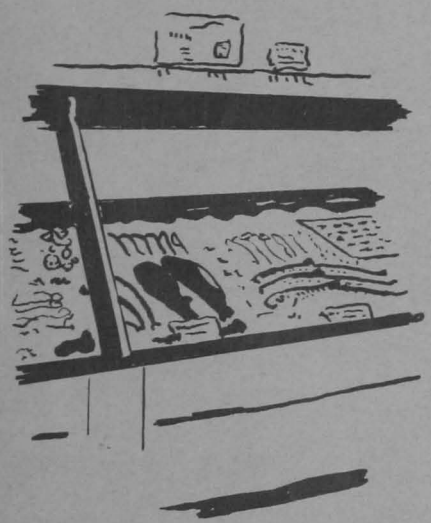
PRODUCERS' MARGINS FOR FOOD FISH AND SHELLFISH



Circular 156

UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

BUREAU OF COMMERCIAL FISHERIES

The work was financed by the Bureau of Commercial Fisheries with funds made available under the Act of July 1, 1954 (68 Stat. 376), commonly known as the Saltonstall-Kennedy Act.

UNITED STATES DEPARTMENT OF THE INTERIOR, Stewart L. Udall, *Secretary*
FISH AND WILDLIFE SERVICE, Clarence F. Pautzke, *Commissioner*
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Circular 156

Washington, D. C.
November 1962

ABSTRACT

Changes in the supply and demand for particular fresh, frozen, canned, and other types of fish or shellfish products, or changes in processing or marketing costs, affect the producers' share of the consumer's dollar. This report is illustrative of the relative size of the producers' share (that is, producers' margin) for particular fishery products (and also the complementary marketing margins) over a period of years and in a wide variety of circumstances. It describes the major influences on producers' margins and changes in those margins caused by product differences and the element of time.

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INTRODUCTION

Fish and shellfish purchased by processors are cleaned, filleted, or otherwise processed into the many forms of fishery products available to consumers on today's markets, and then are packaged for sale. From the processing plants, wholesalers and other middlemen distribute the fishery products to the retailers in whose stores consumers purchase the type and quantity of product they desire. The costs encountered as these fishery products move through the marketing channels from fishermen (producers) to retailers have a considerable bearing upon the prices that must be paid by consumers if the products are to be sold at a profit. The producers' share (margin) of the retail price for certain fishery products has been calculated for the 1950-60 period in this report as well as the total amount added to the original cost of the product by processors, wholesalers, and retailers.

Ex-vessel prices (prices paid to producers at the point of delivery from the fishing vessel) reported in this paper are averages calculated from the total weights and values of the landings. These prices relate to landings of fish and shellfish at ports or in areas where the particular species is of major importance. Retail prices from New York City, Boston, Baltimore, and Washington, D.C., as well as national average prices published by the Bureau of Labor Statistics, were used in computing the producers' margin.

Care must be used in generalizing from the calculations in this report. First, as producers' margins are based on a retail unit of 1 pound, retail prices for products that are normally sold at other weights (canned tuna, for example) had to be adjusted to the same basis. Second, the producers' margins may be quite different for large, economy-sized packages or other special packs. Thus, exact figures from this report can be used only when precisely defined as to the period of time, product, and area covered. The trends that are evident are more significant than are individual margin percentages.

This report is divided into two parts. The first part discusses the principal factors affecting producers' margins. The second part summarizes the trends in fishermen's shares for fresh, frozen, or canned fish and shellfish.

FACTORS INFLUENCING PRODUCERS' MARGINS

The following main topics are discussed in this chapter: (1) definition of margins, (2) margins and costs, (3) retail prices, (4) producers' margins, and (5) distribution.

Definition of "Margins"

The difference between the price a consumer pays for a pound of fish or shellfish and the price the producer (fisherman) receives for an equivalent quantity[1] is

Note.--David K. Sabock, Branch of Economics, Bureau of Commercial Fisheries, U. S. Fish and Wildlife Service, Washington, D. C.

[1]Conversion factors are used to determine what percentage of edible flesh remains after the fish are processed. For instance, 10,000 pounds of flounder will yield 3,700 pounds of fillets, so the conversion factor is 37 percent.

