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FOOD MARKETING IN DENMARK:

- DEVELOPMENTS
- PROSPECTS FOR 1980
- SIGNIFICANCE FOR U.S. EXPORTS

ABSTRACT

Sustained economic growth is modernizing Danish food marketing. This development offers U.S. exporters many opportunities and challenges to expand U.S. agricultural exports--\$293 million in 1969--in the years ahead. The Danish retail food market may grow 22 percent in the 1970-79 decade and sales of convenience foods will increase much faster. The increasingly affluent Danes are upgrading their diets. They are buying autos and refrigerators, which are essential to supermarket retailing--the keystone of a modern mass distribution system. Auto density rose from only 50 cars per 1,000 Danes in 1956 to an estimated 220 in January 1971. About 90 percent of all Danish families have a refrigerator and 44 percent own food freezers. Nearly half of all married women are gainfully employed. Supermarkets are replacing small foodstores. Denmark had 38,155 foodstores, most of them small, in 1958 but only 28,000 in 1970. By 1980, there may be only 13,000. Nearly all will be larger self-service stores. About 12.5 percent will be supermarkets, compared with 2.5 percent in 1970, but they will make the major share of retail food sales. Also by 1980, only 10 to 12 big retailing organizations may control 75 to 80 percent of Denmark's food trade. Equally rapid and drastic structural changes are going on in Danish food wholesaling and manufacturing.

Keywords: Denmark, foodmarketing, distribution, manufacturing, American food exports, marketing research.

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SUMMARY

The Danish market for processed foods and some other farm products is growing rapidly. This growth, however, does not assure the United States an expanding market share. U.S. food and farm products worth \$293 million went to Denmark in 1969. The United States supplied 25 percent of Danish agricultural imports, compared with only 7.7 percent of total 1969 imports. In the years ahead, the Danish food market may present more of a challenge for American producers to overcome because of a continuing revolution in Danish food marketing. Denmark's food manufacturers are becoming more efficient and competitive as they adopt American production, marketing, and management techniques. Leading retailers, facing nearly certain prospects of falling profit margins and more sophisticated consumer buying habits, are demanding more from suppliers, including U.S. producers, on all key market variables--prices, quality, packaging, deliveries, product and market research, and promotion.

Accordingly, U.S. market development activities must be based on current, expert knowledge of Danish market conditions. The same intense, continuing, expert effort that goes into marketing consumer goods in the United States is becoming essential in successful marketing of U.S. foods in Denmark. In recent years, several U.S. food manufacturers have successfully introduced a variety of American processed foods using basically American marketing methods. The companies, however, have placed major emphasis on direct merchandising of their products to leading Danish retailers. All of the American firms have their own Danish sales forces or have contracted with a Danish manufacturer of complementary products to utilize his professional sales staff. In addition to modern marketing programs, export expansion continues to demand U.S. action to encourage Denmark to remove or lower old trade barriers, including tariffs and nontariff trade restrictions. If these barriers are not lowered, U.S. agricultural exports may well become less competitive with European products in Denmark. Moreover, Danish entry into the European Community would intensify the need for action on these trade policy problems.

Sustained economic growth at high rates since the late 1950's is the main force behind the modernization of Danish food marketing. Denmark's real per capita gross national product rose about 3.4 percent a year from 1958 to 1968. It is expected to grow at about the same rate in the 1970's. If this happens, per capita food expenditures may rise about 1.5 percent annually and total retail sales in constant prices, with population increasing about 0.5 percent a year, may rise about 22 percent over the present decade.

Rising Danish incomes are changing consumer demand. Danish families are buying higher quality and more expensive foods. They are also upgrading their diets by consuming a greater variety of products, including more imported foods. Sales of processed foods are rising about 5 to 7 percent a year, or three times the growth rate in total food expenditures. Sales of some convenience items are increasing about 10 to 30 percent annually. They include frozen foods, pet foods, prepared main dishes, baby foods, canned and dry soups, and snack foods.

The rising number of employed women, especially married women, is another factor stimulating demands for convenience foods and supermarket retailing.

Nearly half of all Danish married women are gainfully employed, compared with 38 percent in the United States, and women are about 39 percent of the Danish labor force.

Increases in Danish family incomes have permitted mass ownership of the two items--autos and refrigerators--that are essential to the success of supermarkets, the keystone of a modern system of mass marketing. Denmark had only 50 cars per 1,000 people in 1956 but 220 in January 1971. Household refrigerators were owned by 89 percent of Danish families in 1969; 44 percent of all households in 1970 owned a food freezer. Moreover, rising incomes, more cars and kitchen equipment, and other factors are rapidly increasing the tempo as well as the level of Danish living, which, in turn, is changing food consumption and shopping patterns.

Removal in 1970 and 1971 of major legal restraints on large-scale retailing is expected to contribute to further change in Denmark's food marketing system. Denmark now has about 28,000 foodstores, most of them small, compared with 38,155 in 1958. The current net disappearance rate of about 30 small stores a week is expected to continue. By 1980, Denmark probably will have only 13,000 foodstores of all types. Nearly all of them will be self-service stores. Supermarkets, including the food departments of department and variety stores, may be 12.5 percent of all Danish foodstores in 1980, compared with only 2.5 percent in 1970, but they will have the major share of total retail food sales.

Large distribution enterprises--cooperative and corporate food chains, department-variety store chains, retailer cooperatives, and voluntary chains--have expanded rapidly in the past 10 to 15 years. By 1980, only 10 to 12 of these big enterprises will make 75 to 80 percent of all retail food sales in Denmark.

Danish food manufacturing--a large, highly fragmented industry--is also undergoing rapid structural change. The number of small family-owned food factories is declining and the future is bright only for the larger companies. In the years ahead, mergers, acquisitions, and liquidations will rapidly increase the concentration of Danish food manufacturing, as in Danish agriculture and food distribution, in a few large, efficient, market-oriented companies. If Denmark enters the European Community, this process of modernization will be accelerated.

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FOOD MARKETING IN DENMARK:

. DEVELOPMENTS

. PROSPECTS FOR 1980

. SIGNIFICANCE FOR U.S. EXPORTS

by

Norris T. Pritchard 1/

I.--INTRODUCTION

Denmark is a small nation of big contrasts and transitions. In some ways it is the Fairy Tale Country of the tourist brochure and Hans Christian Andersen's stories. The gently rolling Danish countryside is a mosaic of storybook castles, picturesque villages, whitewashed red-tiled churches, and small farms. Modern Denmark also is a land of productive farms and factories, busy ports, and bustling centers of commerce. Once predominantly agricultural, Denmark now is an important industrial nation and a major world exporter of both agricultural and industrial goods. This amazing little country of only 5 million people ranks fifth in per capita income after the United States, Canada, Sweden, and Switzerland. 2/

The Kingdom of Denmark embraces metropolitan (European) Denmark, the Faroe Islands, and Greenland. Metropolitan Denmark lies north of Germany and between the Baltic and North Seas. It consists of the Jutland peninsula and 482 islands, of which only 99 are inhabited (27). 3/ The total area of 16,619 square miles is about double that of Massachusetts. Copenhagen, the capital and largest city, is on the island of Zealand. Aarhus, in Jutland, and Odense, on the Island of Funen, are other major cities.

Because of its geographic position, its productive farms and factories, and its lack of certain raw materials, Denmark has long been a major commercial center in northern Europe and an important international trading partner of the United States. In 1969, U.S. exports to Denmark totaled \$292.6 million, of which \$82.3 million, or 28 percent, were agricultural products. Soybeans, valued at \$36.4 million, were by far the largest export. U.S. imports from Denmark in 1969 were valued at \$247.1 million, of which \$97.6 million, or 40 percent, were agricultural products. Canned ham, worth \$82.6 million, was the main import item.

1/ Agricultural Economist, Foreign Development and Trade Division, Economic Research Service, U.S. Department of Agriculture.

2/ Denmark's 1968 per capita gross national product of \$2,540 was exceeded only in: United States, \$4,380; Sweden, \$3,230; Canada, \$3,010; and Switzerland, \$2,790 (29). (See footnote 3.)

3/ Underscored numbers in parentheses refer to items in Literature Cited, p. 45.

Although the U.S. share of all Danish imports in 1969 was 7.7 percent, the United States supplied 25 percent of Denmark's agricultural imports. 4/

Expansion of U.S. agricultural exports is a common objective of U.S. food manufacturers, export agencies, farmers, and the Foreign Agricultural Service, U.S. Department of Agriculture. This study of Denmark's dynamic food marketing system contributes to this goal by developing useful marketing intelligence for planning and implementing improved export expansion programs. The need for more effective marketing strategies and techniques based on adequate marketing information and analysis continues to rise. The reason is the continuing revolution in the structure and operation of the Danish food marketing system. All key market variables are changing. Old ways and institutions are giving way to new practices and organizations. The who, what, and how of marketing food in Denmark are changing and these changes require new approaches in exporting.

In this study, the author interviewed 40 executives of leading Danish food retailing, wholesaling, importing, and manufacturing companies, trade associations, and Government agencies in a 3-week period in November and December 1970. Foodstores, warehouses, and shopping centers were observed in the Copenhagen area. These observations included conversations with store and warehouse workers. Data were obtained from official publications of the Danish Government, international organizations, and trade associations. The method of analysis, outlined in (41), centers on the concept of food marketing as a dynamic subsystem of the Danish economy.

Chapter II of this report discusses the impacts of rapid economic growth on Danish consumer buying patterns and on Denmark's food marketing system. Past and prospective developments in the organization and operation of Danish food distribution and manufacturing are analyzed in chapters III and IV. Chapter V deals with the significance of the revolution in Danish food marketing for U.S. exporters.

4/ The author is indebted to Mr. Harlan J. Dirks, Agricultural Attaché, American Embassy, Copenhagen (his letter of May 10, 1971), for these trade statistics. They differ from official U.S. trade volumes because the latter do not reflect transshipments to Denmark via Rotterdam and some other European ports. Unmanufactured tobacco, soybean meal, raisins, prunes, canned fruits and vegetables, nuts, and citrus fruits and juices were other important U.S. agricultural exports to Denmark. In addition to canned ham, U.S. agricultural imports from Denmark included substantial volumes of rennet, cheese, sausage, sausage casings, cider, bakery products, and beer.

II.--BASIC FORCES AFFECTING FOOD MARKETING

Food marketing is a major economic sector in all industrial nations because food is the largest item in most household budgets. Like other economic activities, food marketing is affected by the basic socioeconomic forces that shape the total economic life of a nation. Therefore, analysis of these forces in Denmark contributes to understanding of developments in the structure and operation of that nation's food marketing system.

Population

Population growth continues to promote moderate expansion of the Danish food industry; but in the years ahead, this source of industry growth will be less important than in the past. From 1950 to 1966, the Danish population increased nearly 0.75 percent a year. In the next 5 years, the growth rate averaged only 0.5 percent a year as the birthrate fell from 18.4 per 1,000 people in 1966 to 15.3 in 1968. 5/ The 1971 rate may be under 15. This sharp and probably permanent decline in the birthrate is widely attributed to (1) more widespread use of effective birth controls, and (2) a shift in Danish preferences toward smaller families enjoying a higher level of living.

In the 1970's, Denmark's population probably will increase only 0.5 percent annually from the 4,921,156 people registered on July 1, 1970, (11) to 5,172,800 in 1980. 6/ Thus, the food industry can expect population growth to increase retail food sales only a modest 5.1 percent in the decade ahead.

Economic Growth

Economic growth is the main source of food industry expansion and change. Rising real income stimulates increases in consumer demand for food and marketing services even though food expenditures are a steadily declining share of the national income. But economic growth does more than increase food sales. It produces a continuing evolution in the structure of consumer demand. Affluent consumers have more discretionary income to satisfy a diversity of wants, to upgrade diets, and to save time in meal preparation and food shopping. Increases in disposable income and rising real wages in food manufacturing and distribution also stimulate adoption of new technology and modernization of food marketing structures, orientation, and operations.

Denmark's gross national product (GNP) rose 4.1 percent a year, in constant prices, from 1958 to 1968 (29). Annual per capita growth averaged 3.4 percent. 7/

5/ Immigration has been a minor factor in Denmark's population growth.

6/ This estimate is sharply below earlier estimates, ranging as high as 5.3 million, based on the growth rates of the postwar years to 1965 (1).

7/ In the postwar development of the Danish economy, 1958 was a major turning point. From 1950 to 1958, Denmark's real GNP rose only 2.5 percent a year. In most of these years, unemployment exceeded 100,000 workers, compared with fewer than 50,000 throughout the 1960's.

