# **Profile of the U.S. Food Distribution System**

# Going into the 1990s

by

Anthony E. Gallo Agricultural Economist Economic Research Service U.S.D.A. Washington, DC

The U.S. food distribution system going into the 1990s is considerably changed in size, structure, competitive conduct and performance from the previous decade. Essentially, the food system, composed of 400,000 firms which manufacture, wholesale and retail the nation's food supply, is considerably more concentrated, leveraged product differentiated, globalized, and declining relative to the rest of the economy. The system's performance going into the 1990s has been little short of spectacular, with increases in profitability, productivity, automation, and common stock prices, all performing well compared to the rest of the economy.

#### Size and Structure

Although the U.S. food distribution system is still the nation's largest marketing system, its relative importance continues to decline. Whereas the food system accounted for 11 percent of the valued added to GNP in 1980, only about 9.5 percent will be added in 1990. The system will account for 10 percent of U.S. employment, down from 11.5 percent in 1980 (Figure 1). The share of disposable income allocated to food dropped from 13.5 percent to an estimated 11.7 percent.

The nearly \$730 billion sales by the food marketing system in 1990 will be provided by a

Journal of Food Distribution Research

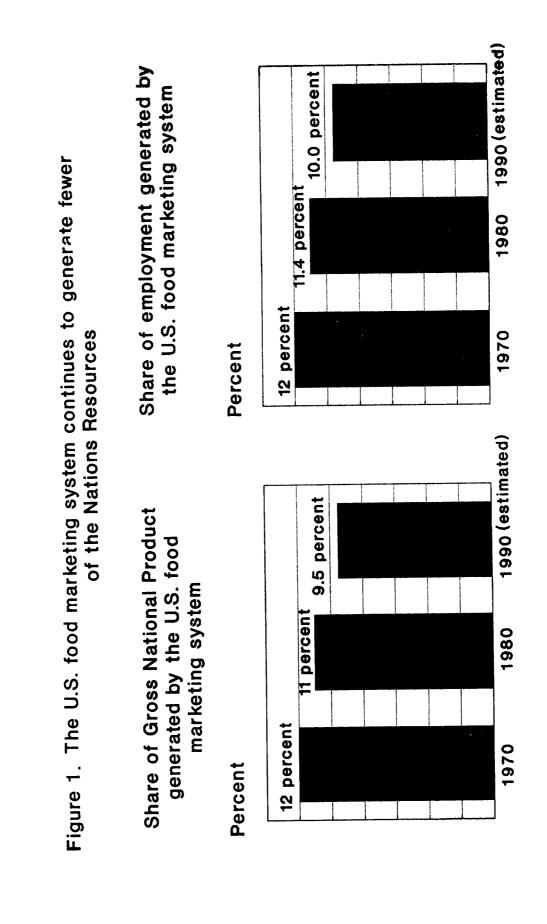
more highly concentrated system. Concentration is increasing for nearly all of the 49 food processing industries, as well as retailing, wholesaling, and food service (Table 1).

Aggregate concentration continues to increase in all four sectors, while the number of food marketing companies continued to decline, partially due to increased mergers.

Much of this increased concentration has been due to increased merger activity. Between 1982 and 1988, nearly 34 mergers and leveraged buyouts took place in the food marketing system. Food processing, which had 16,800 firms in 1982, had more than 2,000 of these transactions during that period, while food wholesaling, retailing, and foodservice each had nearly 1400 transactions (Table 2).

#### Leverage

Total liabilities of food processors and retailers rose from about \$90 billion to nearly \$260 billion between 1980 and 1990 (Figure 2). Inflation, several successive years of major capital expansion, and normal asset growth accounted for a small portion of that growth. The overwhelming portion of growth in liabilities was due to leveraged buyouts and mergers in the late 1980s,



### Table 1

	Share of market controlled by top firms					
Year	Top 50 processing firms	Top 50 wholesaling firms	Top 2 retailing firms	Top 50 foodservice firms		
			Perce	ent		
1963	NA		NA	34.0	NA	
1967	35.0		NA	34.4	NA	
1972	38.0		48.0	34.8	13.3	
1977	40.0		57.0	34.5	17.8	
1982	43.0		64.0	34.9	20.2	
1987 <u>1</u> /	48.0		71.4	36.5	22.3	

### Aggregate concentration in food marketing

NA = Not available.

