 .01 .85 .93 1.18 .14 .79 .59 1.09 -1.00 .15	13.12 .98 1.28 .08 .08 1.34 .39 .09 .01 1.00 1.43 .19 .92 .66 1.16 -1.15 .21	2.71 .02 .48 .01 02 .07 -1.15 .04 02 .56 .18 40 .10 05 .13	26% 2 60 14 -20 6 -75 80 -67 127 21 -22 111 - 5 25 61 163
Total Expenses	20.65	20.28	20.75	20.99	22.79	2,113	

Source: Cornell University, Operating Results of Food Chains, 1965-1984.

Between the periods 1964-65 and 1983-84, payroll increased 26 percent in the U.S. Substantial though this payroll increase may be, however, it underestimates the actual magnitude of total retail labor costs since the major portion of "employee benefits," an important sub-component of total labor costs, is included not in "payroll" but in other expense categories. When payroll and employee benefit costs are considered in concert, however, several additional facts are revealed. First, employee benefits expenses have risen many times the rate of payroll alone. Between the 1964-65 and the 1983-84 two-year averages employee benefits expenses rose 113 percent in the U.S. (versus 26 percent for the payroll category) (Table 7). Second, when payroll and employee benefits are taken together as a reflection of real total labor costs the U.S. average has risen 34 percent since 1965. Therefore an accurate representation of retailers' total labor bill is 15.25 percent of sales, for the most recent 1983-84 two year average, or 67 percent of total operating expenses.

Table 7
Food Chain Total Labor Costs, 1965-1984

	Payroll_	Total Employee Benefits	<u> Iabor Cost</u>
1964-65 (ave.) 1970 1975 1980 1983-84 (ave.)	10.41 10.54 11.71 12.39 13.12	1.00 1.13 1.66 1.86 2.13	11.41 11.67 13.37 14.25 15.25
Percentage Point Change Percent change	2.71 26.0	1.13 113.0	3.84 34.0

Source: Cornell University, Operating Results of Food Chains, 1965-1984.

Other Cost Changes

Since 1965-66, U.S. food chains insurance costs have risen by more than 127 percent from .44 to 1.00 percent of sales in 1983-84 (Table 6). Given the above discussion of indirect labor costs, it is interesting to note here that approximately 80 percent of all food chain insurance costs are some form of employee benefit insurance. Similarly, the large and relatively steady rise in "unclassified" expenses (from .66 percent in 1964-65 to 1.16 in 1983-84), may also be explained by the growing employee benefit-related company contributions to employee pension plans.

In the 1983-84 two year average, taxes and licenses expense amounted to 1.04 percent of sales in U.S. food chains, a 21 percent rise from the .86 percent level two decades earlier. The majority of this natural expense item covers state mandated and controlled property taxes and license fees.

Although gradually falling over the past 20 years, "property rentals" expense has rebounded since 1980, reflecting the recent intensification in new store development activity typical of many food companies. For example, from 1965 to 1980 the "depreciation and amortization" category was declining to relatively stable. Beginning in 1980, however, depreciation and amortization expense has risen over 16 percent for the average U.S. food chain due to new capitalization of leases and an upsurge in food store capital construction. This increase is impressive when considered in light of the record inflation during the early 1980s, that artificially boosted the sales portion of this ratio. In order therefore for the overall ratio to increase, the depreciation and amortization portion, — determined by prior levels of investment — must have had substantial new infusions of capital.

When weighted by the real sales per store in each region, regional variations in depreciation, reflecting differential levels of fixed investment, become more dramatic (Table 8). First, all regions show a marked increase in depreciation per store since 1965-66 (ranging from a 70 percent increase in the Midwest to a 158 percent increase in the South). Since 1980, however, depreciation (and amortization) per individual retail establishment in the Northeast has grown at an annual rate more than three times that of any other region. This provides strong support for the suggestion that Northeastern retailers, perhaps starting with a relatively older physical inventory and capital stock, have recently begun to make substantial investments in upgrading their physical plants and equipment as well as the book value of leasehold improvements.