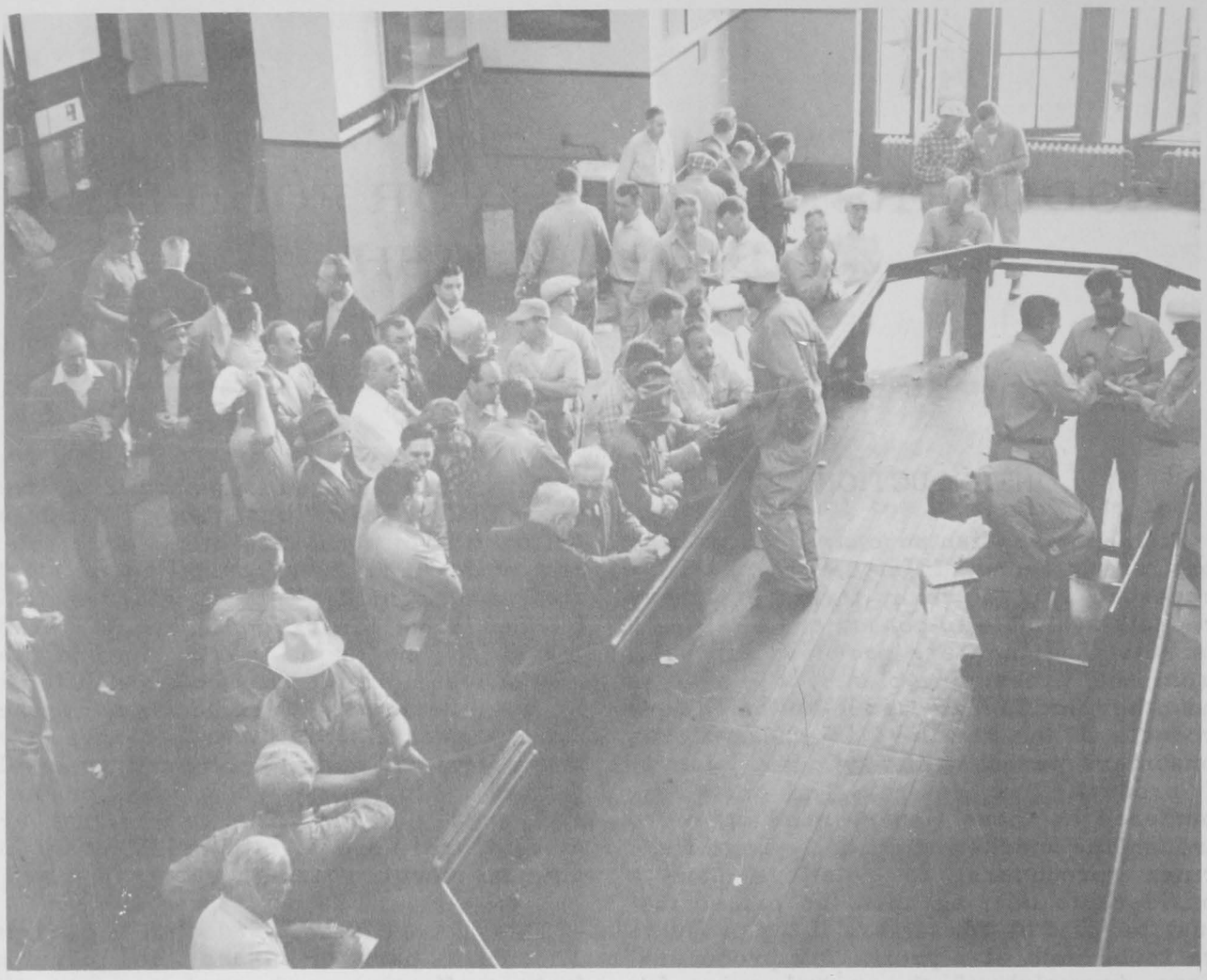

Figure 1.--In Boston, the fish auction furnishes a mechanism for establishing ex-vessel prices.

called the marketing margin. Included in this margin are all the costs added for services or functions performed at each step in moving fishery products from fishermen to retailers. These services or functions include local assembly of the product, processing, storage, transportation, wholesaling, and retailing. Generally, the cost to the consumer increases with each succeeding step in distribution, and the marginal return to the producer decreases.

A producer's margin or share is the proportion he receives of the retail price that the consumer pays for the product. This margin or share is expressed here as a percentage of the retail price. By measuring producers' margins in terms of percentages, we obtain a more meaningful comparison of these margins over a period of time. It is true that total gross income is most important to fishermen, but it is nevertheless important to know whether other segments of the industry are increasing or decreasing their income relative to fishermen. Therefore, using percentages establishes a valid basis for comparing producers' margins with marketing margins.

An important element in determining producers' margins for fish and shellfish is the amount that these products, as sold in retail outlets, have been processed--changed from their original form. Conversion factors, the percentage of a given quantity of a fish or shellfish that can be processed into a particular form, are used to make the needed adjustment in ex-vessel prices. The following example illustrates the method of calculating producers' margins for haddock fillets. If 10,000 pounds of haddock were landed, valued at $300,

for example, the ex-vessel price for the drawn fish would be 3 cents. Applying the conversion factor for haddock fillets (37 percent) to landings, we get 3,700 pounds, and an ex-vessel equivalent price of about 8 cents a pound. Dividing the ex-vessel equivalent price by the retail price for haddock fillets (30 cents), we would get a producers' margin of 27 percent.

The size of the producers' margin shown in this report does not, by itself, provide a basis for judging the adequacy of the share that fishermen get from the consumers' dollar spent for fishery products. The basis for such judgment would necessarily have to be founded on an intensive study of all of the details in a specific case. This general examination of producers' margins, however, does give the reader an overall picture of the relative size of producers' margins in a wide variety of circumstances. Producers' margins and marketing margins complement each other so that when the percentage of one decreases, the other increases, and vice versa. Consequently, when marketing margins are unusually high, producers' margins are unusually low. Upon examining the underlying causes of that situation, one may discover areas where significant economies in distribution may be effected.

Margins and Costs

A better understanding of marketing margins and the producer's share can be obtained by considering the costs involved in marketing fishery products and the specific markup policies followed by wholesalers and retailers. Many of the major cost items in the margin increased from 1950 to 1960. The average hourly earnings for nonsupervisory employees employed in seafood canning, for example, rose from $1.49 in 1951 to $1.84 in 1960. Extension of the Federal Wage-Hour Law, making all employees engaged in shore-based fishery occupations subject to the minimum wage provisions, will cause labor costs to increase. Part of the increase in wage rates, however, should be offset by increased productivity and by higher prices to consumers.

Another cost item that increased from 1947 to 1960 was transportation rates (table 1). Rail freight rates for all fishery products increased 72 percent in that period.

TABLE 1.--Indexes of rates of three principal types of carriers of fishery products, 1947-60

(1947 = 100)

Year	Index			Average index for all traffic[1]
	Rail freight	Rail express	Motor carriers	
1947	100.0	100.0	100.0	100.0
1948	122.5	110.3	109.6	117.4
1949	133.9	120.8	116.8	127.5
1950	136.7	129.8	120.8	131.2
1951	139.6	133.5	130.0	136.1
1952	150.4	146.4	144.6	148.3
1953	152.6	154.4	153.9	153.2
1954	153.8	169.2	164.9	158.7
1955	155.1	169.6	168.8	160.7
1956	163.6	178.0	176.2	168.8
1957	174.2	191.3	184.6	179.0
1958	171.7	192.7	201.8	182.8
1959	171.9	198.0	206.3	184.8
1960[2]	171.9	208.7	214.0	188.2

[1] Weighted average; relative weights: Rail freight, 60 percent; rail express, 10 percent; motor carrier, 30 percent.
[2] Data for first 6 months only included.

