

CORNELL
AGRICULTURAL ECONOMICS
STAFF PAPER

FOOD INDUSTRY POLICY */

by

D. I. Padberg

January 15, 1975

75-2

Department of Agricultural Economics
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York 14853

FOOD INDUSTRY POLICY

by

D. I. Padberg

It seems very likely that the food industry policy of the United States is destined for careful reexamination and basic redesign. The objective of this paper is to identify conditions which necessitate this reevaluation and constructive directions it might take.

WHERE WE ARE AND HOW WE GOT HERE

The events of the early 70's in the U. S. economy stand in contrast to the previous pattern of events and expectations. Included in these events must be listed food shortages, rapidly rising food prices, a great surge of food exports, dramatic decline in the value of U. S. currency relative to other currencies, apparently chronic balance of payments problems, and rapid price inflation. The causes and explanation of some of these events may be much beyond the economics of food industry, but the situation in the food industry is none the less tremendously influenced by these general forces. In fact, I think it is impossible to understand the events in the food industry without relating them to other events.

The U. S. economy was tremendously stimulated by World War II and emerged from that conflict in a state of rapid growth and tremendous strength. In the world market for technically complex industrial products, all competitor economies (particularly Western Europe and to a lesser extent Japan) had been virtually neutralized by the great war. As a result of these circumstances, the U. S. economy emerged as a world monopolist for complex industrial goods. As a result of this preferred position, the value of U. S. currency relative to other currencies became extremely high. This gave the U. S. economy a very favorable position. We could buy raw materials or finished goods at relatively low prices and sell our scarce products at relatively high prices. This line of events generated tremendous balance of payments surplus and financed political activities such as the Marshall Plan, etc.

The effect on the food industry was to isolate it from the World Market. Although U. S. agricultural resources including land, capital and technology have always been abundant in relation to our population, it became very difficult to move the chronic surpluses into the world market. The basic reason was that although food is important, it could not compete with the importance of the monopolized industrial products. From this situation we came to inherit two or three decades of very frustrating surpluses, subsidies and subsidized trading policies which lasted through the Great Russian Wheat Deal.

These circumstances began to change in the 1960's. Industrial competitors with new and modern facilities and probably significantly more modern labor management relations patterns emerged in the world markets for industrial goods. Our balance of payments situation began to weaken partly for these reasons and partly because of other political commitments. As a result gold began to move out to compensate for the balance of payments problem during the 1960's. By 1968 the balance of payments had become acute although the basic advantageous currency values of the dollar had not yet collapsed. At this point gold shipments were terminated and the value of exchange currencies outstanding rose from something like 38 billion to over 80 billion by 1972.

With this rapid growth of exchange currencies outstanding, the basic terms of trade of the U. S. economy in relation to the rest of the world were forced to change. These U. S. dollars spent overseas have a value which must bear some relation to what they can be exchanged for. Since they could not be exchanged for gold and since the industrial economy was increasingly less competitive with other economies, the value of this currency began to decline. During the early 70's circumstances changed to have the effect of devaluing the U. S. currency by approximately 25 percent.

The newly enriched industrial competitors had money to spend and began to upgrade their diet. The consumption of meat in these countries began to rise as it had in the U. S. during similar conditions. Not only did their demand for basic food commodities increase, the devaluation of U. S. currencies tended to make these products available at a considerably reduced price. Accompanying these events were several climatic and other biological events which shortened up food supplies. Crop failures (the Russian grain situation and equally important protein supplies shortened up by the anchovy harvest failure) tended to reduce supplies of foodgrains and animal feeds. This combination of short supplies and strengthened demands resulted in rapidly rising basic food commodity prices and a great outflow of food commodities from the U. S. A general pattern of shortages began to be apparent for the first time in decades.

This analysis puts past events in the food economy in context and suggests something of the character future events may take. I shall attempt to assess the implications of this analysis for future policy in two dimensions--food export and aid policy and domestic food prices.