Table 8

Real Amortization and Depreciation Per Store (1967 = 100) by Region, 1965-84 Averages

Region	1965-66 Average	1970	1980	1983-84 <u>Average</u>	Chara 1964/ Dollar	ge Between 55-1983/84 Percentage	198	ge Between 0-1983/84
Northeast	12.8	15.8	14.7	27.6	14.8		Dollar	Percentage
South	14.3	15.2	30.1			116	12.9	88
Midwest	**		30.1	36.9	22.6	158	6.8	23
_	14.9	12.8	19.8	25.3	10.4	70	5.5	28
West	17.5	22.2	25.8	32.9	15.4	98		
Source: Calc	ulated from					00	7.1	28

Source: Calculated from Cornell University, Operating Results of Food Chains.

Another considerable change (116 percent increase in 20 years) in operating costs is "net interest" expense (Table 6). The gradual rise in this category is simply explained by two factors: the recent record high costs of capital confronting all agricultural and food industries coupled with the greater capital resources required to support accelerated building programs and to keep abreast of ever more costly technological advances. Finally, "promotional activities" expense merits attention if only because it was formerly one of the largest single expense categories for all food chains. This was due, of course, primarily to the high costs associated with once popular trading stamps and continuity promotions. When changing consumer attitudes and mounting inflationary pressures caused most retailers to discontinue such programs in favor of lower prices this expense category fell, by 1983-84, to less than 20 percent of its 1964-65 average (.39 percent of sales in 1983-84 versus 1.54 percent in 1964-65).

Firm Size and Cost Change

The proposition that large firms exercise "market power" and thus are more likely to charge higher prices and obtain higher earnings than their smaller counterparts has generated an enormous amount of academic and policy-oriented research (see Benston for a recent theoretical review of the validity of these profits-structure studies). Several analysts have attempted to examine the relationship between firm size and profitability in the food retailing industry, although with mixed results. Duft and Deloach, for example, found that between 1953-63 the ten largest food chains as a group had more favorable earnings than groups containing firms numbered 11-20 and 21-30. O'Rourke, however, demonstrated that for a latter period, between 1963-1977 the situation had reversed. Specifically, he found that the firms contained in the group from the 21-30 largest consistently outperformed firms in the larger two groups in terms of overall profit/sales ratio and in profit per store.

The Cornell data summarize operating results for all U.S. food chains disaggregated into three broad sales classifications, small, medium and large. Definitions of these sales classifications have changed since 1965 (see footnotes for Table 9); nevertheless these data provide useful insights into several of the key so-called structure-performance issues for the food retailing industry.

With respect to total expenses, Table 9 makes two points inescapably clear: first, a tendency exists for increases in total expenses to accompany increases in company-wide sales volume and; second, over the past two decades each of the three sales volume categories demonstrated an increase in total expenses as a percent of sales relative to each preceding time period. The increases in both of these expense trends are largely explained by observing the "store operations" (largely payroll) and "employee benefits" cost centers. In general costs increase in each of these two categories both over time and as sales volume increase. For example, among the three sales volume designations, large chains exhibited the highest percentage of sales devoted to covering store operation expenses in each of the time periods examined. The same relationship holds for large chains and the employee benefits category. In fact, the combined difference for 1983-84 between small and large companies for these two responsibility centers, store operations and employee benefits, explains over 80 percent of the difference in total expenses reported for these two sales volume

U.S. Food Chain Operating Results for Selected Responsibility Centers by Sales Volume², Selected Yearly Averages, 1965-1984 Table 9

