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Marketing

TRENDS IN GROCERY RETAILING

By
Gerald Grinnell

The advent of chain stores in the 1920's and the "supermarket revolution" in the 1930's brought meat, produce, self-service, and lower prices to the grocery store. Consumers saw important changes again during the 1960's when trading stamps, games of chance, continuity merchandise sales and give-aways, and similar promotional devices (which probably resulted in higher food prices) were in vogue.

During the early 1970's, A&P conducted its WEO (Where Economy Originates) discounting program, wage-price controls were imposed, food shortages loomed, and food prices increased sharply.¹ "Price wars" flared up in some cities in 1975 and are still going on in some places. This price competition often has taken the form of direct price cuts or offers of double or triple redemption value on manufacturers' coupons.

Changing Store and Firm Size

Other important changes have been less apparent to consumers. Consistent with trends in many other industries, small family grocery stores are being replaced by big stores operated by large food

chains. In 1954, single store operators accounted for about 52 percent of total grocery store sales, but by 1972, they had less than 32 percent. Grocery chains with 11 or more stores increased their share of U.S. sales from about 39 percent in 1954 to 56 percent in 1972. Chains with 101 or more stores had 29 percent of sales in 1954 and 39 percent in 1972.

Between 1954 and 1972, the number of grocery stores in the United States fell from nearly 280,000 to less than 195,000—a 30-percent decline in 18 years. Sales per store increased sharply during the same period, with the average store selling \$123,000 in 1954 and \$480,000 in 1972. After adjusting for changes in food prices, average volume per store in 1972 was over two and one-half times the 1954 level. In 1972, supermarkets (grocery stores with annual sales of \$1,000,000 and over) accounted for 68 percent of total grocery store sales in the Nation.

Over time, grocery stores have added both food and nonfood items. In 1928, stores handled an average of 867 items. By 1950, the number was 3,750 and now supermarkets typically handle over 11,000 different items. Many firms have added nonfood departments, such as drugs and general merchandise.

Urban markets have been characterized by increasing concentration of food stores.² The four largest firms in the different metropolitan markets (standard metropolitan statistical areas)

increased their market share from an average of 45 percent of grocery store sales in 1954 to nearly 52 percent in 1972. The four largest supermarket firms averaged about 67 percent of total supermarket sales in the Nation's standard metropolitan statistical areas in 1972.

Most independent retailers have affiliated with other retailers or with wholesale distributors to obtain management assistance, private label merchandise, group advertising, and economies in buying and distribution that enable them to compete effectively with chains that operate their own warehouses. Well-known affiliated groups of independent retailers include I.G.A., Red and White, and Foodland.

In 1972, the Nation's 263 cities and an average of 5 multi-market food chains (i.e., operating in 11 or more cities). On average, a bit more than half of the four leading firms in each market area were multi-market food chains. Nevertheless, independent operators continue to be important in many

²Although heavily dependent on national events and company policy, the final competitive outcome in U.S. food retailing is observed in local market areas. Retail chains and affiliated wholesalers develop and implement competitive strategy from distribution centers or buying offices, where decisions are made concerning store location, pricing, advertising and promotion, products handled, and identification of changes in local markets.

¹Mention of specific firms does not imply an endorsement by USDA.

cities. In 27 of the 263 cities, at least one of the four largest firms operated only a single grocery store. In many cities, independents with 10 or fewer stores are among the four leading grocery firms.

Changing Technology

Computer-based technology appears to be growing in importance in food distribution as a way to control inventories, cut operating costs, and assess changing consumer demands. Electronic scanning of Universal Product Code (UPC) symbols, although not yet widely adopted, is one application of computer technology that becomes highly visible to consumers where used. In those stores, each item's description and price are printed on the grocery store's cash register receipt when a checkout clerk passes a package over a scanner that reads an identification code³ printed on the package. Product description and price for all items that have UPC symbols are stored in a computer that is activated by the scanner. The rest of the customer transaction is handled in the customary manner.

Use of the scanner reduces checkers' work requirements and eliminates misreadings on the cash register. It also provides the store with precise information about sales of each item. Because scanners eliminate the need for checkers to enter prices in the cash register, there is no need to stamp the price on each item. Although most stores using UPC scanners continue to price-mark merchandise, some have started putting prices on the shelf rather than on each package.⁴ Scanning can provide firms with a vast amount of information that has only begun to be used to reduce costs and better meet consumer demands. It also provides more information to the consumer on the cash register tape.

Another relatively recent innovation that has touched the lives of food shoppers in many parts of the United States is electronic funds transfer (EFT). EFT refers to unmanned electronic terminals that enable bank customers to complete simple banking transactions away from bank offices at any time of day.

