CONGLOMERATION AND CONSUMER LOSS IN THE FOOD MANUFACTURING INDUSTRIES

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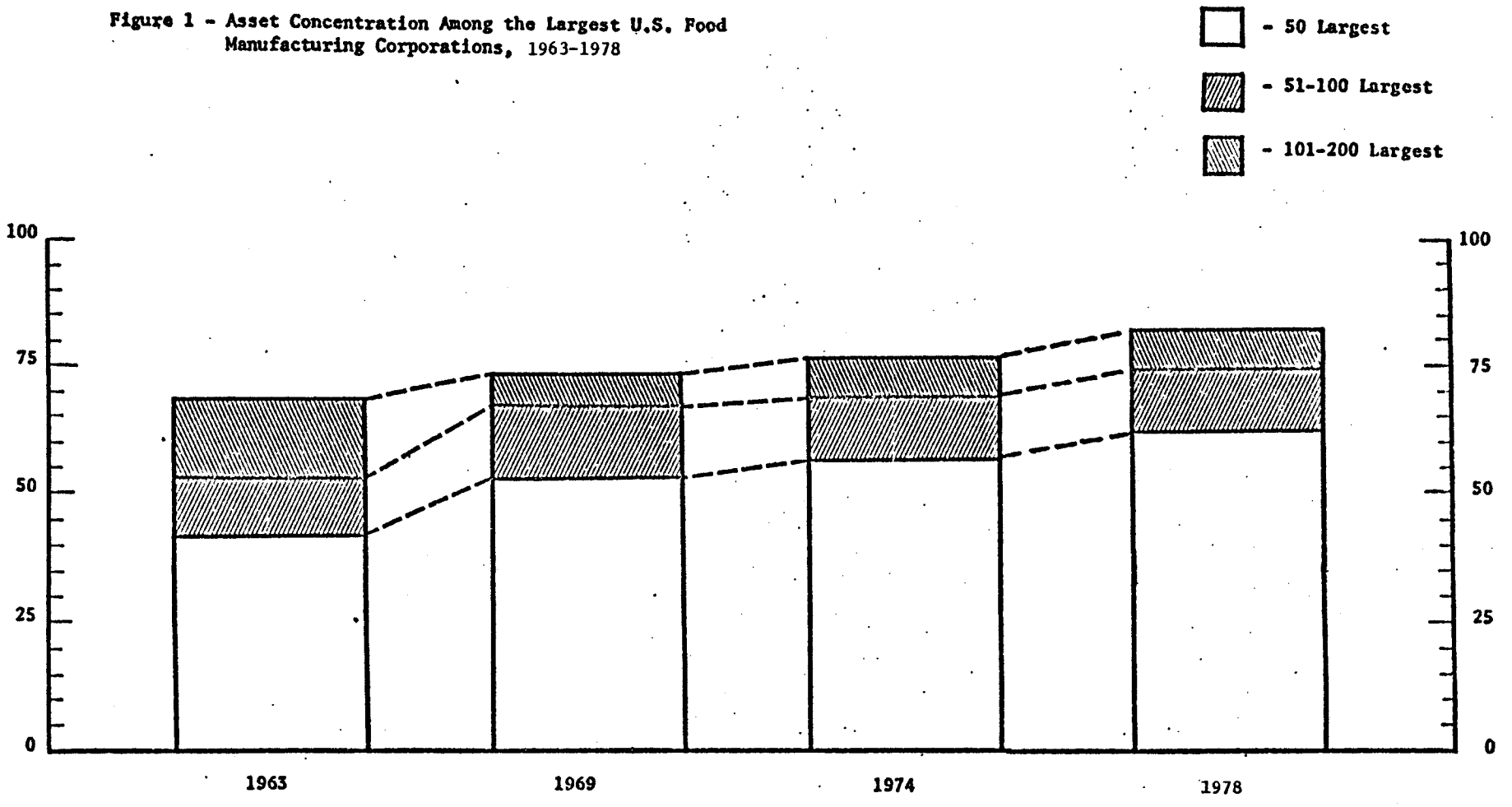
A few large conglomerate enterprises dominate U.S. food manufacturing. Just one percent of the 20,000 food manufacturing companies now control over four fifths of the total assets of all food manufacturers (Figure 1 and Table 1). The entrenched market positions and the financial strength of these large corporations in terms of assets, profits, and advertising expenditures means that their decisions permeate nearly every aspect of the American diet from nutrition to pricing to the actual shaping of consumer demand.

