The Food Marketing System in 1996. By Anthony E. Gallo, U.S. Department of Agriculture, Economic Research Service, Food and Rural Economics Division. Agriculture Information Bulletin No. 743.

Abstract

New food product introductions fell sharply in 1996. The number of new plants, consumer advertising expenditures, and common stock prices reached new highs in 1996, as did the number of mergers in the foodservice industry. Profitability from food manufacturing and retailing was higher due to strong sales, wage and producer price stability, and streamlining of operations.

This report analyzes and assesses yearly developments in the growth, conduct, performance, and structure of food marketing institutions—food processors, wholesalers, retailers, and foodservice firms. *Industry growth* includes changes in sales for each of the four sectors, product mix, and external economic factors affecting the food system. *Conduct* measures firms' competitive behavior, which includes such price and nonprice competition as advertising, promotion, new product introduction, new store formats, price discounting, and menu variety. *Performance* includes profitability, capital expansion, foreign trade and investment, research and development, capacity use, equity market changes, and productivity. *Structure* developments include mergers, acquisitions, divestitures and leveraged buyouts, and changes in the number of companies and establishments.

Keywords: food marketing, food processors, wholesalers, retailers, foodservice, advertising, profitability, trade.

Acknowledgments

Annette Clauson, Thomas Carlin, and Alden Manchester reviewed earlier drafts, and Dale Simms edited this report.

Washington, DC 20036 July 1998

Industry Growth

Sales Higher

Food marketing system sales reached $890 billion in 1996, but the system's share of disposable personal income fell to 10.9 percent

General Economy. The U.S. economy grew at a healthy pace in 1996 as real GDP growth rose an estimated 2.8 percent, compared with 2.0 percent in 1995. Employment was up over 1.8 million jobs, and the unemployment rate fell to 5.4 percent, the lowest since 1989.

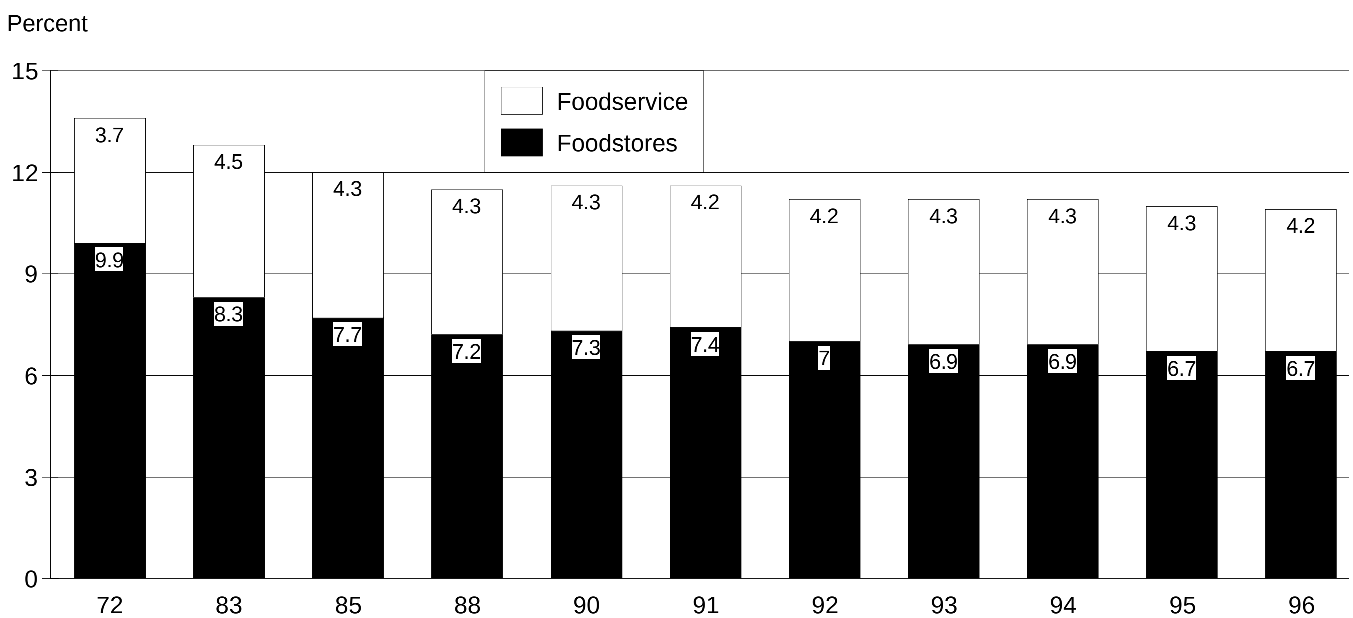
Real per capita disposable income rose about 1.5 percent, and consumer spending for 1996 grew about 5 percent. Continued low interest rates, widely available credit, mortgage refinancing, and employment growth kept consumer spending strong and benefited the food marketing system.

Sales. The increase in consumer spending was reflected in the food system's sales growth. In 1996, retail sales, adjusted for price and population increases, showed a 1-percent increase. The share of disposable personal income captured by the food marketing system fell to 10.9 percent (fig. 1). Total sales of items purchased at foodstores and foodservice establishments, packaged alcoholic beverages and drinks purchased at eating and drinking places, and nonfood items purchased in retail foodstores reached an estimated $890 billion, 3.2 percent above 1995 (fig. 2).

Product Mix. About $377 billion was spent in retail foodstores and $317 billion in foodservice establishments. The 3.4-percent increase in retail foodstore sales, was slightly above the increase in retail prices. The 4.7-percent increase in foodservice sales was partially offset by a 2.3-percent increase in restaurant prices, implying a 2.4-percent real gain.