By 1970, Denmark's estimated per capita GNP was \$3,500 (45), or nearly 74 percent of the U.S. per capita GNP of \$4,740 (46). 8/ The Danish food industry shared in this growth. Food expenditures increased 2.5 percent annually even as they fell from 17.4 percent of the 1958 GNP to 14.0 percent of the 1968 GNP. The per capita increase averaged 1.8 percent a year. In 1968, Danish consumers spent \$1,738 million for food, or \$356 per person. 9/

In the 1970's, Denmark's GNP is expected to rise about 3.9 percent a year (and 3.4 percent per capita). This estimate lies between the projections in two recent studies (1, 34), and may be conservative in terms of (1) the historical record of Danish economic growth and (2) the commitment of the Danish Government to policies of economic growth and full employment.

Food expenditures in the 1970's are expected to rise, in constant prices, about 2.0 percent annually, or 1.5 percent per capita. 10/ These growth rates are below the 1958-68 rates because food expenditures will continue to decline as a percentage of GNP, perhaps to 11.5 percent by 1980. Total food expenditures in Denmark may increase about 27 percent from 1968 to 1980, at 1968 prices, to about \$2,204 million. Per capita food expenditures, therefore, will rise nearly 20 percent to \$426 in 1980.

Automobiles and Refrigerators

The automobile and the refrigerator are key instruments in changing ways of living and food marketing. The auto is a major cause of the changing shape of our cities, especially the explosive growth of the suburbs (40, 24). The family car and household refrigerator are responsible, in large measure, for growth of supermarket retailing, closure of small foodstores in central city and rural areas, construction of suburban shopping centers, and other changes in the marketing system discussed in chapters III and IV.

Automobiles and refrigerators broaden the effective area of competition among stores and indirectly among food products and manufacturers. The housewife without these modern conveniences usually shops daily in neighborhood foodstores, but with them she can shop as infrequently as once weekly in supermarkets. This shift in shopping patterns saves both consumers and retailers considerable time and money. Furthermore, the refrigerator affects the kinds of food people buy, especially perishables and frozen foods, while the auto alters food buying patterns by facilitating tourism and weekend and holiday travel.

8/ Because Danish tax and consumer price levels are well above those in the United States, the difference in real levels of consumption between the 2 countries is greater than these GNP figures suggest.

9/ U.S. consumers spent about \$490 per person for food in 1968.

10/ An annual growth of 1.6 percent per capita was estimated in a recent study for the Benelux countries in the 1970's (39). The slightly higher Benelux estimate is consistent with the Danish projection, despite similar expectations for total GNP growth, because Benelux family incomes average well below the Danish level.

Denmark now (1971) has nearly 10 times as many cars as in 1951 and almost three times as many as in 1961 (table 1). In the 5 years to January 1, 1971, the number of licensed passenger cars increased about 48 percent. The density of ownership rose from 156 to 220 per 1,000 people. Danish auto registrations are expected to continue to rise rapidly in common with the general European trend. 11/

Table 1.--Passenger automobiles: Number registered on January 1, selected years, Denmark 1/

Year	Total	Per 1,000 people
	<u>Number</u>	
1951.....	111,585	27.5
1956.....	210,424	49.6
1961.....	391,851	88.9
1966.....	730,497	155.9
1967.....	798,918	168.9
1968.....	874,311	183.1
1969.....	942,258	196.0
1970.....	1,010,320	208.7
1971 (estimated).....	<u>2/1,078,000</u>	220.0

1/ Excludes passenger cars in commercial uses.

2/ Estimated by comparing registrations in the first 7 months of 1969 and 1970.

Source: (7).

Reflecting sharp decreases in refrigerator prices and rising family incomes, a 1969 survey found that 89 percent of all Danish families owned a refrigerator, compared with only 76 percent in 1966 (43). 12/ Moreover, most of the refrigerators marketed in Europe now are much larger than the 4-cubic foot units sold only a few years ago. The new units have 2 or more cubic feet of frozen food space, an important factor in marketing frozen foods.

11/ There are several bases for this widely held expectation: (1) A 1969 survey of representative Danish families found that 42 percent were not car owners. Only 4 percent owned 2 or more autos (43). A similar U.S. survey found that 20 percent of U.S. families had no car but 26 percent owned 2 or more. (2) Although Denmark's ratio of autos to people is one of the highest in Europe, it is only half the U.S. ratio. (3) The Danes evidently are willing to pay dearly for the privilege of owning a car. The author observed in December 1970 that Copenhagen dealer prices on a small German car were more than 50 percent higher than Washington, D.C., dealer prices. On identical brands of gasoline, Copenhagen prices were double prices posted in Washington service stations. Danish auto and gasoline taxes are primarily responsible for the price differences.

12/ On the basis of trends in other European countries, the 1963 figure probably was not over 50 percent.

Urbanization and Suburbanization

Historically, migration of farm people to cities has been an important source of growth of the food marketing systems of industrial countries. When people move to urban areas, they buy more of their food in retail stores. In 1954, about 75 percent of all Danish workers were employed outside agriculture and fishing (30). By 1968, this share was close to 87 percent and today (1971) it probably is about 90 percent. In the 1970's, the Danish farm population is projected to fall 38 percent (1), but employment outside agriculture and fishing may not go above 94 percent of total employment in 1980. In other words, increasing urbanization of the Danish population will have only a minor impact on retail food sales in the years ahead. 13/

In contrast, the trend to suburban living continues to promote significant changes in the structure and operation of the Danish food distribution system. Increasingly affluent, motorized citizens in Denmark and other industrial nations are moving in large numbers from congested centers of large cities to nearby suburbs (39, 24). For example, from September 1960 to January 1969, Copenhagen's population declined from 926,900 to 833,700, while its suburbs grew from 436,800 to 551,000 residents (5).

Employment of Women

More and more Danish women are working outside their homes. For the Danish food industry, this employment trend is significant because (1) more families have the "double" income that permits a more expensive diet; and (2) these families have a strong demand for convenience foods and self-service retailing.

Numbers of gainfully employed women in Denmark increased from 700,000 in 1955 to 857,000 in 1968 (30). There was another big increase to 920,000 in May 1970 (5). 14/ Women were 34.6 percent of all Danish workers in 1955 but 38.5 percent in May 1970. All of this rise came from increases in numbers of gainfully employed married women. Of all Danish married women, 32.9 percent were working outside their homes in 1962, compared with 48.5 percent in 1970.

In the years ahead, numbers of gainfully employed women in Denmark probably will increase less rapidly than in the recent past for several reasons. (1) Population growth in the 1970's is expected to be slower than in the 1950's and 1960's. (2) Young Danes are remaining in school longer. And (3) Denmark's 1970 level of 48.5 percent of all married women gainfully employed is one of

13/ Another long-term trend, increasing specialization within agriculture, also can be expected to have a slight positive effect on retail food sales and almost no impact on total food consumption.

14/ The May 1970 figure has not been adjusted for seasonal variation and may not be fully comparable with the 1955 and 1968 annual averages. Nevertheless, there was a large increase in numbers of women workers in 1968 and 1969 stimulated in part by changes in Danish income tax laws. These changes increased after-tax earnings of married women.

the highest in the world. 15/ These employment trends strongly suggest that future increases in numbers of gainfully employed women can raise demands for convenience foods and modern shopping facilities only modestly in the years ahead. That is, the food industry can achieve large increases in these demands mainly by persuading the present generation of "working" wives to change their food buying patterns.

Domestic Servants

Economic growth normally reduces employment of domestic servants (40). Their wages rise; fewer families can afford the luxury of domestic help; and thousands of domestics accept better paying jobs in industry and commerce. The decline in employment of servants is important for the food industry. It accelerates the shift in food processing from households to factories and increases consumer demand for processed foods.

The number of paid domestic servants in Denmark fell 45.4 percent from 56,009 in September 1960 to 30,600 in May 1970 (5). Servants were 2.8 percent of total employment in 1960 but only 1.3 percent in 1970. 16/ Employment of domestic servants probably will continue to decline slowly and the demand for the "maid services" built into factory-processed foods will rise. 17/

Food Consumption and Nutrition

The Danes have long had a fully adequate diet in terms of basic nutritional requirements (table 2). Nevertheless, the current Danish food consumption pattern allows substantial room for change in the average "quality" of the diet. In comparison with Americans, the average Dane consumes substantially more bread grains, potatoes, cheese, and fats and oils and much less meat (other than pork), vegetables, and eggs.

15/ Sweden in 1968 had an employment rate among married women of 47.0 percent, compared with Denmark's 45.0 percent. The U.S. level of 38.3 percent is more typical of the world's industrial nations (30). On the other hand, the forces in Denmark that raised the level of female employment in the past remain strong. They include economic growth, expansion of job opportunities, tight labor markets, high income taxes, expansion of child-care services, equalization of salary scales for men and women, smaller families, and high demand for the goods and services deemed essential to modern living.

16/ No data are available on numbers of unpaid domestics but the upward trend in employment of women outside private households suggests that numbers of unpaid family assistants are falling, too.

17/ From 1929 to 1969, employment of domestic servants in the United States fell from 2.35 to 1.39 million workers, or 41 percent, as total employment doubled (48, 47). Domestics were 1.9 percent of all U.S. workers in 1969. No available evidence suggests any change in this U.S. employment trend in the foreseeable future.

In both countries from 1955/56 to 1967/68, the consumption of so-called "poor men's" foods, such as potatoes, declined as family incomes rose, while consumption of meats, cheese, and other "rich men's" foods increased. In addition, there is some evidence that food consumption patterns in Denmark and the United States are becoming less different.

Table 2.--Denmark and the United States: Per capita consumption of selected foods, 1955/56 and 1968/69

Item	Denmark		United States	
	1955/56	1967/68	1955/56	1967/68
All grains (and products).....	84.7	1.9	69.1	64.8
Of which: bread grains.....	77.0	64.6	57.7	52.7
Potatoes.....	119.1	85.0	48.2	43.4
Sugar.....	47.1	48.0	41.9	42.4
Vegetables (fresh equiv.).....	39.5	41.0	94.6	91.6
Fruit (fresh equiv.).....	41.5	55.8	72.5	64.5
All meat.....	58.5	60.4	81.5	93.8
Of which: pork.....	35.0	28.6	28.2	27.8
poultry.....	2.6	4.0	11.9	20.4
beef, veal.....	16.2	20.1	33.3	38.1
Eggs.....	7.2	11.8	21.2	18.4
Milk.....	138.5	145.4	145.8	128.5
Cheese.....	6.5	9.6	5.4	6.8
All fats and oils <u>1/</u>	25.8	<u>3/</u> 27.9	21.2	<u>3/</u> 22.3
Of which: butter <u>2/</u>	8.8	9.3	4.1	2.5
margarine <u>2/</u>	19.5	18.0	3.7	4.9
Calories (units per day).....	3,160	3,180	3,140	3,207
Protein (grams per day).....	84	89	90	95
Of which: animal protein....	50	61	62	68
Fat (grams per day).....	143	153	144	154

1/ Fat content.

2/ Product weight.

3/ 1967/68

Sources: (33, 31).

Changes in Daily Living

Ways of living are changing rapidly in Denmark and other western European countries (40, 43, 39). The general direction of change is toward the American and Swedish patterns of living. The primary cause of this evolution is rapidly rising family incomes, but other socioeconomic forces are important too. In addition to the factors already discussed in this chapter, they include rising levels of education, reductions in weekly hours of labor, increasing ownership of television sets and laborsaving household equipment, more travel in foreign countries for both business and pleasure, and a noticeable rise in the tempo of daily living. 18/ Changing life styles alter food consumption and shopping habits and, hence, force important changes in the structure, orientation, and operation of the food marketing system.

A recent study of European ways of living suggests that many Europeans went on a gigantic spending spree in the 1960's (43). They bought thousands of household appliances and new houses with modern kitchens. In 1969, the percentages of Danish households owning some of the essentials of modern living were:

Running hot water	86%	Electric toaster	42%
Telephone	54	Electric food mixer	58
Refrigerator	89	Television set	82
Food freezer	36	Auto (at least one)	58

In all cases, the Danish percentages are well above the averages for the 16 western European countries in the survey and far above the ownership levels of only 10 years earlier. The result of this, together with the rising number of "working" wives, is a "kitchen revolution" that is changing the assortment of foods Danish consumers are buying (chapter III). Moreover, while most Danes, like Americans, have more leisure time than ever before, rising incomes are opening more avenues for interesting use of this time. Food industry leaders generally are aware of the significance of these changes for the demand for new products (including imported foods), quick-service eating places, and laborsaving shopping facilities.

Agriculture

Danish agriculture is an intensive, highly productive, mixed type of farming. About 90 percent of gross farm income comes from sales of livestock and livestock products and 60 percent of total production is exported (15, 3). Approximately 95 percent of all Danish farms are owned by operating farmers who have achieved world renown for their efficiency in production and marketing and for the high quality of their exported foodstuffs.

18/ The standard workweek in Denmark has been declining slowly for years. It reached 41-3/4 hours in September 1970, following a reduction from 44 to 42-1/2 hours in June 1968 (26). The 40-hour week probably will be the standard in a few years. The share of the Danish national budget allocated to education and research increased from 12 percent in 1955 to 17 percent in 1967 (27). More young people are remaining in school beyond age 15 than in earlier years (43).