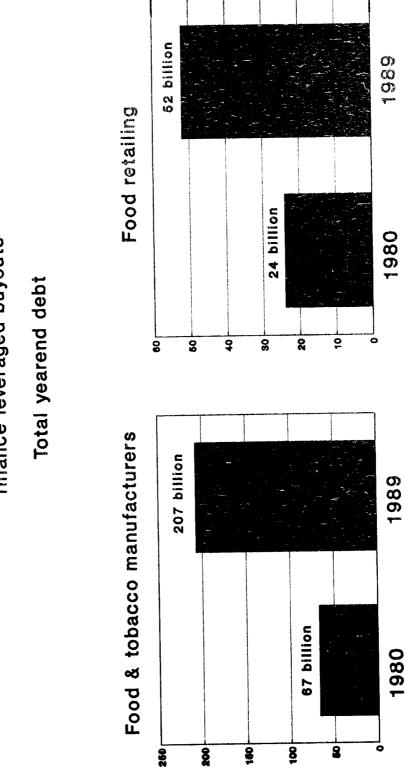
1/ Estimated.

### Table 2

# Food marketing mergers

Year	Processing	Wholesaling	Retailing	Food service	Total <u>1</u> /
			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	<b>30</b> 1	71	65	77	514
1988	351	71	76	75	573

1/ 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.





February 91/page 92

and at that, several firms accounted for much of the increased debt. A selloff of some of these assets could further reduce debt. In the case of leveraged buyouts, after-tax proceeds that would normally be paid out as dividends are now paid as interest. Debt as a percent of assets for food manufacturing rose from about 50 percent in 1980 to nearly 70 percent in 1989, considerably above the **60 percent** for all manufacturing corporations in 1989 (Figure 3). The ratio for food retailing rose from **63 percent** to 83 percent during that same period. By comparison, the debt of assets ratio for all retailers was 71 percent in 1989.

### Increased Product Differentiation

Although food marketing is more concentrated in the 1990s, competition continues at a more vigorous pace in each industry sector as firms seek to acquire a greater market share in this slow growth sector. New product introduction, the clearest case of product differentiation, has risen sharply over the past decade. Less than 2,000 new food products were introduced in 1980, compared to over 10,000 in 1990 (Figure 4). Between 1982 and 1990, nearly 75,000 new products were placed on the market.

Food is also the largest advertiser in the U.S. economy in 1990, but its share has been declining in recent years, fading from 23.6 percent to 21.5 percent (Figure 5). In 1990, food marketing firms will spend about \$12 billion directly advertising their products, compared to \$4 billion in 1980. However, competition for scarce shelf space has also seen an increase in trade promotion aimed directly at retailers.

#### Globalization

The U.S. food system is considerably more global going into the 1990s compared to the previous decade. Although foreign trade, both imports and exports, remains at between four and five percent of total shipments, foreign investment, both inward and outward, has risen sharply. In 1982, the value of shipments by U.S. owned affiliates was \$39 billion; by 1988 the value of these shipments had risen to over \$60 billion (Table 4). Increased investment in the U.S. food marketing system was reflected in a change in the value of shipments by U.S. affiliated foreign firms from about \$15 billion to \$20 billion. The book value of total foreign investment in U.S. food marketing rose from \$19.5 billion to \$24 billion. Direct foreign investment by the United States in food manufacturing, wholesaling, and retailing rose from \$9.5 billion to \$17 billion.

### **Performance Profile**

The last half of the 1980s saw sharp increases in profitability, productivity and output of the food system, while input costs rose at a moderate pace.

In food manufacturing, employment remained the same as in 1980, but output increased sharply, rising by about two percent per year.