Food is not only a necessity it is of enormous economic importance. The $280 billion consumers spent for food in 1978 was 21 percent of their total consumption expenditures. Food manufacturers purchased nearly 70 percent of the production from farms and employed a labor force of 1.6 million persons.

Increases in food processing and distribution costs have been a major cause of inflation, although until quite recently their rapid increase has been unnoticed by the public. Despite significant cost reducing innovations in machinery and in packaging materials, processing and distribution costs per unit of sale increased by 80 percent over the period 1948 to 1971. This average increase, due significantly to higher promotion costs, had a mutted impact on retail food prices because it was offset by farm prices that were virtually constant for the quarter century period. Average retail food prices increased only 35 percent -- less than the general rate of inflation (Parker 1976). However, in 1972, as worlwide food shortages and higher farm costs pushed raw food prices up sharply, the continued rise in marketing margins began to arouse public concern. Attention was directed to the state of competition in food manufacturing and to potentially anti-competitive structural changes taking place because of a growing dominance of the sector by large conglomerate firms.

Figure 1 - Asset Concentration Among the Largest U.S. Food Manufacturing Corporations, 1963-1978



Source: IRS Book of Corporation Income Tax Returns (1963, 1969, 1974) and a special tabulation of data supplied to the Federal Trade Commission's Quarterly Financial Statistics Program (1978).

Table 1--Aggregate asset concentration among the largest food manufacturing firms, 1963-74

Size class	Food manufacturing only			
	1963	1969	1974	1978
50 largest	42.0	52.7	56.5	63.7
100 largest	53.5	67.4	68.5	74.4
200 largest	67.9	73.4	76.7	81.1

Source: IRS, Source Book of Corporation Income Tax Returns, various years. Figures are lower bound estimates made on the assumption that each firm in a size class of a minor industry is of equal size; each concentration ratio is constructed so as to maximize the ratio consistent with this assumption. Data for 1978 supplied by the Financial Statistics Program of the FTC.

Asset Concentration

In 1978, just 50 corporations accounted for nearly two-thirds (64 percent) of all food manufacturing corporation assets (Figure 1 and Table 1). One hundred firms accounted for 74 percent and 200 firms for 82 percent. The top 50 food manufacturers conducted 75 percent of total media advertising and 90 percent of network television advertising. Comparable data for the 200 largest are 85 percent and 100 percent (Connor 1979).

Concentration is increasing. In the decade and a half between 1963 and 1978, the 50 largest firms' share of food manufacturing assets increased by more than half (from 42 to 64 percent). This 1.5 percentage point annual increase is an acceleration of an upward trend; for the previous decade and a half (1950 to 1963) asset concentration increased at only a half percentage point a year (NCFM 1966). If the present trend continues, by the year 2000 fifty firms will account for all of food manufacturing assets.

Some Causes of Increasing Concentration

The trend toward increasing concentration is profoundly altering the structures of the U.S. food processing industries. It is strongly associated with a drastic decline in the number of food firms, most of them local or regional enterprises. Behind these dual trends lie four main causes: increasing merger activity, increasing size economies in advertising and promotion, increasing plant sizes, and rising barriers to entry facing new firms.

In contrast to the rest of manufacturing, where the number of companies has been increasing, the number of companies in food manufacturing declined between each census year since 1947 (Table 2). The rate of exit has been increasing. The 1947 Census enumerated over 40,000 companies in food manufacturing. In the most recent 1972 Census, this number stood at 22,172.

Table 2

Number of Food and Kindred Products Manufacturers, Census Years 1947-72

Year	Number of Companies		Average Yearly Percentage Change from Previous Census Year	
	Sum of 4-Digit Industries (1)	Net of Duplication (2)	Col. 1 (3)	Col. 2 (4)
1947	41,147	N.A.		
1954	38,610	N.A.	-.86	
1958	36,545	N.A.	-1.31	
1963	32,617	N.A.	-2.06	
1967	27,706	26,749	-3.19	
1972	23,326	22,172	-3.00	-3.21

N.A. - not available

SOURCE: General Summary, 1972, Census of Manufactures and same publication for previous Census years. U. S. Bureau of the Census, Table 2.

Between the two earliest post World War II censuses, the rate of decline averaged a little less than 0.9 percent per year. Over the most recent decade, 1963-72, the rate of exodus averaged 3.2 percent annually. If this trend continues for another decade, half the 1972 number of food manufacturers will disappear.