Once the cornerstone of the Danish economy, agriculture has declined rapidly in importance in recent years. Agriculture and fishing accounted for about 10 percent of gross domestic product and 13 percent of total employment in 1968 (29, 30). Industrial exports exceeded agricultural exports for the first time in 1957 and stimulated the continuing transformation of Denmark from an agricultural to an industrial economy. While land in farms has declined only slightly more than 5 percent in the past two decades, and still accounts for 75 percent of all Danish land, numbers of farms have dropped dramatically. From the record 206,000 farms in 1946, farm numbers declined slowly to 196,520 in 1961 but rapidly to 146,211 in 1969 (table 3). Average farm size increased sharply from 37.8 acres in 1951 to almost 50 acres in 1969.

Table 3.--Danish farms: Number by size of farm, 1951, 1961, and 1969 and 1980 projection

Size of farm (hectares 1/)	1951	1961	1969	1980
	Number			
Under 5.0.....	42,922	37,163	16,309	4,500
5-9.9.....	55,165	54,478	31,396	6,500
10-14.9.....	32,554	32,771	26,337	8,300
15-29.9.....	49,465	48,622	45,053	37,500
30-59.9.....	21,401	19,693	21,856	25,300
60-119.9.....	3,390	2,916	4,199	6,300
120 and over.....	938	877	1,061	1,600
Total.....	205,835	196,520	146,211	90,000
Hectares per farm.....	15.3	15.9	20.2	31.3

1/ One hectare = 2.47 acres.

Sources: (5, 1).

Two factors are mainly responsible for the rapid structural changes in Danish agriculture during the 1960's compared with earlier years. In the 1950's, farmers' earnings, on average, were not unfavorable in relation to nonfarm wages and a low rate of economic growth failed to produce many new nonfarm jobs. In contrast, in the 1960's, rapid economic growth produced full employment, tight labor markets, and many new urban jobs. Disparities between farm and nonfarm incomes increased. The second major factor was the progressive removal in the 1960's of the legal barriers that had restricted mergers of small farms into larger, more efficient units. Today (1971), farm acquisitions and mergers are essentially free of legal restrictions if the resulting farm does not exceed 75 hectares (about 185 acres). Pending legislation, if enacted, will raise this maximum to 100 hectares (247 acres).

Danish agriculture is expected to change greatly in the years ahead. A recent study forecasts a decline of only 5 percent in land in farms from 1969 to 1980 but a 38-percent decline in farm numbers to only 90,000 (1). All of this decline will take place in farms of less than 75 acres because most of them produce incomes that compare unfavorably with earnings in nonfarm employment (5). Another important factor is the high average age of Danish farmers. Nearly 55 percent of all Danish farmers in 1969 were 50 years of age or older and 26 percent were 60 years or over.

Production and productivity in Danish agriculture will continue to increase rapidly, but some important shifts in the structure of output seem likely. Feed grain and pork production are expected to rise but the production of food grains, feed, beets, potatoes, milk, poultry meat, and eggs probably will decline. Production of fruits and vegetables is not expected to keep pace with rising demand. In general, the trend in Danish agriculture, as in agriculture in other countries experiencing rapid economic growth, is toward production of crops and livestock that put minimum demands on the short supply of manpower. As shown in chapter IV, these changes in Danish agriculture are having important impacts on Denmark's food marketing system, especially on the farmer and consumer cooperatives and food manufacturers.

III. DANISH FOOD DISTRIBUTION

A revolution in Danish food retailing and wholesaling began in the late 1950's. The rate of economic growth rose and unemployment fell sharply. Technological advances in food distribution, changes in the structures of agriculture and manufacturing, and changes in ways of living were other contributing forces. The pace of change increased in the 1960's. It will remain high in the years ahead. The revolution in food distribution is changing all key market variables, such as the numbers and types of foodstores and wholesaling businesses, product assortments, marketing organizations, marketing practices, and competition.

Historically, European retailing systems have had many small shops. Economic, technological, social, and political conditions favored a fragmented retail structure which, in turn, encouraged small-scale wholesaling. Few families owned automobiles and refrigerators. They had to shop often and on foot in neighborhood stores. Each shop sold a limited volume and range of products to a few customers at high prices and profit margins. Low family incomes also limited store size. Poor families lacked the effective demand for the thousands of items displayed in modern supermarkets.

The small shop permitted easy entry into retailing because its capital, labor, and business skill requirements were modest. In the prewar depression years, many modest-income families opened small stores to avoid unemployment (23). Another important factor was the weakness of pressures to increase labor productivity in food distribution (16). Until the late 1950's, wages were low and economy in the use of labor through investment in modern supermarkets and warehouses was less urgent than it is now.

Like most European countries, Denmark has a long history of legal protection of small shopkeepers and, indirectly, small wholesalers. Danish restrictions on large food retailers have taken three forms:

(1) Until January 1, 1970, chainstores could operate only one store in each of Denmark's several score municipalities (14). Although this ban did not apply to the consumer cooperatives or to private chains selling goods of their own manufacture, it curbed the growth of food chains in the major cities. Furthermore, by reducing competitive pressures on both the cooperatives and small retailers, the law slowed modernization of Danish food distribution.

(2) Another law that was repealed on January 1, 1971, limited sales of milk to specialized dairy products shops. Large stores also were prohibited from selling some other items in areas where Government officials feared that competition was too severe for the small shops (21). These limitations on store inventories and sales favored small shops by preventing supermarkets from offering consumers the convenience of one-stop shopping.

(3) The third and mildest form of legal restraint on the growth of large-scale retailing is the only one that remains in force. By Government regulation, all retail stores have been effectively limited since 1936 to 54 hours of operation a week. Stores must close by 5:30 p.m. Monday through Thursday; 8:00 p.m. on Friday; and 2:00 p.m. on Saturday. Sunday operation is prohibited.

This short operating week limits competitive pressures on small shopkeepers in two ways: (1) Their own working hours and expenses for hired labor are less than for the longer operating weeks common in other countries, 19/ and (2) supermarkets cannot gain the economies of scale and the minimum operating cost and price levels possible with longer store hours. 20/

Numbers and Types of Stores

Despite these legal deterrents, economic conditions in Denmark since the late 1950's have favored growth of self-service and supermarket retailing and the disappearance of small foodstores. In 1948, Denmark had 37,959 foodstores (table 4). A decade later there were a few more, 38,155, but by about 1958, store numbers began to decline. By 1968, Denmark had an estimated 30,400 foodstores. Trade sources estimate that Denmark had about 28,000 foodstores in 1970,

Table 4.--Food, beverage, and tobacco stores: Number by product type of store, Denmark, 1948, 1958, and 1968

Type of store	1948	1958	1968
	----- <u>Number</u> -----		
General grocery.....	16,048	15,710	12,731
Specialty shops:.....	25,536	26,382	21,646
Dairy products, eggs, bread.....	5,254	4,915	
Meat, fish, poultry.....	7,320	6,968	
Fruit and vegetable.....	3,923	3,585	
Retail bakery shops.....	4,384	4,392	<u>2/</u>
Other food shops.....	1,030	2,585	
Tobacco and wine.....	3,625	3,937	
Total <u>1/</u>	41,584	42,092	34,377

1/ Excludes department stores, of which there were 11 (with food departments) in 1968.

2/ No breakdown of specialized shops is available for 1968.

Sources: (5, 6). The 1948 and 1958 figures are national census data. The 1968 data are from reports required by the Danish value added tax enacted in 1967.

19/ Many U.S. supermarkets are open 69 to 72 hours a week, and most American convenience stores are open 112 hours. A few never close.

20/ Chances for repeal of the law limiting store hours are not now favorable. The main opposition to repeal now comes from Danish labor unions. Most store employees want to be free from evening and Saturday afternoon duty.

or one shop per 176 people. 21/ From 1958 to 1968, Denmark had an annual net loss of 775 foodstores. This rate rose to about 1,200 shops a year from 1968 to 1970. Leading Danish retailers estimate that the current net disappearance rate is about 30 shops a week, or about 1,500 to 1,600 annually.

Causes of the Decline

All of these decreases in foodstore numbers continue to be concentrated, as in other European countries, among the small shops. Few owners of these little stores ever have earned more than modest incomes, and trade sources say that in the past decade, the small shop has become a less attractive occupation. The serious economic plight of thousands of small Danish grocers is shown in table 5. Independent grocers with 1969 sales between 600,000 and 1 million Danish crowns (DKr) (\$80,000 and \$133,333) earned about as much per hour as the average Danish factory worker, slightly under \$2 (7.5 DKr = \$1). They earned much less than the average skilled factory worker's \$2.28 per hour. Owners of stores selling less than \$26,666 in 1969 earned only 57 cents an hour, assuming a workweek of 60 hours. 22/

As table 5 shows, stores with 1969 sales of a million DKr or less generally have a sales area of less than 50 square meters (538 square feet). A 1967 study of Denmark's 11,214 independent grocery stores revealed that 72.5 percent of them were smaller than 50 square meters (18). Nearly all specialty shops are in this size class. Many have only 25 to 30 square meters of sales area. Few of these little shops are economically viable in the sense that owners' earnings equal or exceed wages in other jobs requiring comparable skills. Moreover, in the years ahead the combined force of rising wages and other costs and falling profit margins may double the minimum breakeven size of about \$100,000 of annual sales. Leading Danish retailers say that the minimum dimensions of an economically viable grocery store soon will be 100 square meters of sales area and annual sales at 1969 prices of 1.5 million DKr (\$200,000).

The uneconomic nature of the small foodstore also is evident from the actions of the largest Danish food retailers. Until 1963, the consumer cooperatives were expanding their huge network of retail outlets to a record 2,382 stores (14). By the end of 1969, the number was down to 2,217, a net decrease of 165 stores in 6 years, or 27 a year. Nearly a third of this decline, 52 stores, came in 1969. The cooperatives actually closed 58 small shops in 1969, but through new construction and store enlargements they opened six new variety stores and 25 supermarkets. In 1963, the cooperatives made only 27 percent of their total sales in their supermarkets and variety stores, compared with 52 percent in 1969.

21/ "Trade sources" is shorthand for the Danish food industry executives, Government officials, and other market observers interviewed in this study. The approximate numbers of people per foodstore in some other industrial countries in 1970 were: Belgium, 160; the Netherlands, 195; Sweden, over 500; and the United States, over 700 (39).

22/ A 1967 Dutch study revealed that about 75 percent of the owners of foodstores with annual sales below 275,000 guilders (about 550,000 DKr or \$76,400) had negative economic returns. That is, shop earnings were less than wages in other employment requiring equivalent skills (20).

Table 5.--Small independent grocery stores: Key operating results by store size, Denmark, 1969 ^{1/}

Annual sales: (1,000 DKr)	Average	Average	Work-	Annual sales		Profit rates ^{3/}		Net profit:	Net
	sales	sales	ers ^{2/}	Per	Per sq.	gross	net	before	economic
:	area	:	:	worker:	meter	:	:	taxes	return ^{4/}
:	1,000	Square	Number	1,000	DKr	Percent		DKr	DKr
:	DKr	meter							
Under 200...	144.5	28.3	1.46	99	5.1	15.6	9.3	13,439	-20,797
200-299.....	266.1	28.6	1.74	153	9.3	14.5	9.9	26,344	-5,892
300-399.....	353.0	38.4	1.92	184	9.2	14.8	8.2	28,946	-3,290
400-599.....	496.8	37.9	2.19	227	13.1	14.5	7.0	34,776	2,540
600-999.....	766.6	56.4	2.97	258	13.6	15.1	6.0	45,996	13,760
1,000-2,000	1,329.5	75.5	4.33	307	17.6	14.5	5.0	66,475	34,239

7.5 DKr = \$1.

^{1/} Based on a cross-section sample of 631 record-keeping and reporting stores.

^{2/} Includes owner and family labor on full-time equivalent basis.

^{3/} Percentages of sales before deduction of salaries of the owner and other unpaid family labor.

^{4/} Difference between store net profit and the average factory worker's income of 32,236 DKr (\$4,298) for the standard 42-hour week in 1969. However, for a 60-hour week at the average factory worker's hourly wage of 14.76 DKr, the annual income would be 46,051 DKr (\$6,140).

Sources: (17) and supplementary letter to the author, dated Dec. 8, 1970, from Mr. P. B. Nielsen, Chief Consultant, Danish Federation of Grocery Association, Copenhagen (except the last 2 columns are author's computations).

Another reason for the disappearance of small foodstores is that they are no longer the essential havens from unemployment they once were. Since 1960, the expanding Danish economy has held unemployment at low levels and simultaneously increased the total number of jobs. As a result, most Danish shopkeepers' sons, like the sons of Danish farmers, have broken with the tradition of remaining in the family business in favor of better paying work.

Finally, the advanced age of many Danish grocers is accelerating the decline in foodstore numbers. The Danish Federation of Grocery Associations estimates that more than half of all independent Danish grocers are between 50 and 60 years of age. Each year, many small stores are liquidated because the owners have reached retirement age and there are few buyers for these shops.

