

DECENTRALIZATION IN THE MEAT PACKING INDUSTRY

by

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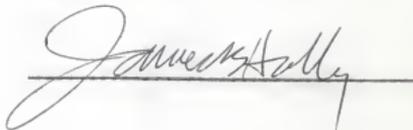
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INTRODUCTION

Considerable attention has been given in recent years to the so-called decentralization in the meat packing industry. This decentralization has taken place in two forms. One is the closing of older plants at terminal markets and the opening of new plants at country points, referred to hereafter as geographical dispersion. The second is the trend for some plants to specialize in processing meat products rather than slaughtering, or to slaughter solely, typically handling only one species of livestock, hereafter termed functional specialization.

The purpose of this report is to analyze the reasons why the two forms of decentralization occurred in the meat packing industry. These reasons will be examined in detail in the following sequence: first, to examine factors contributing to geographical dispersion; and second, to analyze the occurrence of functional specialization of the prepared meats and slaughtering phase of the industry.

The meat packing industry, for purposes of this study, includes three classifications of establishments. The first is termed meat packing plants. These plants slaughter cattle and/or hogs, primarily for meat to be sold or transferred for use on the same or adjacent premises. Meat transfers are channeled into canning, curing, sausage making, lard, or other meat products or by-products. The second classification is the prepared meats establishments. These include firms engaged in manufacturing sausages, cured meats, canned and frozen meats and other meats from purchased carcasses and other materials. Sausage kitchens and other prepared meat

plants operated by meat packing companies as separate establishments are also included in this second classification. Establishments in this phase of the industry are not engaged in slaughtering. The third classification comprises those plants which slaughter only.

References to specific companies in this report are used to focus attention upon occurrences relevant to the industry as a whole. No attempt to analyze managerial decentralization in any one company or group of companies in conjunction with decentralization as defined in this report is intended. Federally inspected and non-federally inspected plants are not separated except in instances where data from the United States Department of Agriculture does so. The term establishment is defined as a single physical location where industrial operations are performed. Multi-plant companies include those operating two or more plants in either the meat packing or prepared meats industries, or in a combination of the two.

The first part of the report presents an historical review of the development of the meat packing industry. Chicago was used as a focal point for the analysis of the growth and decline of the terminal markets as meat packing centers. The concluding phase of the first part is an examination of the causes of geographical dispersion. The second part of the report is devoted principally to the evolution of functional specialization and reasons for this trend developing. Statistics, graphs, and charts were used in both parts of the report to indicate where and how decentralization has occurred.

Data were obtained through trade association articles and bulletins, and correspondence with the major periodical publishers for the industry.

A number of letters were directed to men currently holding managerial positions in the large nationally known companies. The American Meat Institute and United States Department of Agriculture publications were excellent sources of data, particularly the U.S.D.A. which compiled most of the statistical information included in the report.

Although decentralization can be defined to include many broad issues, the meaning is limited to two facets to keep the report clear and succinct. First, is the physical decentralization occurring in the industry as represented by geographical dispersion. The other is decentralizing by adopting operations that emphasize practical utility, defined as functional specialization. Conclusions and data are presented with this limitation in mind.

PART I -- GEOGRAPHICAL DISPERSION

Birth and Development of the Meat Packing Industry

The livestock production of this country has increased substantially over the years due partly to the development of the meat packing and processing industry. The birth of the industry in America dates back to colonial times. William Pynchon and his followers raised corn to feed their increasing herd of cattle in the area around Springfield, Massachusetts. They were known to have shipped salted beef and pork products, packed in barrels, to the other colonies.¹

Livestock raising and meat packing pushed westward as new frontiers

¹Cholm G. Houghton, "Meat Industry in the United States," United States Department of Agriculture, Meat Hygiene Training Center, International House, Chicago, Illinois, 1961, p. 3.

were opened, and the industry played a major role in the growth of this country. The Ohio Valley in the 1800's became one of the large livestock producing areas. Cincinnati became a meat packing center, and for a time was named Porkopolis. Salted meats were shipped from there to Atlantic ports for export.

Following the Civil War the expansion of the railroad system opened up frontiers of range and grasslands. From these areas livestock was shipped to meat packing centers which developed in Omaha, Kansas City, St. Louis, and Chicago.

Chicago as the Focus of Analysis

Chicago is used to illustrate the growth and decline of the industry at terminal markets. Being the largest rail center of the nation enabled Chicago also to become the meat packing center. It was the only market which could be reached by rail from the corn producing areas west to the Rockies.² Certainly the industry flourished at many terminal market cities, but Chicago captured the title of meat capital of the world.

Chicago became the home of the industry's 'Big Three' packers: Armour and Company, Swift and Company, and Wilson and Company. In 1919, Chicago plants slaughtered 14,540,964 meat animals. According to the federal census of manufacturers for that year, 45,695 persons were employed in the meat packing industry within the city. The second largest industry in the city was men's clothing, with 30,000 workers. Comparing those

² Joseph Ator, "Chicago, Hog Butcher to World? Not Now!" Chicago Daily Tribune, Monday, July 13, 1959.

figures with more recent ones, we find that in 1947 Chicago plants slaughtered 5,276,000 animals. By 1957 the total had gradually fallen to 3,657,743, and in 1961 slaughter was down to 1,789,000. Instead of 45,000 employed by the industry, as in 1919, only 22,600 were employed in 1957.³

The key to both Chicago's success and eventual decline as the meat center lies in transportation. Even before the railroad, salt beef from Chicago went east by schooner to Buffalo, then by barge on the Erie canal and on the Hudson River to New York. With the railroad, Chicago took on more significance. With the invention of the refrigerator car, Armour and Swift established their dynasties.

The development of the refrigerated railroad car revolutionized the industry by enabling the major Chicago packers to sell fresh meat products on a national scale. There were problems, like the attempt by eastern butchers to boycott chilled Chicago meat. Armour and Company defeated this boycott by setting up their own retail shops and selling cheaper meat. Also, the railroads profited from the shipping of live animals; they did not wish to provide refrigerated cars to haul less weight in dressed meat. Armour and Swift circumvented this obstacle by building their own refrigerated cars.⁴ Thus the 'Big Three' made their niche and enabled Chicago to become the center of livestock selling, meat packing, and processing.

³Joseph Ator, "Change in Time Brings Their Downfall," Chicago Daily Tribune, Tuesday, July 14, 1949.

⁴Joseph Ator, "Packingtown Grew so Big it Tumbled Down," Chicago Daily Tribune, Wednesday, July 15, 1959.

Physical Plants and Structures

There were numerous reasons for the shift of slaughtering operations from the terminal markets and larger metropolitan areas. One of the more significant reasons involved the large, many-storied, uneconomical structures. For example, the Armour site in Chicago covered 87 acres and included 121 buildings, some of which were ten stories high. Armour employed more than 1,000 employees who did nothing but push meat tubs and trucks from one department to another.⁵

Similar conditions existed at the other two 'majors' in Chicago. The plants grew so large structurally that it was impossible to operate them at a profit. Blocked traffic flow and communications clogged by mere size resulted in uneconomical and inefficient operations. The industry in general failed to keep pace with technological progress and advances in design of both plants and equipment. In their huge, many-storied edifices with slow moving freight elevators, the Chicago packers eventually were unable to compete with packers who had built more modern plants. Auditors of the three major companies in Chicago examined results of operations in recent years and found the Chicago plants of the companies were the least profitable. In fact, more showed losses than profits.⁶

⁵Ibid.