One type of EFT installation has been installed in many grocery stores. These terminals are

used by retailers to validate customers' checks and usually to instantaneously transfer funds from a grocery customer's bank account to the grocery firm's bank account when groceries are purchased. This virtually eliminates bad check losses and permits retailers to use their sales revenues immediately.

EFT systems also are used to transfer funds among banks and by many employers to electronically transfer payrolls to their employees' bank accounts. An important feature of EFT systems is that they eliminate float—the time between when a check is

³Most items have a unique identification number (UPC symbol). If an item does not have a UPC symbol it is handled in the conventional manner.

⁴Attempts to eliminate price-marking of individual items have often met resistance from consumer and labor organizations. Six States and a number of municipalities have passed legislation requiring price-marking. Recently the Retail Clerks International Union, a major union representing grocery store workers, suspended its efforts to seek Federal legislation requiring price-marking of individual packages in grocery stores.

Cost components of the marketing bill for farm foods

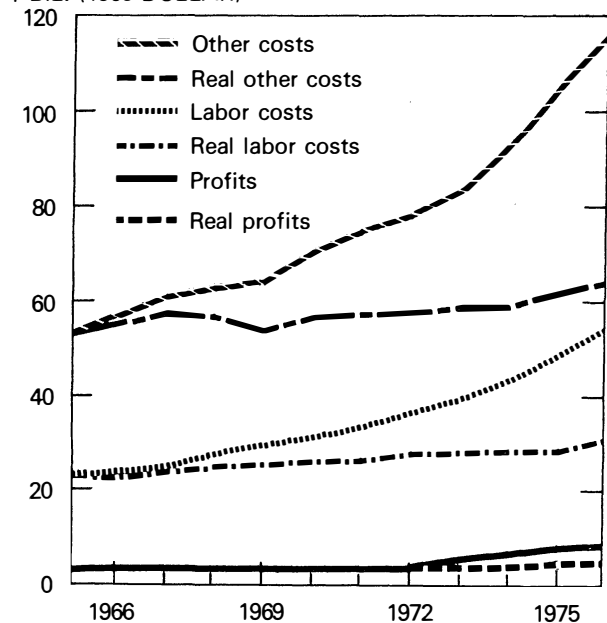
Item	1966	1970	1971	1972	1973	1974	1975	1976 ¹
<i>Billions of dollars</i>								
Labor ²	24.6	32.3	34.5	37.6	40.6	44.8	49.1	54.3
Packaging materials	6.9	9.1	9.7	10.2	10.9	12.1	13.4	15.0
Rail and truck transportation ³	4.2	5.2	6.0	6.1	6.1	7.3	8.5	9.6
Corporate profits before taxes	3.4	3.6	4.4	4.0	5.4	6.2	8.2	8.3
Business taxes ⁴	2.2	2.9	3.1	3.2	3.4	3.8	4.2	4.6
Depreciation	2.2	2.5	2.6	2.7	2.9	3.2	3.6	3.9
Rent (net)	1.8	2.3	2.4	2.5	2.7	3.0	3.3	3.6
Advertising	2.0	2.0	2.1	2.2	2.3	2.5	3.0	3.3
Repairs, bad debts, contributions	1.1	1.5	1.6	1.7	1.7	2.0	2.2	2.4
Interest (net)	.4	1.1	1.2	1.2	1.3	1.4	1.6	1.7
Residual ⁵	8.3	8.7	7.9	7.1	6.9	6.9	9.4	9.3
Total	57.1	71.2	75.5	78.5	84.2	93.2	106.5	116.0

¹ Preliminary. ² Includes supplements to wages and salaries such as social security and unemployment insurance taxes and health insurance premiums. Also includes imputed earnings of proprietors, partners, and family workers not receiving stated remuneration.

³ Includes charges for heating and refrigeration. Does not include local hauling charges. ⁴ Includes property, social security, unemployment insurance, State income, and franchise taxes, license fees, and other fees, but does not include Federal income tax. ⁵ Includes food service in schools, colleges, hospitals, and other institutions, and utilities, fuel, promotion, local for-hire transportation, water transportation, and insurance.