Self-Service Retailing

As thousands of small shops were closed, Danish food retailers have built larger self-service foodstores. Self-service retailing first appeared in Denmark, as in other European countries, in the late 1940's, more than 30 years after its introduction in the United States (39). On January 1, 1950, Denmark had only two self-service foodstores (table 6). Self-service retailing was adopted slowly in the 1950's but rapidly during the 1960's. This development contributed to

Table 6.--Self-service foodstores, supermarkets, and variety stores:
Numbers in selected years, Denmark, 1950-70

Month and year	Self-service foodstores	Supermarkets <u>1/</u>	Variety stores <u>2/</u>
	Number		
January 1950.....	2	0	n.a.
January 1960.....	645	n.a.	n.a.
July 1964.....	2,717	277	n.a.
July 1965.....	4,040	365	n.a.
July 1966.....	4,328	462	32
July 1967.....	4,842	531	42
January 1969.....	n.a.	652	68
January 1970.....	<u>3/5,550</u>	733	84

1/ The number of supermarkets is included in the total of self-service stores. In Denmark a supermarket is defined as a large self-service, full assortment foodstore (including food departments in department and variety stores). If the International Self-Service Organization minimum of 400 square meters of sales area is applied, Denmark had 238 supermarkets on Jan. 1, 1970.

2/ The numbers in this column include Denmark's 11 department stores and are, in turn, included in the numbers of supermarkets and self-service foodstores.

3/ Estimated from data supplied by the International Association of Department Stores, Paris.

Sources: (36, 37).

the closure of many small foodstores because even a small self-service store is much larger and more efficient than the typical counter-service store (table 7). In fact, sales per square meter and per worker generally rise as store size increases (tables 5 and 7).

Table 7.--Consumer cooperative foodstores: Number, sales area, and sales per square meter, by type of store, Denmark, 1969

Type of store	Stores	Sales area		Sales per square meter
		Total	Per store	
	Number	Square meters		DKr
Counter-service.....	386	24,464	63	10,186
Small self-service....	1,352	154,204	114	9,004
Supermarkets.....	315	91,782	291	
Variety stores.....	41	58,260	1,421	12,338

7.5 DKr = \$1.

Source (14).

In the late 1960's, the rate of growth in numbers of self-service foodstores declined as retailers shifted the emphasis of their modernization programs from conversion of traditional shops to enlargement of self-service stores and construction of supermarkets and variety stores. ^{23/} The number of supermarkets doubled from 1965 to 1970 and the number of variety stores jumped from 32 in 1966 to 84 in 1970. Moreover, the current trend in the construction of both supermarkets and variety stores is toward larger units. Most of Denmark's newest supermarkets have sales areas of 800 to 1,200 square meters (8,600 to 12,900 square feet). That is, they are about the size of typical American supermarkets and roughly twice as big as the Danish supermarkets built only 5 to 10 years ago. The new variety stores usually have a sales area of at least 1,500 square meters. The food department occupies about 40 percent of the sales area and accounts for about 60 percent of store sales.

Prospects for 1980

Leading Danish food industry executives generally believe that the current rate of disappearance of foodstores, 1,500 to 1,600 a year, will be maintained in most years of the present decade. By 1980, Denmark may have fewer than 13,000 foodstores of all types, compared with about 28,000 in 1970. The density of stores will fall from about 57 per 10,000 people in 1970 to only 25 in 1980.

^{23/} The Danish retail trade is unique in calling variety stores "double supermarkets". A supermarket becomes a "double supermarket" when nonfood sales exceed 20 percent of total sales.

The number of supermarkets probably will continue to increase rapidly. By 1980, supermarkets may be about 12.5 percent of all Danish foodstores, compared with only 2.5 percent in 1970. ^{24/} Accordingly, supermarkets (including the food departments of the department and variety stores) almost certainly will have the major share of the Danish retail food market in 1980, compared with only slightly more than 20 percent in 1969.

The reasons advanced by Danish food industry executives for expecting these major structural changes in food retailing are more significant and basic than simple projection of past trends. The most fundamental factors, of course, are the socioeconomic forces discussed in chapter II. Increasingly affluent, motorized, time-conscious Danes are attracted in growing numbers to the new supermarkets, variety stores and shopping centers. These modern establishments offer the convenience of one-stop shopping, lower prices, and large product assortments. As they become the key elements of an efficient modern system of mass distribution of food, they displace thousands of small grocery stores.

Expansion of supermarket retailing in Denmark probably will have even more adverse effects on specialty foodstores than on small general groceries. Danish supermarkets are increasing their product assortments by adding many items formerly sold almost exclusively in specialty shops. The shift in consumer shopping patterns in favor of the general grocers is shown clearly in the tabulation below of the 1970 indexes (1961 = 100) of Danish foodstore sales (5):

<u>Type of store</u>	<u>1970 index</u>	<u>Type of store</u>	<u>1970 index</u>
All foodstores.....	247	Specialty stores (con.):	
Consumer cooperatives.....	299	Cheese shops.....	171
Other general grocers.....	261	Retail bakeries.....	187
Specialty stores:		Retail butchers.....	194
Fruits and vegetables...	253	Coffee & tea stores.....	165
Retail dairies.....	193	Confectionary stores.....	192

These sales trends suggest that specialty stores are a declining percentage of all foodstores. In 1958 and 1968, specialty shops were about 58 percent of all Danish foodstores. In the years ahead, their share seems likely to move a long way toward the pattern in America, where specialty shops are less than 30 percent of all foodstores.

The potentials for rapid structural change in food retailing in the next few years were greatly increased by the 1970 and 1971 changes in Danish trade

^{24/} A Danish market analyst recently predicted that the number of supermarkets will rise from 733 on Jan. 1, 1970, to about 1,000 on Jan. 1, 1973, or nearly 40 percent in 3 years (37). American readers should interpret "supermarkets" as "supermarkets and superettes" because the Danish retail trade does not observe the international minimum sales area of 400 sq. meters in classifying a store as a supermarket. But few, if any, Danish supermarkets are under the international minimum of 120 sq. meters for a superette.

laws mentioned earlier in this chapter. There are now no major legal restraints on expansion of supermarkets and large retailing enterprises. 25/

Market Organization

The number of Danish food retailing companies, like the number of stores, continues to fall. The nature of these companies and their market shares also are changing about as much as the kinds of stores they operate.

Table 8 presents a rough sketch of the organization of the Danish retail food market in 1968. Although lack of data for other years prevents historical comparisons of structural change, Danish trade sources insist that the trend to

Table 8.--Food retailers: Estimated number of organizations and their market shares, by types of organization, Denmark, 1968

Type of organization	Firms or groups	Food market shares			
		Total retail market		General grocery sector	
		Stores	Sales	Stores	Sales
	Number	Percent			
Consumer cooperatives...	<u>2/1,787</u>	7.5	22.9	17.8	32.9
Corporate chains <u>1/</u>	10	1.1	8.7	2.6	12.5
Voluntary chains.....	6	6.7	10.9	16.0	15.7
Retailer cooperatives...	7	8.6	15.0	20.5	21.7
Other independents.....	n.a.	76.1	42.5	43.1	17.2
Total.....	n.a.	30,400	14.4	<u>2/12,731</u>	10.0
			<u>2/bil. DKr</u>		<u>2/bil. DKr</u>

1/ Chains operating 4 or more stores each in 1968.

2/ Official data reported in (14) and (6).

Note: Valuable assistance in preparation of this table was received from Professor Leif Kristensen, Okonomisk Forskningsinstitut and Handelshojskolen, Copenhagen, and the principal researcher in the study reported in (22). The author, however, accepts full responsibility for the estimates shown here.

Sources: (6, 14, 22).

25/ Abolition of the special privileges long enjoyed by the retail dairies may bring about their nearly total liquidation very quickly. In 1970, owners of many of these little shops were trying to convert them into a type of convenience foodstore by adding a limited range of other food products. But Danish law governing store hours prevents the shops from remaining open after the supermarkets close and thereby limits the shops' chances of survival.

fewer but larger retailing companies is firmly established. They also indicate that basic changes in the internal structures of the major companies are being made in response to the growing intensity of competition in Danish markets for food and other consumer goods.

Consumer Cooperatives

Consumer cooperatives are by far Denmark's leading group of food retailers. Their 1968 share of total retail food sales was almost 23 percent (table 8). In the expanding general grocery trade, they had nearly one-third of all sales. Within the Danish cooperative movement, the concentration of sales also is high. Among the 1,742 consumer cooperative societies operating on January 1, 1970, only 51 societies owned at least two stores (14). The largest society, Brugsforeningen HB, is also Denmark's largest retailer of food and related consumer goods. HB's 1969 sales of more than \$200 million in 359 stores were roughly 10 percent of all retail food sales in Denmark.

The cooperatives not only are Denmark's major food retailing group, but also have been increasing their market share. 26/ Although this growth may be attributed in part to a favored legal position that was abolished in 1970, it is mainly the result of competent professional management enjoying strong membership support. Membership in the cooperatives nearly doubled from 1950 to 1970 to about one-half of all Danish families.

Because of the cooperatives' leading position in Danish retailing, a review of developments within the cooperative movement explains much about past and future structural change in the retailing system. Until the mid-1950's, as the consumer cooperatives grew in membership and sales, the number of societies also increased. But since then the number of societies has declined even as membership and sales continued to rise. There were 1,908 societies in 1955 but only 1,742 on January 1, 1970. In 1969 alone, 45 small societies disappeared, 27 by liquidation and 18 by mergers into other societies. Increasing competition in Danish retailing, population shifts, and operating losses in some stores are the main forces underlying the trend to fewer but larger societies. Increasing motorization of the Danish population makes this development possible. 27/

In another major structural development, the consumer cooperatives recently intensified their efforts to increase sales and operating efficiency through integration and coordination of their total purchasing and merchandising operations. All consumer cooperatives long have been members of the national

26/ From 1961 to 1970, the consumer cooperatives increased their sales 199 percent, compared with the 147-percent increase in sales by all Danish food-stores (5).

27/ Many small Danish cooperatives are in rural areas. When few Danish farmers had automobiles and trucks, many small co-op stores were both necessary and profitable. A declining rural population is rapidly reducing the number of stores and societies able to operate profitably. Furthermore, motorization expands a store's trading area and enhances possibilities of gaining the economies of larger scale retailing.

federation, the Faellesforeningen for Danmarks Brugsforeningen (FDB), through which they have purchased much of their shop goods. 28/ However, neither these purchases nor participation in FDB-sponsored sales promotion campaigns were mandatory for the member societies. To improve the cooperatives' competitive position in Danish retailing, FDB has been organizing its members into a voluntary chain. By early 1970, about 87 percent of the societies were contractual members of the chain. In 1969, member society purchases through FDB reached a record 71 percent of their total purchases (14). 29/

In the near future, the internal structure of Denmark's consumer cooperative movement may be changed even more radically. Leaders of the movement have decided to transform FDB from a federation of "independent" societies into a single national society to be named "Co-op Denmark." 30/ Increasing competition from other large modern food retailers is the main reason advanced for this major reorganization designed to increase management, purchasing, merchandising, and operating efficiency. The change in organization also is viewed as contributing to FDB's stated long-term goal of expansion to 30 percent of Denmark's retail food market.

Corporate Food Chains

On January 1, 1970, Denmark had 11 corporate food chains with four or more supermarkets, variety stores, and department stores per chain (37). 31/ One of the 11 is a department store chain and two others operate variety stores only. 32/ The 11 companies owned 117 self-standing supermarkets and 37 department and variety stores with large food departments. 33/ All of the 147 smaller stores operated by the chains were owned by four companies. The chains ranged in size from four to 177 stores. The three largest chains operated 104 of the 154 supermarkets and 143 of the 147 small shops.

28/ FDB, or Federation of Danish Consumer Cooperatives, also is known as the Danish Cooperative Wholesale Society. Its main business is to serve its member societies as their principal purchasing agent and wholesaler. But FDB also is one of Denmark's major food manufacturers and is engaged in publishing, advertising, and a variety of other services to its members.

29/ In comparison with the percentage for Danish voluntary chains of independent wholesalers and retailers, this percentage is exceptionally high. It also indicates much about the strength of the cooperative movement and the comparative weakness of the independents. Wholesaler members of Danish voluntary chains reported that the retailer members, on average, buy only about 25 percent of their total purchases from the chain wholesaler. One wholesaler said that his long-term goal is to increase this purchasing rate to 50 percent.

30/ Individual Danes would than be members of Co-op Denmark rather than members of a local society.

31/ Denmark may or may not have other food chains that own only small shops.

32/ A striking difference between European and American department and variety stores is that most of the European stores have supermarket size food departments while few American department and variety stores sell food.

33/ 10 of Denmark's 11 department stores have large food departments of which 3 are operated by major supermarket chains under leasing arrangements. These 3 operations are counted in the chain's 117 supermarkets.