⁶Ator, op. cit., "Chicago, Hog Butcher to World? Not Now!"

Why were these plants allowed to grow to such uneconomical proportions? Was the space ever fully utilized? For fifty years the huge facilities had been necessary for two principal reasons. First, near the end of each year, when the mud roads froze farmers marketed their hogs. Hogs glutted the market. The capacities of the plants had to be large to accept the flood of hogs each year for processing and storage or freezing in order to provide the country with a supply of pork throughout the year. Evidence of an over-supply of hogs at year end is found in records from 1898 through 1957, revealing the low price for hogs occurred in November, December, or January in 52 of the 60 years. The low occurred in December in 26 of those 52 years, indicating the marketing of great numbers of hogs in the winter months.⁷

In a condition where supply exceeded demand the major packers bought hogs, paying more than they could realize by processing and selling in the current retail market. Cuts such as hams and bellies were frozen and processed later in the year when the packers expected they could realize inventory profits. Plants in the terminal market areas where the supply of hogs exceeded the demand at year end had the capacity for the glut of hogs in freezers and cold storage rooms. As hard-surfaced roads were constructed farmers leveled out their hog marketings over the year, leaving the major plants with unused and wasted space.

A second reason why many plants were overbuilt was due to the length

⁷ Kansas City Drivers Telegram, January 3, 1958, p. 10.

of processing time. Forty years ago 55 days were needed to cure a ham, and 30 days were required to cure bellies. Curing was done by soaking the product in a pickle of brine and sugar. Someone thought of pumping the pickle either into the arteries or stitch pumping the products so that the curing action took place from inside the ham or belly. The time needed for curing by this new process was greatly reduced. A packer who wanted to sell a ham a day previously had to have storage space for 55 hams. Today he can sell one ham and only have to store three. Since curing time has been reduced from nearly two months to three or four days, additional time reductions are credited to advances in chemistry. Today a ham can be cured, smoked and chilled in a matter of hours if necessary. Technological advances in the meat industry have enabled the packers to produce more volume in less space.

There were times when the space provided by the huge, many-storied structures was needed, if only for part of the year. The sweeping changes that occurred over a period of forty years left these antiquated facilities empty, or utilized at a low level. Modern plants were built to meet the requirements of today and tomorrow. Obsolete plants, excessively costly to operate, were the routine explanation given by Chicago's "Big Three" packers for quitting the town.⁸

⁸ Ator, op. cit., "Change in Time Brings Their Downfall."

Unique Problems from Raw Materials Through Finished Goods

The meat packing industry is unusual because it is governed by what is termed "the perishability of an uncontrolled supply."⁹ Cattle, hogs, and sheep are presently produced and marketed by some four million farmers and ranchers who operate independently of one another in marketing their livestock. Livestock production is one of the few agricultural areas in America that still exists relatively free from government interference and controls. Farmers and ranchers take great pride in the "supply and demand" climate of their market.

Marketing of animals fluctuate widely from day to day, week to week, and even year to year. Many uncontrollable factors influence the size of daily receipts at a terminal market. Such factors include: expected receipts at the various terminal markets; the weather; condition and abundance, or scarcity, of grassland for grazing; supply and cost of feed (i.e., corn and maize); current and prospective prices; government controls over livestock or feed prices; diseases in herds; changes in breeding, feeding, and management practices; and even the personal whim of farmer Jones, who decides, after a lift from a passerby in an air-conditioned car, that it suddenly has turned cold enough to warrant taking a load of hogs to town. A midwestern farmer can tune in the radio by 10:00 a.m. and get stock quotations. If the markets sound good he can get a load of stock together and drive 40 to 50 miles to either a packer

⁹ Houghton, op. cit., p. 4.

or livestock auction. But despite the uncontrollable and unpredictable fluctuations in marketings, the meat packing industry generally has followed the practice of buying all livestock offered for sale.¹⁰ No other industry gears its manufacturing operations to the inflow rate of raw materials.

The packer has little control over the supply of his raw materials compared with other industries. Many manufacturers buy from only a few suppliers and coordinate their purchases on practically a budgeted basis. Other types of manufacturers are often able to shift production or a portion of it to another product that they make. For example, the manufacturer of a front end loader for tractors may shift production to a haying fork if either a seasonal slump or market saturation occurs in the loader business. Also, in most industries raw materials, as well as finished goods, can be stored without undue danger or spoilage. Meat is highly perishable. Once the manufacturing process begins - at the time of slaughter - the products must move steadily on their way to final consumption. Most meat cannot be stockpiled, and since its value is too great to allow spoilage, it must be priced to move the output to the consumer almost as rapidly as it comes off the production line. Indeed the industry is caught in the middle of paying market prices on an uncontrolled supply of raw materials and selling finished products in a market determined by consumer demand at the time when the merchandise must be moved.

Further examination of raw material problems involves the pork and

¹⁰Ibid., p. 5.

beef divisions of the packing industry. The pork segment of packing house operations consists of two phases: slaughtering the raw material; and processing the raw material into the finished product. First, the packer must find space for the slaughtered animals. Each slaughtered hog generates two hams, loins, bellies, and shoulders which may or may not have a ready market. Various other cuts are provided in the slaughtering which can be sold, used in sausage, processed further, or rendered into lard. But the packer is faced with what to do with these products every time a hog is slaughtered. The products are always the same. The situation is in sharp contrast to the automobile manufacturer, who puts various parts together to make a car. Further, there is no annual model change. The packer has the same model each year and goes through a disassembly process to get various items which he must prepare for sale.¹¹

The slaughtering and selling of cattle is simpler than that of hogs. The steer is killed, hung, its throat slit and the dressing operation begins. The carcass is split down the middle, then split again into quarters for shipment to retail outlets. The beef operation is primarily a fresh meat operation. It differs sharply from the "packing" of pork cuts in salt so as to logically establish a completely separate operation. In the large integrated packing houses there is usually vertical division between beef and pork. The integrated houses filled a definite need for a long period; but changing economics caught up with them.¹² The

¹¹Joseph Ator, "Meat Capital Title Stays in Chicago," Chicago Daily Tribune, Friday July 17, 1959.