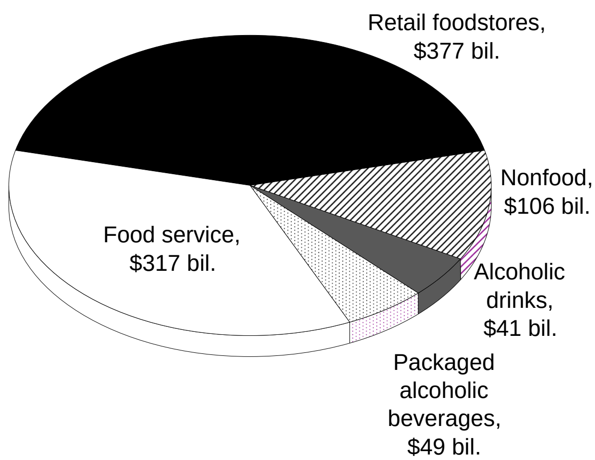
The alcoholic beverage market, which accounts for about 12 percent of sales in the food marketing system, continues to reflect lower consumption. Alcoholic beverage sales accounted for $90 billion of

Figure 1
Food marketing system's share of disposable personal income
The food marketing system's share of income fell to 10.9 percent in 1996.



Source: ERS/USDA.

Figure 2
Food marketing sales, 1996
Most sales occurred in retail foodstores in 1996.



Source: ERS/USDA.

food marketing sales in 1996. Over $49 billion was in the form of packaged alcoholic beverages, while alcoholic drinks served in restaurants and other institutions likely amounted to nearly $41 billion. Distilled spirits in 1996 likely accounted for about 30 percent of total alcoholic beverage consumption, while beer accounted for nearly 58 percent. Wine sales appear to have fallen to about 12 percent of the total.

The nonfood component of retail sales likely amounted to about $106 billion in 1996. Nonfood groceries include tobacco, health and beauty aids, detergents, paper products, gasoline sold in convenience stores, and other grocery items sold through retail foodstores. Nonfood items—such as tobacco products, catering supplies, and nonfood supplies—sold through vending services, are grouped into the foodservice category.

Industry Growth

External Economic Factors

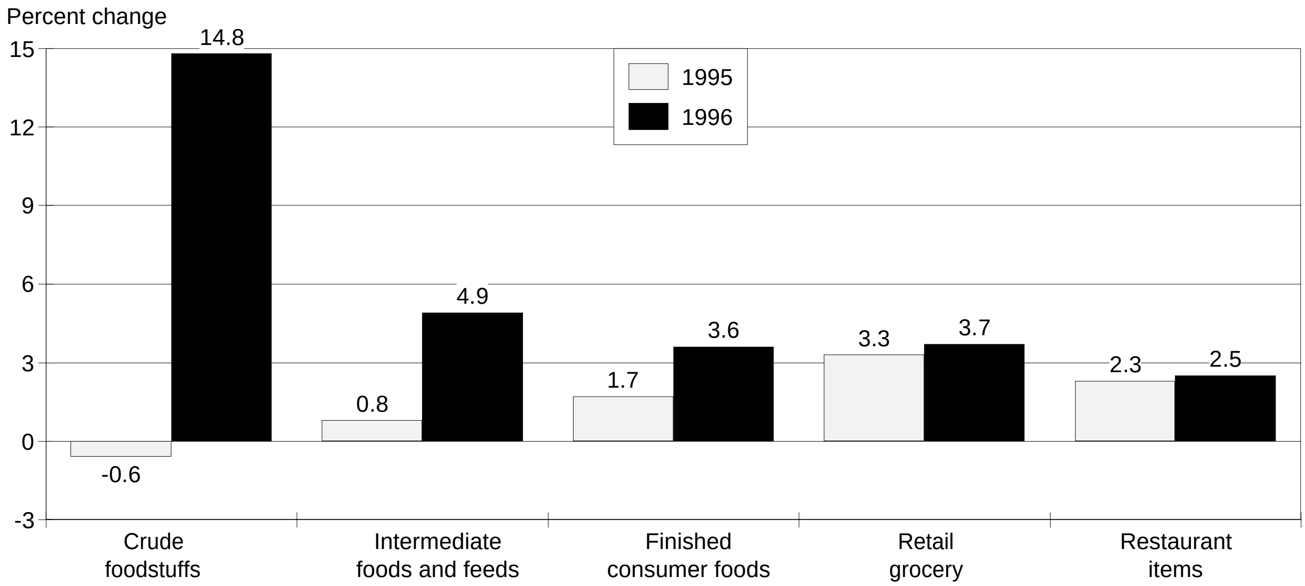
Wages, producer prices, and interest rates were favorable to the food marketing system in 1996. The food system purchased an estimated $123 billion in U.S. agricultural commodities, $27 billion in foreign agricultural commodities, and $11 billion in seafood products. The system then added an estimated $658 billion in value to these raw products.

The economic climate was favorable to the food marketing system for the 13th consecutive year in terms of costs. The food system is labor-intensive and sensitive to farm prices. The system is also highly leveraged and global, as well as advertising-intensive. Consequently, movements in wages and prices, interest rates, and the value of the U.S. dollar affect the performance of the food sector, and all were favorable to the food system in 1996.

Prices. Price changes for food and feed inputs for each channel in the food marketing system are reflected by the Producer Price Index (PPI). Wholesale prices were higher in 1996 largely due to higher livestock prices. The PPI for finished consumer foods—an indicator of changes in prices paid by retailers, wholesalers, and restaurateurs to food manufacturers—rose 3.6 percent in 1996, compared with 1.7 percent in 1995 (fig. 3). The PPI for intermediate foods and feeds—an indicator of changes in prices food processors pay one another—increased nearly 4.9 percent, compared with 0.8 percent in 1995. The PPI for crude foodstuffs, or prices paid by food manufacturers, increased almost 15 percent in 1996 due to higher prices for both crop and livestock products.

Labor Costs. For the 14th consecutive year, labor costs, which include hourly earnings and fringe benefits, constituted the major expense item for the food marketing system. In 1996, the food marketing system had about 13.5 million full- and part-time

Figure 3
Producer and retail price index changes for food marketing system, 1995-96
The PPI reflected higher input prices paid by most channels of the food marketing system in 1996.



Source: ERS/USDA.

employees. About 7.5 million workers were employed in foodservice and another 3.4 million were employed in food retailing. About 1.7 million were employed in food processing, and nearly 900,000 worked in grocery wholesaling. Average hourly earnings in food processing increased 2.5 percent to $11.20. In food retailing, where average hourly earnings rose 3.1 percent to $8.50, wage concessions, benefit reductions, and lump-sum payments in lieu of wage hikes continued a decade-long trend. Wages in eating and drinking places averaged 3.4 percent higher, at $5.78 per hour.