REA Express (formerly known as Railway Express Agency) rates increased 100 percent. The rates advanced most, however, for fishery products transported by motor carriers. Between 1947 and 1960 these rates increased 114 percent.

Costs of packaging materials, plant and equipment, and storage also have increased.

A majority of wholesale and retail establishments follow a general pricing policy that consists of applying a fixed percentage markup to costs. Some representative retail markups on cost for fishery products, as reported in a study by the Bureau of Commercial Fisheries (1955), are shown in table 2. Markups will vary according to the selling policy of the outlet. Low margins of profit and, therefore, relatively low prices are established on many items as "specials" to attract buyers to the stores and to increase sales generally. Whether a product is a "fast-moving" item will also help determine its markup. The primary objective of large retail and wholesale outlets is to make a profit while maintaining the right combination of both high and low margins, a high sales volume, and a competitive margin on all sales.

Retail Prices

Retail prices are subject to lesser fluctuations in percentage terms than are ex-vessel prices. An example of this is found in figure 3, where changes in retail and ex-vessel prices for drawn haddock are compared. Assuming that retail prices are relatively stable, it then follows that profit margins somewhere in the channels of distribution must be reduced when ex-vessel prices are high. Conversely, profit margins at some point in distribution must be high when ex-vessel prices are low.

Figure 2.--Fish 'n Seafood retail store located at "The Landing." *Courtesy of Mid-Central Fish Co., Kansas City, Mo.; photograph taken by Tyner and Murphy, Kansas City, Mo.*

TABLE 2.--Representative retail markups on cost in 1955 for the United States

Product	Markup
	Percent
Fresh shrimp.....	41
Frozen halibut.....	23
Canned salmon.....	22
Canned tuna.....	20

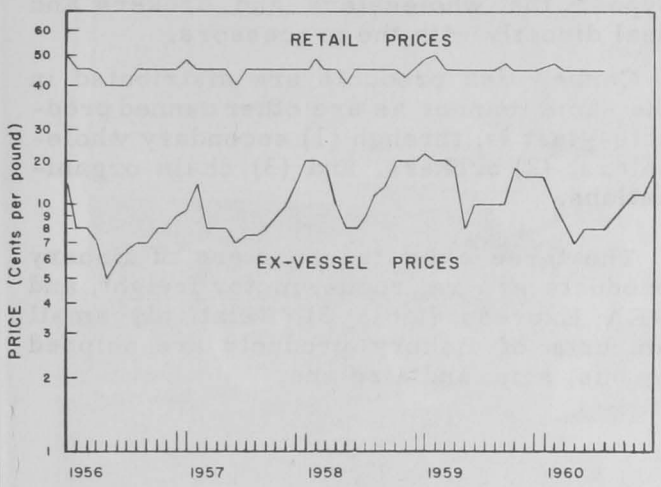

Figure 3.--Monthly retail and ex-vessel prices for drawn haddock.

Producers' Margins

The producers' share of consumer expenditures for whole, fresh fish, which include croakers, striped bass, whitefish, Boston mackerel, sea bass, and yellow pike, averaged 45 percent in 1959. The share varied considerably, however, depending on the particular species. It was 60 percent for whitefish, but was only 24 percent for mackerel. Like most statistical averages, these percentages "cover up" considerable variation caused by season, city or area, source of supply, and even among stores in the same locality.

Many factors cause producers' margins to fluctuate. Among the most important over the long run are changes in the types and costs of marketing services. The changing costs will be reflected in retail prices, and as retail prices change so will the fishermen's share. Over a period of time, for example, if increases in efficiency were achieved in marketing a particular fishery product, the producers' share of the retail price would tend to increase, assuming a relatively constant supply and no change in other important economic factors.

Several general observations can be made about the relation between the size of the fishermen's share and the type of product. The more highly processed a product is, the smaller the producers' share. The low producers' margins on canned fish, as compared to fresh or frozen fish and shellfish, illustrate this point. There are, however, exceptions to this generality. In comparing producers' margins for two forms of haddock, for example, we see that the margins are much higher for frozen fillets than for fresh, drawn haddock. The reason for this exception to the general rule results from several other factors influencing producers' margins. Two of these factors are (1) the distance from the production point to retail outlets and (2) the perishability of the product, which affects the cost of transportation, storage, and losses due to spoilage. Packaging and advertising costs also affect producers' margins.

Processing of fish and shellfish results in an expanded market by making a product easier to transport and store and by increasing consumer demand for the easier-to-prepare products. Fishermen, in many instances, benefit when their catches are suitable for processing and wide distribution; that is, the "value added" to their catch by processors results in higher producers' margins than could be expected if the product were not processed and promoted. As consumer demand increases for a particular type of processed fish or shellfish, ex-vessel prices will rise if production does not keep up with the demand.

Producers receive lower margins on fresh drawn (eviscerated) haddock than on frozen haddock fillets for two reasons: (1) fresh drawn haddock, because of its greater perishability, is marketed in a relatively restricted area, and (2) handlers must recover losses when demand is miscalculated and surplus stocks must either be sold at "distress" prices or thrown away. In contrast, frozen fillets are marketed over a wider area, so the total demand is much greater than for fresh fillets, and losses due to perishability are much lower.

The division of the retail price for fishery products between producers and marketing agencies may shift over time because of the changes in types and costs of marketing services that occur. Examples of services may be the marketing of different sized packages, more cleaning, trimming, and boning (that is, substitution of plant labor for consumer labor), and increased transportation or storage services. In the long run, the general price relation among the various segments of the distribution channels is the primary determinant of trends in producers' margins. Even for shorter periods, producers' margins for various species of fish and shellfish may change rapidly and drastically as prices change at various levels as a result of fluctuations in supply and demand.

Distribution

The distribution channel for some fishery products is quite short. In port cities fresh fish, for example, may sometimes pass directly from fishermen to retailers. More often, though, a port wholesaler who has purchased fish from a number of vessels distributes the fish to retailers in the port or over a wider area.