The principle reason for the decline in company numbers in the early post-1945 period was the elimination of inefficient size plants operated by small firms. The exodus was particularly rapid in the dairy industry and other local market industries. However, as the postwar period progressed, declines in company numbers became widely distributed among food industries and average establishment sizes; inefficiency due to small plant size did not appear to be the prime cause of the increasing rate of company exodus (Parker 1976). Instead, mergers have become a prime cause of company disappearance.

During the late 1950's and early 1960's, and coincident with an increasing merger trend for the whole economy, the merger activity of food companies accelerated rapidly. The increasing tempo of that activity in the years following 1963, and particularly the increasing acquisition rate of medium-sized and larger food companies, began to threaten the survival of a viable middle tier of independent companies which compete with the very largest companies.

Through 1977, 217 large food companies (over $10 million in assets at time of acquisition) had been acquired (Table 3). These were 11 percent of all large manufacturing mergers for the period 1948 through 1977. Most of the acquisitions took place since 1965. After 1965, the number of large food companies acquired yearly increased not only absolutely but also as a percentage of all large manufacturing companies acquired (13 percent after 1965 compared to 9 percent before). Many acquiring companies are not only

Table 3 Number of Large Food Manufacturing Companies Acquired as a Percentage of All Large Manufacturing Companies Acquired, Selected Periods 1948 through 1977

Period	Number of years	Number of large food manufacturers acquired[1/]	Percent of all large manufacturing acquisitions
1948-65	17	69	8.8
1966-68	3	47	12.1
1969-71	3	46	13.1
1972-74	3	29	14.4
1975-77	3	26	12.9

1/ Acquired firm's assets of $10 million or more at time of acquisition.

Sources: National Commission on Food Marketing The Structure of Food Manufacturing table 2, page 110, and table 4, page 112; Federal Trade Commission, Statistical Reports on Mergers and Acquisitions; 1972 (table 13), 1973 (table 14), 1974 (table 14); Large Mergers in Manufacturing and Mining, 1948-71 (table 3); and Economic Report on Corporate Mergers, 1969 (table 1-7).

large food manufacturers but conglomerate enterprises whose activities include the manufacture of non-food grocery products, grocery products distribution, and services that are related to these areas.

Connor (1979) has shown that by 1975 at least 40 percent of the total assets of the 100 largest food manufacturers were attributable to mergers occurring between 1950 and 1975. Were it not for these mergers and had the largest companies not replaced merger expansion by internal growth, asset concentration of the 100 largest food manufacturers would have been lower in 1975 than it was in 1950.

In 1963, prior to the increased frequency of large mergers, a special census tabulation for the National Commission on Food Marketing showed that just 50 food manufacturers controlled nearly 70 percent of the top 4 producing positions in food manufacturing industries and almost the same percentage of the top 4 positions of more narrowly defined census product classes (NCFM 1966). Control of top positions by the largest food manufacturers was much greater in concentrated industries than less concentrated industries. The increase in large firm acquisitions since 1965 has doubtless tightened the grip of the largest food manufacturers on important positions in individual food product areas.

The principal barrier to new entry by regional and local firms is the huge expenditures required to launch new consumer food products. Initial-year advertising costs for a new product often exceed $20 million today. It is estimated that in 1978, a total of $13 billion was spent in the U.S. on all forms of advertising of food products: media costs, point-of-purchase displays, direct mailings, free samples, coupons, and the like (Connor 1979). These same expenditures were only $2 billion in 1950. Because advertising

expenditures have risen faster than sales, the intensity of advertising of food products has more than doubled over 1950-75, making it ever more difficult for smaller firms to inform consumers of their products.

Some Effects of Increasing Aggregate Concentration

The trend in concentration has changed the nature of competition in the processed foods markets. The largest companies have become increasingly conglomerated, selling scores of products in dozens of different domestic and foreign markets. Grocery products have proliferated with as many as 6000 "new" items introduced in one year. Market concentration has also risen. Two other effects, discussed below, are the creation of monopoly profits and monopoly prices.

Large food manufacturers have not only been absorbing other large food manufacturers but also large companies in other industries, particularly in other grocery product areas. They have also expanded forward into restaurant operations. Currently, the largest food manufacturers are also owners of most of the largest fast-food restaurant chains (Table 4). Large food and tobacco manufacturers accounted for 18 percent of all large manufacturing and mining mergers occurring in the U.S. between 1950 and 1975; and most recently, between 1971 and 1975, they accounted for 28 percent.