Interest. Interest rates fell in 1996. The prime interest rate averaged 8.27, percent compared with 8.83 percent in 1995. Short-term rates also declined, as reflected in a drop in 3-month Treasury bills from 5.51 percent in 1995 to 5.02 percent in 1996. Long-term corporate bond rates averaged about 7.37 percent, compared with 7.59 percent in 1995.

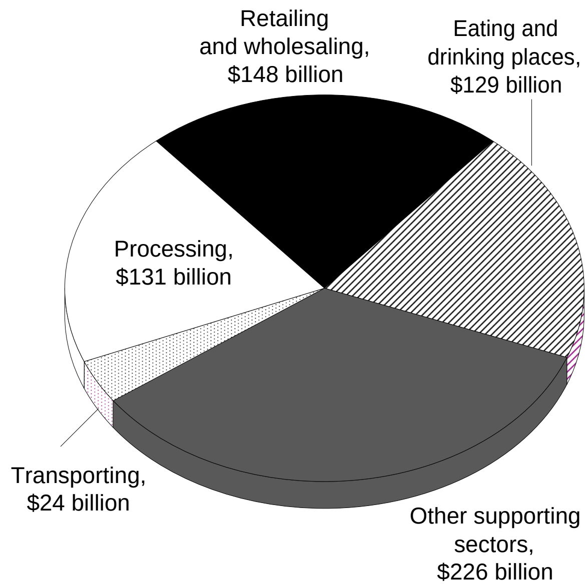
Value of the U.S. Dollar. The trade-weighted value of the U.S. dollar rose from 84.2 in 1995 to 87.3 in 1996. This increase was not favorable to remittances of overseas profits of American food companies. The higher valued U.S. dollar also made U.S. exports of processed food less attractive to foreign buyers and imports more attractive to U.S. buyers.

Value Added. The food system purchased about $123 billion in animal and crop products from the U.S. farm sector, about two-thirds of domestic production, USDA's Economic Research Service estimates. An additional $27 billion was spent on imported agricultural products, and $11 billion was spent on seafood. To this base of $161 billion in raw agricultural and fishery products, the food system added an estimated $658 billion in value in 1996 compared with $627 billion in 1995 (fig. 4). Food processors added about $131 billion in 1996, while wholesalers, retailers, and transportation firms added another $172 billion. The contribution of separate eating and drinking places to value-added topped $129 billion in 1996.

Figure 4

Estimated value added in food marketing system, 1996

The U.S. food marketing system added about $658 billion in value to raw products in 1996.



Source: ERS/USDA.

Structure

Merger Activity Slowed in 1996

Merger activity slowed in the number of transactions, but the value of large recorded mergers remained the same at $8 billion in 1996.

In 1996, new merger and leveraged buyout transactions in the food marketing system fell. The number of acquisitions (purchase of company or subsidiary) fell from 425 in 1995 to 399 in 1996 (fig. 5). The number of food processing mergers fell from 244 to 210, and wholesaling from 56 to 32. Food retailing mergers fell from 42 to 37. Offsetting was a record number of mergers in the foodservice industry, which rose from 83 in 1995 to 120 in 1996 (table 1).

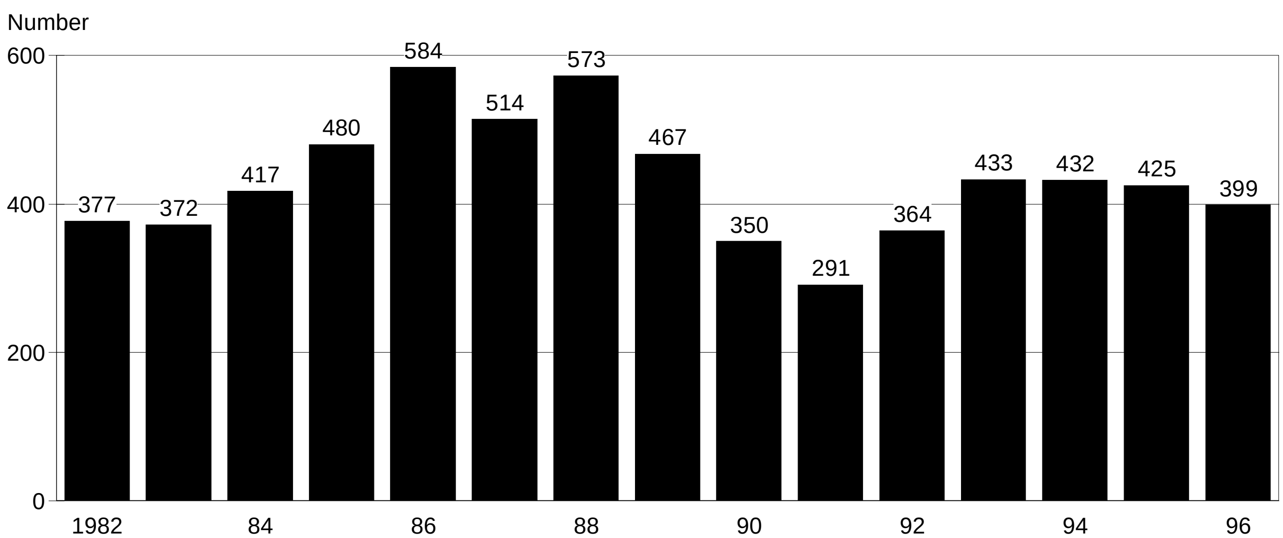
The average value of these transactions remained the same as in 1995. The value of food marketing mergers and leveraged buyouts that cost more than $100 million fell from $11 billion in 1994 to $8 billion in 1995 and 1996 (fig. 6). Food processing ranked 20th among all manufacturing industries in the value of mergers. Food wholesalers ranked fifth among all wholesalers, while food retailers ranked second. Leveraged buyout activity was minimal.

Measures of Structural Development

The following indicators are used to measure structural development in the food marketing system.

- Mergers—The combination of two or more firms into one.
- Acquisitions—The purchase of a business unit or subsidiary.
- Divestitures—Selling of a business unit or subsidiary.
- Leveraged buyouts—The purchase of the common stock of a company through debt financing, pledging assets of the new company as collateral.