The distribution channel for frozen fish usually is more complex than that for fresh fish. Processors often sell their frozen packaged fish to large distributors of frozen food products who assemble a wide variety of frozen foods under a single brand name. Some of the larger distributors maintain central storage facilities and offices in a number of States and conduct their business through local wholesalers. Large grocery store and restaurant chains, however, often bypass the wholesalers and brokers and deal directly with the processors.

Canned fish products are distributed in the same manner as are other canned products--that is, through (1) secondary wholesalers, (2) brokers, and (3) chain organizations.

The three chief transporters of fishery products are railroads, motor freight, and REA Express (table 3). Relatively small amounts of fishery products are shipped by bus, ship, and airplane.

TABLE 3.--Estimated weights of fishery products transported in the United States by three principal types of carriers, 1947-59

Year	Estimated weight of fishery products transported by:						Total weight of fishery products transported
	Motor freight		Railroad		REA Express		
	Weight	Weight relative to total	Weight	Weight relative to total	Weight	Weight relative to total	
	Thousand pounds	*Percent*	*Thousand pounds*	*Percent*	*Thousand pounds*	*Percent*	*Thousand pounds*
1947.....	1,223	26.5	3,054	66.1	342	7.4	4,619
1948.....	1,467	31.1	2,911	61.6	345	7.3	4,723
1949.....	1,540	31.2	3,056	61.9	340	6.9	4,936
1950.....	1,582	31.4	3,127	62.0	330	6.6	5,039
1951.....	1,612	34.1	2,814	59.5	300	6.4	4,726
1952.....	1,615	35.1	2,681	58.2	310	6.7	4,606
1953.....	1,600	34.8	2,695	58.7	295	6.5	4,590
1954.....	1,650	34.0	2,926	60.3	275	5.7	4,851
1955.....	1,636	34.1	2,906	60.5	260	5.4	4,802
1956.....	1,778	34.3	3,198	61.7	210	4.0	5,186
1957.....	1,866	39.0	2,752	57.6	160	3.4	4,778
1958.....	1,793	37.8	2,804	59.1	145	3.9	4,742
1959.....	1,875	37.3	3,028	60.2	125	2.5	5,028

Figure 4.--One major cost element affecting producers' margins is transportation expense. Frozen fishery products, shown here being loaded into a refrigerated truck, require constant and expensive care during their shipment to distant markets.

Figure 5 illustrates the marketing channels for fishery products in the United States. The various intermediaries in the chain of distribution represent hundreds of concerns in widely scattered markets. The product moves from fishermen through the various distribution links to final acquisition by the consumer. Solid lines between the boxes indicate physical movement or change of title, usually both. The diagram expands the usual concept of presenting the channels of distribution by including the activities of those who arrange change of title as well as those engaged in the physical movement of goods. (Cassady, 1957.)

PRODUCERS' MARGINS FOR SPECIFIC PRODUCTS

In this part, specific reference is made to trends of producers' margins for fresh, frozen, and canned fish and shellfish. Included in the discussion of each of these topics is a summary of the trends for the individual species making up the four classifications. That discussion is followed by general comments about producers' margins relating to the main classifications of fresh, frozen, and canned fish and shellfish. Tables are included on which producers' margins have been computed.

Producers' Margins for Fresh Fish

The producers' share of the retail price for yellow pike, croakers, and haddock has been increasing, but their share for carp, mackerel, striped bass, cod, and flounder has been decreasing. Producers' margins for whitefish and sea bass remained almost unchanged during 1950-60.