Export Policy

The food export and aid policy of the future must adjust to very different economic realities than have prevailed in the past. Over the past two or three decades we have been the worlds largest holder of feedgrain supplies. This happened because our agriculture was isolated to a considerable extent from world trade. As a result of this reality

we acquired some responsibility associated with operating the World's Store House of food. Various theories and experiences have been accumulated in our effort to shoulder that responsibility effectively. Two observations suggest to me that we are unlikely to be the World's storekeeper of surplus grain in the future.

Firstly, the market for U. S. grain will be much more elastic in the future. That is, when we get a large crop, it will move into the market with much less of a tendency to depress price. This will happen for two reasons. The more realistic values our currencies will have in relation to other world currencies will enable other consumers to compete for our basic food supplies. Without the barrier of artificial currency valuation, we can expect greater likelihood for the international food market to clear itself. In addition, it is quite possible that future demands will grow at a pace which will keep abreast with supplies. The rising per capita consumption of meat in developed countries seems an important contributing factor to this event. In view of these observations, it seems not so likely that world grain surpluses of any import or magnitude will develop in the next decade or so.

Another factor should be taken into account. With the large accumulation of dollars in overseas markets, it is unlikely that any food or feedgrain surplus which does accumulate around the world would be retained by the U. S. Recent history suggests a tendency for the value of U. S. dollars to decline when being held by other economies and for the value of U. S. grain to increase. In such a circumstance it seems most likely that any surplus which may develop around the world will be held by someone other than the U. S. There are relatively few areas in which the U. S. economy is competitive in world markets and grain is one. This is likely to create a tremendous incentive to export as much as possible to maintain a reasonable balance of payments. The incentives seem equally strong for other nations to acquire and hold any grain surplus. In view of both of these observations it seems that the U. S. responsibility as the storehouse of food reserves will be much diminished in the next couple of decades as compared to the past. Our ability to supply expertise (agronomists, economists, etc.) may be a much more important area of aid than any policy we can devise which is geared to the handling of reserve food supplies.

Domestic Food Policy

On the domestic scene we have the problem of converting a consuming population which has enjoyed cheap food for a generation to circumstances of more expensive food commodity supplies. The primary reason behind the increased food prices in the supermarkets is the rapid increase in exports and general shortages of basic food commodities. Although most of the trade has been in grain, the very high prices for grain tempt farmers away from the more expensive and intensive vegetable and other crop production. The high cost of grain translates into higher costs of

dairy and other animal products very quickly. Some food products such as fruits are less affected by grain competition but general shortages and higher prices have affected them through demand increases.

I see these events as a basic transformation in the world trade posture of the U. S. The events related directly to food have been tremendously influenced by other factors in the economy. These other factors lead to a basic change in the balance of payments posture, the currency valuation picture and our incentive to export food. Even though we will have some bumper crops in the future, I do not expect surpluses to build up and depress domestic food prices as has happened in the past. I see no way that the cheap food of the past generation will be experienced in the next two decades.

It is difficult for anyone associated with the food industries to explain these realities to consumers or their representatives. This reality comes against the backdrop of a generation of telling the public about our great agriculture, its great resources, ingenuity and capability. It is difficult to explain why, after a generation of cheap food, we must now share our supply with other competitors in the market who have high incomes and strong demand for a rich diet. Although we are moving closer to understanding what is happening and why it happens, it is not surprising that such an explanation is unsatisfactory to consumers. Consumers don't want to know why food prices are high, they want them lower. In this situation it seems that our governmental machinery is destined to investigate carefully and severely all dimensions of the food industries over the next few years. In the remarks that follow I hope to appraise the alternatives available to this investigatory process and identify areas of work most likely to yield significant payoff in the quest for lowering food costs to consumers.

WHAT CAN WE DO ABOUT IT

The general theme of most government surveillance of business in our economy and particularly in the food industry pertains to antitrust questions. Is the industry monopolistic in structure? Does it have price rigging trade practices? Do its dominant firms make "excessive profits?" There are several reasons for going after these questions. A distaste for concentration of power is very deeply rooted in our economic and political philosophy. Further it has been perceived that these questions identify the major problems which may exist. In view of this perception and philosophy, we have maintained a continuous surveillance on the part of government through the actions of the Federal Trade Commission and the Justice Department. In the case of the food industries these investigatory activities have been supplemented by major efforts such as the work of the T.N.R.C. Committees in the 1930's and the National Commission on Food Marketing in the 1960's. Again the major thrust of these committees and commissions centered on antitrust questions.