All but two of the chains are Danish owned. One variety store chain is a subsidiary of a Swedish supermarket-variety store chain. Another variety store chain is jointly owned by a Swedish food chain and a Danish chain of textile stores. A third supermarket-variety store company is owned by two Danish companies primarily engaged in shipping and department store retailing.

Like the consumer cooperatives in recent years, the 10 supermarket and variety store chains have pursued policies of expansion with emphasis on new supermarkets and variety stores. From July 1, 1967, to January 1, 1970, these chains increased their self-standing supermarkets from 91 to 117 and their variety stores from 15 to 33. In the same period, they closed 19 small shops. Although accurate sales data are not available, there is no doubt that the chains' sales are rising rapidly and their market share is now well above the 8.7 percent estimated for 1968 (table 8). ^{34/} Further absolute and relative market growth is expected in the years ahead. One chainstore executive said that his company's sales target is 10 percent of the Danish retail food market. The prospects for more rapid expansion by the chains in the 1970's than in the 1960's were enhanced by the elimination in 1970 and 1971 of the main legal restraints on their growth, the rising rate of disappearance of the small foodstores, and the chains' own policies of growth emphasizing mass merchandising through supermarkets and variety stores.

Nevertheless, the number of food chains seems almost certain to decline sharply in the years ahead. Danish trade sources indicate that in addition to the several Danish food chains that have been purchased by larger firms in recent years, several more are likely to be similarly absorbed in the near future. By 1980, Denmark probably will have six rather than 11 corporate supermarket-variety-department store chains plus Co-op Denmark.

Affiliated Independents

Little can be said about past and current structural developments among the voluntary chains and retailer cooperatives. One reason is lack of reliable information and the other is the highly fluid structure of this segment of Danish food distribution.

In 1968, Denmark had six voluntary chains with about 2,000 foodstores and nearly 11 percent of all retail food sales (table 8). ^{35/} Then in December 1970, an agreement among the seven wholesalers serving four of these chains merged them into one chain (38). Trade sources indicate that this merger process is not finished. At least one of the present three voluntary chains may disappear

^{34/} These closely held private companies are not in the habit of publishing their vital statistics.

^{35/} In a sense, there were 8 voluntary chains. 2 large wholesalers each had 2 chains of independent retailers. In each case, 1 chain included only independent supermarkets, while the other involved only smaller shops. Also in each case, the chains operated under different names. For example, the Favor supermarkets and the Elite (small) stores are affiliated with the same wholesaler.

soon. In addition, substantial realignment of wholesalers among the voluntary chains through mergers, acquisitions, and liquidations is expected in the near future. 36/

In 1968, Denmark had seven retailer cooperatives with about 2,600 food-stores and 15 percent of all retail food sales (table 8). As a result of recent acquisitions of three of these organizations by others, only four remain in business. Of these, one is said by Danish trade sources to be too small for efficient operation and the number of retailer cooperatives soon may fall to three. 37/

1980 Structure

Although predicting future marketing developments is risky, few Danish food industry executives were not willing to predict drastic changes in the structure of Danish food retailing. One executive said that not more than 10 large food retailing organizations would have at least 80 percent of the retail food market by 1980. The 10 include Co-op Denmark, three corporate supermarket chains, two variety store chains, two retailer cooperatives, and two voluntary chains. Another executive listed the same 10 firms but accorded them 75 percent of all 1980 retail food sales. More cautious industry leaders were inclined to add a third variety store chain, a third retailer cooperative, and a department store chain for a total of 13 major companies. The remaining 20 to 25 percent of all 1980 food sales would be shared by a few small chains and several thousand independent grocers and specialty shops. The basic reason for these expectations of drastic restructuring of Danish retailing along the lines of the present Swedish food retailing system is simple. In the increasingly intense competition now evident in Danish food retailing, only a few large, financially strong, efficient, professionally managed, mass merchandising companies can survive. However, these large-scale retailers will not be able to capture the whole food market. Many small foodstores (but far fewer than today) will be needed to satisfy consumer demands for special products and services.

36/ One of the serious structural problems is also most unusual. Several wholesalers in the 3 voluntary chains actually sell to retailers in more than one chain. The resulting confusion of channels of distribution and marketing services to the retailers is inefficient and, therefore, an invitation to further mergers.

37/ Another development contributing to the fluidity of the organization of this segment of Danish food retailing is the continuing transfer of a limited number of independent supermarkets from the voluntary chains to the retailer cooperatives. Such changes of affiliation were reported with evident delight by executives of 2 retailing cooperatives interviewed in this study. One executive said that 6 of the 20 supermarkets in his organization had transferred from a voluntary chain within the past year. The main reason, according to these executives, for these changes in affiliation is the lower prices and operating margins of the retailer cooperatives. Another factor is the currently fluid state of organization of the Danish voluntary chains and the adverse impacts the resulting confusion has on the chains' marketing programs.

Food Wholesaling

Denmark had 4,706 wholesalers of food, beverages, tobacco, and toiletries in 1968 (6). 38/ On average, they sold only 3.4 million DKr (about \$457,000) of merchandise, or roughly half the annual sales of a typical Danish supermarket. The 1968 ratio of retailers to wholesalers in these product lines was only 7.3 to 1. Several conditions in Danish food retailing largely explain why so many small Danish food wholesalers were still in business as recently as 1968. (1) Independent retailers had a much higher percentage of retail food sales than the integrated companies (table 8). (2) The wholesaler members of the voluntary chains and retailer cooperatives handled only about 25 percent of member retailers' total purchases. (3) Thousands of small foodstores were in business. And (4) most retailers, including the so-called general grocers, were narrowly specialized on product lines.

In addition to fewer customers and declining sales, the small independent food wholesaler, like the small foodstore, is faced with steadily rising costs. Too small to make profitable use of the modern warehousing and marketing technology employed by his larger competitors, he has difficulty increasing labor productivity in line with rising wages and avoiding a growing gap between his earnings and salaries paid in alternative employment. Leading Danish food wholesalers estimate that under present relationships of costs and returns in wholesaling and salaries paid outside the food distribution sector, the minimum economic size of a food wholesaler has risen to annual sales of 50 million DKr (about \$6.7 million). 39/ Furthermore, this minimum is almost certain to increase in the years ahead, and to stimulate many more liquidations, mergers, and acquisitions of independent Danish wholesalers, including many of Denmark's largest firms.

All of Denmark's largest independent food wholesalers are members of two buying organizations, A/S UNIL for imported products and Dagrofa for domestic goods. 40/ Membership in the two organizations appears to be identical. The 1970 Dagrofa membership list names only 31 companies. In 1967, UNIL had 42 members, compared with 66 in the early 1960's. Comparison of the 1970 and early 1960 lists shows that only 24 firms were on both. In less than a decade, UNIL and Dagrofa had a gross loss of 42 members and a gain of seven firms (probably from mergers of some of the 42 wholesalers no longer in business). This decline is continuing. The leading wholesalers interviewed in this study predicted that UNIL and Dagrofa soon will have only 10 members. These firms will include, as now, the major wholesalers serving the voluntary chains and the principal wholesalers serving the institutional trade. In addition, UNIL probably will

38/ No breakdown of this number by types and sizes of firms is available, and no comparisons with 1958 census data seem to be possible. In 1968, Denmark had 19,839 wholesalers of all types of goods, compared with 10,667 in 1958 (5). This large increase may have been more apparent than real because it suggests that different definitions of a wholesale enterprise were used in the 2 years.

39/ Similar estimates of minimum economic size were made in 1970 by leading Benelux wholesalers (39).

40/ A/S UNIL stands for United Nordic Importers Limited and Dagrofa is shorthand for Danske Kolonial Grossisters Centralkontor.

continue to handle imports for several nonmembers including the retailer cooperatives; some of the small corporate supermarket, variety, and department store chains; and a few Danish food manufacturers.

Import Agents

Traditionally, the Danish import agent has been a key figure in his country's market for imported goods. As the local representative of a foreign manufacturer, the agent performs a variety of marketing services designed to promote and expedite sales of his clients' products. Most agents are narrowly specialized on product lines. Their success depends on (1) their intimate and expert knowledge of the domestic market and marketing techniques appropriate for the product and (2) contacts with domestic buyers and customs officials. Import agents generally are paid on a commission basis. In 1970, Danish food import agents received commissions ranging as high as 5 percent of the value of the goods sold but, according to both the agents and wholesalers interviewed in this study, agents earned 2 percent on most transactions.

In 1969, Denmark had 23 import agents specializing in food and beverages, not counting UNIL and Nordisk Andelsforbund (NAF), the import agencies serving, respectively, Denmark's largest independent food wholesalers and five Scandinavian federations of consumer cooperatives (13). Of the 23 independent agencies, three handled only agricultural raw materials imported for Danish manufacturers. Nearly all of the firms are small. One reportedly has a staff of about 20 salesmen but most firms seem to have only two or three. Few, if any, of the firms have warehouses or other distribution facilities.

Some market analysts strongly recommend the agency system of marketing goods in foreign countries (35, 25). The method is claimed to be the most effective and inexpensive marketing technique available to many foreign producers. Import agents stress that exporters pay nothing for the agents' services until a sale has been made. Agents also argue that they give their clients valuable advice on prices, product qualities, and marketing practices and conditions. Some agents can cite cases of American manufacturers who have exported their products to Denmark for years through them with satisfactory results.

Nevertheless, the future of most of Denmark's independent food import agents may be affected adversely by changes now taking place in Danish food marketing. (1) The agents are losing their oldest customers, Denmark's independent food wholesalers, as the consumer cooperatives, corporate food chains, retailer cooperatives, and voluntary chains expand their sales and market shares. These big retailing organizations increasingly are bypassing both the independent import agents and wholesalers in favor of direct buying from foreign and domestic manufacturers through their own agencies, NAF and UNIL.

(2) Most independent import agents are oriented to and expert in the marketing practices, institutions, and channels that are disappearing. Danish food industry executives say that few independent import agents have comparable understanding and expertise in the more complex marketing concepts and techniques needed for successful marketing of today's more sophisticated food products to Denmark's mass merchandising companies.

(3) Although the American food manufacturers contacted in this study formerly marketed their products in Denmark through import agents, none now do. Two U.S. companies have their own sales staffs to market a wide range of products through direct contacts with leading Danish retailers and wholesalers. The other companies have contracts with Danish manufacturers of complementary products to utilize the Danish firms' sales staffs, marketing expertise, and trade contacts. All of these American firms recommend these arrangements to other American companies considering entry into the Danish food market.

(4) In the late 1960's, five marketing organizations were established in the four Scandinavian countries to offer modern marketing services to both Scandinavian and foreign manufacturers. The companies, operating under common management, offer a complete package of services including market analysis, test selling, market planning, administration of advertising and physical distribution, receiving orders, and direct selling and promotion in stores. The companies, in short, undertake the complete responsibility for marketing a manufacturer's products in one or all of the Scandinavian countries under a long-term subscription contract. The Danish company in 1970 had a staff of four marketing managers and 35 salesmen and contracts with 10 companies, including a large American food manufacturer.

Product Assortments

In line with the new emphasis in Danish consumer food demand on convenience, variety, quality, and product standardization, Denmark's leading food manufacturers are developing and promoting new products. Major food retailers also are stimulating changes in food buying patterns. As a result, retail store inventories are steadily expanding in numbers and variety of articles, especially convenience foods, and in level and uniformity of product quality. Important shifts also may be taking place in foodstore inventory and sales ratios of (1) food to nonfoods and (2) distributors' and manufacturers' brands.

Although detailed data on the changing structures of store inventories and sales are not available, useful generalizations on them were obtained through interviews with Danish food industry executives and visits to Denmark's new supermarkets and variety stores. Another visible indicator of change is the rapid replacement of little foodstores with superettes, supermarkets, and variety stores. This development alone greatly expands the number and variety of foods and nonfoods available to consumers and intensifies competition among food and nonfood products and indirectly among manufacturers.

A typical small Danish foodstore with a sales area of only 30 to 50 square meters (about 325 to 540 square feet) usually can stock only 500 to 600 items. A superette may handle three times as many articles. A supermarket will display 3,000 to 4,000 products and a variety store will stock about 2,500 food products and many nonfoods. As noted earlier, the general trend in store construction is toward larger supermarkets and variety stores. One chainstore executive said that his new supermarkets have sales areas of 800 square meters and up, or about 60 percent more than the supermarkets built in the mid-1960's. Another company is building new supermarkets in the range of 800 to 1,200 square

meters. ^{41/} The new Danish variety stores are mostly in the range of 2,000 to 3,000 square meters, of which the food departments have about 40 percent, or 800 to 1,200 square meters.