The producers' share for fresh fish increased from 39 percent in 1950 to 41

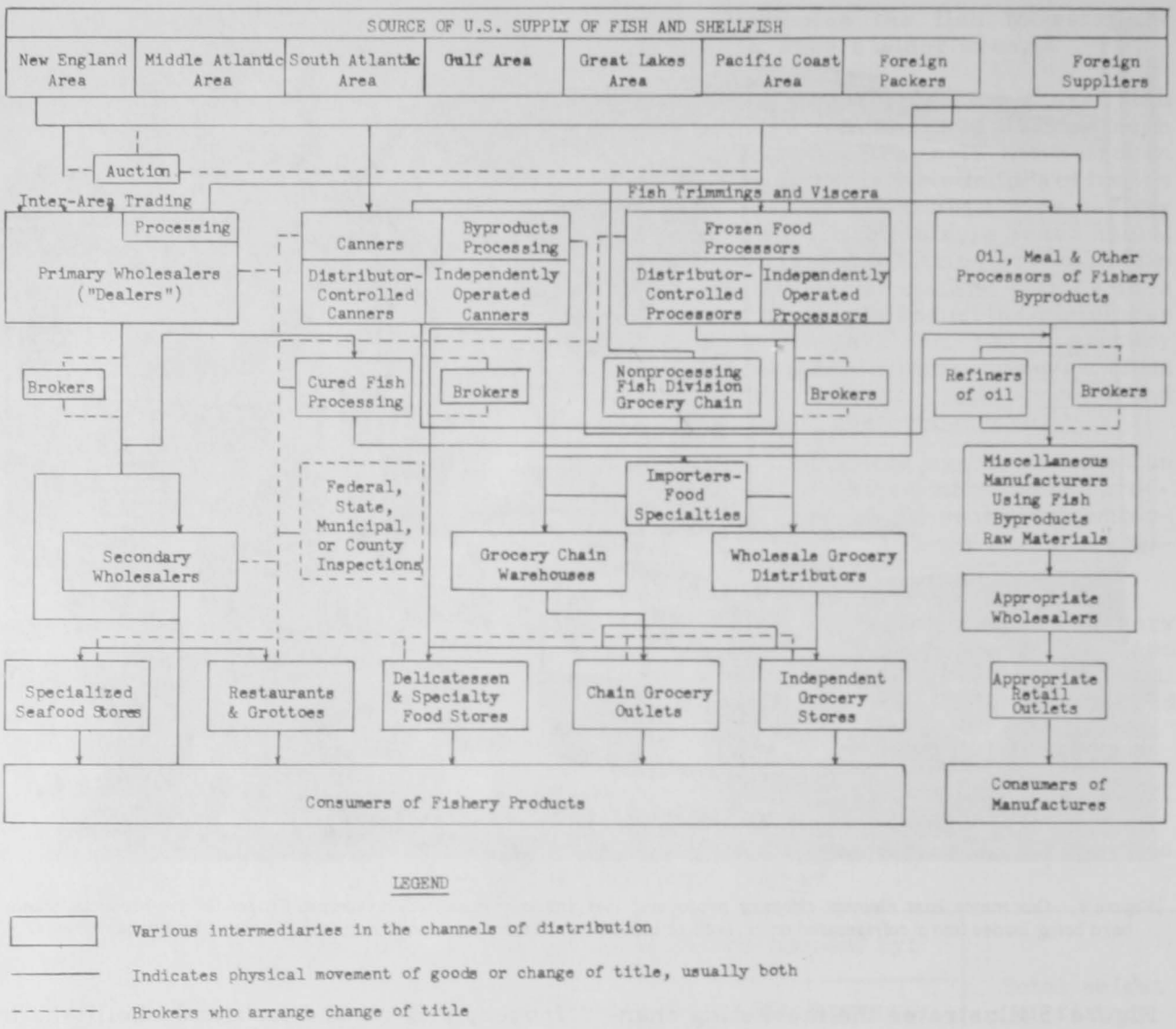

Figure 5.--Marketing channels for fishery products in the United States.

percent in 1951 (fig. 6). In 1952, the producers' margins began declining, falling to 37 percent in 1953, and maintaining approximately that level until a slight upward trend began in 1957. These averages, however, cover a considerable range.

Producers' margins for fresh fish marketed as steaks, whole or round, filleted, and drawn have been changing (fig. 7). Producers' margins for fresh fish sold as steaks are declining, although those for round fish are increasing. The fishermen's share for fillets declined from 1951 to 1954, but then increased until 1960. Producers' margins for fresh, drawn fish declined from 1952 to 1956. Increasing margins were then recorded until 1960.

Declining producers' margins are caused by several factors. Usually margins are lowered by large increases in supply, but that problem has not been the primary one in the fishing industry. The total demand for fresh fish has been declining because the preference of consumers has shifted from fresh to frozen fish. Consumption of fresh fish has been restricted to coastal areas mainly because of the perishable nature of the product. Moreover, in inland markets fresh fish costs relatively more to distribute than frozen fish. In recent years, products designed for maximum convenience to housewives--such as cooked or breaded fish sticks, frozen fillets, and other frozen fish and shellfish products--have become increasingly important. Items

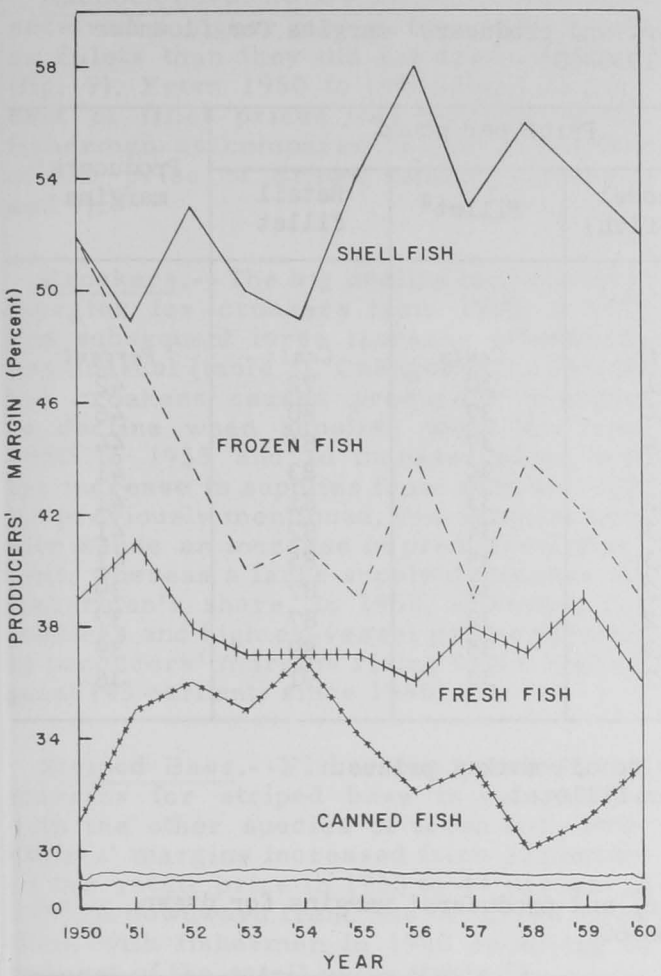

Figure 6.--Average producers' margins for all fish and shellfish, 1950-60.

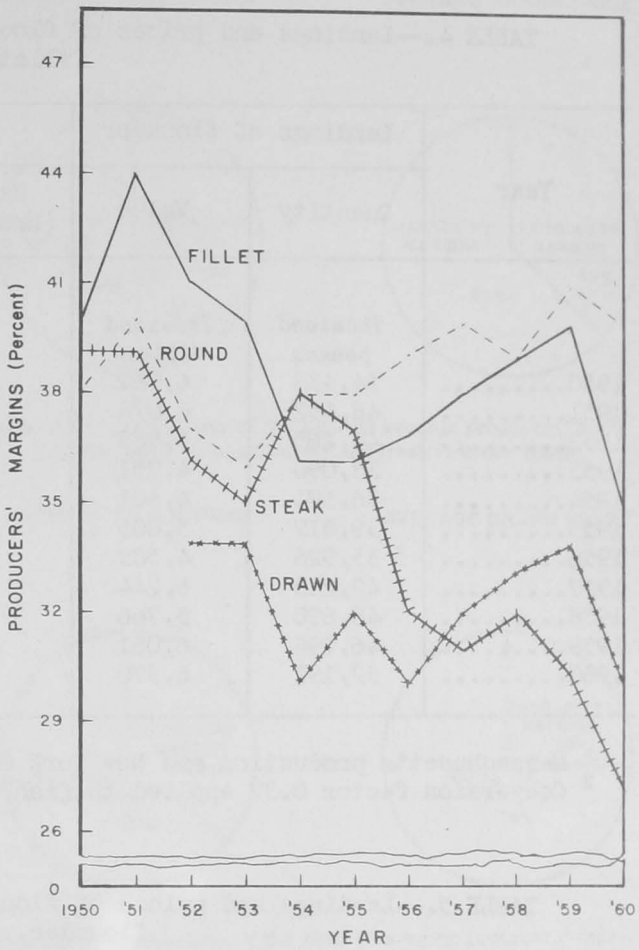

Figure 7.--Average producers' margins for round, drawn, steak, and filleted fresh fish, 1950-60.