The trend toward increasing diversification is dramatic. In 1950, 14 of 25 of the largest food manufacturers held significant positions from 1 to 5 grocery product industries (Table 5). By 1975, none of the 25 firms had significant positions in fewer than six grocery products industries, and 3 firms made sales of over one million dollars in more than 20 different grocery products industries.

Table 4 -- Foodservice operations and their sales of the 200 largest food and tobacco manufacturing companies, 1975

Company, ranked by foodservice sales	Name(s) of U.S. foodservice operations	Foodservice sales, 1975
		Million dollars
Heublein	Kentucky Fried Chicken, Colonel Sanders, Country Style, H. Salt Seafood, Davis Bros., Zantigo Mexican-American, Zapata	1,550
Pillsbury	Burger King, Steak and Ale, Bennigan's, Granny's Attic, Hungry Jack, Hungry Lion, Jolly Ox, Poppin Fresh Pie Shops, Three Crowns	841
J. Lyons[2/]	Baskin-Robbins Ice Cream, Tastee Freeze, London Steak Houses, Wimpy's	489
ITT	Sheraton Inns and Hotels	335
Ralston Purina	Jack-in-the-Box, Stag & Hound, Boar's Head, Hungry Hunter, Barclay Jack's, Monterey Jack's, Mountain Jack's, The Boat House, The Dry Dock, Tortilla Flats	321
General Foods	Burger Chef, Crock & Block, Ernie's	375
United Brands	A&W	268
General Mills	Red Lobster, Betty Crocker, Hannahan's	180
Squibb	Dobb's House, Steak N' Egg	162
Nestlé	Stouffer's, Borrel, Bob's, Cohills, Movenpick, Swiss Inn	157
Great Western United	Shakey's Pizza	124
Greyhound	Greyhound, Post House	131
International Multifoods	Mr. Donut, Scanda House, Svenden House, T. Butcherblock, Boston Sea Party	104
W.R. Grace	Far West	100
Del Monte[2/]	Del Monte Service Systems	95
Consolidated Foods	L. & K., Lyon Inn, Almanack, Hamburger Paddys, Lyon'et, Penny Pincher Inn, Royal Buffet, Towne House	61

Table 4 (continued)

Company, ranked by foodservice sales	Name(s) of U.S. foodservice operations	Foodservice sales, 1975
		Million dollars
Riviana Foods 2/	Lum's, Ranch House	60
AMFAC	Fred Harvey, Island Holidays	50
Green Giant 2/	Henrici's, Hoffman House	48
CPC International	Dutch Pantry	44
Campbell Soup	Clark's, Hanover Trail, Herfy's, Pietro's	42
Quaker Oats	Magic Pan	35
Borden	Borden Burgers	28
Dean Foods	Bressler's Ice Cream, Baskin-Robbin's	25
Pet 2/	Stuckey's	21
American Stores	Alphy's	21
Esmark	Dipper Dan	17
Smithfield Foods	Smithfield Inn, Family Fish House	11
Rapid-American	Holland House, Wm. Talley House	NA 1/
Federal	Holly Farms Chicken	NA 1/
General Host	Hot Sam	NA 1/
Hubbard Milling	Henry's Drive-In	NA 1/
United Biscuit	Carry Out Bars	NA 1/
Southland	Charles & Co. Sandwich	NA 1/
Dibrell Bros.	Briarpatch Kentucky Rib-Eye	NA 1/
Total		5,595

Sources: Derived from data in Connor and Mather (1978) and Foodservice Today November, 1976.

1/ Amount not available.

2/ Acquired by another company since 1975.

Table 5 -- Diversification of 25 leading food processing companies, 1950-1975

Number of 4-digit SIC grocery product industries	Number of companies		
	1950	1966	1975
	Number		
1 to 5	14	5	0
6 to 10	8	14	13
11 to 20	3	6	9
over 20	0	0	3

Sources: The National Commission on Food Marketing, The Structure of Food Manufacturing (June 1966) and Economic Information Services, Inc. For 1950 and 1966, only industries with $500,000 in sales by company are counted; for 1975, the cutoff was $1,000,000.

When large firms acquire established firms in other product areas, case studies have shown a doubling of the acquired companies' advertising expenditures. Typically, advertising switches from more informational media, such as newspapers where prices are often featured, to television advertising which emphasizes more emotive messages. As a consequence of the diversification of the largest food manufacturers and their predeliction for differentiation products through advertising, upward pressure is put on food industry concentration (Mueller and Rogers 1979).