CURRENT DOLLAR AND CONSTANT DOLLAR (REAL) FOOD MARKETING COSTS

\$ BIL. (1965 DOLLAR)

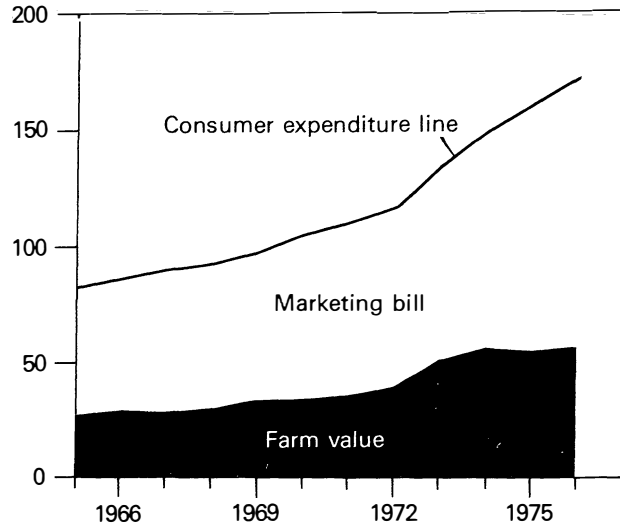


USDA

NEG. ERS 2949-77 (11)

FARM FOOD CONSUMER EXPENDITURES, MARKETING BILL, AND FARM VALUE

\$ BIL.



USDA

NEG. ERS 2944-77 (11)

written and when it clears the banking system. Potentially, electronic funds transfers might substantially reduce the amount of paper involved in financial transactions and make banking services more convenient to consumers. However, stringent safeguards are needed to assure that EFT users' confidentiality and other legal rights are not infringed. The U.S. Congress is considering legislation that would protect consumers' rights in retail transactions involving electronic funds transfers. The rate of adoption of EFT throughout retailing industries likely will be strongly influenced by how successful they are in grocery stores which reportedly account for most such installations to date.

Food retailers have learned that computer technology can be used to manage stores more efficiently and reduce operating costs.

Specifically, by carefully monitoring sales they can reduce labor costs through improved scheduling of part-time help and by reducing the amount of inventory needed.

A recent study by USDA has shown that supermarkets that use advanced labor scheduling techniques and efficient product handling methods⁵ can achieve up to a 50-percent reduction in direct labor costs (excluding supervisory and checkout labor) in the grocery department compared with handling methods and labor scheduling common in conventional supermarkets of similar size. However, larger buildings and more equipment are needed to achieve the labor savings. When the higher costs of buildings and equipment are taken into account, a store might achieve a net overall reduction in total direct expenses of 20-35 percent in

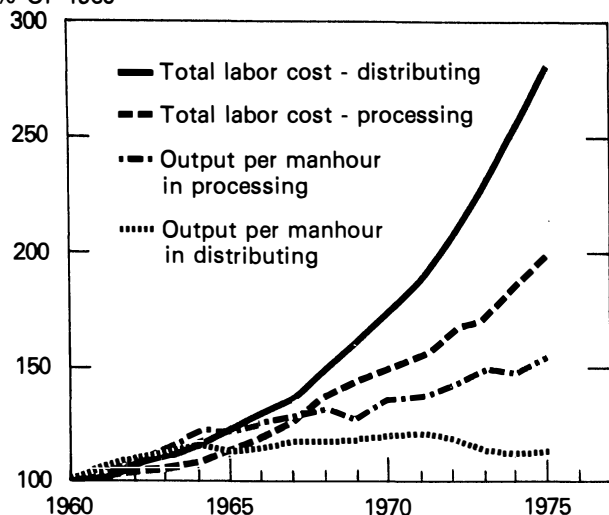
the grocery department, with bigger stores realizing the larger savings.

The study also reported that operators of very large supermarkets that use these same labor scheduling and product handling methods—and, in addition, receive and display fast-moving

⁵The following labor scheduling techniques and product handling methods were assumed in the study: (1) most products are received on pallets and moved directly to aisles; (2) most merchandise is displayed in shipping cartons with the tops cut off; (3) labor scheduling is based on analytical forecasts of daily man-hour requirements; (4) to the extent possible, shelf-stocking is done after hours; (5) the store is organized in a manner that minimizes employee travel during shelf-stocking; and (6) shelf space for each item is determined by computer analysis of the item's projected sales and merchandising requirements.