of this kind eliminate many of the objectionable features associated with fresh fish; for example, odor, difficulty of storage, seasoning, preparing, boning, and determining the portion needed for each serving.

In most of the larger retail food stores, fresh and frozen fishery products are popular. Many of the large chains and independents handle both varieties; however, an increasing number of stores handle frozen fish only. This change in merchandizing tends to lower producers' margins for fresh fish because the demand for these products is reduced. For example, in northeastern coastal areas where fresh and frozen fishery products compete directly with each other, consumers prefer the fresh fishery products.

Research is in progress to discover means by which fresh fish may be stored and transported more easily, and yet made to retain longer their quality and taste. Producers will benefit when economical methods of achieving these aims are found.

Trends in producers' shares for flounder, haddock, croakers, striped bass, and whitefish are significant enough to warrant specific mention. Computed producers' margins for other species will be found in the group of tables at the end of the following discussions on the individual species.

Flounder (Drawn and Fillets).--Fishermen received a higher margin for flounder fillets than they did for drawn flounder (tables 4 and 5). From 1950 to 1960, producers received 41 percent of the retail price for fillets and only 37 percent of the price when sold drawn (fig. 8). The lower costs involved in shipping, storing, and handling fillets account for most of the difference in margins.

TABLE 4.--Landings and prices of flounder, and producers' margins for flounder fillets, 1950-60[1]

Year	Landings of flounder		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round fish)	Fillet[2]	Retail fillet	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	54,438	6,062	11	30	72	42
1951.....	48,652	6,672	14	37	80	46
1952.....	44,265	5,983	14	37	85	44
1953.....	38,090	4,751	12	34	83	41
1954.....	36,574	4,401	12	33	81	41
1955.....	39,817	5,005	13	34	82	41
1956.....	35,926	4,589	13	35	85	41
1957.....	42,213	5,244	12	34	87	39
1958.....	48,690	5,766	12	32	87	37
1959.....	46,796	6,061	13	35	89	39
1960.....	52,191	6,370	12	33	91	36

[1] Massachusetts production and New York City retail market prices.
[2] Conversion factor 0.37 applied to fish when filleted.

TABLE 5.--Landings and prices of flounder, and producers' margins for drawn flounder, 1950-60[1]

Year	Landings of flounder		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round fish)	Drawn[2]	Retail	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	54,438	6,062	11	15	38	39
1951.....	48,652	6,672	14	18	43	42
1952.....	44,265	5,983	14	18	45	40
1953.....	38,090	4,751	12	17	45	38
1954.....	36,574	4,401	12	16	44	36
1955.....	39,817	5,005	13	17	44	39
1956.....	35,926	4,589	13	17	45	38
1957.....	42,213	5,244	12	17	47	36
1958.....	48,690	5,766	12	16	47	34
1959.....	46,796	6,061	13	17	47	36
1960.....	52,191	6,370	12	16	47	34

[1] Massachusetts production and New York City retail market prices.
[2] Conversion factor 0.7491 applied to fish when drawn.

Haddock (Drawn and Fillets).--Producers received a higher margin for haddock sold as fillets than they did for drawn haddock (fig. 9). From 1950 to 1960, about 36 percent of fillet prices was returned to the fishermen as compared to only 26 percent of the price of drawn haddock (tables 6 and 7).

Croakers.--The big decline in producers' margins for croakers from 1950 to 1955 and subsequent large increase afterwards are unusual (table 8). Changes in the demand for croakers caused producers' margins to decline when supplies were low from 1950 to 1955 and to increase along with the increase in supplies from 1956 to 1959. As previously mentioned, low supplies usually cause an increase in producers' margins, whereas a large supply decreases the fishermen's share. In 1960, however, low landings and high ex-vessel prices resulted in producers' margins rising to the highest point (43 percent) since 1950.

Striped Bass.--Fishermen received high margins for striped bass in comparison with the other species of fresh fish. Producers' margins increased from 33 percent of the retail price in 1950 to 47 percent in 1955. A downward trend has occurred since then, with fishermen in 1960 receiving 32 percent of the retail price (table 9).

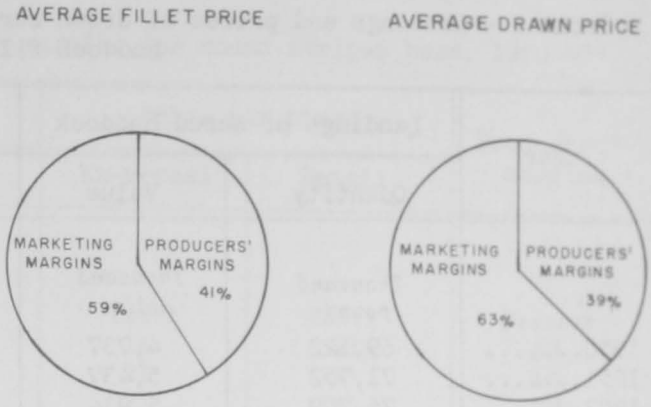

Figure 8.--Comparison of the 1950-60 average producers' margins for fresh, drawn flounder and fresh flounder fillets.