Food manufacturing ranks fourth among the twenty major groups within manufacturing in terms of average industry concentration (Parker and Connor 1978). Average four-firm sales concentration in food manufacturing rose from 47 percent in 1958 to 52 percent in 1972 (Table 6). Concentration is particularly high in those industries which market differentiated products: breakfast cereals, beer, candy, and soft drinks, for example (Connor 1979).

According to Bain's (1968) classification system of industries on the basis of their levels of concentration, about four-fifths of the food manufacturing industries are considered to be oligopolies; only one-fifth are classified as unconcentrated (Table 7). Between 1958 and 1972, the proportion of value added originating from highly or very high concentrated industries rose from 24 to 34 percent of the sector's total, while the proportion in the two least concentrated categories declined.

Notwithstanding the generally larger size of food industry plants, scale economies at most explain only a fraction of the actual concentration levels observed in the food industries. The average level of 4-plant concentration justified for the 23 food industries with over 40 percent 4-firm concentration was 15 percent, one-fourth the 60 percent level

Table 6. Weighted Average 4-firm Concentration in Food and Kindred Products Industries 1958, 1967 and 1972

	National market industries 1/	National market industries plus average local market concentration for 5 industries 2/
1958	39	47
1967	41	50
1972	44	52

1/ Includes all food and kindred products 4-digit SIC industries except Food Products not elsewhere classified and 5 local market industries. In 1967 and 1972 poultry dressing, egg processing and frozen specialties were not included because of definition changes. The 1967 and 1972 data are for identical industries. 1958 tabulations use definitions which in several instances were changed by 1967. The purpose of the changes was to accommodate the changing character of products.

2/ Average local market concentration ratios for the late 1950's through the early 1970's, as reported in the Federal Trade Commission staff report, The Structure of Food Manufacturing, and in the staff economic report on the Dairy Industry. The same average weighted local concentration ratios were used in both 1967 and 1972. The increase in the average between 1967 and 1972 was due to higher national market concentration.

Source: Concentration Ratios in Manufacturing Industries, 1958, Subcommittee on Antitrust and Monopoly, U.S. Senate, table 2; and Concentration Ratios in Manufacturing, 1972 Census of Manufactures, U.S. Bureau of the Census, table 5.

Table 77

Classification of Food and Kindred Products Manufacturing Industries According to Bain's Concentration Types, 1972

Bain's industry concentration type 1/	Number of industries			Percent distribution of Value added			Percent distribution of Value of shipments		
	National	Local 2/	Total	National	Local 2/	Total	National	Local 2/	Total
I. Very highly concentrated	3	1	4	3%	7%	10%	2%	5%	7%
II. Highly concentrated oligopolies	8	2	10	11	9	20	9	9	18
III. High-moderate concentrated oligopolies	10	2	12	23	14	37	17	10	27
IV. "Low-grade" oligopolies	11	-	11	10	-	10	12	-	12
V. Unconcentrated industries	10	-	10	23	-	23	36	-	36
Total	42	5	47	70	30	100%	76	24	100%

1/ Joe S. Bain, Industrial Organization, John Wiley & Sons, 1959, pp. 124-133. Bain's type I, very highly concentrated class, includes industries whose top 8 firms control 90 percent or more of production or whose top 4 cont 75 percent or more. The equivalent percentages for type II are 85-90 percent for the top 8 or 65-75 percent for the t Type III, 70-85 percent for the top 8 or 50-65 percent for the top 4. Type IV, 45-70 for the top 8 or 35-50 for the t Unconcentrated industries would fall below type IV.

2/ Industries identified as local market industries in The Structure of Food Manufacturing Technical Study Numbe National Commission on Food Marketing 1966, pages 31 and 37. Concentration data for the five industries are from same source and Economic Report on the Dairy Industry, Federal Trade Commission, 1973.

Source: Concentration Ratios in Manufacturing 1972 Census of Manufacturers, U.S. Bureau of the Census, Table 5.

actually observed. Four-plant concentration of 15 percent is probably a substantial overstatement of the level of concentration justifiable strictly on the basis of plant scale economies (Parker 1976). Firms, for reasons of business strategy, often operate plants which exceed the minimum optimal sizes for their industries.[1/] Diseconomies due to very large plant size are not severe in most food industries. Usually the production capacity of a food processing plant can be increased without increasing average unit costs simply by adding more production lines.