These antitrust questions are not unimportant. The investigations

(which are already underway) will likely provide examples of malpractice, (Price discriminations, usually powerfully solicited by buyers will probably be the most common example). An occasional conspiracy or price rigging collusive arrangement may also be found. The biggest importance of these matters is in the demoralizing influence they have on market participants. Enforcement of antitrust laws will both improve the integrity and professionalism of the food marketing system and make it somewhat more efficient. On the other hand this effort will have an effect on food prices to consumers so tiny as to be totally undiscernable. It is probably a bit deceiving to the public to report that stepped up antitrust enforcement will yield noticeable improvement in food prices. There is no place in the food industry where profits are particularly high. Profits represent a very small percentage of the consumers dollar and the elimination of all malpractice, if that were possible, would have only a very small effect on what the consumer pays.

It seems to me that there is another line of inquiry which deserves attention. This general direction is an investigation of operating costs. After going through a generation of low priced food, it is just possible that competitive practices have crept into our system which are expensive and require consumers to pay higher prices. The long period of low priced commodities may have led to emphasizing prices and costs less than the emphasis that we now give them. Over the last fifteen or twenty years, surveys of consumers preferences in the selection of food stores put price perhaps third or fourth after convenience, variety and other matters. Today however, similar surveys show food prices to have moved to the highest priority in consumers views. ^{1/} In looking for such examples it may be useful to consider the food industries in two parts-- manufacturing and distribution.

Food Distribution

An indication of the costs society pays for the food distribution function (wholesaling and retailing) is presented in Table 1. Note that distribution firm's profits are small in comparison with most industries whether viewed in relation to total sales or the firm's net worth. In addition we can observe that profits by both these measures trended downward steadily over the past decade. Data for gross margin may be interpreted as "the percentage of the consumers food dollar going to wholesaling and retailing." These costs climbed from about 18 percent in the early '50s to a high of over 22 percent in '64-65 and have declined slightly over the past decade.

Many factors affect the trends and changes in gross margin as a percent of sales. The decade between the middle '50s and middle '60s when gross margin was rising relates to a period when the complexity of the food

^{1/} See 1974 Burgoyne Index, Burgoyne, Inc., Central Trust Bldg., Cincinnati, Ohio, 45202: also Yankelovich study reported in Supermarket News, Nov. 18, p.1.

Table 1. Operating Figures for Food Chains, 1949-74.

Year	Gross Margin \$ Sales	Profits (after tax)	
		% Sales	% Net Worth
73-74	20.90	.56	7.5
72-73	20.93	.49	5.6
71-72	21.53	.83	8.9
70-71	21.36	.85	8.8
69-70	21.31	.92	9.4
68-69	21.47	1.02	9.8
67-68	21.46	.99	9.2
66-67	22.23	1.19	10.7
65-66	22.32	1.31	11.5
64-65	22.48	1.41	12.6
63-64	22.23	1.31	11.5
62-63	22.13	1.24	10.7
61	21.76	1.26	11.3
60	21.62	1.32	
59	21.18	1.38	
58	20.48	1.40	
57	20.36	1.44	
56	19.53	1.41	
55	18.12	1.21	
54	18.88		
53	18.53		
52	17.97		
51	17.51		
50	18.52		
49	18.06		

Source: Operating Results of Food Chains, Harvard Business School 1955 to 1961, Cornell University 1962-63 to present. 1949-54 reported in 1956 issue.

retailing services were increasing. Trading stamps came into fashion and accounted for a substantial part of this increased cost of retailing. Stores were becoming larger in size and handling a wider variety of merchandise. Competition from new stores entering food retailing tended to lessen the utilization of all facilities and raised costs. Rising hourly wage rates also contributed to rising cost during this period. Competitive activities intensified during this period as the more crowded supermarkets competed for customers. These competitive costs include advertising, extra services, longer hours of operation and many small items as well as trading stamps.