Major Danish retailers also are increasing the inventories of existing stores for several reasons. Consumer demand is one. Another is the retailers' desire to counter the declining trend in net profits by increasing sales of products with above average profit margins. The third major reason is the rising intensity of efforts by Danish and foreign food manufacturers to develop and sell new convenience foods. Denmark's leading supermarket retailers are adding a net of 100 to 150 new items to their store inventories annually. ^{42/}

One large Danish food chain has recently drastically revised its policy of stocking only a limited assortment of fast-selling foods. The company's small self-service stores now sell some 800 articles instead of only 500. The supermarkets formerly limited to about 1,100 items now have about 1,500. This assortment is increasing at the rate of nearly 150 products annually.

Most of the additions to Danish supermarket assortments are convenience foods, nonfoods, and food products formerly sold mainly in specialty shops. Danish food industry executives and market analysts interviewed in this study estimated that retail sales of factory-processed foods are rising about 5 to 7 percent annually, in constant prices. This growth rate is roughly three times the annual 2-percent increase in total food expenditures. Sales of some convenience foods are rising much faster, as discussed in chapter V.

Frozen Foods

The extremely rapid growth of Danish production and consumption of frozen foods warrants special comment. Frozen foods were almost unknown in Denmark only 15 years ago. Domestic sales (consumption) in 1957 were only 1,000 metric tons, or 0.24 kilogram per person. ^{43/} By 1962, domestic sales, excluding ice cream, had reached 13,300 metric tons and 3.0 kilograms per capita. From 1965 to 1970, consumption increased 153 percent:

^{41/} A supermarket with a sales area of 1,200 sq. meters (almost 13,000 sq. ft.) is close to the size of the typical U.S. supermarket constructed in the 1960's. A U.S. supermarket with about 13,000 sq. ft. of sales area usually will have a total area of approximately 20,000 sq. ft. (⁴²). However, the trend in construction of U.S. supermarkets has changed recently in favor of larger stores of about 30,000 sq. ft.

^{42/} In 1969, the typical U.S. supermarket added 490 articles and deleted 335 items for a net gain of 155 (⁴²). Benelux supermarkets are experiencing similar increases in their stocks (³⁹). In 1950, the typical U.S. supermarket displayed 3,750 products, compared with 7,700 in 1969. By 1980, most U.S. supermarkets will stock about 10,000 articles (⁴²).

^{43/} One metric ton = 1,000 kilograms = 2,204.6 lbs. Most of the data in this section are from undated press releases of the Dybfrostinstituttet (Danish Frozen Food Institute) obtained in Copenhagen in Dec. 1970.

<u>Year</u>	<u>Metric tons</u>	<u>Kg./person</u>
1965.....	20,125	4.4
1966.....	25,130	5.4
1967.....	27,133	5.7
1968.....	29,525	6.1
1969.....	39,638	8.1
1970 (estimate) <u>44/</u>	50,000	10.2

The 1969 pattern of domestic sales of the 179 frozen foods produced by Denmark's 23 manufacturers is shown in table 9. In addition to their domestic sales, the manufacturers exported nearly 80 percent of their total production. In 1968, frozen poultry and fish accounted for more than 90 percent of frozen food exports, compared with about 45 percent of domestic sales. Frozen food imports were about 12 percent of domestic consumption (19).

Table 9.--Domestic frozen foods: Sales by product groups and trade channels, Denmark, 1969

<u>Product group</u>	<u>Products</u>	<u>Retail</u>	<u>Institutional</u>	<u>Total</u>	
	<u>Number</u>	<u>1,000 metric tons</u>		<u>Tons</u>	<u>Pct.</u>
Vegetables.....	42	7,821	3,560	11,381	28.7
Fruit and juices....	7	606	221	827	2.1
Prepared meals.....	19	1,364	561	1,925	4.9
Poultry.....	13	<u>1/</u>	<u>1/</u>	13,386	33.8
Meat.....	51	4,584	2,151	6,735	17.0
Fish.....	40	3,653	770	4,423	11.2
Other products.....	7	581	380	961	2.3
Total.....	179	<u>2/</u> 18,609	7,643	39,638	100.0

1/ No breakdown for poultry is available.

2/ Excluding poultry.

Source: Undated press releases obtained in Dec. 1970 from the Dybfrost-instituttet (Frozen Foods Institute), Copenhagen.

44/ The 1970 estimate assumes an annual increase of 26.1 percent over 1969 based on the actual 28.7-percent increase in the first 9 months of 1970 over the corresponding 1969 months.

Industry leaders expect frozen food consumption in Denmark to continue to rise about 25 to 30 percent a year. This expectation is based on several favorable factors. (1) Studies by the Dybfrostinstituttet of the North American, Swedish, and Swiss industries suggest that when per capita consumption reaches approximately 6 kilograms the industry's growth rate rises sharply and remains at a high level for years. Denmark's per capita consumption reached 6.1 kilograms in 1968. (2) Frozen food consumption is highly responsive to consumer income, and average family incomes are rising rapidly in Denmark. 45/

(3) About 24,000 of Denmark's estimated 28,000 foodstores had frozen display and storage cabinets in 1970. In 1969 alone, 5,100 freezer units were installed in Danish foodstores. Only the smallest stores do not now sell frozen foods. (4) The number of Danish families with household freezers increased by 158,000 in 1969. Early in 1970, roughly 44 percent of all Danish families owned a freezer. 46/

(5) The modern Danish frozen food industry is developing and promoting new products, especially convenience items. In 1963, Danish frozen food companies marketed 93 products, compared with 179 in 1969. Recently, the industry increased its penetration of the rapidly growing institutional market (restaurants, hotels, armed forces, hospitals, and so forth). In 1969, institutional sales of frozen foods increased 56 percent over 1968, compared with the 29-percent increase in retail sales. In summary, as the Danish Frozen Foods Institute concludes, the Danish frozen foods industry can look forward to 1980 with confidence.

Nonfoods

Most Danish supermarkets, like their American counterparts, have only modest numbers and sales of nonfoods. 47/ Danish trade sources say that supermarket sales of nonfoods are rising but future growth may be modest. The major retailing companies are not ignoring the profit potentials of nonfood sales. But their plans for future expansion emphasize higher rates of construction of variety stores than of supermarkets. Some industry executives see the variety store as the wave of the future in Danish retailing. These new stores are likely to have sales areas of 2,000 to 3,000 square meters with about 40 percent allocated to the food departments. But instead of the present food department share of 60 percent of total sales, the variety store chains want to expand the nonfood sales to 50 percent or more.

45/ In 1968, Denmark ranked 5th in the world in both per capita income and per capita consumption of frozen foods. Excluding ice cream, frozen food consumption per capita was (in kilograms): United States, 30.3; Sweden, 12.2; Switzerland, 8.1; and Denmark, 6.1 (19). Frozen food consumption in Canada is close to the U.S. level.

46/ Many of these units are small. Danish home appliance stores sell a small freezer of about 4 cubic feet designed to stand on top of the counter-height refrigerators of the same size that many Danish families now own.

47/ Sales of nonfoods in U.S. grocery stores were about \$4.7 billion, or slightly under 6 percent of total store sales, in 1969 (42). The nonfood products sold in Danish and American supermarkets are much alike.

Brand Competition

The growth of large food retailing enterprises usually intensifies competition between manufacturer and retailer (private) brands. Private label products capture a larger share of the total retail market for branded goods. Food manufacturers then come under increasing pressure from major retailers to supply private label products which can be priced to consumers slightly below retail prices of competing producer brands. However, in contrast with trends observed in many countries, Danish market shares of retailer and manufacturer brands may not change much in the years ahead.

Denmark's two largest food retailing organizations have long emphasized sales of their own label products, part of which they produce in their own factories. The consumer cooperatives have a sales ratio of co-op to manufacturer brands of about 80:20 and manufacturer brands account for less than 1 percent of the sales of Denmark's largest private food chain. In contrast, other leading Danish food retailing organizations now handle few private label products. Executives of these firms say that they expect to continue to emphasize sales of producer brands.

Accordingly, the competitive position of private and producer brands in the Danish food market in the years ahead may depend largely on the relative growth rates of the two largest companies and their willingness to maintain their present brand policies. As indicated earlier, both firms have ambitious goals for expanding their sales and market shares. Prospects for at least partial success are favorable. Thus, the sales and market shares of their private label products could rise and, while sales of producer brands also will increase, their market shares could decline.

On the other hand, Denmark's two largest food retailers may be unable or unwilling to maintain their present brand policies against growing pressures for change. More and more Danish consumers are acquiring the effective demand needed to induce retailers to offer larger product assortments. A marketing policy that emphasizes private labels to the degree found in the two largest retailing firms conflicts sharply with this powerful demand trend.

The rising intensity of competition in Danish retailing is another factor favoring manufacturer label merchandising. Not long ago, Denmark's two largest food retailers had little effective competition from other retailers. The latter were too small to present much of a competitive challenge to anyone. But this situation is changing. Several food retailing enterprises may now have enough market power to influence the policies of the big two. By 1980, Denmark probably will have 10 to 12 mass merchandising food retailers each of which will be big enough to offer the others highly effective competition. ^{48/} In short,

^{48/} Executives of both Co-op Denmark and the largest private food chain are acutely aware of the potential impacts of current developments in Danish retailing on their market positions and future policies. The 1969 annual report of the Danish Cooperative Wholesale Society notes another important factor: "As from January 1, 1970, the limitation under the Trade Act was abolished of the individual traders' access to operate more than one shop in the same municipality. This may entail increasing competition from new private chain concentrations The competition on the selection and range of goods is steadily stiffening in the retail sector due to the liberalization of the Trade Act ..." (14).

the changing structure of Danish food retailing and rising consumer demand offer both domestic and foreign food manufacturers favorable opportunities for expanding their sales and improving their competitive position in the Danish food market.

Profit Margins

Gross profit margins in Danish food distribution differ considerably by trade channels and product groups (table 10). Gross margins of independent general grocery wholesalers averaged 10.7 percent of their sales in 1968. Independent general grocery retailers' margins averaged 13.9 percent. Thus, the combined wholesale-retail gross margin in the independent grocery trade was 23.1 percent of retail sales and close to the 1967 margins in the same trade channels in the Netherlands (39).

Table 10.--Food wholesalers and retailers: Gross margins
by product class, Denmark, 1968

Product class	Wholesalers	Retailers
	<u>Percent of sales</u>	
General grocery.....	10.7	13.9
Consumer cooperatives.....	<u>1/</u>	<u>1/17.8</u>
Specialized firms:		
Meat and poultry.....	7.9	<u>2/25.6</u>
Fruit and vegetables.....	13.0	27.1
Fish.....	14.8	31.8
Milk and products.....	5.4	13.8

1/ The 1969 annual report of the Danish Cooperative Wholesale Society shows 1968 gross profits on wholesale operations of 6.1 percent of sales before deduction of a dividend of 0.6 percent to member societies. The retail societies had average gross margins of 15.2 percent (14). The combined wholesale-retail margin, therefore, was 20.4 percent of retail sales before average patronage dividends of 2.6 percent of retail sales, or a net combined margin of 17.8 percent.

2/ Includes margins of retail butchers as well as retail meat shops; presumably, the former do not buy all of their supplies from meat wholesalers.

Source: (12).

Denmark's consumer cooperatives operated on a gross wholesale-retail margin of 20.4 percent of retail sales. Although similar data are not available for the private food chains, retailer cooperatives, and voluntary chains, competition probably kept their gross margins close to the cooperatives' average. However, the effective gross wholesale-retail margin paid by members of the cooperatives was 17.8 percent in 1968 after payment of the patronage dividend of

2.6 percent. Assuming that these differences in gross distribution margins are reflected in the net retail prices paid in different trade channels, it is not surprising that the consumer cooperatives and other integrated and affiliated food distributors continue to gain sales at the expense of independent grocers and specialty shops.

By North American standards, gross margins of Denmark's large, integrated food retailers are reasonable. That is, the margins are about the same. In the year ending April 4, 1970, Denmark's largest food chain, Brugsforeningen HB, reported gross profits of 22.2 percent on sales of \$186.5 million (2). 49/ In 1969, average gross margins of large U.S. and Canadian food chains were 21.5 percent of sales (42).

In contrast, net profit margins are far higher in Denmark than in North America. In 1969, North American food chains had average net profits of only 1.0 percent of their sales. Denmark's HB chain reported 1969/70 net profits of 2.7 percent. Other Danish food chains probably had equally high net profit rates. Many factors account for these sharp differences in net earnings. Wages are lower in Denmark and customer services are fewer. But the main factor probably is the greater intensity of competition in North American food retailing. This, in turn, reflects significant differences in the structures of Danish and North American food retailing. In North America, small independent retailers, not affiliated with a retailer cooperative or a voluntary chain, accounted for only 8 percent of total retail food sales in 1969. In Denmark, the independents had more than 40 percent of the market in 1968. They provided a "price umbrella" that allows Denmark's leading supermarket companies to earn high profits while they hold their prices about 5 percent under prices in the small shops. In contrast, North American small retailers are not price leaders. Effective competition is almost entirely among the big supermarket chains, including the retailer cooperatives and the voluntary chains. 50/

Danish food industry executives agree that the current high net profit rates in food retailing cannot be maintained and, in fact, are declining. In the year ending April 7, 1962, the consumer cooperative chain HB reported net profits of 5.3 percent of sales (2). 51/ In the next 8 years, the earnings ratio declined steadily to only 2.7 percent.