¹²Meat Industry Trends, Chicago, Illinois, 1961, MEAT, p. B-2.

comparative simplicity and economy of beef operations (as contrasted to the complexity of the plants required, and extra labor needed, for killing, cutting, curing, and processing of pork) made a logical inroad for small independent beef slaughterers. A small investment was required to get into the beef slaughtering business. Because of the large number of small firms that entered the field, and because the large integrated packers had to staff their plants to be ready at all times to handle peak marketings, the net profit which meat packers earned was notoriously low.¹³

The packers are not proud of their earnings record and have taken steps in recent years to correct the low profitability of their operations by increasing their efficiency, improving their management practices, and modernizing their facilities. In examining their operations the packers had to consider livestock marketing patterns and their lack of control over the supply of raw materials. They also began to find areas of uneconomical operation which could be corrected. The solutions to these problems led in part to operations that were decentralized geographically and were more specialized than those of the integrated terminal market packer outlets. Cattle can be driven on hoof to market or to rail terminals to take them to market, whereas hogs are not suitable for driving. They suffer more shrinkage and bruise easily. These factors concerning marketing and an uncontrollable supply of raw materials added to the problems of terminal market packers, making it even more difficult to conduct profitable operations.

¹³Houghton, op. cit., p. 6.

Employment and Labor Relations

Three points will be considered in the areas of employment and labor relations: first, improvements in technology; second, the decline in employment and geographical shift of the industry's work force; and finally, problems brought on by unionization of employees.

1. Employment in the nation's meat packing industry declined from 208.4 thousand in 1947 to 185.7 thousand in 1962, while during the same period meat production increased approximately 24 per cent.¹⁴ Modernization of facilities and the development of improved techniques have greatly contributed to the increase in productivity. The increased mechanization that has taken place in various departments of both the meat packing and meat processing industries has required changes in plant construction, plant layout, and equipment. Within the last few years many plants have had to undergo extensive remodeling as well as purchasing new equipment just to meet requirements imposed by the Federal and some State Humane Slaughter Laws.¹⁵

Generally, such extensive remodeling and new equipment purchases result in either labor savings or increased productivity. In addition, within the last few years, sweeping changes in packaging have taken place. As each packer battles for the consumers' dollars, both the attractiveness of the product and the eye appeal of the package has become intensely

¹⁴ Industry Wage Survey, November, 1963. (Bulletin 1415, United States Department of Labor), p. 2.

¹⁵ Houghton, op. cit., p. 10.

important. For example, within the last six months three packers, two nationally known and one much smaller regional packer, have introduced in Kansas a new vacuum wiener package. In addition to being attractive, the new package increases the shelf-life and freshness of the product. The packaging machinery alone exceeds \$40,000. Either a savings in labor or increased production needs to be realized to justify purchasing such equipment, especially for smaller packers, when in two years the equipment could possibly be obsolete.

2. Since World War II, there has been a decline in the concentration of employment within a few large companies, and a geographical shift of the work force. In 1947, the four largest companies employed 47 per cent of the workers in the meat packing industry. By 1958 the figure was down to 36 per cent.¹⁶

The geographical shift of the industry is apparent from slaughtering statistics provided by the United States Department of Agriculture, as shown in Table 1. Note that Illinois, which ranked first among the States in 1947, dropped to sixth in 1962 in cattle slaughtering. Iowa gained first place from third, and Colorado, ranking fifteenth in 1947, jumped to eighth in 1962. Cattle slaughtering accounted for slightly over half of the nation's meat production in 1962.¹⁷

¹⁶ Livestock and Meat Statistics, 1962, (Bulletin 333, United States Department of Agriculture), p. 289.

¹⁷ Industry Wage Survey, op. cit., p. 3.

Table 1. Percent of cattle slaughtered commercially in the 10 leading states in 1962, selected years. (State rank in parenthesis)

	1962	1955	1947
United States (except Alaska and Hawaii)	100.0	100.0	100.0
Iowa	(1) 11.1	(3) 7.4	(3) 6.8
California	(2) 9.8	(1) 9.5	(2) 7.8
Nebraska	(3) 8.7	(4) 7.4	(7) 6.1
Texas	(4) 5.9	(5) 6.8	(4) 6.5
Minnesota	(5) 5.3	(6) 5.7	(6) 6.1
Illinois	(6) 4.7	(2) 8.0	(1) 10.2
Ohio	(7) 4.5	(8) 4.6	(8) 5.2
Colorado	(8) 4.5	(10) 3.5	(15) 2.2
Missouri	(9) 4.2	(9) 4.0	(9) 4.3
Kansas	(10) 4.1	(7) 4.7	(5) 6.5
10 states combined	63.0	61.5	61.7

NOTE: Because of rounding, sums of individual items may not equal totals.

Maki et al. reviewed the prospective regional redistribution of employment in meat packing in relation to the changing location pattern of livestock slaughter. Table 2 indicates that projected regional redistribution of employment can be associated with increases or decreases in the number of slaughter establishments in each of the livestock regions. The differential rate between employment and locational changes is due to increased efficiency of labor utilization and the changing size distribution of slaughter establishments. It is felt that, were the increased labor efficiencies experienced simultaneously in all segments of the meat packing industry, the total number of establishments in 1964 probably would exceed the 1954 level only in the West-North Central region.¹⁸

¹⁸Wilbur R. Maki, Charles Y. Liu, William C. Notes, "Interregional Competition and Prospective Shifts in the Location of Livestock Slaughter," Research Bulletin 511, Iowa State University, Ames, Iowa, Nov., 1962, p. 738.

Table 2. Percentage distribution of employment in meat packing industry, by regions, 1954 and 1964.

Region	Reported 1954	Projected 1964
Northeast	11.9	10.1
East North-central	26.8	22.7
West North-central	34.3	37.7
Southeast	9.9	12.7
West South-central	7.1	6.2
Mountain	3.2	4.0
Pacific	6.8	6.6
Total	100.0	100.0

3. How much poor labor relations contributed to shutdowns on livestock killing by packers in Chicago and other cities is difficult to determine. What information is available tends to be vague and inconclusive. Ator charges that a radical union made it impossible to operate the big Chicago plants profitably.¹⁹ The United Packinghouse Workers Union represented the majority of packing house production employees. This union was heavily infested with, and perhaps controlled by, Communists in its early days.²⁰ In 1959, many of its executives denied that they were then Communists. They took the Fifth Amendment when questioned about previous membership, or having abandoned membership (but not principles) due to

¹⁹Joseph Ator, "Packingtown Has Memories of Union Reds," Chicago Daily Tribune, Saturday, July 18, 1959.

²⁰Ibid.

congressional inquiry. An anti-Communist who was forced out of the union was quoted as saying, "In the U.P.H.W. there are Communists and non-Communists. There are no anti-Communists."²¹

The Chicago packers did not have an easy time bargaining with this union. However, on numerous occasions the big packers themselves denied that the union and poor labor relations were significant causes of the closing of larger plants. Perhaps a reason to question these denials would be that the national packers still have to deal with this same union in most of their other plants.²²

Packing houses do not offer the best environment for employees. Plant odors and temperature extremes do not make for pleasant working conditions. A great many employees in any given plant work with and around water, and must wear boots. This condition, plus the handling of spices, cause a high rate of skin irritations, dermatitis and allergies among workers. These conditions resulted in the loss of desirable labor to other industries, especially in the Chicago area. It might be suggested that labor relations, including problems with labor unions and necessarily unpleasant working conditions could have been among factors relating to the closing of terminal market plants.