Monopoly Profits

There have been two large-scale, rigorous, statistical studies of the relationship between food manufacturer profit rates and indexes of monopoly in market structures. Both studies, using different data sources and time periods, confirm that high concentration, high advertising intensity, and large market shares boost firm profits above a competitive rate (FTC 1969, Mueller and Rogers 1979).

Since market structures have worsened, one would expect to see profit rates rise as well. This is precisely what has been observed (Table 8). Food manufacturers profit rates were only three-fourths the rate of all manufacturers during 1951-55; however, by 1971-76 food manufacturers profits had surpassed those of the rest of manufacturing.

[1/] Using the midpoint Census plant method of calculating the minimum optimal plant scale, Parker and Connor (1978) found that average food manufacturing MOS amounted to only about 2 percent of industry shipments in 1972. Even allowing for 3 plants per leading firm, average four-firm concentration justified by economies of scale will not exceed 20 percent.

Table 8. Profits after taxes as a percentage of stockholders' equity, 1951-76.

5-year Period	Food manufacturing	All manufacturing	Food profit rate as a percent of all manufacturing profit rate
1951-55	8.3%	11.2%	74%
1956-60	8.9	10.3	86
1961-65	9.5	10.7	89
1966-70	10.9	11.6	94
1971-76	13.0	12.3	106

Source: Federal Trade Commission, Quarterly Financial Reports.
Profit rates of food manufacturers are likely understated because of the exclusion of food chain plants and because Capper-Volstead farmer cooperatives subtract their distributions of profits to owners before net income is calculated in their profit and loss statement. About 85 percent of all farmer cooperative in manufacturing are food manufacturers. They account for about 8 percent of food manufacturer sales (See Parker and Connor 1978 appendix B).

Monopoly Loss

Consumer loss due to monopoly has two parts. The first, and the largest, is the overcharge (the difference between the monopoly and the competitive price) on quantities actually purchased, and the second is an allocative loss incurred by consumers for additional quantities they would have purchased had the prices been at competitive levels (Figure 1).

The overcharge is a transfer of income from consumers to manufacturers with market power. However, just how much of the overcharge manufacturers take home as profits depends on how much higher their average costs are compared to what they would be under competition. Over 200 years ago, Adam Smith described monopoly as the great enemy of good management. By that he meant that monopolists do not have as strong incentives to minimize their costs as do competitive firms. Besides the technical inefficiency due to lax management, the monopolists higher costs often include excessive expenditures on advertising, the cost of excess plant capacity, excessive wage settlements, and costs of other strategies which protect the monopolist's profits from encroachments by competitors. Moreover, monopolistic firms often allow managerial withdrawals in the form of fancy offices, corporate jets, and other inessential perquisites.

A full economic articulation of monopoly welfare loss would adjust the welfare loss of consumers (as consumers) by the welfare gain of the monopolist (as consumer) to derive a net welfare loss. Food is a basic necessity (a wage good) consumed by all roughly in proportion to dietary needs regardless of income or wealth. The income transfers to monopolies go to relatively few, higher-income individuals.

Our estimates of overcharge may be overstated by the value received by consumers because of food manufacturers' subsidy of the information and