49/ HB's 1969/70 sales were between the sales of the 45th and 46th ranking U.S. and Canadian food chains (42). As in North American food chains, HB's gross margins have been rising slowly for more than a decade. HB reported gross margins of 20.0 percent in its 1959-60 and 1960-61 fiscal years.

50/ In 1969, U.S. supermarkets and superettes made 83 percent of total retail food sales (42). The Canadian percentage probably is almost as high. U.S. corporate food chains had about 46 percent of the U.S. retail food trade; the affiliated independents had about the same share; and fully independent retailers (including small chains of 5 to 10 stores) had only 8.1 percent.

51/ HB reported even higher net profit margins in many earlier years: 5.4 percent in 1954/55; 6.0 percent in 1944/45; and 10.4 percent in 1939/40.

In the years ahead, net profit margins are expected to continue to fall slowly. As small foodstores disappear, effective competition in Danish retailing will be an activity limited to only a few companies, as in North America. These firms are the major Danish supermarket and variety store chains, Co-op Denmark, and a few voluntary chains and retailer cooperatives. In addition, wages in the distributive trade probably will rise faster than labor productivity. Other costs, including more customer services and more luxurious stores, may increase faster than gross profit margins.

The declining net profits trend in Danish food retailing has much significance for food manufacturers. In searching for means of slowing the fall in net profit margins, Denmark's leading food retailers are increasing pressures on manufacturers to develop new convenience foods that carry wider retail profit margins, to lower factory prices and profit margins, and to give retailers more financial assistance in advertising and promotion activities. Retailers also are becoming generally more demanding of manufacturers on such other matters as product quality and standardization and reliability of deliveries.

Food and feed processing is a big, dynamic industry in Denmark and by far the largest segment of the nation's growing industrial complex. In 1968, Denmark's 6,190 food and feed factories reported sales of \$2,342.3 million (6). These plants were nearly 15 percent of Denmark's 42,267 factories, employed roughly one factory worker in eight, and sold almost 29 percent of all Danish factory products. 52/ Among Denmark's 500 largest industrial enterprises, 115 manufacture food products and seven more produce beverages and tobacco products (28). 53/

Most Danish food and feed factories are small, family enterprises oriented to production for local markets. In 1968, nearly 90 percent, or 5,549, of the 6,190 food and feed factories had fewer than six workers (including owners) per plant. These little firms had average sales of only \$150,800, but collectively they accounted for 35 percent of total Danish factory sales of food and feed. 54/ The remaining 641, or 10.5 percent, of the 6,190 factories with a minimum of six and an average of 74 employees per plant had average annual sales of \$3.6 million. However, even in this group of larger factories most are small. Only 132 had at least 100 workers per plant (table 11). Only five employed 500 or more workers. Denmark's 115 largest food manufacturing companies reported 1968 sales ranging from only \$467,000 to about \$85 million. Only five had sales in excess of \$50 million.

Although Danish food manufacturing is structurally fragmented, the bulk of the industry's huge assortment of products is concentrated in a limited range of animal products. These include swine and pork, poultry and eggs, cattle and beef, and milk and milk products. Bakery products and fish and fish products are other important product groups. Excluding plants specializing in the processing of byproducts, 180 of the 641 larger Danish food and feed factories and 23,336 of their 47,678 workers were engaged in processing livestock and livestock products in 1968 (table 12). This concentration by product groups is directly related to the structure of Danish agricultural production. Roughly 90 percent of Danish farm income comes from the sales of swine, cattle, milk, and poultry and eggs (ch. II).

The structure of Danish agricultural production also has been a determining factor in the types of factories owned by Denmark's farmer cooperatives. Although most Danish food factories are privately owned, some of the largest

52/ In 1969, Danish food and feed manufacturers' sales of \$2,451 million were 27 percent of total factory sales of \$9,073 million (9).

53/ Another 7 large food, beverage, and tobacco manufacturers could not be listed among the top 500 because their 1968 sales data were not known. None of the 7 had fewer than 550 employees in 1968. A ranking of Danish manufacturers by number of workers would place these 7 firms high in the list of Denmark's top 500 industrial companies.

54/ Most of these small enterprises probably can be classified as artisans' workshops rather than industrial operations. Production methods are essentially artisanal and the owners generally have the artisan's orientation to production rather than the modern businessman's orientation to marketing.

Table 11.--Food and feed factories: Number and employment by size of plant, Denmark, 1958, 1965, and 1968 1/

Workers per plant	1958		1965		1968	
	Plants	Workers	Plants	Workers	Plants	Workers
	----- <u>Number</u> -----					
6-9	143	90	90	543	86	560
10-19	<u>2/474</u>	162	162	2,304	142	1,995
20-49		166	166	5,126	183	5,767
50-99		103	103	7,210	98	6,759
100-199		80	80	11,150	72	10,147
200-499		57	57	16,895	55	16,920
500 and over		6	6	4,471	5	4,093
Total			664	47,699	641	46,241

1/ Factories with 6 or more employees (including owners).

2/ All plants with 10 or more employees in 1968.

Source: (8).

Table 12.--Food and feed factories: Number and employment by type of plant, Denmark, 1958, 1965, and 1968 1/

Product type	1958		1965		1968	
	Plants	Workers	Plants	Workers	Plants	Workers
	----- <u>Number</u> -----					
Meat & poultry & products ..	127	8,499	171	21,635	141	20,101
Milk and milk products	40	1,985	43	3,294	39	3,235
Fruit & vegetable canning ..	57	2,798	41	2,617	43	2,586
Fishery products	49	2,451	71	4,551	99	5,629
Grain mill products	51	1,494	29	1,333	28	1,287
Bread, biscuits						
pastry, etc.	72	3,115	96	3,928	78	4,021
Sugar refining	11	3,297	7	2,647	7	2,295
Chocolate & sugar products :	46	1,504	37	3,820	39	3,467
Other foods and feedstuffs :	159	3,585	169	4,980	167	5,507
Total	617	30,837	664	78,805	641	47,678
Workers per plant		50.0		73.5		74.4
Plants with 10 and more workers	474	N.A.	574	48,262	555	47,118

1/ Factories with 6 and more workers, including owners.

Source: (4).

plants are cooperatives. Moreover, in several product areas the cooperatives clearly dominate the Danish market. The Central Cooperative Committee of Denmark recently estimated that the cooperatives' 1970 shares of the processing and marketing of Danish farm products were: 55/

Bacon <u>56/</u>	92%	Poultry.....	44%
Milk.....	86	Feedstuffs.....	40
Vegetables.....	70	Seeds.....	40
Beef.....	50	Fish.....	20
Eggs.....	45	Groceries <u>57/</u>	17

The Danish farmer who does not belong to and market his products through a cooperative is indeed rare. Most farmers are members of several marketing and purchasing societies, including a consumer cooperative.

Another important feature of Danish food manufacturing is the high percentage of its total production that is exported. Denmark ranks first among the world's nations as an exporter of bacon, second in butter exports, and third in exports of cheese. It also is a major exporter of canned meats (including ham), poultry meat, beef, veal, and eggs. The farmer cooperatives operating through their national export marketing associations have a leading role in exporting Danish agricultural products. Several large private companies also are important. In 1969, Danish food, beverage, and tobacco manufacturers sold \$1,071 million of products in foreign markets. Exports were 33.8 percent of their total reported sales of \$3,170 million. 58/ In 1968, Denmark had 12 large food manufacturers whose exports exceeded 75 percent of their total sales and Denmark's frozen food producers exported 80 percent of their aggregate production (19).

The two main reasons for such high export shares in Danish food manufacturing can be simply stated. First, Danish farmers produce far larger quantities of many commodities than Danish consumers can eat. Second, the small

55/ These estimates appear in an undated committee press release obtained in Dec. 1970. The committee is the central organization of all Danish farmer and consumer cooperatives. Its main functions are to coordinate activities of its many member societies in areas of common interest including public policy and public relations.

56/ In Europe, bacon has a less restrictive meaning than in North America. Bacon refers to whole pork sides. The cooperative bacon factories also produce canned ham and other processed pork products.

57/ The manufacturing divisions and subsidiaries of the consumer cooperatives, FDB and HB, are the major producers of these grocery items. In 1969, their outputs of manufactured foods had an estimated market value of \$101.5 million (14, 2).

58/ Manufacturers exported \$441 million of products directly and \$630 million through wholesalers and agents. Another \$6.9 million of food and kindred products were exported by firms classified as retailers (9).

Danish market gives food manufacturers the choice, as one company executive said, of (1) exporting most of their production or (2) remaining small enterprises. 59/

Structural Developments

Denmark's leading food industry executives say that Danish food manufacturing is in the midst of a long period of fundamental change in industry organization, operation, and orientation. The direction and causes of movement are basically the same as in food manufacturing in other European countries and North America. All key industry structural and operating variables are changing.

Liquidations, acquisitions, and mergers continue to reduce numbers of factories and companies, especially the smaller enterprises. As in other countries, advances in food processing technology and changes in the structures of agriculture, food distribution, and consumer demand are increasing economies of scale in food manufacturing, including procurement and marketing as well as factory operations. Increasing competition in markets for processed foods also encourages food manufacturers to increase efficiency through larger scale operations and adoption of modern technology.

Rising consumer incomes are giving consumers more freedom to exercise natural talents for selective buying. Supermarkets facilitate selectivity in food shopping and intensify competition among products and indirectly among manufacturers. Market power continues to shift slowly from sellers to buyers. Both consumers and large-scale retailers are increasing their demands on food manufacturers to improve product qualities, standardization, and packaging; to expand product assortments; and to develop new convenience foods. Advertising, promotion, and research and development expenditures are rising as the basic orientation of the Danish food industry continues slowly to make a 180-degree turn from its historical emphasis on production to the modern priority on marketing.

In this evolution of Danish food manufacturing, most of the "high cards" are held by the large private companies and the farmers' cooperatives. As in other countries (39), the future is bright mainly for the few manufacturers with at least 100 employees and professionally trained executives who understand modern marketing concepts, strategies, and techniques. In fact, the dominant market position of the Danish farmer cooperatives in processing and marketing bacon and several other products is attributed to early recognition by cooperative leaders of the nature of the modern marketing revolution and to adoption of modern organizational structures and marketing and management methods. 60/

59/ Co-op Denmark's manufacturing subsidiaries may be an exception because of the cooperatives' large share of the Danish retail food market.

60/ The 50 local bacon factory cooperatives are responsible for assembly and processing operations but marketing is controlled by the professionally staffed Federation of Danish Cooperative Bacon Factories. Exports of all Danish bacon, including the outputs of 4 private factories, are handled by the Danish Bacon Factories' Export Association (44).

Little statistical information is available to support the above observations of Danish food industry executives on structural change in Danish food manufacturing. The data in tables 11 and 12 are not reliable for estimating trends in factory numbers and employment, 61/ but table 13 gives some useful evidence on the changing structure of Denmark's farmer marketing cooperatives.

Table 13.--Farmers' marketing cooperatives: National and local societies and farmer members, Denmark, 1960 and 1969

National organization	Local societies		Farmer members <u>1/</u>	
	1960	1969	1960	1969
	<u>Number</u>		<u>Thousands</u>	
Federation of Danish Dairy Associations}				
"Andelssmor" Coop. Butter Export Society} <u>2/</u>	1,132	564	155	92
"DOFO" Coop. Cheese Export Society}				
Federation of Danish Coop. Bacon Factories.....	62	<u>3/50</u>	182	104
Federation of Coop. Cattle Export Societies} <u>2/</u>	58	52	116	N.A.
Danish Farmers' Cattle Sales Organization}				
Federation of Coop. Poultry Packers.....	4	4	127	8
Danish Fruit Grower's Coop. Association.....	6	6	1	0.3
Danish Farmers' Coop. for Seed Growing.....	1	1	5	6
Federation of Fish Marketing Associations.....	35	30	1	1

1/ Denmark had 146,211 farmers in 1969 (5). Nearly all are members of at least 1 farmer cooperative.

2/ The local societies are members of all 3 (2) national associations.

3/ The number of bacon factory cooperatives reportedly fell to 34 at the end of 1970.

Source: Unnumbered 1969 public information release of the Central Cooperative Committee of Denmark (whose members are the above cooperatives plus all of the consumer, farm supply, insurance, banking, and other cooperatives in Denmark).

