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### CONCENTRATION OF POWER—ISSUES AND ALTERNATIVES

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Economic concentration has occurred at a different time in the food industry than in other industries. Structural evolution, particularly in distribution, is more complex in food than in other industries. Thus, it is difficult to treat the food industry and the general economy in the same analysis.

Economists have long been interested in the causes and consequences of structural change, particularly increases in economic concentration. Although a great deal has been written on the subject, I have always been amazed at how few ideas the writings contain. Certainly two concepts are central to this body of "conventional wisdom." *Technical scale economies* are seen as a major cause of concentration. Several varieties of scale economies have been identified. The concept has been related to production processes as well as distribution and product introduction processes. For technical reasons, some operations are less costly per unit when performed in large volumes.

The other major concept is *monopoly restriction*. This is simply the age-old concept of the possessor of a scarce resource, commodity, or service restricting its availability in order to enhance its price. Again, this concept may be identifiable in several forms. Oligopolies of various kinds offer opportunities for a few possessors to combine their activities to obtain some of the benefits of monopoly restriction. This is the main element in the theory pertaining to the behavior of conglomerate enterprises as well. Monopoly restriction becomes not only an effect of economic concentration but a cause as well. The opportunity to obtain the benefits of monopoly restriction is an important incentive for enlarging enterprise size. Within this scheme, advertising can create an entry barrier through product differentiation and thereby support monopoly restriction.

The concept of scale economies does not have heavy social implications, but the concept of monopoly restriction is blatantly antisocial. It is from the implications of monopoly restriction that our concern for business concentration has developed. Monopoly restriction is the primary theme which undergirds our concern for bigness in the economic system.

Given this set of concepts, one is led to another set of policy implications. J. S. Bain and others observe that "enlightened policy would encourage as many competitors as possible consistent with technical scale economies, and the direct regulation of performance of natural monopolies." Yet, there are seemingly important issues not adequately treated in this conceptual framework.

1. It does not fit a world of technical change. Monopoly restriction works best in a technically dormant economy. The availability of an industrial system capable of exploiting the possibilities for technical change makes the monopoly restriction strategy most unattractive.

2. It does not explain expansive and growth-oriented behavior or large firms. A look at the behavior of the largest firms almost always reveals a pattern of aggressive sales strategies and an orientation to growth. This is patently inconsistent with the monopoly restriction strategy, which should be most attractive to the largest firms.

3. It does not adequately deal with advertising, which is much more important as a policy issue than as an entry barrier. It has meaning far beyond that one implication, for example, as a mind pollutant. Conventional theory does not identify this broader meaning.

4. It does not explain new product competition. The largest firms are often the most active in offering product alternatives. The focus of competition among such firms is not centered on the allocation question surrounding the economics of known products but rather on identifying new products and making them attractive to consumers. Firms motivated by monopoly restriction would be most reluctant to develop and present product alternatives.

5. It does not deal with the conglomerate firm. The pattern of structural evolution of greatest interest in the past decade has been the broad tendency toward conglomerate organization. The conventional set of theories does not deal with this trend in a satisfactory way. Monopoly restriction pertains to a market, an industry, and a known set of products. Conglomeration is a strategy of growth and behavior independent of conventional markets. One would expect an intensity of growth within markets rather than a dilution of monopolies by jumping from one industry to another.

These are important exceptions. A theoretical framework

which would deal with these issues would be a bit more complex and would involve more concepts than the conventional treatment. We get some clue where to look for the additional concepts by examining the broad historical pattern of industrial development.

A period of intensive industrial development was associated with the harnessing of mechanical power to replace human beings and animals in creating known products. We tend to call this *the* industrial revolution. Perhaps we should call it the first industrial revolution; a second industrial revolution has been associated with establishing a process for changing products and methods. The first industrial revolution hit different industries at different times but began as early as the mid-eighteenth century. It transformed the manufacture of many products from household industries to a factory system. It had a very profound influence on industry structure. Industries that had been dispersed among many households became influenced or dominated by a few of the new factories.

The second industrial revolution has had a significant influence on many consumer goods industries since World War II. This new pattern involves the application of science to products and processes and the integration of several different activities within the business structure. Research and development activities explore physical possibilities; market research probes present and potential life styles; advertising introduces new products, new ideas, and new images; distribution logicians plan ways of serving widespread markets; and financial planners deal with the uncertainties inherent in the process of change as well as the uncertainties created by competitors.

These new "marketing" overheads are not particularly unique to any conventional product line. In many cases, research and development capability and advertising capability may be used for many additional products as well as those conventionally handled by the firm. This emphasis on product development and change has intensified the tendency toward industrial conglomeration. Once these capabilites have become available to the firm, they can be amortized across new industries and product groups and encourage conglomerate mergers and conglomerate growth.

Perhaps the second industrial revolution is not of the same magnitude or significance as the first. The first transformed human experience from a rather stable feudal situation to a significant wage-earning class and a greater availability of many goods and services. The political power structure in society changed from a landed aristocracy to an industrial aristocracy. These were profound changes. What sort of changes can society expect from the second industrial revolution? Living with this process day to day, we hardly notice any change at all. Yet, the change may become more profound than those of the first revolution.