OUTPUT PER MANHOUR AND TOTAL LABOR COMPENSATION IN FOOD PROCESSING AND DISTRIBUTING

% OF 1960



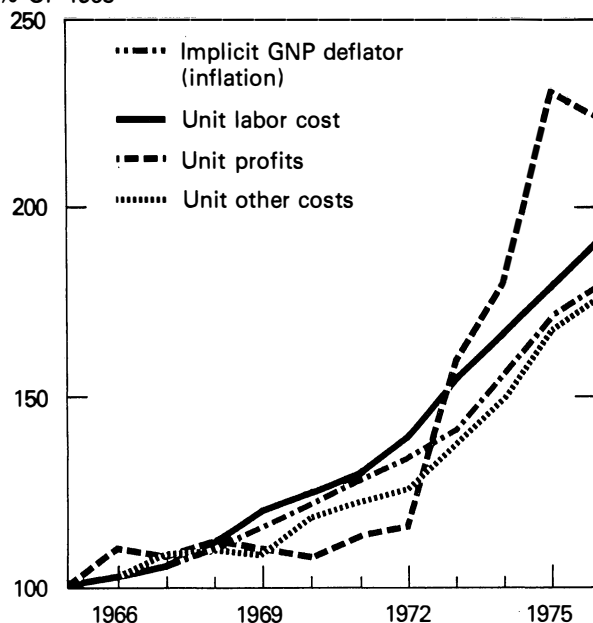
NOTE: DISTRIBUTING IS COMPOSED OF: WHOLESALERS, FOOD STORES, AND PUBLIC EATING PLACES.

USDA

NEG. ERS 2945-77 (11)

PER UNIT LABOR, PROFIT, AND OTHER COSTS OF FOOD MARKETING; IMPLICIT GNP PRICE DEFLATOR

% OF 1965



USDA

NEG. ERS 2946-77 (11)

grocery items in 7 and 23 cubic foot wire bins moved with forklifts—may achieve unit total direct costs in the grocery department that are 60-percent lower than costs for conventional supermarkets of average size.

However, very large grocery stores require a substantial investment and a large population base. Whereas an average size supermarket has sales equal to the total grocery store purchases of about 5,000 people, the single large store assumed in this study needs about 65,000 customers. Considering that the store must compete with existing stores, the market area would have to contain several times more than 65,000 persons. Clearly, such stores might appear only in large urban areas.

Do large efficient stores of the type discussed here actually exist in the United States? The inno-

vations studied currently are in use but they generally are not all found in a single store. Many stores combine some of these innovations with other cost-saving measures.

One type of innovative store that appears to be gaining popularity is referred to as a warehouse store. Warehouse stores usually restrict the number of items offered for sale. One or more perishable product groups⁶ may be completely eliminated or severely restricted and the number of brands offered may be reduced—often with increased emphasis on private or store brands that customarily have lower prices. Warehouse stores generally have a no-frills decor, do little or no advertising, display merchandise in shipping cartons or bulk display bins, and request that customers bag and carry out their own merchandise using their

own bags.⁷ Some warehouse stores have eliminated price-marking of individual packages. When prices are removed, checkout clerks memorize all prices or Universal Product Codes are electronically scanned for computer price retrieval.

Warehouse stores often rely heavily on part-time non-union workers to provide maximum flexibility in labor scheduling and minimize fringe benefits and overtime wages. According to trade sources, operators of warehouse stores claim customers save 15 percent to 30 percent compared to prices paid in conventional supermarkets.

⁶Meats, dairy products, frozen foods, bakery products, and produce.

⁷The stores sell grocery sacks at a nominal price such as 3 cents per bag.

The Future

Grocery stores and firms will grow larger and sales of nonfood products in grocery stores will account for a larger share of total grocery store sales. A variety of types of grocery stores and merchandising techniques will probably continue to exist as firms seek greater efficiency, consumer appeal, and competitive advantage. Small family operated stores, convenience stores, conventional supermarkets, warehouse stores, combination grocery-nonfood stores, and very large superstores will all be important. Trading stamps, continuity programs (an encyclopedia volume each week), games, giveaways coupons, deep-cut specials (including loss leaders), and similar merchandising activities are likely to come and go in different geographic areas as retailers search for a competitive edge over rivals.

Large chains are expected to account for an increasing portion of food store sales. However, small family-operated independent grocery stores are likely to be affected more by growing convenience store chains than by supermarket chains, which already account for a sizable share of supermarket sales.

Management of grocery firms is expected to continue the trend toward sophisticated management techniques and increased use of computer technology, as firms seek to increase control and efficiency in their operations and to respond to consumer demands. UPC scanning may be a critical link in this development, although important changes also are occurring in warehousing and headquarter operations. Although grocery stores will probably be more efficient than in the past, there will likely also be more questions

raised about the overall competitive performance of retail food firms.

BEHIND THE INCREASE IN FOOD COSTS

By

Andrew Welser

In the past 10 years, consumer expenditures for U.S. farm foods have almost doubled—twice the rate of increase for the previous decade. In fact, food costs rose more rapidly in the last four years than in any other peacetime period. The marketing bill statistics of the U.S. Department of Agriculture chronicle and measure changes in farm food marketing costs and provide some insight into their causes.