					ı carades,	1303-1384			
Category	<u> 1965-6</u>	6 Two-Year			1975		3004 -		
<u>accedot y</u>	Small_	Medium	Large	Small	Medium	T +	<u> 1984-84</u>	Two-Year	Average
Gross Margin					**********	Large	Small	Medium	Large
-	19.24	19.60	22.67	19.71	20.66	21.42	21.89	22.63	23,57
Operations:								48.03	23.5/
Store	8.52	8.36	8.90						
Warehouse & trans-		0.00	0.90	9.13	9.43	9.83	10.45	10.34	11.25
portation	.44	1.01	1.74					10.34	11.25
		2.02	1.74	1.01	1.66	1.92	.12	1.51	1.55
iscellaneous ^l	4.25	3.85	4.06	2.90					1.55
			4.00	2.90	2.73	2.53	3.85	3,11	2.18
mployee benefits	.99	1.26	1.58	1.82	4			-,	2.10
			1130	1.82	2.19	2.68	2.37	2.79	3.40
Occupancy	3.85	3.83	4.54	3.62					3.40
4-3-			1.51	3.62	4.06	3.86	4.53	4.40	4.59
otal Expenses								****	4.35
pefore interest	18.04	18.28	20.79	18.02					
-A 4			-4173	10.02	20.04	20.88	20.72	21.46	22.80
iterest	.16	.16	.07	.16					#2100
4m1 m			,	110	.20	.23	.06	.32	.20
otal Expenses	18.20	18.44	20.86	18.18	70.0				.20
				10.10	20.24	21.11	20 ₁ 78	21.78	23.00
et operating profit	1.04	1.16	1.81	1.51	4.0			·	
her income				**21	.42	.31	1.12	.84	.56
THET THEXIMS	.82	.82	.77	.51	70				,,,,
t			,		78	.91	.60	.67	.89
t earnings									.03
efore taxes	1.86	1,98	2.58	2.03	1 10				
ource: Cornell Univers					1.19	1.22	1.72	1.51	1.45

Source: Cornell University, Operating Results of Food Chains, 1965-1984.

small: 1965-71 below \$20 million medium; between \$20-\$100 million large: over \$100 million

1972-81 below \$100 million between \$100-\$500 million over \$500 million

<u>1982-84</u> below \$150 million between \$150-\$500 million over \$500 million

categories. Since, increasingly, large retailers are seeking to differentiate themselves from their competitors through the addition of distinctive, albeit often labor-intensive, perishables merchandising programs, it is not surprising that these additional services are increasing labor costs relatively faster for larger firms. In fact, however, it should be recognized that the addition of such programs and departments is one of the key driving forces responsible for increasingly larger stores and firms.

Expenses for warehouse and transportation operations, although relatively stable within volume categories over time, demonstrate a distinct pattern of increasing with firm size. In most cases, this is to be The explanation for this phenomenon is likely to lie in the additional warehouse functions and transportation fleets undertaken by larger food chains. Indeed, for some smaller firms, it is probable that many of the inventory, handling and delivery tasks are performed by outside, or independent wholesale contractors.

In general, gross margins follow the pattern observed for total expenses: that is, they have generally risen both with sales volume and, over time, within a given sales category (eg, "large"). Gross margin comparisons between small and large firms must proceed with several words of caution, however. First, a basic economic postulate is that gross margin must cover all functions performed if a firm is to be profitable. But food retailing is a dynamic industry. The bundle of functions (and services) that must covered by gross margin changes continually. One hardly needs

lincludes: Merchandising and buying, advertising and sales promotion, accounting and office services, general ²Company annual sales volumes are defined as follows:

reminding that a food chain in 1984 is not performing the same functions in the same way it may have in 1964. Thus gross margin variations must be interpreted with this qualification in mind. Second, since some of the firms in the "small" category are likely not to include integrated warehouses, the gross margin reported may effectively be considered strictly a retail margin.

Table 9 shows that gross margin for large food chains has generally risen over time and has uniformly been the largest of any of the three volume groups. However, in recent years it has not increased at a sufficient pace to stay as far ahead of expenses as it had in earlier periods. This is especially true when compared to the growth in the same indicators for smaller companies. Although large food chains enjoyed the largest net operating profit of any sales group in the early and mid-1960s (consistent with Duff and Deloach's results mentioned earlier), they have in fact had the lowest net operating profit as a percent of sales of any of the three sales groups 12 of the last 13 years. In addition to intensified price competition, this evidence also suggests that large retailers may have so aggressively added labor and specialty service departments (delis, fish shops, salad bars, etc.) to thwart competitive countermoves that additional revenues generated were inadequate to sustain historical levels of profitability.