The second industrial revolution opens up the business world to the possibilities of scientific exploration. While this is good, it is essentially an unguided process. Values and life-styles are modified and determined in the process. In total, an important part of society's activities and interests are being delegated to private initiative. As a result of the first industrial revolution, society had to face questions of equity. The same questions of equity may be involved in the second revolution and its consequences, but many other issues are involved as well.

Conventional wisdom has been useful in dealing with antitrust matters and industrial concentration. This takes us through the first industrial revolution. Although the new revolution has already affected several consumer goods industries, this does not make the conventional concerns and policy directions irrelevant. They will constitute the mainstream of policy in many industries. However, if we are concerned about the most serious consequences of the industrial concentration of power, we must inquire further. How much of our life-style and values are we going to allow to be determined by private interests? What are the alternatives? Is it better to have public initiative instead of private initiative? Is it feasible to have public surveillance and limits yet depend on private initiative?

#### THE FOOD INDUSTRY EXPERIENCE

Industrial development in the food industry is quite unique when seen in the context of American industry, both from the perspective of timing and the character of development. In terms of timing, the industrial structure associated with food was notably late in getting started with the first revolution. We think of the factory system as under way in the 1700's in textiles and some other industries and well established by the 1800's.

The food industry remained a household industry through both these centuries. The science of food preservation developed during the nineteenth century but really went full scale as we entered the twentieth century. Like other industries, development proceeded first in the manufacturing stage of the food system. The mechanization of processing led to mechanical equipment and processing lines that developed first in meat and then extended to canning and dairy processing. The industrial structure that developed essentially accommodated product flows to the capabilities of the new equipment. The commodity orientation was well developed, with each firm oriented toward its agricultural product.

Some of the processing industries attained high concentration in this period. Perhaps the most notable was the meat industry, which was affected by the advantages of national brands and by the centralizing tendencies of a national rail transport system. Dairy manufacturing also developed some rather large concerns centered in the dairy-intensive regions.

The distribution sector in the food industry is one of its unique structural features. Most of the theory concerning structural development pertains to manufacturing. In most industries the manufacturing structures tend to be the focal point of industry power. The activities prior to manufacture are often more atomistic and are coordinated and dominated by the manufacturing sector. Yet, in food a distribution sector has emerged that has a big business organization with large powerful firms exercising an independent behavioral strategy.

As modern methods of management were being developed within the newly concentrated food processing sector, the sluggishness and stagnation of the traditional distribution sector became a problem. It is not surprising that goods handling technology and management practices from this newly concentrated industry spilled over into the distribution sector. Importers and manufacturers got into distribution. In so doing, they did not particularly change the retail facilities, but they reorganized the system which supplied it. This was compatible with their needs, as well as their capabilities. The result was the new food chain. Although there was limited experimentation with food chain organization and operation since the mid-1800's, the food chain grew from practically nothing in 1910 to a third of the food distribution industry in 1930.

Food distribution through the traditional grocery store had been a very personalized and family operation. While friendliness and personal service might remain the province of the small family organization, it was discovered that price competition could be organized and managed in large organizations. Large organizations had the capability of reducing costs through management practices. A few other practices like soliciting deals from manufacturers for purchases in large lots added to the intensity of the movement. The result was the very rapid growth of chain food distribution operations competing for patronage through a price advantage.

The most celebrated event in the development of food distribu-

tion is the supermarket. Although the supermarket was the competitive response of small independent food retailers, its success soon required its adoption by all food distributors. The supermarket eliminated hundreds of thousands of retail competitors but did not have an appreciable effect on any big business concentration. The largest eight chains had a higher level of national concentration in the early 1930's, when the supermarket was introduced, than they have ever had since.

The supermarket, by combining many departments and making the food distribution outlet a conglomerate, has made it difficult for consumers to understand or perceive prices of individual items. Through this system, it has since created an environment where nonprice competition has become significant.

The second industrial revolution hit food manufacturing in many commodities following World War II. Consumer income surged rapidly in the postwar period. The widespread availability of work-saving household devices freed women's time. Women began to participate much more in education and employment following the war. With these changes, food evolved from a very central position in the household and family sustenance to a maintenance activity. This transition made convenience foods very important. As food preparation moved from the kitchen to the processing plant, variety and status differentiation moved to the marketing system.

The second industrial revolution in the food industry affected the grocery department in the supermarket more than the specialty or perishable areas. The effect has been to make the grocery department larger and the other commodity-oriented departments smaller.

The lateness of the first revolution in food has made these two phenomena almost concurrent in timing. The consolidation of fluid milk operations in the fifties really resulted from the first revolution. Centralized, standardized, and undifferentiated products replaced the more specialized regional operations. This change resulted from technical scale economies and better distribution and included few of the features of the second revolution involving product evolution. This process was developing concurrently with the development of convenience food conglomerates in other parts of the food system.