Figure 5
Food marketing mergers and acquisitions
The number of mergers fell in 1996.



Source: ERS/USDA.

Table 1—Food marketing mergers

Year	Processing	Wholesaling	Retailing	Food service	Total
			Number		
1982	250	38	38	51	377
1983	225	38	45	64	372
1984	242	37	60	78	417
1985	291	64	52	73	480
1986	347	65	91	81	584
1987	301	71	65	77	514
1988	351	71	76	75	573
1989	277	65	53	72	467
1990	208	58	37	47	350
1991	181	35	39	36	291
1992	217	59	29	59	364
1993	266	57	39	71	433
1994	232	62	60	78	432
1995	244	56	42	83	425
1996	210	32	37	120	399

Total includes some double counting because of interindustry mergers. For example, a food processing firm merging with a foodservice firm is included as an acquisition in each sector.

Source: ERS tabulations of Food Institute data.

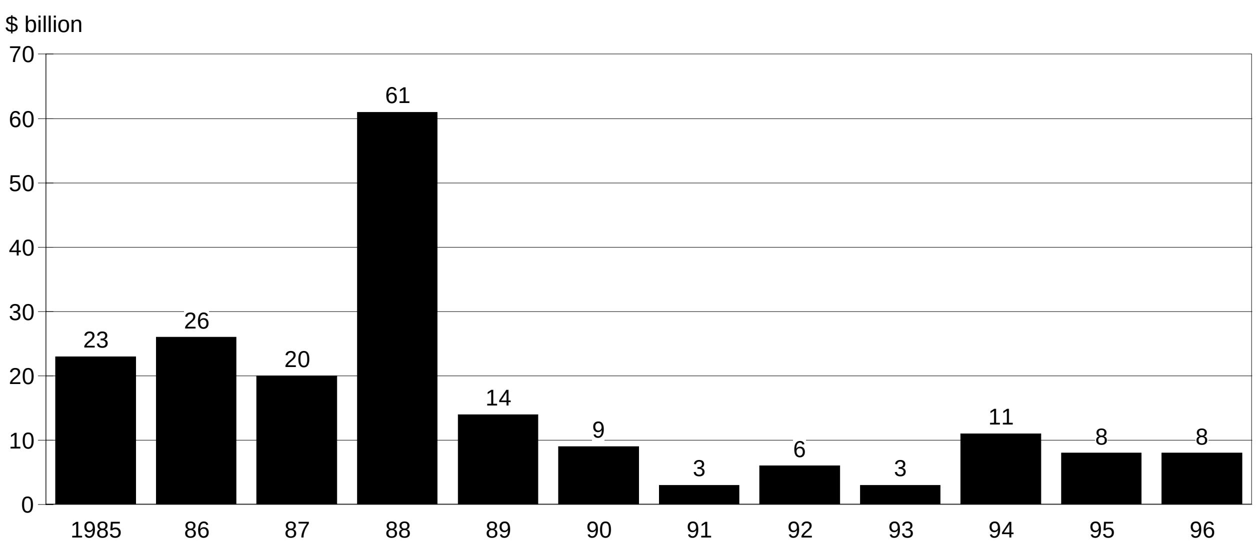
Between 1982 and 1996, nearly 6,500 mergers, divestitures, and leveraged buyouts took place in the food marketing system. Included among these were some of the largest transactions in U.S. history.

Despite the merger activity and consolidation, the number of food processing plants appears to be increasing. According to the 1992 Census of Manufacturers, the number of food processing companies rose from 15,692 in 1987 to 16,075 in 1992. The number of plants also increased, rising from 20,583 in 1987 to 20,792 in 1992. Trade intelligence since 1992 indicates that the trend is continuing, but the definitive trend will become clearer when the l997 census is released.

Figure 6

Value of food marketing mergers and leveraged buyouts costing more than $100 million

The value of mergers stayed about the same in 1996.



Source: ERS/USDA.

Conduct

Price and Nonprice Competition Vigorous

Food prices rose 2.8 percent in 1996. Advertising increased, and the number of new products introduced fell.

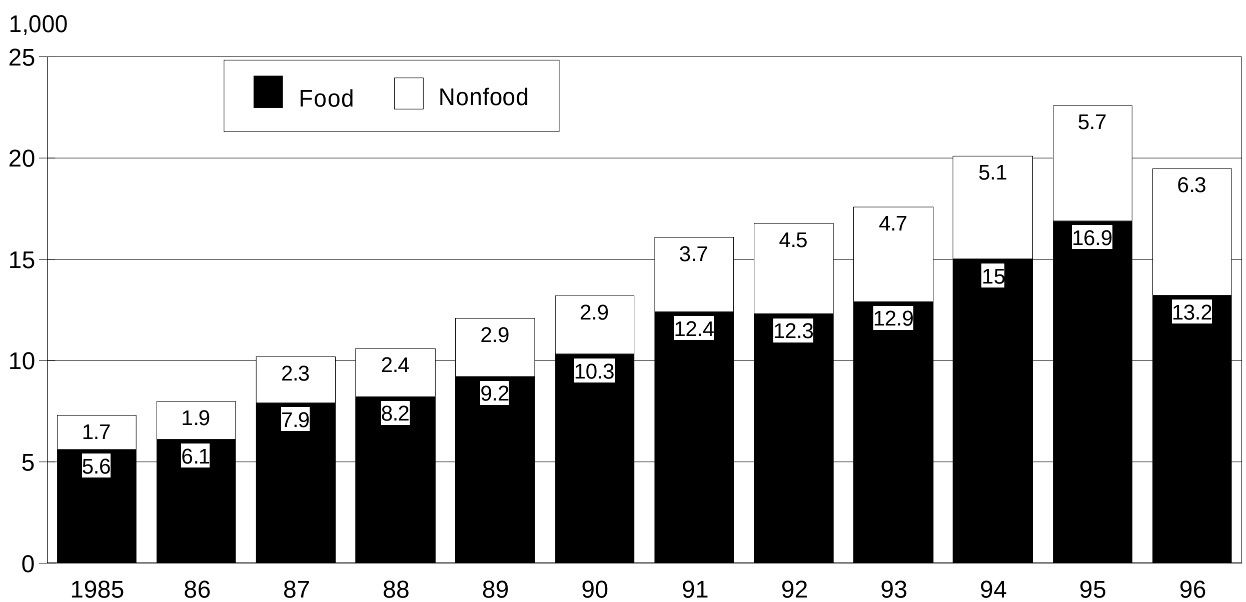
In 1996, about 9.3 percent of the Nation's gross national product (GNP) was generated by the food marketing system, compared with 12 percent in 1972. And, while the value added by the food system has increased in dollar terms, a much greater portion of this output is supplied by fewer and larger firms. Although food marketing has become significantly more concentrated, firms in each market sector sought to acquire or maintain market shares through both price and nonprice competition. In 1996, there was vigorous competition among manufacturers, wholesalers, retailers, and foodservice firms for the consumer dollar and among manufacturers for scarce shelf space in the Nation's grocery stores.