In the decade between the middle '60s and the middle '70s, gross

margins have declined about a percent and a half. This decline has taken place regardless of a continuing rapid increase in wage rates and the most rapid general inflation that we have seen for over a generation. Probably the two most important reasons that gross margins have declined in this period are 1) the de-emphasis of trading stamps and 2) the rapid rise in food prices. Trading stamps may account for about two-thirds of the decline. On the other hand, most retailing costs have increased but the rapidly rising food prices makes them a smaller share of the consumer food dollar.

Is there any reasonable prospect that food prices may be reduced by lowering the costs of food distribution? The present gross margin of just under 21 percent is roughly comparable to the level of gross margin in the late '50s. Is it possible to move that down to approximately 18 percent--comparable to the early 1950's? This would be a considerable reduction in the costs of food distribution--a reduction approximately six times as great as profit levels in this industry. Certainly industry executives, plagued with the effects of nationwide inflation upon the costs of everything, are likely to feel this an unrealistic and impossible objective. On the other hand, there remains several patterns of competitive interaction and competitive costs which have built up through many years of low priced food and public indifference and now deserves careful attention.

The great American institution of the "price special" should probably head the list. A price special is the offering of and advertising of products at temporarily low prices. This practice is widely used in many industries and in fact is taken for granted as the central element of retail competition. It seems quite harmless and generally accessible to all competitors.

Yet, price specials have implications for the cost of the retailing function and for consumers that bears investigation and consideration. Food products are produced and moved through marketing channels in smooth and even flows and tend to be consumed in smooth flows as well. By putting an uneconomic and spectacularly low price on a food product, we encourage a great surge in buying. This surge causes tremendous difficulties on an otherwise orderly product handling system. The store itself is designed to handle and display thousands of food items but only gives a small amount of storage space for each item. The stock in the store of each item are usually adequate for normal purchase needs of consumers but are not adequate to surges which are caused by uneconomic prices. In order to accommodate the surges which price specials stimulate, the store must operate a separate logistic system for planning ahead, ordering and handling products for price specials. This duplicate handling system is an extra cost which we need not bear.

From the consumers point of view this requires extra storage, and inconvenience. The food retailers have narrow margins and have nothing to give away. The amount which they take off the price of the special

item must be made up in the prices of other items. So, this motivation the specials give consumers for studying ads and handling products in surges is not a real savings because it must be made up in the price of other products. Specials not only increase cost by increasing the burden of handling products in uneconomic surges but advertising of these specials is a major expense. We must conclude that price level of a store using price specials extensively must be higher than it would be for the same volume of food products handled at regular prices.

It is also interesting to observe the impact of price specials upon the consumers' basic pattern of price information. The price information going out in expensive advertisements does not assist the consumer in determining where to go to get the best prices for their basket of groceries. It gives information on perhaps a hundred items that are priced considerably below their market value. At best these ads are confusing. Even an expert could not take the ads in a newspaper and advise an individual consumer where to go to get the best price on his list of groceries for the week. If this process is so confusing that even an expert cannot make the simple determination which the consumer must make, it is a very poor instrument in terms of conveying price information to the consumer. Perhaps price ads are not intended to convey the price information consumers need. Perhaps that was not important during the past generation of artificially low food prices. But today's consumers are more concerned about food price levels. If this is true then perhaps we should look at communications going from the industry to consumers as an instrument of price information rather than solely as a promotional technique of interest to the industry.

Price specials have often been defended because they make "bargains" available to low income consumers. Changes in the structure of industry and the demographics of the consuming population make this almost irrelevant. Price specials are a phenomenon of the large markets which happen to be located in high income areas. Low income consumers often live in areas not well served by supermarkets and without the transportation flexibility necessary to shop from store to store.

I do not know the magnitude of costs which price specializing adds to the U. S. food bill. I do not know the magnitude or even the nature of benefits consumers get from this competitive activity. If studies indicating a major change in priority which puts prices and costs in a more important position are valid, this matter may merit more consideration than it has received in the past. If price specials were eliminated, some stores and firms would be significantly affected competitively. The focus of competition would be less on creating an impression with uneconomic pricing and more on functional matters of costs and general price levels. The food retailing industry is a most reactive and responsive institution. I believe it could find more constructive ways to compete than this major emphasis we inherit from times past.