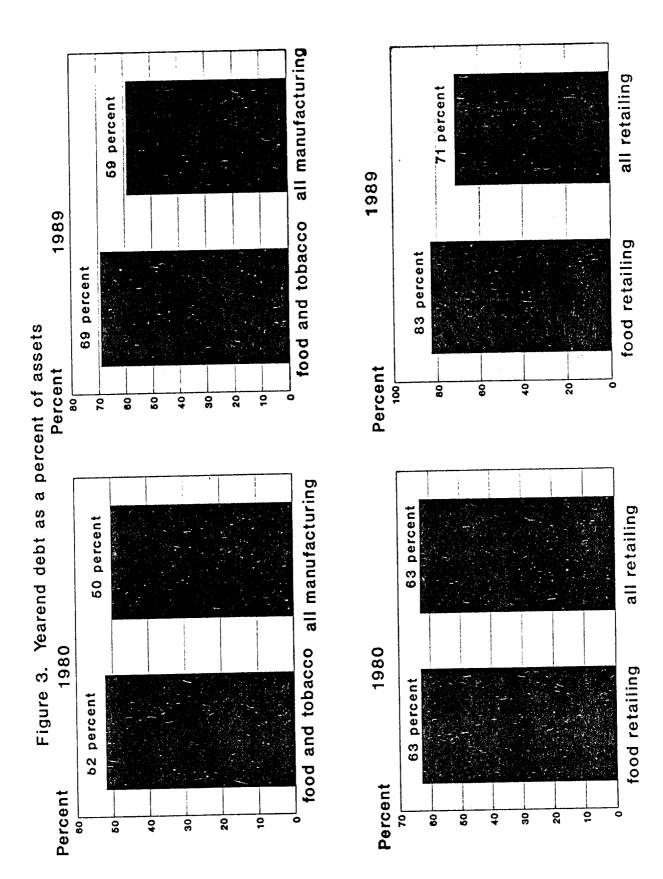
Consequently, output rose for such industries as dairy, sugar, beer, and soft drinks. However, the number of employees in food retailing and foodservice outpaced the level of output, resulting in productivity declines, largely reflecting increased services. The declines have stabilized in recent years.

Much of the increase in output is due to automation. New plants and expenditures at the corporate level (on an enterprise basis) rose sharply during the 1980s, rising at an average yearly rate of about nine percent between 1984 and 1990.

Thus the stock of capital adjusted for price increases and replacement continued to show a gain.

Going into the 1990s the food system continues its high profitability from operations. Between 1985 and 1990, after tax, profits as a share of stockholders equity outperformed that of all manufacturers (Table 6).

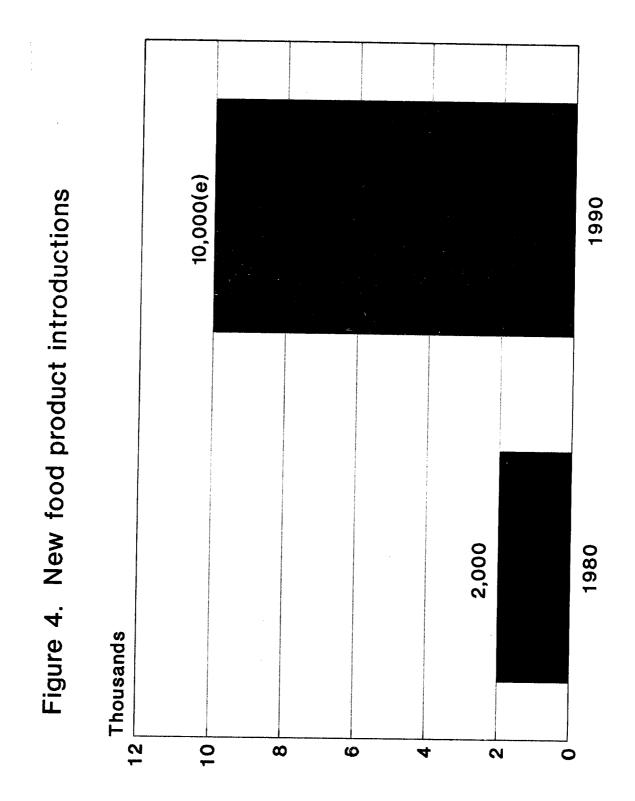
After tax profitability of food retailers and food manufacturers have fallen in recent years due to higher interest payments, but still exceed that of their nonfood counterparts. Input costs continued to rise at a slow pace, with real wages declining