Consumer prices for food increased 2.8 percent in 1996, compared with 3.3 percent in 1995. In 1996, food prices in grocery stores rose 3.7 percent, while foodservice prices were up 2.5 percent. Retail egg prices rose nearly 18 percent, while pork prices rose 10 percent. The food marketing system also charged higher prices for processed fruits and vegetables, fats and oils, and dairy products.

Nonprice competition to differentiate the product in the eyes of the consumer continued strong by the two routes in which the food system has always been the forerunner: new product introduction and advertising.

The Nation's food processors introduced over 19,500 new grocery products in 1996, the first drop in about 20 years (fig. 7). New foods dropped from 16,900 to 13,200, while nonfood product introductions rose 600 to about 6,300 products. Candy, condiments, breakfast cereals, beverages, bakery products, and dairy products accounted for 75 percent of new product introductions.

Figure 7
New food and grocery product introductions, 1985-96
New food products dropped over 3,500 in 1996.

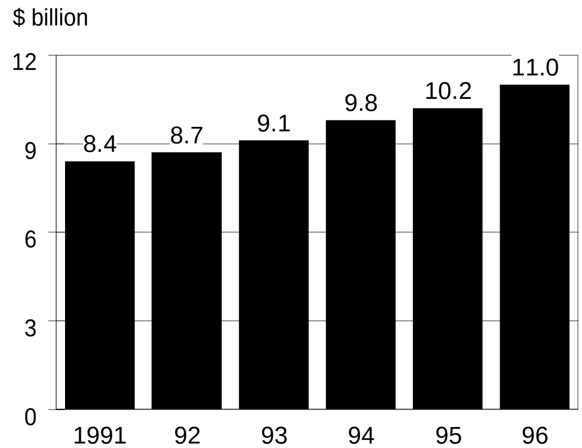


Source: ERS/USDA.

Food marketing firms spent an estimated $11 billion in direct consumer advertising— such as electronic and printed media and coupons—in 1996, compared with $10.2 billion in 1995 (fig. 8). Food processors spent over $7 billion on mass media advertising, while food retailers spent over $1 billion (excluding local newspapers). Restaurants, mostly fast-food chains, spent almost $3 billion. In addition, the food marketing system spent billions of dollars on coupons, games, incentive advertising, and other direct consumer promotions.

Competition was also keen in getting products on the shelves of the Nation's grocery stores. By most industry estimates, food processors spent about $2 on retail promotion—through trade shows, promotions, discounts and allowances, and other incentives—for every $1 in direct consumer advertising.

Figure 8
Food-related advertising (excluding coupons)
Food marketing firms spent nearly $11 billion on direct consumer advertising in 1996.



Performance

Higher Debt Levels; Profits from Operations Higher

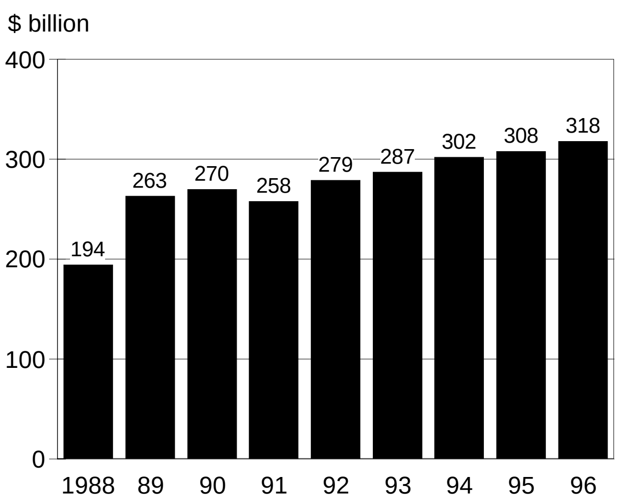
Debt of the Nation's food processors and retailers rose $10 billion in 1996. Profits from operations were higher.

Debt. Total liabilities of food processors and retailers rose $10 billion in 1996 to $318 billion (fig. 9). Food marketing remained one of the most leveraged industries in the American economy. The equity-to-debt ratio of food manufacturers rose from 0.92 in 1994 to 0.96 in l995 and again to 0.97 in 1996, but was still well below the ratio for all manufacturing (1.48). The equity-to-debt ratio for food retailing rose from 0.53 to 0.66 between 1994 and 1995 (fig. 10), but then fell to 0.61 in 1996.

Profits. Food processors and retailers showed an increase in profits from operations. Food and tobacco processors' profits from operations rose from $38 billion in 1995 to $41 billion in 1996. Food retailers' operational profits rose 8.3 percent from $7.2 billion in 1994 to $7.8 billion in 1995 and 1996 (fig. 11).

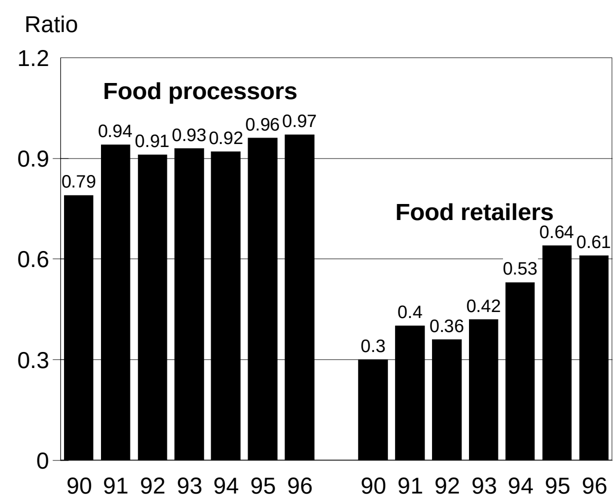
After-tax profits as a portion of stockholders' equity rose to 19.4 percent for food processors in 1996 (fig. 12). Retailers' after-tax profits amounted to 0.4 percent of sales and 17.4 percent of stockholders' equity. However, after-tax profits among both processors and retailers varied significantly. Discerning a true picture of profits is difficult because such a large portion of food sales is controlled by large diversified food marketing firms.