Transportation Developments Bring Packers Nearer Livestock Supplies

The Assistant Executive Secretary of the National Independent Meat Packers Association, John G. Mohay, made these comments on decentralization:

²¹Ibid.

²²Ibid.

For years packers have been relocating nearer the supply of raw materials, as is evidenced by the decline of the former major packing centers.

As I'm sure you are well aware, Chicago is practically a ghost town as far as packing houses are concerned, St. Louis also has declined as a packing center and few packers along the East Coast are engaged in slaughtering.

With the advent of the super highways and improved refrigeration systems, it is uneconomical to operate a slaughtering house in the large cities of the East. Packers in the interior, Iowa, Kansas, and Nebraska, can operate much more efficiently and economically.²³

Here is one of the most significant keys to geographical dispersion of the meat packing industry: the building of hard surfaced roads, followed by super highways and the development of the trucking industry.

There are a number of important factors concerning transportation which should be explored. One is the problem of live animals. A live animal has to be fed and watered. It also can incur an injury when shipped alive, and always suffers a weight loss or shrinkage. The hazards and the costs are thereby increased. Conversely, an animal dead and dressed is almost never damaged after being hung on a rail in a refrigerated unit, and the shrink is no more in a modern refrigerated van than it would be in a packer's holding cooler.

One item which cannot be overlooked is freight expense. Assume a rancher ships livestock to the Chicago area. The livestock must be shipped into Chicago, slaughtered and sold. Freight is paid on the live weight from the producer or feedlot. Suppose that livestock is killed at or near the source of supply. The carcasses are shipped to

²³John G. Mohay, Assistant Executive Secretary of National Independent Meat Packers Association, (Personal letter to John M. Thies, February 28, 1964.)

Chicago and sold. Freight is paid on approximately 60% of the live weight. (The percentage that an animal will dress out varies, but 60 per cent is a reasonable figure.) With less risk involved by not having to ship live animals, and less cost in freight, it is natural that a major shift in the slaughtering industry would lead to dispersion toward the producing areas or sources of supply.

Shipping live animals East to a major slaughter center, having them slaughtered, then shipping them back for consumption to the supply areas became a significant problem of competition to the large packer in the terminal market. It was too costly. Because of hard-surfaced roads and super highways, the rail terminals were no longer the vital link between feeder and packer. Just as the railroads made Chicago the meat capital of the world, so hard-topped roads played an important role in dethroning it and encouraging geographical dispersion.²⁴

A farmer can take livestock to market any time of the year and in any kind of weather. He can find a packer or auction near his farm or ranch without the necessity of having to get to a rail center or terminal in order to ship his animals to market. The increased flexibility in marketing livestock, along with a change in swine production, tended to level off the marketing of hogs throughout the year.²⁵ Relatively speaking, we do not now find the peak winter marketings which were previously discussed. This, as mentioned earlier, was a cause of over

²⁴Ator, op. cit., "Change in Time Brings Their Downfall."

²⁵Houghton, op. cit., p. 7.

capacity leading to unprofitable operations and forcing of a change.

The comments of Swift and Company's K. E. Herron are helpful in summarizing the points of transportation changes and the economy of locating near supply sources.

The major reason for some of the major companies locating plants elsewhere has been the desirability for decentralization.

It is highly desirable to locate processing plants as near as possible to the centers of livestock supply, and serving the metropolitan areas from there.

One of the most basic changes in recent decades is a vast, all-weather highway system and efficient refrigerator truck transportation which has been developed. This has meant that the location of plants does not have to be determined by the existence of huge rail centers.

With more plants in rural areas, livestock producers have greater choice and flexibility, being able to sell direct to packers "in their own back yard" or to dealers, livestock auctions or terminal markets.²⁶

Historically, the evolution of dispersion has been basically an adjustment to changing patterns of production and consumption by gradually modifying, expanding, or relocating existing facilities. It covers a span of several decades and includes adopting new methods of livestock procurement and distribution.²⁷

With a few notable exceptions, figures through 1961 for a number of larger terminal markets show a definite decline of slaughter at most of these market centers. These figures are shown in Table 3. Another set of figures, Table 4, also indicative of the trend, shows the increase in

²⁶ K. E. Herron, Swift and Company, (Personal letter to John M. Thies, February 21, 1964.)

²⁷ Maki, et al., op. cit., p. 708.

Table 3.
Livestock Slaughter at Packing Plants Located at
30 Terminal Markets, 1961 vs. 1947

Market	Cattle		Calves		Sheep & Lambs		Hogs	
	1961	1947	1961	1947	1961	1947	1961	1947
	1,000 Head							
Baltimore	59	131	10	83	10	64	110	304
Buffalo	58	120	33	48	30	96	31	36
Chicago	692	1,305	8	247	197	688	892	3,036
Cincinnati	168	317	18	58	21	37	592	699
Cleveland	200	127	25	74	51	112	16	183
Denver	567	372	3	47	1,217	572	511	600
Detroit	240	254	26	294	205	213	82	138
Evansville	88	84	10	25	22	20	485	73
Fort Worth	207	445	6	223	1,023	942	242	630
Houston	33	65	70	128	1	2	2	10
Indianapolis	167	215	9	50	49	59	629	449
Kansas City	666	842	33	211	189	853	726	401
Louisville, Ky.	75	112	23	70	6	4	311	203
Memphis	89	127	5	42	*	1	477	170
Milwaukee	283	252	316	495	146	57	345	467
Nashville	49	61	20	38	23	21	168	75
Ogden, U.	47	36	1	3	309	12	95	73
Oklahoma City	219	330	8	144	66	264	436	485
Omaha	1,468	1,132	40	69	568	995	2,427	2,026
Peoria	60	52	4	24	14	7	669	403
Pittsburgh	27	115	7	62	23	86	74	452
Portland	97	126	10	27	155	127	215	203
Richmond	49	27	12	17	5	4	367	307
St. Joe	654	476	16	92	552	728	1,349	1,143
St. L. NSY	270	878	54	400	143	578	1,540	2,119
St. Paul	757	877	200	513	797	534	2,414	1,902
San Antonio	96	233	4	91	52	212	43	68
Sioux City	760	545	---	27	229	426	1,568	1,290
Sioux Falls	203	87	---	1	126	95	299	299
Wichita	191	194	---	45	---	153	564	295
Total 30 Markets	<u>8,539</u>	<u>9,937</u>	<u>971</u>	<u>3,648</u>	<u>6,229</u>	<u>7,962</u>	<u>17,679</u>	<u>18,539</u>

Source: USDA Annual Reports entitled, Livestock Receipts and Disposition at Public Markets.

*Less than 500 Head.

Table 4. Packer purchases of livestock at sources other than terminal stockyards.

Item	1923	1947	1961
	(%)	(%)	(%)
Cattle	90	76	42
Calves	86	61	23
Sheep and Lambs	86	61	37
Hogs	76	37	29

total packer purchases of livestock at sources other than terminal markets.

Figures in Table 5 bring out other features of regional changes in livestock slaughter.