Once "other income" is included with net operating profit, however, a modified profit picture emerges for larger firms. In 11 of the last 14 years large firms have reported greater "other" income than small and medium sized companies. This generally is a result of greater coupon income and larger cash discounts for larger retailers from food manufacturers. Thus, examination of "net earnings before taxes" (net operating profits plus other income) for the same most recent 13 years as above reveals that large firms moved up from the lowest position (where they ranked when net operating profit was considered alone) in 6 out of the 13 instances as a result of larger relative contributions of other income.

PERFORMANCE TRENDS

Both economists and financial analysts alike argue over what constitutes "good" performance in particular industries. Precise economic criteria are generally relied upon. When analysts restrict themselves to rigid measurable standards, however, they often miss much of the drama and dynamics of a given industry. To thus allow no room for incorporation of qualitative information and experienced management opinion, so critical to the success of an industry like food retailing, is to provide an inadequate assessment of industry performance. In fact, overall performance is a set of often vague and sometimes conflicting goals where results cannot always be summarized by a convenient ratio but instead must be examined along a continuous spectrum, and generally with considerable infusions of subjective judgement. However, that qualification in mind, industry performance can and must be measured. Several key financial dimensions, useful in shedding light on the recent performance of the food retailing industry, are discussed below.

Generally speaking, because much more is encompassed conceptually, profitability is preferred to simple price levels as an indicator of overall industry performance. However, because the latter is highly visible and because food prices have been controversial in recent years it is useful to

examine the pricing performance of food retailers. Food prices, at least as measured by the market basket of representative food items contained in the Consumer Price Index (CPI), have on average lagged behind increases in the All Items CPI since 1974; and have had a smaller annual increase than the All Items CPI for each of the last five years (Table 10). Although the product mix of the average supermarket today contains nearly 25 percent non-food items, one may conclude that as far as the food portion of the supermarket industry is concerned, since 1972 price increases have been more moderate than in the general economy.

Table 10 Consumer Price Index (CPI) and Food Prices, 1974-1984

	All It		Food-at-Home - CPI		
	Level	Annual Change	Level	Annual Change	
1974 1976 1978 1980 1981 1982 1983	147.7 170.5 195.4 246.8 272.4 289.1 298.4 311.1	11.1 5.8 7.7 13.5 10.4 6.1 3.2 4.3	162.4 179.5 210.2 251.5 269.9 279.2 282.2	14.9 2.1 10.5 8.0 7.3 3.4 1.1	
Percent Change 1974-1984	110.6%		80.2%		

Source: Bureau of Labor Statistics, 1974-1984.

Performance of retail food chains has traditionally been predictable, perhaps even "unexciting," in comparison to many other riskier industries: chemicals and electronics, for example, provide ready examples of industries where recent growth has been rapid but where profits have exhibited wide variance. On the other hand, the relatively stable nature of food retailing has made retailing firms good investments for those interested in steady, if not spectacular, growth and earnings.

Low profit margins and limited overall industry growth — resulting partly from a stabilization of population growth in the U.S. — have prevented food retailers from attaining the levels of return on investment and profitability common to many higher growth industries. These latter industries typically are characterized by greater financial returns to accompany their greater levels of risk.

Return on investment (ROI), defined here as net income after taxes as a percentage of net worth, measures the productivity with which funds invested by share owners have been employed in the business. Over the past twenty years, average ROI has plummeted 18 percent for all firms sampled in Cornell's annual "Food Chains" study (Table 11). Although since 1975 ROI has increased by 3 percent it has yet to return to the levels attained

in the mid 1960s. In fact, further examination of Table 11 reveals that the same general pattern is repeated for all of the financial indices reported. That is, the ratios deteriorate until 1975, then gradually begin to rebound; but in no cases do they attain the levels of profitability achieved in the growth years of the 1960s.