Figure 9
Total liabilities of food and tobacco processors and retailers
Debt levels increased again in 1996.



Source: ERS/USDA.

Figure 10
Food system's equity-to-debt ratio
The ratio of equity to debt rose slightly for processors and dropped for retailers in 1996.

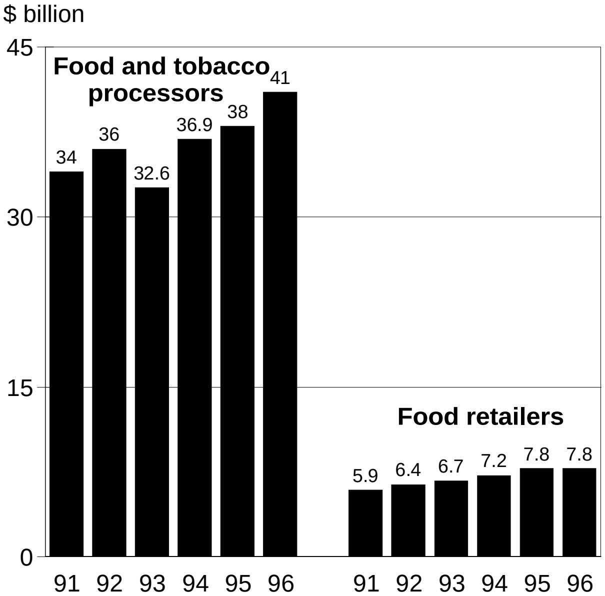


Source: ERS/USDA.

Figure 11

Profits from domestic operations, food processors and retailers

Profits rose for processors and stayed the same for retailers in 1996.



Source: ERS/USDA.

Measures of Performance

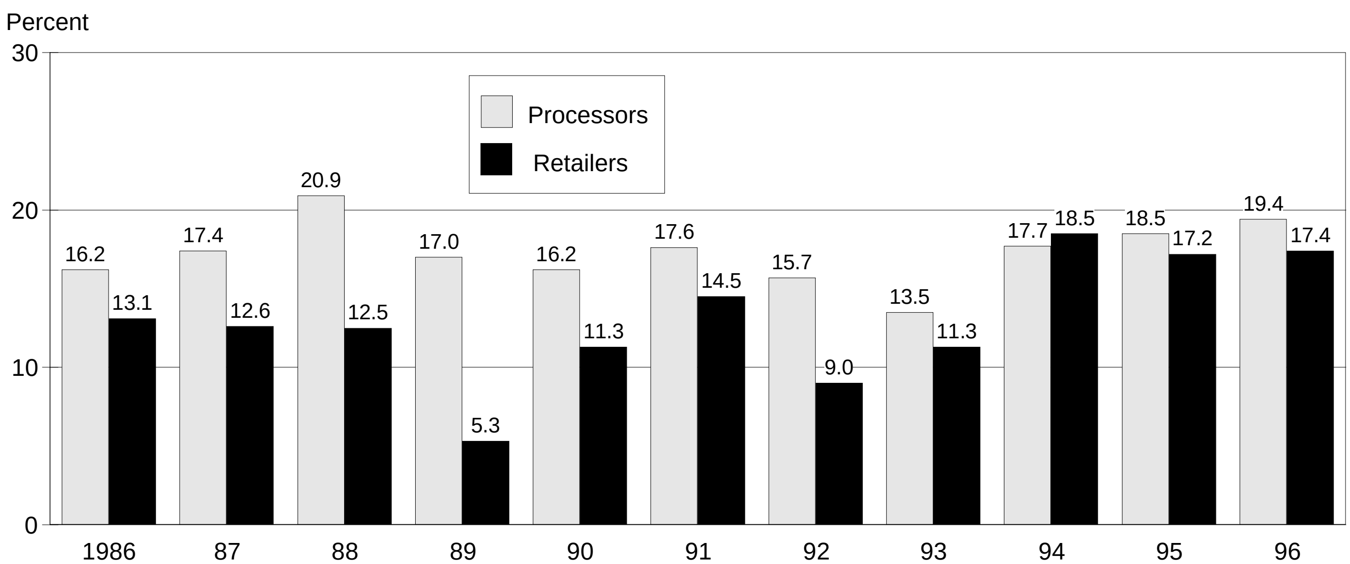
The following indicators are used in this and the following four sections to measure performance in the food marketing system.

- Debt
  - Stockholders' equity-to-debt ratio
- Profits
  - After-tax profits to sales ratio
  - Return on stockholders equity
- Expansion, modernization, and production capacity use
  - Capital expenditures
  - Research and development
- Productivity
  - Output per hour
- Investment performance
  - Common stock prices
  - Owners' equity appreciation
- Participation in the global market
  - Foreign trade balance
  - Foreign investment

Figure 12

Aftertax profits as a percentage of stockholders' equity

Profit/equity ratio rose for both processors and retailers in 1996.



Source: ERS/USDA.

Performance

Food Marketing System Performance Indicators Up

New plant projects in U.S. food processing rose sharply in 1996. Productivity likely increased in many food processing industries in 1996. The investment performance of owners' equity, as measured by increases in common stock prices, sharply outpaced other sectors of the economy for the eighth consecutive year. Processors paid out 52 percent of income as dividends. Global participation continued strongly.