If we are interested in paying less for food distribution services,

other competitive practices might merit consideration as well. Handling of coupons at the checkout counter, hours of operation, number of items handled, the possibilities of labor saving devices such as the automated checkout--all of these affect what we pay for food.

Food Manufacturing

The food manufacturing industries are more complex than food distribution industries because the range of functions being performed is much wider. Some food processors such as canners and freezers, perform fairly simple and straightforward operations of preparation, preservation and storage. In many cases these products move to the final consumer under the label of the large food retailer. In these cases, the food manufacturer has very simple marketing operations with most of the marketing activities done by the food distributor. These private label manufacturers usually have simply, a small business structure and a competitive emphasis on prices and costs.

On the other hand, other food manufacturers produce convenience foods of rapidly changing and more complex physical characteristics. In addition to the complexity of these products, they are produced in much greater variety which complicates the coordination of production and distribution. Production operations also must be closely interrelated with a research and development function which is experimentive in character. It embodies considerable risk in that the success rate of new products are extremely difficult to judge. Not only are the production and handling of these products complex; the marketing activities are monumental. If this process of new product experimentation is to be successful, marketing activities must study consumer preferences and changes in life style. In addition, consumers must be made aware of the new alternatives coming from the laboratory. In the effort to make consumers aware of the results flowing from this experimental activity, food processors have become some of the nation's largest advertisers.

In contrast to the small business structure of the private label food manufacturers, these manufacturers of convenience foods are much larger and more complex--they have a conglomerate structure. That is, many different types of foods may use a common center for marketing activities. The development laboratories, the computerized distribution and logistics facilities, the advertising brands and know how are very expensive. Once they are developed, these expensive overheads may be spread across many lines of activity that were once separate industries.

It is difficult to assess the health of competition, monopolistic tendencies, unnecessary costs and excessive profits in the food industries generally. It is my observation that the private label processor sector tends to have a competitive structure and the type of competitive practices which emphasize costs and prices. They are usually characterized by efficient operations and very modest profits. To relate these questions to

the Galbraithian conglomerates in the food processing industry is much more difficult. In the first place data are not available for these large operations in the form which allow very careful surveillance. For example, ITT owns Continental Baking. Greyhound corporation owns Armour. These are both public corporations and are required by the Securities and Exchange Commission to make certain facts known to the public. However, their food operations are usually mixed up with the myriad other activities in which they are engaged. For this reason it is difficult to have a very functional or useful set of facts to analyze. In addition, the functions these large organizations perform include both the physical processing functions (also performed by the small manufacturers) and complex new product experimentation and marketing activities. There is no meaningful way to compare the cost levels of such different activities. Risks are different in character and profits also are different. It is difficult also to assess consumer or societal benefit accruing to these functions.

A decade ago the National Commission on food marketing determined that the consumer price level of nationally advertised products tended to be about 20 percent higher than the private label products with which they competed for a dozen important food product groups. There is speculation that the price difference may have declined somewhat in the intervening period. Although there is room for considerable debate among professionals and experts, it is my judgement that this comparison identifies (perhaps in a rough and ready way) the cost to society of the experimentation process in which these large manufacturers are engaged.

Are these costs "necessary"? Over the past couple of decades, when consumer priorities put food product prices well down in the list, this process of experimentation may well have been consistent with consumer goals and wellbeing. It is certainly true that consumers life style changed tremendously during this period and that convenience foods served consumer interests and preferences in an important way. Despite the availability of cheaper private label alternatives, consumers patronized the exciting and convenient products lavishly. This has contributed to substantial profitability in this activity in the past. As we look to the future, I suspect the changing consumer priorities (which put food prices at the top of the list), may lead to a shift toward private label and generally depressed profits in the large food processing conglomerates. I think it is very unlikely that life styles in the next couple of decades will change at the pace they have in the past couple of decades. If that is true, consumer wellbeing may be served by allocating substantially less resources to the process of product experimentation in the future than we have in the postwar period.