Table 11 Selected Measures of Food Chain Financial Performance, 1965-1984

	Average 1965-66	1970	1975	1980	Average 1983-84	Percentage Point Change	Percentage Change
Gross Margin as a Percent of Sales	22.4	21.3	21.2	21.7	23.4	1.0	5.0
Net Operating Profit as a Percent of Sales	1.8	1.0	. 4.	.7	.6	-1.1	-65.0
Net Earnings After Taxes as a Percent of Sales	1.4	.9	.7	.8	.9	5	-34.0
Net Earnings After Taxes as a Percent of Net Worth	12.0	9.4	9.6	11.6	9.9	-2.1	-18.0
Net Earnings After Taxes as a Percent of Total Assets	6.9	5.3	4.2	4.5	4.4	-2.5	-36.0

Source: Cornell University, Operating Results of Food Chains, 1965-1984.

The relative investment attractiveness of retail food chains seems to have diminished since the 1960's. The principal explanation is fundamental. While economy-wide interest rates soared in the late 70's and early 80's, ROI for retail food chains did not respond as vigorously. All firms average ROI for food chains was 11.66 percent in 1981 when the prime rate was over 20 percent, and the rate on treasury-bills was over 14 percent. Even money market accounts were earning over 16 percent for the entire year. Simply put, investment opportunities in other sectors offered greater rewards than in food retailing.

The relatively low industry-wide earnings power of food retailers has serious long run implications. Basic to the much needed drive for continued productivity increases in food retailing, for example, is adoption of new, sophisticated technologies. Yes these technologies are expensive, in material as well as in employee training costs. Not all operators will be able to afford them. What will become of smaller, less well capitalized firms?

Moreover, as retailers attempt to ease from the climate of excessive labor costs toward greater capital intensiveness, ability to obtain capital will be even more critical than in the past. Yet the industry has earnings ratios about one-third lower than the average of all industries combined, making entry into most capital markets difficult. Individual companies whose above-average returns on investment permit them to enter capital markets or those which are able to turn toward internal capital generation will have considerable market advantage in the future.

This brief review of food chain performance has examined shifts—generally declines—in selected standard financial indicators. Space limitations preclude a fair treatment of a host of other valid, albeit perhaps less conventional, performance elements. Employment levels, nutritional and labeling adequacy, food product safety, progressiveness and many other dimensions critical to the total effective performance of the food retailing industry are not addressed. Yet, indeed, they must be considered carefully in order to arrive at a fair assessment of the overall performance of food retailing—the largest single component in the total food distribution industry.

As U.S. food retailers move into the future, they can expect to see their numbers continue to decline, competition to intensify in a slow-growth market, and continued increases in efficiencies via technological advance. If food distributors can work with one another as well as with public policy makers to anticipate and manage rather merely react to the continuing and inevitable cost and performance changes, the U.S. will enjoy a healthier food retailing industry.

References

- Benston, George J. 1985. "The Validity of Profits-Structure Studies with Particular Reference to the FTC's Line of Business Data," <u>American Economic Review</u>, Vol 75, No 1, March, pp. 37-67.
- Duft, K.D. and D.B. DeLoach. 1967. <u>Growth Characteristics of 30 Major Retail Food Chains -- 1953-1963</u>. California Exp. Sta. Bull. 829.
- Food Marketing Institute, <u>Facts About New Store Development</u>, Washington, D.C., various years.
- . The Food Marketing Industry Speaks: Detailed Tabulations, Washington, D.C., various years.
- Manchester, Alden C. 1984. "The Farm and Food System: Major Characteristics and Trends," in <u>The Farm and Food System in Transition: Emerging Policy Issues</u>, Michigan State University, East Lansing, Michigan.
- O'Rourke, Desmond A. 1982. <u>Growth Characteristics of Major Retail Food Chains, 1963-1977</u>. Washington State University Research Bulletin, XB 0907.
- Progressive Grocer, "Annual Report of the Grocery Industry," April-May issues, various years.
- U.S. Bureau of the Census, <u>Census of Retail Trade 1972-1982</u>, Washington, D.C.