61/ Table 12 suggests that food and feed factory numbers and employment increased from 1958 to 1965 and then fell slightly in the next 3 years. In some product groups, for example fish products, plant numbers and employment seem to have increased dramatically in the 1958-68 period. But actual numbers of factories and workers may have declined in most of these years. Table 12 reflects 2 conflicting developments. One is purely statistical. The official Danish statistical service, Danmark Statistik, has been increasing its coverage of the Danish food industry. Thus, the 641 plants reported in 1968 probably were a higher percentage of the universe of factories with 6 or more workers than the 1965 and 1958 reported numbers were. The other development is the downward trends in factory numbers and employment that Danish food industry executives say have prevailed for years.

For more than a decade, the cooperatives have pursued a policy of liquidating small uneconomic plants, merging local societies, and concentrating processing in larger modern factories. Although factory outputs increased in the 1960's, the number of local dairy cooperatives fell 50 percent from 1,132 societies in 1960 to 564 in 1969. The number of egg societies dropped 32 percent from 1,440 in 1960 to 980 in 1969, of which only 12 actually grade and pack eggs for export and domestic markets. Rising wages, modern technology, falling numbers of farms, and rising production per farm continue to reduce the number of economically viable local cooperatives. In addition, larger factories now are more feasible, as well as more efficient, because of improvements in farm-to-market transportation. Leaders of the cooperative movement expect the trends of the 1960's apparent in table 13 to continue in the years ahead.

Special Problems

Three recent developments in Danish food manufacturing offer foreign food manufacturers new opportunities to expand sales of processed foods in Denmark in the 1970's. Industrial wages in Denmark are rising faster than labor productivity. From 1963 to 1969, average hourly earnings of Danish factory workers rose 85 percent to 14.76 DKr (\$1.97) (10). ^{62/} Labor costs per unit of factory output increased more than 4 percent a year. Danish food industry executives generally expect that (1) wages and unit labor costs will continue to rise rapidly in the years ahead, (2) wage and cost increases in food manufacturing will be greater than in Danish manufacturing as a whole, and (3) Danish food processing costs may rise relative to prices of imported foods.

These industry expectations take into account an important factor affecting wages and unit labor costs in Danish food manufacturing. Wages of women workers are rising faster in Denmark than men's wages, and food processors employ more women than most manufacturers do. Danish employers are under strong pressure from Danish labor unions to eliminate historical wage differences between men and women performing the same work. On this issue, the unions reportedly have broad public support and industry leaders expect that wage equalization will be a fact before 1975.

A rough idea of the absolute and relative impacts of wage equalization on Danish food processors' wage bills is apparent from the following: (1) In 1969, average hourly earnings of women factory workers were 11.57 DKr (\$1.54), or 19.3 percent below hourly wages of unskilled men factory workers (10). At 14.76 DKr (\$1.97), average wages of all factory workers were 27.6 percent above the average for women. (2) In 1968, women workers were 55 percent of all food manufacturing workers, compared with 29 percent of all Danish factory employees and 37 percent of all civilian employees (5).

A second development that adversely affects the costs-profits position of Danish food manufacturers involves a combination of (1) consumer demand for an expanding variety of processed foods, (2) small dimensions of the Danish food market, and (3) increasing economies of scale in modern food processing technology. Danish food manufacturers' costs on some products are high because

^{62/} Average U.S. factory wages rose 30 percent in the same years (10).

production and sales volumes are small. In the years ahead, this cost (economies of scale) problem may become more serious as (1) the number of different articles in a manufacturers' product line increases more rapidly than total sales and production per article declines and (2) investment in modern plants and machinery increases the production volumes needed for profitable operation.

All of the Danish food manufacturing executives interviewed in this study said they are using their "sharp pencils" to determine which of several alternative solutions to their current and future costs problems is best for their companies. One solution is to expand both domestic sales and exports to gain more revenue and to lower average unit costs. Another alternative is acquisition of competing factories and a more efficient allocation of production among several plants. These acquisitions need not be confined to Danish factories. They may involve other Scandinavian and EFTA (European Free Trade Association) country plants 63/ and also European Community companies if and when Denmark becomes an EC member. 64/

A third alternative recently chosen by one of Denmark's largest food manufacturers holds even more direct interest for American food processors. After careful study of its costs, the Danish company decided to cease its own production of two products but to continue to sell them in Denmark. Contracts were signed with two foreign manufacturers, including an American company, to produce the items under the Danish firm's label. Executives of the Danish food industry expect that more processed foods will be imported by Danish manufacturers under similar contracts in the years ahead. For American food processors, such contracts may be a simple and profitable way of exporting to Denmark.

The third development in Danish food manufacturing that offers foreign exporters opportunities for increasing sales and market shares of imported foods, stems from a major change in Danish laws on food retailing. As noted in chapter III, a private corporate food chain could operate more than one store in a city or town prior to January 1, 1970, only if it manufactured a substantial share of the goods it sold at retail. As a direct result of this law, Denmark's largest private food chain is also a major food manufacturer. 65/ However, in the years ahead, many plants owned by Danish retailers may be closed. Under present law, the chains no longer need to maintain unprofitable factories as a means of expanding their main retailing business and they can buy chain label products from other domestic and foreign manufacturers.

63/ The Scandinavian consumer cooperative federations are merging some of their manufacturing operations for more efficient production and marketing. For example, on Jan. 1, 1970, Co-op Denmark's chocolate and candy factory was merged into AB Nordchoklad, jointly owned by the Danish, Swedish, and Norwegian federations (14). At least 1 large Danish food manufacturer is not waiting until the EC is enlarged to act. The company purchased a major Dutch food processor in 1970.

64/ Danish membership in the EC holds the potential for triggering a thoroughgoing reorganization of Denmark's food manufacturing industry, hastening liquidation of small enterprises, and increasing numbers of mergers and acquisitions among larger companies within the enlarged EC.

65/ Because the company publishes few data, the value of its factory production is not known. However, 1 market analyst ranked it as Denmark's 4th largest industrial company in 1968 (28).

V.--SIGNIFICANCE FOR THE UNITED STATES

The dynamic Danish food market offers U.S. food manufacturers both opportunities for expanding sales of American products in Denmark and significant challenges.

Some Opportunities

Although the Danes have long had more than enough good food, their food expenditures are rising about 2.0 percent annually in real terms (ch. II). Danish consumer outlays for factory-processed foods are expanding about 5 to 7 percent annually, or about three times the growth rate for total food expenditures (ch. III). Consumption of some convenience foods continues to rise at the unusually high rates of 10 to 30 percent a year. The products include:

Frozen foods	Canned and frozen
Pet foods	prepared main dishes
Baby foods	Canned and dry soups
Snack products	

Opportunities also are favorable for expanding winter season exports of such fresh fruits and vegetables as iceberg lettuce, celery, radishes, and emperor grapes. Sales of citrus juices in Denmark are rising and sales of institutional packs to the expanding hotel, restaurant, and institutional trade have great potential. 66/

For the reasons given in chapter IV, Denmark's food manufacturers probably will have increasing difficulty in supplying their domestic market with all of the hundreds of new convenience foods Danish consumers are demanding. In recent years, several American food manufacturers have demonstrated that the United States can share in this growing market. Among the U.S. products recently introduced successfully to Danish consumers are dry dog and cat foods, an imitation coffee creamer, salad dressings, and frozen orange juice concentrate.

Some Challenges

Most of the marketing conditions and challenges to expanding Danish imports of U.S. food products are becoming basically like the marketing situation and problems confronting food manufacturers in the American market. This growing

66/ Mr. Harlan J. Dirks, Agricultural Attaché, American Embassy, Copenhagen, in his letter to the author of May 10, 1971, believes that the following additional U.S. products have a growing potential in the Danish market: green asparagus, cherry tomatoes, strawberries, limes, other fresh citrus fruits, and nuts of all kinds.

"Americanization" of Danish food marketing has much significance for U.S. export operations. It means that the basic strategies and techniques of successful marketing of processed foods are becoming essentially the same in the two countries. Nevertheless, some elements of Danish food marketing are sufficiently different to require some modifications of American marketing practices in Denmark. These differences center on the growing concentration of market power among a few large Danish food retailing companies, the small dimensions of the Danish market, and costs and limitations on advertising and promotion in Denmark.

Market Power

By 1980, or earlier, Danish food distribution seems destined, as explained in chapter III, to be dominated by 10 to 12 large integrated companies. Co-op Denmark and several corporate supermarket and variety store chains, retailer cooperatives, and voluntary chains are expected to sell 75 to 80 percent of all food retailed in Denmark. Although this level of market concentration in retailing already prevails in Sweden and is developing in Belgium and the Netherlands (39), it is far higher than in North American food retailing. 67/ Because of their growing market power, the leading Danish retailing organizations are increasingly able to raise and enforce their demands on sellers on such key variables as product quality, prices, packaging, deliveries, and promotion allowances.

The smallness of the Danish market accentuates this concentration problem for manufacturers. As one Danish manufacturer expressed it, a profitable volume of sales in Denmark requires a market share of about 20 percent, compared with perhaps only 2 percent in the United States. To reach this volume, the manufacturer must get his product in the supermarkets and variety stores operated by the major Danish retailing companies. He has no practical alternative and his marketing strategies and techniques must be designed in accordance with the realities of his bargaining position.

Some other developments in Danish food retailing are increasing the marketing challenges to food manufacturers. The expanding organizations are leaders in the adoption of self-service retailing and modern management and merchandising methods. They are building nearly all of Denmark's new supermarkets, variety stores, shopping centers, and warehouses. They are managed by professionally trained executives supported by competent buyers and skilled merchandisers. Their approach to marketing and other business problems differs sharply from the old European, leisurely, almost amateurish way of doing business. These modern Danish retailers, like their American counterparts, are aggressively consumer oriented. Competition among them is intense and profit margins are falling. Successful merchandising of a U.S. product to Danish consumers through these retailers requires the same marketing expertise needed in the United States.

67/ The largest U.S. food retailer had about 6 percent of the U.S. retail food market in 1969 (42), compared with Co-op Denmark's share of nearly 23 percent of the Danish market and the cooperative's goal of 30 percent (ch. III).

Advertising and Promotion

In comparison with the United States, food product advertising in Denmark is expensive and fewer media are available to manufacturers. Both factors tend to weaken manufacturers' market positions and to increase selling costs. Commercial advertising is not allowed on the publicly owned TV and radio networks. Danish magazine and national newspaper advertising rates, according to advertising agency executives, are high in terms of costs per 1,000 potential readers. The largest noncaptive family magazine in Denmark has a weekly circulation of less than 350,000 and carries little food product advertising. In contrast, Co-op Denmark's family journal "Samvirke", which was distributed to about 720,000 households in 1969, is an important part of the cooperatives' promotion program for co-op products (14). Cinema advertising is expensive and is used by few manufacturers.

Danish retailers rely mainly on two other advertising media: (1) the many local weekly newspapers in Denmark and (2) handbills delivered to homes. In joint retailer-manufacturer promotions, manufacturers pay most of the advertising costs and also grant substantial price discounts on distributors' purchases. Thus, the total cost of each promotion may be high. For example, one voluntary chain with a market share below 5 percent has a uniform charge of \$2,400 for including a manufacturer's product among the 30 to 40 items advertised in its handbills.

Successful Marketing Strategies

Because of the structural and other features of Danish food marketing described above, all of the American food manufacturers contacted in this study give top priority in their Danish marketing programs to direct merchandising of their products to Denmark's leading food retailing organizations. Some executives of the American companies declared that no alternative strategy can give satisfactory results in Denmark.

Two of the American manufacturers have their own sales and marketing organizations. Several others have arranged to utilize the services of the merchandising staffs of Danish manufacturers of complementary products. For example, the marketing staff of a Danish farmers' dairy marketing cooperative handles a line of salad dressings and other products for one U.S. company. Another American food manufacturer has a similar arrangement with a Danish manufacturer of soaps and detergents. One U.S. company subscribes for the package of modern marketing services offered by the Danish division of a Scandinavian sales company. None of these American food manufacturers operate through an import agent. Although all of the manufacturers participate frequently in joint retailer-manufacturer special promotions, and pay most of the advertising costs involved, none of the companies spend much on other forms of advertising. Direct merchandising with leading retailers is their primary strategy.

Concluding Policy Note

The "Americanization" of Denmark's food marketing system, described in this report, in no way diminishes the importance of traditional international trade policy issues. On the contrary, current developments in Danish food

marketing tend to increase the importance of reducing Denmark's tariffs and other restrictions on agricultural imports. As the Danish food industry modernizes its structure and operations, it can prosper with lower import restrictions. In other words, unless existing trade barriers are lowered, expected future developments in Danish food marketing will raise the effective levels of protection afforded by these barriers. The policy implication of this development is that the United States must continue to seek freer trade in agricultural products by such means as: (1) tariff reductions, (2) relaxation of quotas and other nontariff barriers, (3) elimination of the discrimination against U.S. exports built into Atlantic freight rates, 68/ and (4) greater uniformity in national laws and regulations on product standards, additives and preservatives, labeling, and related subjects that currently restrict international trade in food.

68/ Atlantic freight rates are higher on most goods moving from the United States to Europe than on westbound shipments.

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