Cattle: It will be noticed that the four regions which increased the most in slaughter - Mountain, Pacific, Northern Plains, and Central Corn Belt - were associated with increases in cattle production. There is also here an indication of the westward shift of the population as well as the increase in supply. The North Atlantic region maintained a relatively high level of slaughter in 1962, despite the tendency to relocate slaughtering facilities closer to the sources of supply.²⁸

Calves: The general decline in calf slaughter reflects a decreasing supply of calves for slaughter due, in part at least, to consumer desire for fed beef. There has been in the last 10-15 years a considerable increase in the size of cattle slaughtered, indicating the desire for cattle with more quality, longer feeding time and higher grades.

Sheep: Despite an over all decline of 1.4 million head in commercial

²⁸ Financial Facts About the Meat Packing Industry, Department of Marketing, American Meat Institute, p. 15.

Commercial Livestock Slaughter by Areas, 1962 vs. 1947 and Estimated
Net Movement of Slaughter Livestock by Areas for 1962
(Million Head)

Area	Commercial Slaughter			Net Livestock Movement 1962	
	1962	1947	Change	In	Out
Cattle					
North Atlantic	2.1	2.0	+ .1	1.2	---
Appalachian	1.2	1.0	+ .2	---	.4
Southeast	1.0	1.0	---	---	.1
Lake States	3.0	2.7	+ .3	.4	---
Central Corn Belt	7.1	6.3	+ .8	---	.5
Delta . . . . .	.6	.5	+ .1	---	.4
Northern Plains	3.9	3.0	+ .9	.5	---
Southern Plains	1.9	1.8	+ .1	---	.7
Mountain	2.0	.9	+1.1	---	.6
Pacific	3.3	2.3	+1.0	.6	---
U.S. Total	<u>26.1</u>	<u>21.5</u>	<u>+4.6</u>	<u>2.7</u>	<u>2.7</u>
Calves					
North Atlantic	2.5	2.5	---	.8	---
Appalachian . . . . .	.5	.9	- .4	---	.4
Southeast . . . . .	.3	.5	- .2	---	.3
Lake States	1.5	2.6	-1.1	---	.1
Central Corn Belt	1.1	2.8	-1.7	.4	---
Delta . . . . .	.3	.5	- .2	---	.4
Northern Plains . . . . .	.1	.7	- .6	---	*
Southern Plains . . . . .	.8	1.4	- .6	---	*
Mountain	*	.2	- .2	---	*
Pacific . . . . .	.4	.9	- .5	*	---
U.S. Total	<u>7.5</u>	<u>13.0</u>	<u>-5.5</u>	<u>1.2</u>	<u>1.2</u>
Sheep & Lambs					
North Atlantic	2.2	3.2	-1.0	1.9	---
Appalachian . . . . .	.4	.3	+ .1	---	.5
Southeast	*	*	---	---	---
Lake States	1.9	1.6	+ .3	.6	---
Central Corn Belt	3.1	5.1	-2.0	---	.7
Delta	*	*	---	---	---
Northern Plains	1.9	3.2	-1.3	---	.5
Southern Plains	1.9	1.3	+ .6	---	.4
Mountain	2.5	.9	+1.6	---	.9
Pacific	2.9	2.6	+ .3	.5	---
U.S. Total	<u>16.8</u>	<u>18.2</u>	<u>-1.4</u>	<u>3.0</u>	<u>3.0</u>
Hogs					
North Atlantic	6.5	6.2	+ .3	5.5	---
Appalachian	8.1	3.6	+4.5	2.9	---
Southeast	3.5	2.9	+ .6	---	*
Lake States	10.5	8.9	+1.6	1.2	---
Central Corn Belt	32.7	25.7	+7.0	---	14.0
Delta	1.3	.7	+ .6	.4	---
Northern Plains	9.7	7.7	+2.0	.5	---
Southern Plains	2.4	2.3	+ .1	.7	---
Mountain	1.6	1.2	+ .4	.7	---
Pacific	3.0	2.7	+ .3	2.1	---
U.S. Total	<u>79.3</u>	<u>61.9</u>	<u>+17.4</u>	<u>14.0</u>	<u>14.0</u>

Source: Based on Official Slaughter and Shipment Reports of the USDA. Net Movement figures are estimates of the AMI.
*Less than 50,000 head.

slaughter, the three western-most regions showed an increase of 2.6 million head, indicating a marked shift to the western part of the country for sheep and lamb slaughter.²⁹

Hogs: Each of the 10 areas showed an increase in hog slaughter from 1947 to 1962. A relatively large seven per cent increase is noted for the Central Corn Belt States. Next in line was a rather interesting four and one-half per cent for the Appalachian region.

Considerations of supply offer an increasingly important place among the factors affecting the location of slaughtering plants. Due to the wide geographical distribution of cattle feeding and breeding enterprises, as illustrated in Fig. 1, and the increasing consumer demand for beef, the meat packing industry is more dispersed now than ever before and the four largest packers account for a lesser per cent of the total livestock slaughtered. Findings of Maki et al. conclude that it is cheaper to slaughter livestock in supply areas and ship meat, rather than ship livestock for slaughter in areas where the meat is consumed.³⁰

PART II -- FUNCTIONAL SPECIALIZATION

In introducing the analysis of functional specialization within the meat packing industry, a short summary of geographical dispersion is necessary because the two forms of decentralization concatenate. Outmoded plants were scrapped, and cumbersome branch-house systems revamped as

²⁹Ibid., p. 19.

³⁰Maki et al., op. cit., p. 708.

engineering studies revealed inefficiencies which it would have been impossible, or prohibitively expensive to eliminate. Outmoded facilities had been costing money for some years. The decision to replace them led to relocation in areas more advantageously situated near sources of supply. The new or relocated plants, as will be shown in subsequent discussion, were not only dispersed to livestock producing areas of the country, but have often specialized in beef or pork slaughter. A subsequent development has been the trend for sausage operations, meat processors and manufacturers of meat products to locate near the population centers, Figs. 1 and 2. In many cases these plants are old ones that used to be fully integrated and were economically adaptable to one or more specialized functions. As Richard Salzmann recently stated:

The closing of the old integrated plants and the rise of specialist operations have caused quite a wrench for those in the meat packing industry. The movement of slaughtering establishments closer to their sources of raw materials has been a remarkable phenomenon.³¹

Even more amazing may be the changes of the next ten years. John W. Allen, in a speech before the A.M.I. convention in Chicago stated:

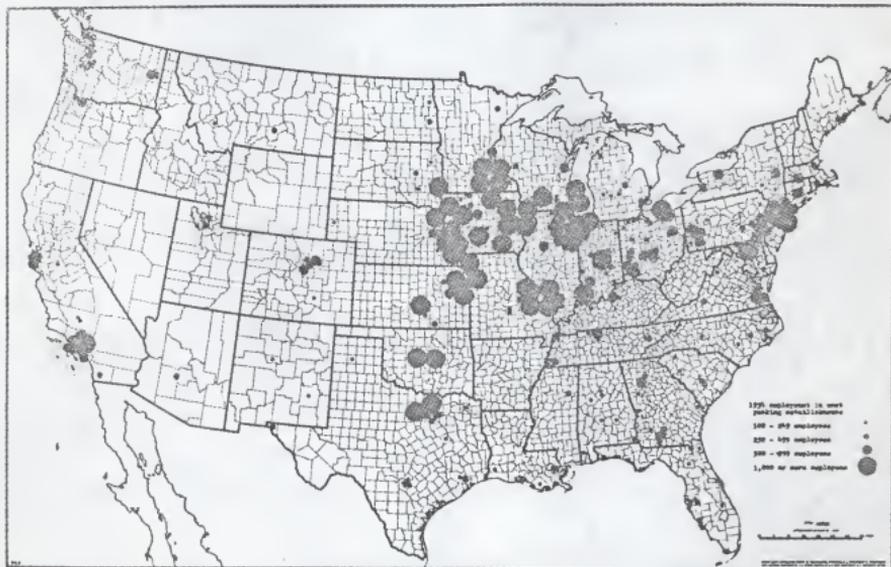
Of one thing we can be absolutely sure—it would be a misjudgment to assume that the meat industry of tomorrow will procure, slaughter, break, cut, package and sell meat in the way it is done at the present time. The editors of Sales Management a few weeks ago stated that marketing changes that have occurred during the last 10 years were equal in scope to the marketing changes that occurred during the previous 50 years and the changes that will be occurring during the next decade will be

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"The Packing House Executive and the Challenge of Change," speech by Richard R. Salzmann, before the National Independent Meat Packer's Assn., Regional Meeting, Las Vegas, Nevada, Nov. 12, 1964.



Geographical distribution of meat packing establishments with 20 to 99 employees in 1954.



Geographical distribution of meat packing establishments with 100 employees or more in 1954.

Fig. 1.



Geographical distribution of prepared meats establishments with 20 to 99 employees in 1954.



Geographical distribution of prepared meats establishments with 100 employees or more in 1954.

Fig. 2.

at a rate double or even triple that of the past decade. These observers are most probably correct in their belief. Indeed, they may be found to have been conservative in their forecast for the decade ahead.³²

Changes in the next 10 years apparently will continue to result in functional specialization.

Specialized Functions Developed

The following facets of functional specialization will be briefly discussed: 1) beef slaughter, 2) hog slaughter, 3) small stock slaughter, 4) boning and processing operations, 5) meat manufacturing and distribution centers.

Beef Slaughtering. The specialist in this field confines his operation to slaughtering, dressing, and chilling beef for sale in carcasses, sides, or quarters to large chain stores, meat processors, or distribution centers. During the period from the Civil War to the turn of the current century, the integrated packing houses took over much of the beef business as refrigerated transports and commercially practical canning methods made possible wide distribution. These large firms were successful at being "all things to all customers" until changing economics began to catch up with them.³³ The comparative simplicity of beef slaughtering to other plant operations, plus the small investment needed to get into

³²Marketing Trends," John W. Allen, Director of Retailer Relations, American Meat Institute. Speech before General Session of 58th Annual Meeting of AMI, Mon., Sept. 23, 1963, Palmer House, Chicago.

³³"Meat Industry Trends, 1961," published by MESA, 59 E. Van Buren St., Chicago 5, Ill., p. B-2.

the beef business provided an excellent opportunity for independent beef slaughterers to make inroads in the field.

New firms entering the industry are not exclusive in specialization. The large nationally known companies such as Swift and Armour have built a number of plants which specialize in beef slaughtering. Recent Swift plants opened at Clovis, New Mexico, and Jackson, Mississippi, to slaughter cattle only. Clovis is considered the cattle capital of the Southwest. It is an area where feed and cattle are important aspects of the agricultural economy. In its Clovis location, Swift utilizes specialization of function and a highly mechanized, yet flexible, plan of operation. The plant breaks with the tradition of integration followed in the past by many larger companies.³⁴

Hog Slaughter. Specialization has not progressed as far in hog slaughtering as in the slaughter of cattle. The pattern in the industry did not afford the ready market for dressed hogs as for carcass beef. The economics of hog slaughtering in the last five or six years has led a number of integrated plants to close their hog kills and, (already possessing cut and processing facilities) to buy dressed hogs. Sigmund Meat Company of Denver adopted the practice of buying dressed hogs from a hog killing plant in central Nebraska. Dold Packing Company of Wichita, Kansas, exercises the other option of purchasing only the cuts it needs from pork slaughterers in Iowa.

The substantial leveling of the peaks and valleys of hog marketing

³⁴The National Provisioner, Vol. 149, No. 2, p. 15. (7-13-63).

made inventory speculation less predictable and less profitable. A hog killing plant must be located and scaled so that a supply of live animals of consistent quality is available to keep it operating at capacity the year around.³⁵

A packer buying either dressed hogs or cuts from a specialist can count on and demand a consistent size and quality, whereas the firm following the traditional policy of buying any and all animals brought in will receive every size, shape, and weight of hogs imaginable.

Small Stock Slaughter. Small stock slaughter has become specialized particularly in the sheep and lamb area. The total volume of sheep and lamb slaughter has risen so little since 1900 that, in comparison with population growth, it constitutes a serious decline. While gross farm income from sheep and lambs has failed to double since 1907, income from cattle has risen 400 per cent.³⁶ Meat Magazine commented on the lamb slaughtering situation in 1959:

Despite the generally gloomy picture, there might be a substantial opportunity for a specialist in sheep and lamb kill, properly located in relation to both supplies and coastal markets. Admittedly, the growth potential would be small since annual consumption figures are almost static even with population on the rise. Competition, however, would be limited to the few similar specialists since the overall picture does not encourage major investment by national packers even in rehabilitation and modernisation of existing facilities for lamb kill.³⁷

³⁵Meat Industry Trends, 1961, op. cit., B-11.

³⁶Ibid., B-20.

³⁷Trends, Published by MEAT Magazine, 1949.

Calf slaughter has increased more than lamb slaughter. The growth of calf kill tends to encourage entrance into the field more than does lamb slaughter. A specialist would find much competition among the beef houses which have been able to incorporate a calf kill on the same floor.³⁸ Successful specialization in calf kill may depend on locating in those sections of the country where substantial quantities of young stock are raised and marketed.

Boning and Processing. Boning plants receive boning cattle, or cattle not generally used in retail processing, for processing into boneless meat of various qualities. Generally, boneless beef is referred to in terms of the percentage of lean for any given quantity. Processing plants can be considered boning operations, although they may include the breaking of carcasses into primal cuts, or even further fabricating for shipment to chain store central warehouses or wholesale meat distribution centers. Both types of operations will result in the boneless meat used by specialists in manufacturing and distribution—either sausage kitchens or portion control houses. Of course, in a boning operation the boneless beef is the objective, while for the processor it is more or less a by-product.