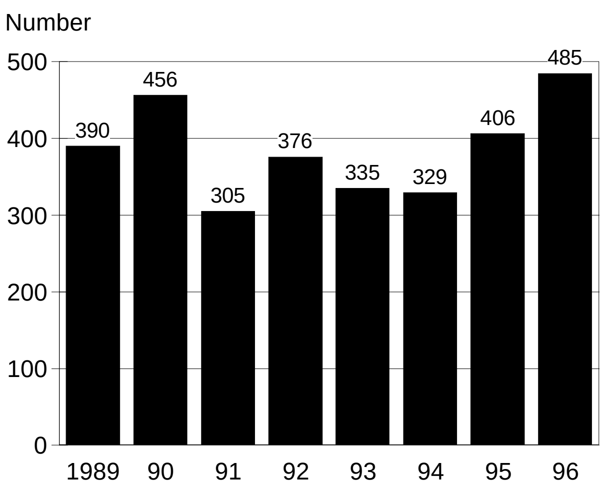
Capital Expenditures. Food processors undertook 485 new plant projects in 1996, compared with 406 in 1995 (fig. 13). Total new plant and equipment expenditures for food processing firms, which include nonfood operations, rose from $13.6 billion in 1994 to $17.7 billion in 1995, an increase of 30 percent. Initial estimates are $19.5 billion in 1996 (fig. 14).

The retail food system continued modernizing and upgrading existing stores, while closing smaller outlets. The number of retail grocery stores, which has been falling steadily over the past 50 years, dropped by an estimated 1,000 in 1996. New supermarkets continued to increase in size, averaging about 30,000 square feet per store. An estimated 1,200 new fast-food stores opened in 1996.

Research and Development. R&D within the food marketing sector is largely conducted in the food and tobacco processing industries. Like most other nondurable manufacturing industries, food is not R&D-intensive. In 1996, food and tobacco processors likely spent about $2.0 billion, or 0.4 percent of sales, on R&D. Only about 6 percent of this amount went to basic research. More than 60 percent of all R&D funds went to processing and new products. However, most R&D in food and tobacco processing is purchased from other sectors, such as food packaging, computer, and machinery firms (much of the technological innovation for food processing comes from these sources). ERS estimates this amount to be about $1.3 billion.

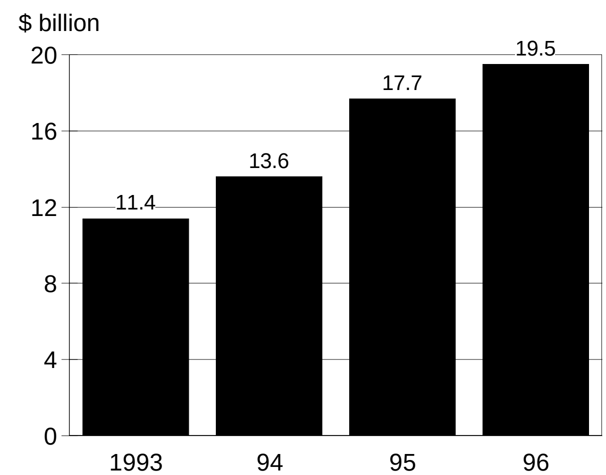
Productivity. Output per employee in 1993, the most recent data available on productivity, declined in foodservice and food retailing. This index of labor productivity increased in some food processing industries, such as those for milk, sugar, and beer.

Figure 13
New plant projects in food processing
The number of new plant projects rose to 485 in 1996.



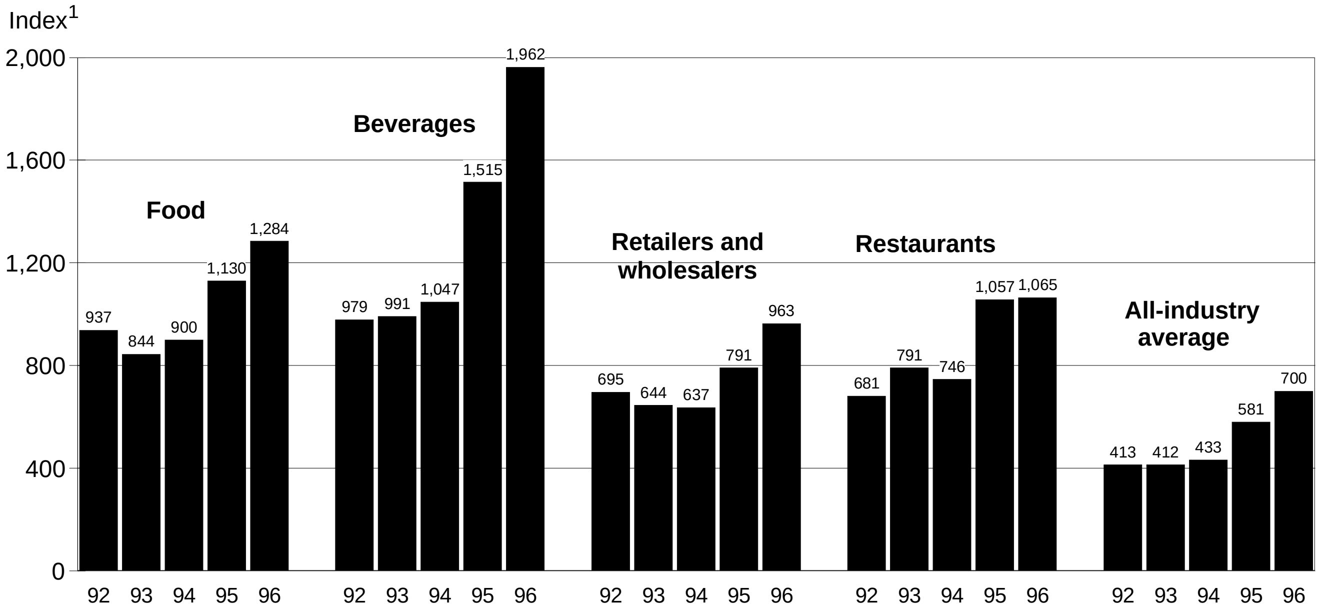
Source: ERS/USDA.

Figure 14
Plant and equipment expenditures in food processing
Expenditures rose from $17.7 billion in 1995 to $19.5 billion in 1996.



Source: ERS/USDA.

Figure 15
Dow Jones equity market indexes for the food marketing system
Food processing companies have outperformed other industries in the 1990's.



[1] June 30, 1982 = 100
Source: ERS/USDA.