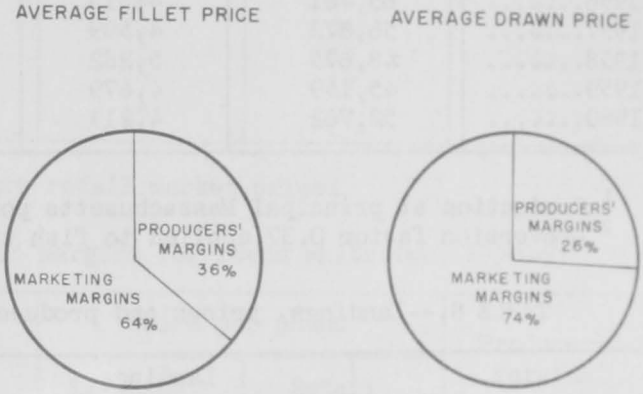

Figure 9.--Comparison of the 1950-60 average producers' margins for fresh drawn haddock and fresh haddock fillets.

TABLE 6.--Landings, prices, and producers' margins for drawn haddock, 1950-60[1]

Year	Landings		Price per pound		Producers' margins
	Quantity	Value	Ex-vessel	Retail	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Percent*
1950	131,431	11,195	9	(2)	(2)
1951	129,419	11,439	9	(2)	(2)
1952	135,827	12,029	9	35	26
1953	117,390	10,134	9	32	28
1954	130,327	9,576	7	32	22
1955	114,107	7,805	7	31	23
1956	128,990	9,274	7	34	21
1957	112,835	9,867	9	35	26
1958	101,329	11,388	11	35	31
1959	95,672	10,622	11	36	30
1960	100,557	9,090	9	35	26

[1] Production at principal Massachusetts ports and New York City retail market prices.
[2] Retail prices not available.

TABLE 7.--Landings and prices of drawn scrod haddock, and producers' margins for fresh haddock fillets, 1950-60[1]

Year	Landings of scrod haddock		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel	Fillet[2]	Retail	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	69,122	4,737	7	19	49	39
1951.....	71,752	5,437	8	20	51	39
1952.....	76,709	5,934	8	21	56	38
1953.....	59,192	4,663	8	21	54	39
1954.....	75,047	4,443	6	16	55	29
1955.....	59,515	3,610	6	16	56	29
1956.....	65,781	4,315	7	18	57	32
1957.....	56,873	4,599	8	22	59	37
1958.....	48,675	5,282	11	29	69	42
1959.....	45,159	4,679	10	28	67	42
1960.....	52,762	4,213	8	22	68	32

[1] Production at principal Massachusetts ports and Boston retail market prices.
[2] Conversion factor 0.37 applied to fish when filleted.

TABLE 8.--Landings, prices and producers' margins for round croakers, 1950-60[1]

Year	Landings		Price per pound		Producers' margins
	Quantity	Value	Ex-vessel	Retail	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Percent*
1950.....	9,192	1,562	17	39	44
1951.....	6,074	921	15	46	33
1952.....	4,492	580	13	47	28
1953.....	4,523	479	11	45	24
1954.....	6,037	625	10	45	22
1955.....	11,457	998	9	41	22
1956.....	11,417	1,039	9	39	23
1957.....	15,598	1,676	11	39	28
1958.....	12,515	1,164	9	39	23
1959.....	8,493	1,388	16	45	36
1960.....	4,519	799	18	50	36

[1] Chesapeake Bay area production and Baltimore retail market prices.

Whitefish.--Despite the fact that whitefish consistently returned the highest producers' margins of any freshfish--averaging 58 percent of the retail prices from 1950 to 1960--depletion of whitefish populations by the predatory sea lamprey has caused severe hardship in the industry. Production has declined from 5 million pounds in 1950 to only 629,000 pounds in 1959. During that time, the value dropped from $2 million to $375,000 (table 10). Efforts to control the sea lamprey in the Great Lakes have shown signs of success but it may be some time before this fishery regains its previous position.

TABLE 9.--Landings, prices, and producers' margins for round striped bass, 1950-60[1]

Year	Landings		Price per pound		Producers' margins
	Quantity	Value	Ex-vessel	Retail	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Percent*
1950	5,834	948	16	48	33
1951	4,140	862	21	53	40
1952	3,413	728	21	55	38
1953	3,106	676	22	52	42
1954	3,059	671	22	52	42
1955	3,466	820	24	51	47
1956	3,145	703	22	54	41
1957	2,788	608	22	55	40
1958	4,422	927	21	50	42
1959	6,446	1,074	17	47	36
1960	6,687	991	15	47	32

[1] Chesapeake Bay area production and Baltimore retail market prices.

TABLE 10.--Landings, prices, and producers' margins for round whitefish, 1950-60[1]

Year	Landings[2]		Price per pound		Producers' margins
	Quantity	Value	Ex-vessel	Retail	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Percent*
1950	5,204	2,014	39	77	51
1951	2,761	1,306	47	83	57
1952	3,717	1,632	44	75	59
1953	2,992	1,342	45	78	58
1954	2,330	1,102	47	82	57
1955	1,885	958	51	90	57
1956	1,499	824	55	91	60
1957	1,413	761	54	94	57
1958	695	380	55	96	57
1959	629	375	60	100	60
1960	830	475	57	95	60

[1] Great Lakes area production and New York City retail market prices.
[2] Common whitefish only, does not include Menominee.

Miscellaneous.--Tables 11-15 give data for carp steak, cod steak, round Boston mackerel, round sea bass, and round yellow pike, respectively.

Producers' Margins for Frozen Fish

In determining the producers' margins for the seven species of fish processed into the frozen fish covered in the report, we found it necessary to lag retail prices to allow for the delay between production and distribution. The period used to compute the average annual retail price for each product is mentioned in a footnote at the bottom of tables 16 through 22.