#### POLICY TOWARD CONCENTRATION OF POWER IN THE FOOD INDUSTRY

The first industrial revolution in the food industry aroused

questions of equity growing from the concern about monopoly exploitation and restriction. The fact that the food industry is very large but contains many small firms and has a cost competitive sector at the distribution level has tended to minimize the severity of monopoly restriction problems. Nonetheless, we have had some problems and have evolved a traditional policy relating to these problems. It seems clear that this traditional policy should be continued. Monopoly is as antisocial today as ever, although it may be somewhat less so in an economy featuring rapid technical change.

The consequences of the second industrial revolution in the food industry are complex and will eventually require a new type of public initiative and policy. Consequences include:

1. COST-INCREASING COMPETITIVE BEHAVIOR. Experimentation with product alternatives on the scale we have witnessed during the past fifteen years must add considerably to the levels of cost in the food industry.

2. ALTERED LIFE-STYLES AND VALUES. The vast amount of graphic imagery on television, as well as the impact of other media, has an influence on desires and goals. The private initiative of large companies has affected values and life-styles. Should public initiative be developed to restrict or guide this process?

3. NEGLECT OF NUTRITION. Convenience and other values of food have been emphasized at the expense of nutritional values. Many cultural patterns and preferences become built into food products and systems, making nutritional considerations rather small in the total set of product characteristics and in the costs involved. The food stamp program is a very inefficient way to exercise nutrition policy if that is the intent.

4. THREATENED LOWERING OF PRODUCT SAFETY. New product experimentation can very quickly overwhelm our scientific ability to appraise the nutrition and health consequences of product alternatives. Product innovation puts tremendous pressures upon the food safety surveillance mechanisms.

Before we can approach the policy problems associated with the second industrial revolution, we must come face to face with a major philosophical barrier. We have a fond preference for consumer sovereignty. Few people are willing to accept as the inevitable companion of consumer sovereignty the attitude of "let the buyer beware." If the consumer is sovereign, he must have unrestricted options. When society begins to protect the consumer, immediately it begins to protect him away from his original pattern of choice. In terms of policy, we have a long tradition of policy relating to production concerns, but we have approached consumer policy with extreme caution and unwillingness to develop a mechanism that tells consumers what they want. Consistent with this, we have a policy toward advertising that deals only with deception. Firms are penalized for ads that are deceptive. However, the truth, even if antisocial, is permissible.

This philosophy and approach to policy worked well and was consistent with circumstances of the first industrial revolution. Essentially these circumstances involve low-income societies with few, known, and slowly changing products. As a result of the second industrial revolution, we have the capability of applying science to the human being for the purpose of discovering weaknesses and vulnerabilities. The consequence is an array of products that exploit human vulnerability and that may be both wasteful and dangerous. Thus unguided private initiative leads to social results not all in the public interest.

We are unable at this time to match this private scientific application with a public surveillance mechanism. No limits have been set by public initiative in what imagery can be developed in presenting product characteristics. There is no policy-making body that sets any limits on the private initiative to exploit personality characteristics. Product choices as well as life-style are being influenced by advertising. This is a more important social consequence of the concentration of economic power than the equity question the traditional theory presents.

We can approach food industry policy from two perspectives. In the broadest sense, the second industrial revolution stimulates growth and places a very heavy draw on the earth's resources. At a more micro level, it tends to emphasize values which relate nicely to mass production techniques and to de-emphasize other values.

A quite different perspective might grow from the following appraisal. The second industrial revolution has as its heart the application of science. While the application of science to modern life is certainly a mixed blessing, it holds the potential for tremendous human benefits as well as negative possibilities. From this point of view, we might generate policy objectives which were not oriented to suppression but rather to surveillance and guidance.

I do not have any orderly analysis which is helpful in selecting between these alternatives. I personally tend to favor the latter alternative. The second industrial revolution has given benefits to society generally, and these benefits have been quite widely dispersed throughout the income levels. The first industrial revolution precipitated exploitive behavior and contributed to human deprivation. It also contributed materially to human well-being and precipitated the development of institutions to guide it and limit it. This historical perspective gives me encouragement that we are capable of monitoring and guiding the present revolution.

How do we get started with the surveillance and guidance responsibilities that accompany the vesting of power in private firms? It seems the first order of business would be to develop performance norms and expectations. The conventional or previous performance norms were so heavily oriented to equity considerations that they give little clue to important pivotal dimensions of scientific experimentation and exploration applied to products and processing methods.

#### SUMMARY AND CONCLUSION

The history of man and of civilization is a history of organization. Where man's organizations are simple and powerless, man lives close to his biological imperatives. Man begins to move beyond his biological needs and to fulfill his potential as a social animal only through the development of organizations and institutions. As we use more science and knowledge in our efforts to manipulate material, our organizational arrangements will become more complex and will embody more power. To categorically restrict power in private organizations will limit social and technical development. The major policy goal should be not the limiting of power in private hands but the balancing of private and public initiative. In that way, we can have the fruits of both—the vigor of private institutions and the identification of public goals and ends through public initiative and guidance.

## PART II

# Energy and Transportation