February 91/page 94

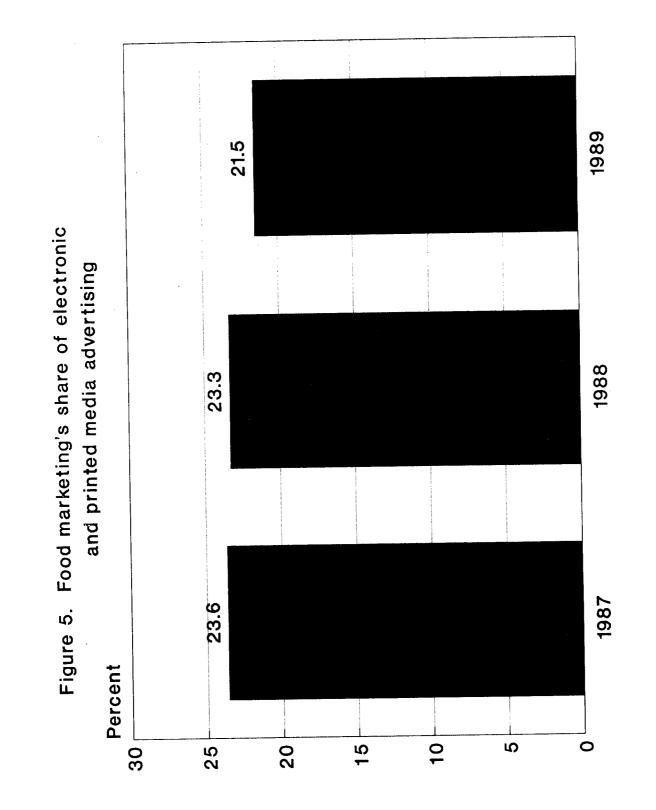
Journal of Food Distribution Research

<' ۰



Journal of Food Distribution Research

February 91/page 95



# Table 3

Acquisition	Target	Price	Year	Industry
		Billion dollars		
1. Kohlberg Kravis Roberts and Co.	RJR Nabisco, Inc.	24.72	1989	Tobacco, food
2. Kohlberg Kravis Roberts and Co.	Beatrice Cos., Inc.	6.25	1986	Food
3. Kohlberg Kravis Roberts and Co.	Safeway Stores, Inc.	5.34	1986	Supermarkets
4. Thompson Co.	Southland Corp.	4.00	1987	Convenience stores

# Largest going-private leveraged buyouts in history: Top four were food related

# Table 4

County or Region	1982	1987	1988	% change 1982-88		
	Million dollars					
Total, all countries	\$39,023	\$50,049	\$60,264	54.4		
Europe	18,974	29,070	34,534	82.0		
EC-12	18,327	27,868	33,164	81.0		
Canada	5,258	5,407	7,518	43.0		
Japan	2,363	4,442	14,933	108.0		
Australia	n.a.	1,880	2,092	44.6		

# U.S. Investments abroad: Value of shipments by U.S. Affiliates of Foreign Firms

County or Region 1982-88	1982	1987 1988	% change
	Million dollars-	······································	
Total, all countries 102.4	\$14,847	\$22,862	\$30,053
Europe 112.0	10,527	17,967	22,318
EC-12 n.a.	n.a.	10,418	14,841
Canada 81.1	2,218	3,174	4,017
Japan 77.8	564	612	1,003
Australia n.a.	n.a.	220	1,478

Foreign Investments in the United States: Value of shipments by U.S. Affiliates of Foreign Firms

## Table 6

	After-tax profits						
	as a stockh						
		Food and					
Year	Before-tax income After-tax from operations income	tobacco processors	All				
	Million dollars	<u>Percent</u>					
1985		20,015	12,798	10.3			
1986		21,595	13,292	1 <b>9.3</b>			
1987		24,658	15,579	1 <b>2.9</b>			
1988		25,686	20,625	26.9			
1989		30,893	16,506	16.0			

Profits of food and tobacco processing firms

February 91/page 98

Journal of Food Distribution Research

## Table 5

during most of the decade and farm prices rising at an average compounded yearly growth rate of less than 0.5 percent.

Another measure of performance is how well the food system performs for its owners. One important measure of that performance is how well the common stock has performed. Over the past eight years, the food system, although a low-growth industry, has done extremely well. The Dow Jones Equity Market Index for all companies showed a threefold increase between 1982 and 1990.

Food processors showed a sixfold increase. Food retailers and wholesalers averages were more than five times greater. Beverages and soft drinks also outperformed the market. This trend continued in 1990, especially for food processing. Also, price earning ratios, a measurement of how investors value the quality of an industry's earnings, were above average for the food system. There are several reasons for this increase. First, part of the system's appreciation reflects speculation due to leveraged buyouts and mergers, many of which were very favorable for investors. Second, food processing and retailing profits have grown rapidly in recent years. Third, although food marketing is a slow growth industry, cyclical movements tend to be small with stable growth in earnings and income in 1990.

Journal of Food Distribution Research

February 91/page 99

February 91/page 100

.

Journal of Food Distribution Research