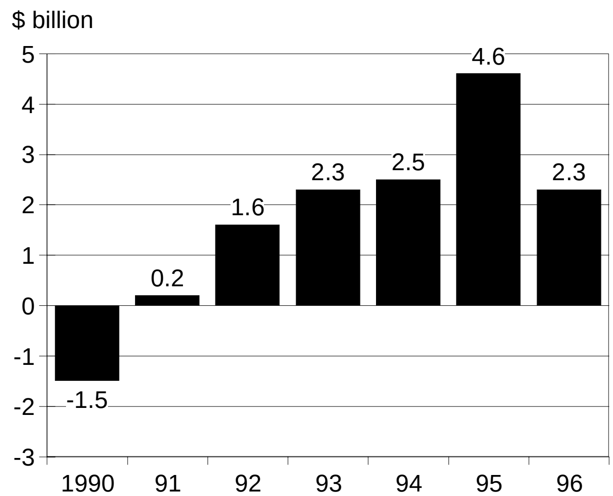
An increase in output in most food processing industries, along with unchanged employment, suggests an increase in productivity for many food processing industries in 1996.

Owners' Equity. Owners (common stockholders) of food marketing companies saw the value of their holdings rise sharply in 1996. The index for food retailers and wholesalers rose 22 percent, while that for beverages rose 30 percent (fig. 15). The index for all industries rose 20 percent. Since 1982, the food marketing sectors have outperformed the index for all industries during most years

Dividends. U.S. food firms have always had a relatively consistent dividend payout ratio. U.S. food processors paid out an estimated $14 billion in dividends in 1996, compared with $11.2 billion in 1995. About half of income after taxes went to retained earnings, which are used for such projects as new product development, capital expansion, and acquisitions. Food retailers paid over $800 million in dividends in 1996.

Global Participation. The U.S. food marketing system continued to expand as the world's most global food system. This expansion is measured by the system's foreign trade, foreign investments, and the sales of its foreign subsidiaries. The United States is the world's leading importer and exporter of processed food. The U.S. surplus in processed food trade was about $2.3 billion, with about $30.1 billion

Figure 16
Trade balance in food processing
U.S. exports exceeded imports by $2.3 billion in 1995.

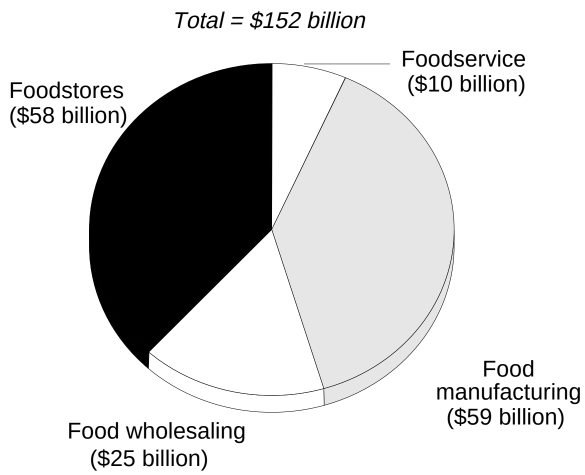


Source: ERS/USDA.

Figure 17

Estimated sales of U.S. affiliates of foreign food marketing firms, 1996

Largest share of sales came from foodstores and processing.

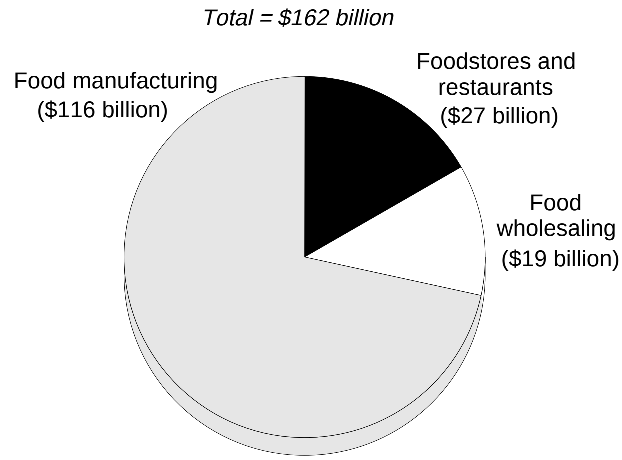


Source: ERS/USDA.

Figure 18

Estimated sales of foreign affiliates of U.S. food marketing firms, 1996

Largest share of sales came from food processing.



Source: ERS/USDA.

in exports more than offsetting $27.8 billion in imports (fig. 16).

However, trade data do not adequately reflect the global presence of U.S. food marketing firms. Many of the world's largest food processing firms expand aggressively in foreign markets by increasing their investments in foreign plants or expanding licensing arrangements with foreign firms to produce and distribute their branded products. While large U.S. food processors export on average only 6 percent of their sales, they receive 27 percent of their total sales from their plants located in foreign countries.

Sales of U.S. affiliates of foreign food marketing firms reached an estimated $152 billion in 1996 (fig. 17). Sales of foreign affiliates of U.S. food marketing firms were a little higher, reaching $162 billion in 1996, with the largest portion coming from food processing (fig. 18).

What Happened in the Food Marketing System in 1996?

Industry Growth and the Economy

- Sales rose over 3 percent.
- The number of new plants, consumer advertising expenditures, and common stock prices reached new highs in 1996.
- The food marketing system's share of income fell slightly in 1996.
- Wages and farm prices were stable, interest rates lower, and the value of the U.S. dollar higher.

Structure

- Nearly 400 mergers took place in 1996, down from the previous 3 years.
- Mergers in the foodservice industry reached an all-time high.

Conduct

- The number of new food products introduced fell for the first time since the mid-1970's
- Media advertising reached an estimated $11 billion.
- Retail prices rose more than in 1995.

Performance

- Profitability was up sharply in all four sectors.
- The food marketing system, one of Nation's most leveraged, saw debt levels go up again.
- Owners' equity appreciation reached a record high.
- The trade surplus in processed foods was lower than in 1995.
- The number of new plant projects rose to a record 485.

Would You Like More Information?

This report is a partial synopsis of the more detailed report, *Food Marketing Review, 1996-98*, to be released in fall 1998. The full report includes detailed data on mergers, sales, concentration, advertising, product industries, profits, productivity, plant and equipment expenditures, equity performance, prices, and international performance measures. It also includes charts and a sizable appendix.

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