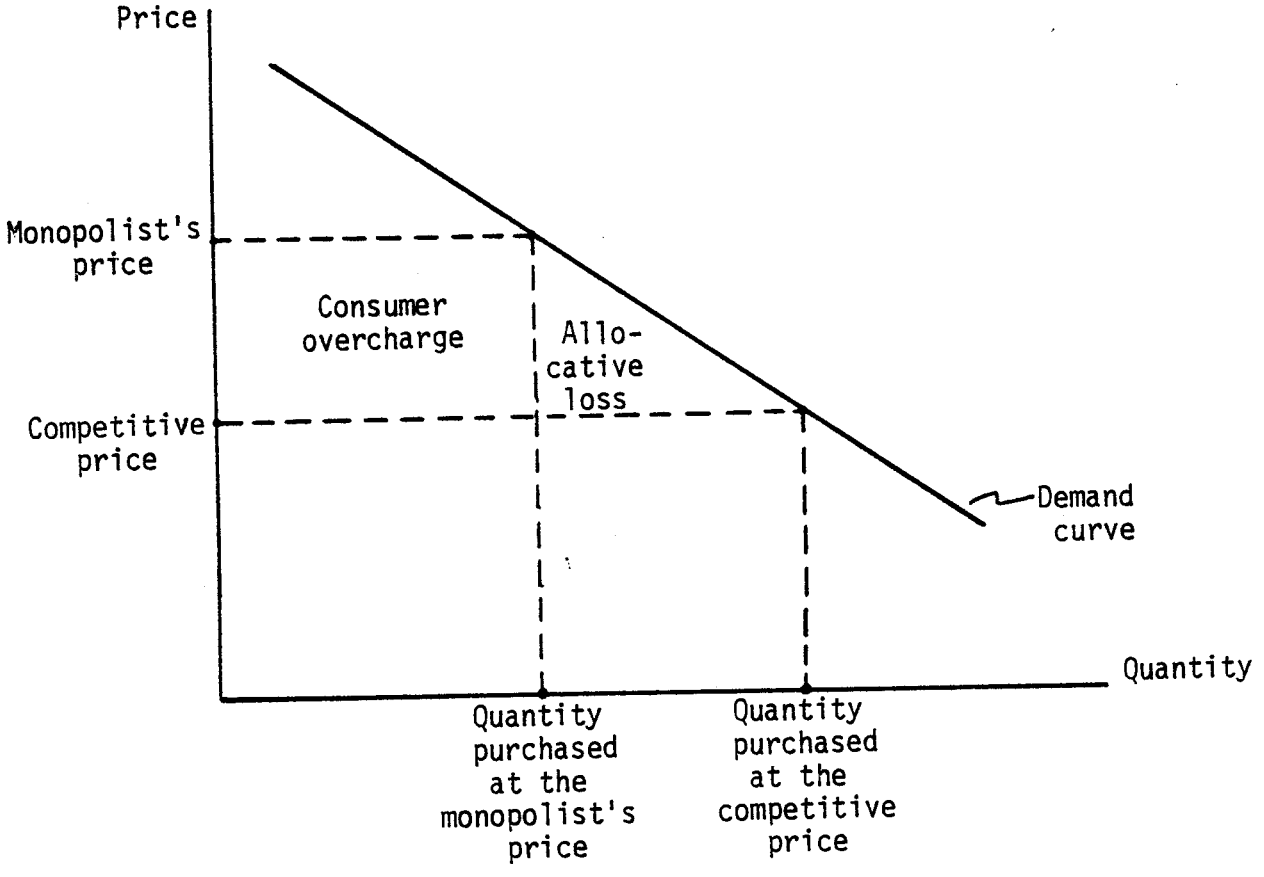

Price
Monopolist's price
Consumer overcharge
Allo-cative loss
Competitive price
Demand curve
Quantity
Quantity purchased at the monopolist's price
Quantity purchased at the competitive price

Figure 1

entertainment media. The value received by consumers from these media is not directly measurable because it is not expressed in a market. Expenditure levels and content are not made in accordance with consumer preference -- rather, they are chosen by companies to maximize advertising effectiveness. Although advertising expenditures may be efficient in producing private benefits for this purpose, they are likely very inefficient in producing social benefits.

We have calculated the monopoly loss to consumers of processed foods using three different approaches (Parker and Connor 1978). The three estimation methodologies differ widely and make use of distinct data sets. The first proceedure was to add together the separately estimated components of monopoly loss. About 60 percent of our first estimate is excess profits and excess advertising costs. These are calculated from estimating models specific to the food manufacturing industries. Excess profits are estimated from company data excess advertising is based on brand by brand advertising data for specific products. The remaining 40 percent of our first estimate consists of extrapolations of F.M. Scherer's estimates for the whole economy applied to food manufacturing. This 40 percent is considered the least reliable of our estimates and is included mainly for heuristic reasons.

Our second estimating method is an adaptation of an exemplary structure-performance analysis of food manufacturing by Collins and Preston. Our analysis is an expanded and updated version of their original work. It utilizes price-cost margins developed from Census statistics for manufacturing establishments. These data are highly regarded for their completeness and accuracy.

The third approach is an original one based on price differentials between "national brands" and "private labels" of individual grocery store products. These data were collected by a subsidiary of TIME Inc. (SAMI)

which obtains them from retailers making about 80 percent of U.S. grocery store sales. Thus, the data we used for our three methods were drawn from three different units of observation (companies, plants, and individual products) and were collected by unrelated institutions.