A number of factors caused boning to become a major specialty. Two of the more significant are: first, boning requires individual skill and dexterity. Any operation which can mechanize product flow to make it practical to split up the skill requirements into a number of specialties

³⁸ Meat Industry Trends, 1961, op. cit., B-20.

is advantageous. Secondly, opportunity exists to reduce or eliminate the need for these skills through automation or mechanization which would result in improved efficiency.

Considering the first aspect, it is much easier to teach a man to perform one specific operation in boning than to develop a good all-around boner. Using conveyors to bring the product to each work station utilizes the skills of each worker and eliminates the laborious tasks of positioning carcasses and cuts. Through utilization of skills, specialist boners achieved a degree of efficiency and productivity which caused many processors to close their own limited boning operations and buy from a specialist.³⁹

A major step in the advance of automation was the introduction of mechanized knives for bone trimming. These knives permit a man with brief training to trim bones faster and more efficiently than a skilled knifeman who must be extremely dextrous in order to make the operation worthwhile. Other uses for these knives, such as trimming fresh bellies and backfat, enable savings in labor and recovery of materials previously economically unfeasible. Since utilization of workers' skills has been fairly well accomplished by eliminating product handling time, specialists in boning will look toward further mechanization which will reduce the need to rely on human skills.⁴⁰

³⁹Ibid., p. B-24.

⁴⁰Ibid., p. C-3.

Manufacturing and Distribution Centers. Meat manufacturing and distribution centers encompass such functions as sausage making, frozen meat specialties, and fresh pre-cut and packaged red meats. Oscar Mayer and Co. is probably the earliest and best known specialist in the sausage field. Quality control and a reputation for excellence of an item in a local or regional area often leads to specializing in sausage. An advantage the sausage maker has over the integrated plant's sausage operation is in procurement of raw materials. The sausage specialist buys items he needs on the market at the lowest possible price. The sausage department of the integrated packer must use up what is transferred from the other departments whether he needs it or not; and he has no control over the cost burden that the meat transfer carries.⁴¹

The trend toward specialization in sausage has been successful due, in large part, to the self-service super market. Consumers were finally willing to purchase pre-sliced, pre-packaged lunch meats, probably because of the convenience in shopping and the attractive packaging. Time and a concerted selling effort were needed to convince people that self-service lunch meats could be as fresh and flavorful as those purchased from the butcher who sliced and wrapped a pound off the loaf.

Frozen meat specialties--patties, pork cutlets, breaded items-- have afforded the consumer either economy or convenience. Therefore, they have been accepted and are growing in popularity. The common denominator of the successful operation appears to be the specialist who chooses a

⁴¹Joseph Ator, "Thousands Still Employed in Meat Packing Industry," Chicago Daily Tribune, July 16, 1959.

market and a combination of raw materials and processes which will result in a product completely acceptable for that particular market-- then sticks by the standards set.⁴²

Fresh, pre-cut and packaged red meats have been sold through modern supermarkets for ten to fifteen years. Acceptance, by the housewife, was slow, due in part to the absence of personal service from the butcher. Meat departments in most super markets are in full view of the consumer, and there is often a sign urging those who desire a special cut to ask for it. Super market managers are constantly concerned with giving enough personal attention to consumers. Perhaps chain stores have been reluctant to change to the potentially strong trend of central-cutting and packaging for fear of alienating the consumer. Processing retail cuts of fresh meat in a central plant can save an estimated \$600,000 a year in facilities, equipment, and labor costs for a firm supplying 40 retail stores with a total yearly meat volume of \$13,000,000.⁴³ Central meat processing offers savings through: 1) Better distribution of meat cuts according to market preferences; 2) more uniform and efficient cutting methods; 3) better control of overhead costs; 4) advantages of quantity purchases, and 5) better markets for carcass by-products.

⁴² Meat Industry Trends, 1961, *op. cit.*, p. C-9.

⁴³ Ibid.

Advantages and Limits of Functional Specialization

Specialization may not be the perfect answer to all of the meat industry problems. For example, it is easier to hypothesize a case for the economy of an integrated operation than for one highly specialized. The industry record and trend indicates that it is apparently easier to demonstrate such economy in theory than in practice.

The integrated packer is not subject to the changing tides of one particular phase of the industry as is the specialist in that particular field. If the hog operation is unprofitable, other departments may work to offset the loss, whereas the specialist in hog slaughtering lacks such flexibility. However, the specialist hog slaughterer or beef slaughterer has lower overhead, operating costs, sales and delivery costs, all subject to better control than those of the integrated operation.⁴⁴ The specialist is under less pressure to operate his kill at a loss in order to keep other departments and a sales force busy. Thus, while the specialist is somewhat more vulnerable to adverse conditions in his own field, he can usually make at least some profit under conditions which throw the corresponding department of his integrated competitor into the loss column.⁴⁵

The fields of specialization discussed have been made more practical by the developments of recent years in retailing. Consider the growth of the chain store super market. Concurrently, the number of corner stores

⁴⁴Ibid., p. A-4.

⁴⁵Ibid., p. B-1.

and small independent grocers has been decreasing. The small grocer needed a supplier who could furnish a full line. Today's chain store buyer has enough volume, in many cases, to buy trucklots of a single item. The chain buyer isn't concerned about the same supplier being able to furnish fresh pork, carcass beef, cured hams, etc. He wants service, quality, price and quantity for each item; and the specialist is often in a position to provide all three.

The specialist can serve many accounts through direct shipment because of quantity orders on one or two items. Integrated packers have pre-determined territories for both salesmen and deliverymen.

Quality should be easier to control with one item than with several. Choosing a plant location with an eye toward a dependable supply of livestock equal to or greater than his capacity, the specialist aims for a steady turnover of product at a volume level adequate to insure profit. He is not hindered by: 1) enormous facilities which can only be operated profitably at the peak of the marketing season; 2) a requirement for filling the material needs of other departments of his own plant regardless of cost; or 3) outmoded concepts of relying on risky speculation to tide him over months of unprofitable operations.

The rising cost of each sales and delivery stop is rapidly precluding the possibility of small accounts continuing to be served by a half dozen packer salesmen getting orders that fail to justify the expense of the stops. The specialist certainly enjoys a cost advantage, and thereby a price advantage, with a direct market through the retailing giants. He is able to operate in that portion of the retail market where both sales

and delivery costs are at a minimum.⁴⁶

The principal limiting factor in the continuing trend toward specialization is the requirement for a complete revolution in thinking of packer, retailer, and consumer. Success for a new business or a new product frequently must await the slow process of altering the thinking of the manufacturer or the retailer or the consumer. A new specialist, or a different form of specialization, must face the problem of reforming the thinking of all three, a hurdle that will not be overcome quickly.

Packaged, portion-cut and frozen meats, for sale at retail in direct competition to the store-packaged red meats in the refrigerator case, could possibly be the next specialized function to be successful. Attempts up to now to promote this segment have been disappointing, however.