Public policy initiatives to relate effectively to this process of experimentation identifies several interesting questions. My personal preference is to design policies that would guide this process of experimentation rather than suppress it. I think it may not be hard to

find particular situations where the process of experimentation is both overdone and directly harmful to consumers' interests. Where breakfast cereal manufacturers identify product sweetness as the most dominant theme in advertisements to children and produce a product that may be about one third sugar by weight, the question of public welfare should at least be given careful attention.

It is my judgement that most of our regulatory laws and agencies are geared to the questions we have raised for centuries concerning the operation of the relatively simple business structures of the past. The question of monopoly is the center of that line of inquiry. The new Galbraithian structure is involved in quite different types of economic activity and quite different questions concerning the public interest. The main problem is that this new type of economic activity incorporates the application of science and the process of change. We live in a society where change is rapid and has the potential of being tremendously beneficial. It also has some nasty and troublesome side effects. I would hope that rather than suppressing the whole show because of recognized problems with side effects, that we would get about the task of setting up public machinery to guide this process of experimentation and change in the way that its benefits may be maximized and its disadvantages limited.

GOVERNMENT ACTIVITIES

In addition to the activities of food manufacturers and food distributors, the price we pay for food is influenced by government activities. Perhaps the dairy industry is a good example. Government policy has set up machinery for price determination at several levels of the market. The import and export of dairy products are influenced by the government. These activities have a direct effect on prices. More directly, prices paid to farmers are determined by government agencies. The "Federal Market Order" system performs this price setting function in about 70 metropolitan areas and (in conjunction with a few state agencies) affect the pricing of most milk at the farm.

It is my judgement that the public interest has been well served by these government agencies in the past. However, the system of regulation is out of date. It was designed to respond to the problems of the dairy industry in the 1930's when milk production and marketing activities were concentrated near population centers. Major changes occurred. The changing import--export posture of the U. S. economy, the emergence of interregional cooperatives, the building of highways linking previously isolated markets, the adoption of bulk handling practices for milk assembly, changes in the activities of manufacturers and distributors--all these make milk marketing a very different matter than in the 1930's.

As a result of these changes, the coordination of milk pricing and movement over wide regions of the country is an important matter. The

government initiative remains in the market (the government still sets prices), but the basis of price determination remains the metropolitan area. Cooperatives have emerged to perform inter-market coordinating functions. Problems of equity between cooperatives and between coop members and non-members abound. Equity questions between producer and consumer are unanswered. How the cooperatives should pay for coordinating services which benefit members and non-members alike is undecided.

This is only one example. The entire food complex provides other examples. Basic relationships between the U. S. food industry and the consumer, the world market and the rest of our economy are changing. We need to reassess the actions of government as well as the activities of food industry firms.

SUMMARY

After a generation of artificially low food prices, the U. S. consumer is confronted by rapid increases in food costs. The basic cause of this change is changes in the way the U. S. economy relates to the rest of the world which result in greatly increased incentives for exporting food commodities. While these events are explainable, the effects on the consumer and the inflationary tendencies of the domestic economy are unsatisfactory and in many cases unacceptable. I judge it to be extremely unlikely that future events will lead us back to the unusually low food prices we've enjoyed since World War II. The latitude of scope available to policy makers motivated to address the issues raised by high food prices is unfortunately narrow.

It is within the realm of possibility to substantially reduce distribution costs and manufacturing costs for our food. This prospect turns much more on what we do to affect the costs of competition than dealing with the question of food industry profits. It is possible to reduce the costs of competition in food distribution and make price information more available and less confused. It is also possible to deemphasize the costly process of experimentation in food manufacturing. It is likely in my view that such endeavors would complement the public interest over the next couple of decades. At the same time it should be pointed out that the magnitude of improvements possible through food industry policy are relatively small compared to the effect on food prices which result from the new incentives for selling our food commodities abroad. Even though we may take all possible steps to reduce the costs of food industry activities, we must look forward to the level of food prices in the future considerably higher than that we've enjoyed in the past.