A summary of the three estimates is shown in Tables 9 and 10. The authors believe the estimates which averaged between $2.4 and $13.4 billion for 1975 are conservative. However, because of the data sets used and because of the estimating procedures employed, a considerable degree of error is likely in each of the estimates. The authors have no method for estimating the likely error range. They feel, however, that a 25 percent error on the individual estimates is the most that would reasonably be expected. The extent of convergence of all three essentially independent estimates gives strength to the conclusion that consumer loss due to monopoly in the U.S. food manufacturing industries in 1975 was at least $10 billion, but possibly as high as $15 billion.

The authors have made no estimate of the trend in the amount of consumer loss due to monopoly in food manufacturing. However, general inflation in the economy, continued growth of the food manufacturing industries and their worsening competitive structures would indicate that on estimate of consumer loss for 1978 would be at least two billion dollars greater than the estimate for 1975.

Twelve to thirteen billion dollars in 1975 is indisputably a lot of money. Previous estimators of the social losses due to monopoly have spoken in terms of a steak dinner per capita. Our results, at over $55 per consumer in 1975, would fund a lavish epicurean feast in one of the country's most expensive restaurants. For a family of four with an income at the federally defined poverty level, in 1975, it would constitute 10 percent of their food budget. Alternatively, it represents about a month's rent for an average family of modest means.

Table 9. Summary of monopoly loss estimates in U.S. food manufacturing, 1975

Type of consumer loss	Scherer-type (adjusted)	Price-Cost margin	Private label differential
	----------Millions of dollars----------		
Monopoly profit	3,613	12,933	11,877
X-inefficiency	8,480		
Allocative	430	473	559
TOTAL	12,523	13,406	12,436

Source: Parker and Connor (1978), slightly revised.

Table 10 -- Estimates of wholesale price elevation due to monopoly in the U.S. consumer food manufacturing industries, 1975

Industry categories	Percentage elevation in wholesale prices due to monopoly	
	From price-cost regression equation No. 3	From national brand-private label regression equation
	Percent	
Meatpacking	0.0	0.0
Meat processing	5.6	1.6
Poultry and egg products	0.0	3.6
Fluid milk	5.3	7.8
Other dairy products	3.2	8.9
Canned fruits and vegetables	5.4	11.2
Other canned and dried foods	16.0	16.1
Flour mixes	21.9	26.2
Breakfast cereals	29.0	29.5
Pet and animal foods	8.6	20.0
Other grain mill products	8.6	16.3
Bread, rolls, and cakes	3.7	5.9
Crackers and cookies	16.3	21.2
Sugar	3.4	9.0
Candy and chewing gums	16.2	20.1
Oils and margarine	9.1	20.4
Beer	18.8	12.5
Wine	11.3	12.2
Other alcoholic beverages	24.2	14.3
Soft drinks and flavorings	19.3	15.3
Coffee	18.8	16.6
Other processed foods	12.6	13.2

Source: Data derived from Parker and Connor (1978), pp. 61, 65, and 66.

Put another way, our monopoly loss estimate for processed foods represents 1.1 percent of U.S. personal disposable income and about 5.7 percent of household food expenditures in 1975.

Conclusions

Our monopoly loss estimates have clear implications for public policy. The loss to consumers in food manufacturing alone is 250 times the combined antitrust budgets of both U.S. antitrust agencies and several thousand times that part of federal antitrust expenditures devoted to antitrust matters in food manufacturing.

Besides indicating that food manufacturing ought to have a high priority for the antitrust agencies, the findings of our national brand-private label price model suggested that advertising is a particularly important problem area for consumer products. Furthermore, the problem appears to be most serious when TV is the primary medium and when the advertisers are large firms. This suggests that consideration be given to limiting advertising, or requiring more factual advertising, in industries where advertising is intense and to formulating stricter policies that would discourage product extension mergers where differentiated consumer products are involved. A new law that would reduce food company mergers, especially takeovers by conglomerates and leading grocery product firms, could be expected to moderate the market power of sellers by its effect on both concentration and advertising. Our overcharge model estimates also suggest that the number of firms has an important influence on food prices: declining firm numbers implies higher consumer losses.

We recognize that neither advertising restrictions nor merger prohibitions may erode existing market power at sufficient speed to

achieve workable competition in all food manufacturing industries. Under these circumstances, therefore, more direct restructuring may be necessary. Such restructuring could take the form of diverstiture of portions of the physical assets of leading firms, compulsory licensing of major trademarks, or other affirmative programs to encourage the entry of firms.

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