The packer who could sell such a program would, for the first time have an opportunity to build a brand franchise for his red meats. Production scheduling would be eased, since production would be for stock rather than immediate delivery. The packer would practically escape the perishability characteristic which weakens the bargaining position of the industry in the sale of fresh meats. His comparatively imperishable product would not be subject to the costly shrink and trim now influencing marketing decisions.⁴⁷ The retailer handling precut, prepackaged frozen

⁴⁶Ibid., p. A-4.

⁴⁷Allen, loc. cit.

red meats would have no shrink and trim losses, no spoilage or distress pricing losses, no cutting, packaging or rewrapping costs to worry about, and no problem of having to buy unwanted slow moving items along with those his trade desires.

The consumer would benefit because the packer and retailer could make more efficient use of skilled labor, and more effective use of the fats, bones, and trimmings--credits which reduce the total cost of a carcass. Savings in transportation costs could be passed on to the consumer due to shipping less total weight in finished packaged goods.

The consumer has been neglected in the effort to launch the sale of frozen meats. Unlike many frozen food items, frozen red meats are not overly convenient. In fact, a great deal of education may be necessary before the housewife will find them as convenient as fresh red meats. Also, frozen meats have generally carried a markup that made them considerably higher than fresh meats. A perfectly logical price difference between close-trimmed boneless cuts and bone-in cuts can be explained to the average consumer. Explaining an unfamiliar and, she thinks inconvenient product at a substantial premium over fresh meat is not so easily accomplished.⁴⁸

In the future consumers will be able to afford products characterized by convenience and improved qualities. Meat must be capable of competing for the retailers' and homemakers' favor. Meat will have to be: a better value relative to all other spending values; superior in eating qualities; and free of excess finish and bone. It behooves

⁴⁸Meat Industry Trends, 1961, op. cit., p. C-6.

the industry to support the development of operations which will improve both products and services from their present form. James Stimpson feels that such developments will come in the form of specialization. The specialist slaughterer will kill and sell dressed carcasses to: 1) the processor-manufacturers of meat and meat products; and 2) the wholesale meat distribution center.⁴⁹ The processing-manufacturing specialist will perform functions such as cutting and packaging retail cuts of fresh meat and fabricating portion control items. The wholesale meat distribution center will perform the same functions, plus that of delivering fresh meat, fresh poultry, processed meat and manufactured meat products to the retail store. Shipments will include many different brands of merchandise delivered two or three times a week, as opposed to the costly individual integrated-packer operation of delivering to each store along the route. If the meat distribution center becomes a central cutting and packaging center, it would be logical for it to eventually become the retail cutting, freezing and packaging center.⁵⁰

SUMMARY

The trend today in meat packing is decentralization. The one-time seasonal nature of meat packing, with its corresponding seasonal inventory accumulation and later dispersal, is no longer a workable method. The

⁴⁹James D. Stimpson, "Marketing Trends." Delivered at the General Session, 9:30 a.m., Monday, September 23, 1963, of the 58th Annual Meeting of the American Meat Institute, Palmer House, Chicago, reproduced courtesy of THE NATIONAL PROVISIONER.

⁵⁰Ibid.

capacity of the obsolete plant had to be big enough to handle twice as much livestock during the fall and winter months as during the spring and summer months. The industry operated on the basis of huge inventories today and empty cellars tomorrow. It was not uncommon to lose money for one period of the year and make it back during another.

Problems with raw materials and length of processing time contributed to the overcapacity of the older integrated plants. The perishability of an uncontrolled supply and the manufacturing process of breaking the raw material down into parts, as opposed to the usual process of putting parts together, presented unique characteristics and problems to the industry.

Transportation developments played an important role in bringing packers nearer livestock supplies. With the development of hard surfaced roads and improved refrigeration systems, it became more economical to locate slaughtering facilities nearer the source of supply. It became cheaper to slaughter livestock in supply areas and ship meat, rather than shipping livestock for slaughter in areas where meat is consumed.

Geographical dispersion of slaughtering facilities led toward functional specialization. Despite some freight advantage obtained by locating prepared-meats establishments near the place of slaughter, demands for locally differentiated processed meat products increased plant specialization, and furthered the location of slaughtering plants in the producing territory and most of the processing plants in the consuming territory.

Functions which have been specialized in the trend toward decentralization run the gamut of operations performed by the integrated

packer from slaughtering to preparation of retail cuts. Companies can continue to locate their abattoirs in producing areas, while bringing their carcass breaking and meat processing and packaging operations into the major consuming areas of the county. Packers are supplying retailers with a greater proportion of their meat as primal cuts and trimmed carcasses. It appears that this trend will continue. Along with carcass defatting and trimming, central meat cutting and packaging may develop into common practice within 10 years just as the self-service supermarket emerged 15 years ago. The benefits include: 1) improved utilization of labor and facilities; 2) application of mass production techniques; 3) distribution of meat to stores in relation to market preference; 4) providing the consumer with fresher, more palatable and convenient meats; 5) reduced transportation costs by removing a greater portion of the fat at the packinghouse; and 6) obtaining a more economic return from carcass by-products. The entire meat industry and the system of meat distribution should be made more efficient by the continuing trend toward decentralization.

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DECENTRALIZATION IN THE MEAT PACKING INDUSTRY

by

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B. S., Kansas State College, 1948

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Decentralization is a trend in the meat packing industry. The purpose of this report is to analyze the reasons why decentralization occurred. The two forms of decentralization analyzed are: 1) geographical dispersion—closing of older plants at terminal markets and the opening of new plants at country points; and 2) functional specialization—the trend for some plants to process meat products and not slaughter at all, or to slaughter only and sell dressed carcass beef or pork.

The report is divided into two parts, one for each type of decentralization mentioned. The material is based largely on published and unpublished data and presented from an historical point of view. Geographical dispersion is examined with weight primarily given to physical decentralizing or relocating. Functional specialization is analyzed in terms of adopting operations that emphasize practical utility with substantial emphasis on advantages and possible limitations on the continuance of the trend.

Decentralization has been due largely to economic factors. Changes in livestock marketings, technological progress and great advances in transportation and refrigeration have had an important influence. Perhaps the most significant factor in dispersion is the desire to locate slaughtering nearer the source of livestock supply which reduces freight expense, shrinkage, and loss due to death or injury.

Although dispersion and specialization are discussed separately, they do dovetail and complement each other. For example, as plants were established in livestock areas either by old firms relocating or new firms entering the field, they quite often slaughtered only—specialization. Another interesting phenomenon, is that while the slaughtering function

moved toward livestock producing regions, sausage operations and processing houses tended to locate near the population centers.

Advantages gained through improved utilization of labor skills and facilities spurred specialization. Central cutting and packaging of meats either by fabricating houses or wholesale meat distribution centers offer additional benefits of distribution, reduced transportation costs, and may eventually provide the consumer with fresher, more palatable and convenient meats. Nearly every function performed by the integrated full-line packer has now been specialized. How far specialization will continue, and the role of the meat packing plants in moving toward it, depends upon the packers themselves, the retailers, and consumer acceptance. As long as economics in some form can be achieved and the resulting meat products are accepted by the consumer, the trend should continue. We may see more progress in meat distribution and processing in the next five years than in the past forty years.