The marketing bill is the difference between what civilian consumers pay and farmers receive for U.S. farm foods consumed at home and away from home. These statistics reflect changes in both the price and quantity of all materials and services used in food marketing.

From 1972 to 1976, consumer expenditures increased from \$118 to \$172 billion (46 percent); the marketing bill from \$78 to \$116 billion (48 percent); and the farm value increased from \$39 to \$56 billion (43 percent). However, over two-thirds of the increase in farm value occurred in a single year, 1973. Since then, higher marketing charges have accounted for 85 percent of the increase in expenditures for farm food.

Marketing charges are principally factor costs—chiefly labor, capital, and material costs of processing, wholesaling, and retailing food through food stores and public eating places.

Marketing costs have been rising because of increases in the prices and quantities of the labor, capital, and other factors employed. To differentiate between these two effects, it is necessary to examine these costs on a unit basis, which partially removes the effect that rising food consumption has had on total marketing costs.

Costs per unit of food marketed have been increasing rapidly in recent years. Unit labor costs and unit profits have been rising at an increasing rate in most years since the late 1960's, with the largest increases occurring since 1973. Other costs, notably energy and packaging, have also increased sharply.

Do these increases in unit costs reflect the use of more factors per unit of food marketed, more services per unit, or just higher factor prices? More factors per unit probably are being used because of the increase in pre-packaged, ready-to-cook foods and the continuing trend toward away-from-home eating and service operations in food stores such as delicatessens and in-store bake shops. However, these added services probably did not cause much of the recent sharp increases in labor and other costs. Instead, rising wage and salaries and prices of materials were the major forces.

Labor productivity data, an adjunct to the marketing bill labor data, support this. Labor productivity, defined as output per hour worked, greatly influences the impact of wage increases on prices. Rising productivity lessens the rise in unit costs because more output comes from the same amount of time worked. Output per hour worked in U.S. farm food processing has increased about 3.5 percent per year since 1965.

However, there has been hardly any increase in labor productivity in food distribution (wholesaling, retail food stores, and public eating places). This lack of increase is due in part to the change in food consumption patterns toward more away from home eating which requires greater amounts of purchased labor for added food preparation and service than do food stores. Total labor costs in all food marketing rose substantially during the same period, especially in distribution where labor accounts for slightly over half of all marketing charges.

Although food industry profits are a relatively small portion (7 percent) of food marketing costs, profit rates of food marketing corporations have been rising in recent years. Contributing to the increase in profits were the declining prices of agricultural raw materials, strengthening demand as the economy moved out of recession, and rising returns on alternative investments which increased competition for the investor's dollars. From 1972 through 1976, the before-tax corporate profit rate for processors rose from 3 to 4 percent of sales; from 0.8 to 1.3 percent of sales for corporate food wholesalers; from 1.3 to 2.4 percent for public eating places; and from 0.4 to 1.5 percent for corporate food retailers. However, in 1972, profits of food retailers were very low as a result of the price discount program of A & P which substantially affected food prices and average industry profits.

Labor, capital, and other marketing inputs are purchased and bid for in the general economy. As prices change in the overall economy, they also change for the factors used in marketing food. Thus, as wages and salaries go up in the general economy, they also rise in food marketing.

As other industries show higher profits, higher margins are needed in food marketing to attract continued investment. In comparison to the Implicit GNP Price Deflator, a measure of the change in factor prices in the general economy, the changes in unit costs in food marketing are not out of line with the trend of all factor costs. Using the Implicit GNP Price Deflator to adjust for the average rate of inflation and putting all of the cost figures in constant dollars shows real profits remaining stable for the past 12 years and deflated labor costs rising but not at an accelerated rate. Other costs, which include energy and packaging, have also been relatively stable in real terms.

Thus, when one looks behind the recent increases in food costs, it is apparent that the increase in the general price level was instrumental in causing marketing costs, and hence food costs, to advance so steeply in recent years. Preliminary data for 1977 do show food prices rising more slowly than other retail prices, because the rate of increase in the cost components has subsided with the slowing of the rate of inflation in the economy, while farm prices will be down a bit.

In the final analysis, much of the rapid escalation of farm food costs since 1972 has been due to the inflation-induced increases in food marketing costs. The major exception was the sharp rise in the farm value that occurred in 1973 when bad weather conditions greatly reduced world grain supplies and worldwide competition for farm products heightened. Since then, the farm value has leveled off. As the inflation rate continues to slow from its former double-digit level, the pressure behind previous food marketing cost increases is expected to ease.