It has been noted previously that producers' margins for fresh fish were lower than were those for frozen fish despite the

TABLE 11.--Landings and prices of carp, and producers' margins for carp steak, 1950-60[1]

Year	Landings of carp		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round weight)	Steak[2]	Retail (Steak)	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	4,209	193	5	17	43	40
1951.....	5,054	261	5	17	45	38
1952.....	5,759	218	4	13	44	30
1953.....	5,467	227	4	13	44	30
1954.....	6,543	315	5	17	43	40
1955.....	6,547	295	5	17	45	38
1956.....	6,504	231	4	13	46	28
1957.....	7,128	303	4	13	47	28
1958.....	8,344	305	4	13	49	27
1959.....	7,274	270	4	13	49	27
1960.....	7,343	254	3	10	51	20

[1] Great Lakes area production and New York City retail market prices.
[2] Conversion factor applied to fish when steaked (ex-vessel price multiplied by 3.33).

TABLE 12.--Landings and prices of cod, and producers' margins for cod steak, 1950-60[1]

Year	Landings of cod[2]		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round weight)	Steak[3]	Retail (Steak)	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	13,357	1,117	8	18	47	38
1951.....	12,716	1,151	9	20	49	41
1952.....	10,742	1,049	10	22	52	42
1953.....	8,439	749	9	20	50	40
1954.....	10,013	773	8	18	49	37
1955.....	9,042	714	8	18	49	37
1956.....	10,596	805	8	18	51	35
1957.....	10,129	772	8	18	52	35
1958.....	8,353	760	9	20	53	38
1959.....	9,560	809	8	18	54	33
1960.....	8,664	655	8	18	54	33

[1] Massachusetts production and New York City retail market prices.
[2] Production of large cod only.
[3] Conversion factor applied to fish when steaked (ex-vessel price multiplied by 2.22).

TABLE 13.--Landings, prices, and producers' margins for round Boston mackerel, 1950-60[1]

Year	Landings		Price per pound		Producers' margins
	Quantity	Value	Ex-vessel	Retail	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Percent*
1950	9,358	779	8	37	22
1951	7,471	665	9	40	22
1952	10,251	762	7	41	17
1953	5,383	606	11	43	26
1954	2,055	293	14	47	30
1955	1,947	230	12	43	28
1956	2,622	320	12	45	27
1957	1,513	235	16	48	33
1958	2,656	343	13	46	28
1959	2,585	305	12	49	24
1960	1,538	223	14	53	26

[1] Production at principal Massachusetts ports and New York City retail market prices.

TABLE 14.--Landings, prices and producers' margins for round sea bass, 1950-60[1]

Year	Landings		Price per pound		Producers' margins
	Quantity	Value	Ex-vessel	Retail	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Percent*
1950	5,706	626	11	38	29
1951	9,092	929	10	37	27
1952	10,057	1,110	11	37	30
1953	6,871	748	11	37	30
1954	4,549	507	11	38	29
1955	5,520	498	9	37	24
1956	6,340	637	10	37	27
1957	4,407	550	12	38	32
1958	5,982	653	11	37	30
1959	3,424	465	14	42	33
1960	3,797	539	14	44	32

[1] Chesapeake Bay area production and Baltimore retail market prices.

TABLE 15.--Landings, prices, and producers' margins for round yellow pike, 1950-60[1]

Year	Landings		Price per pound		Producers' margins
	Quantity	Value	Ex-vessel	Retail	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Percent*
1950	7,472	1,867	25	69	36
1951	6,704	2,057	31	75	41
1952	6,002	1,514	25	70	36
1953	7,164	1,294	18	75	24
1954	6,275	1,569	25	73	34
1955	7,205	1,573	22	72	31
1956	7,368	1,682	23	71	32
1957	5,667	1,549	27	78	35
1958	4,482	1,273	28	86	33
1959	2,190	783	36	92	39
1960	1,798	611	34	94	36

[1] Great Lakes area production and New York City retail market prices.

TABLE 16.--Landings and prices of cod, and producers' margins for frozen cod fillets, 1950-60[1]

Year	Cod landings[2]		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round weight)	Fillet[3]	Retail[4] (Fillet)	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950	9,216	609	7	18	39	46
1951	7,510	587	8	21	41	51
1952	9,423	684	7	20	43	47
1953	7,165	519	7	20	41	49
1954	5,521	358	6	18	39	46
1955	5,719	337	6	17	35	49
1956	6,662	426	6	17	39	44
1957	6,985	418	6	16	36	44
1958	5,289	445	8	23	39	59
1959	6,858	519	8	20	39	51
1960	6,347	435	7	19	40	48

[1] Boston, Mass., production and Washington, D. C. retail market prices.
[2] Market cod for March-October.
[3] Conversion factor 0.37 applied to fish when filleted.
[4] Price year July-June.

TABLE 17.--Landings and prices of flounder, and producers' margins for frozen flounder fillets, 1950-60[1]

Year	Flounder landings		Prices per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round weight)	Fillet[2]	Retail[3] (Fillet)	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	10,145	1,076	11	29	58	50
1951.....	10,103	1,327	13	36	67	54
1952.....	9,213	1,084	12	32	62	52
1953.....	7,552	717	9	26	56	46
1954.....	6,064	601	10	27	60	45
1955.....	7,559	742	10	27	57	47
1956.....	7,300	720	10	27	53	51
1957.....	11,770	896	8	21	54	39
1958.....	18,756	1,404	7	20	49	41
1959.....	14,186	1,436	10	27	59	46
1960.....	18,075	1,448	8	22	57	39

[1] New Bedford, Mass., production of yellowtail flounder for July-December, and Washington D. C. retail market prices.
[2] Conversion factor 0.37 applied to fish when filleted.
[3] Retail prices July-June.

TABLE 18.--Landings and prices for scrod haddock and producers' margins for frozen haddock fillets, 1950-60[1]

Year	Haddock landings[2]		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round weight)	Fillet[3]	Retail[4] (Fillet)	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	35,411	2,361	7	18	(Not available)	
1951.....	42,639	2,876	7	18	(Not available)	
1952.....	40,535	2,717	7	18	51	35
1953.....	29,402	2,259	8	21	49	43
1954.....	37,880	2,092	6	15	49	31
1955.....	31,932	1,630	5	14	46	30
1956.....	31,891	1,842	6	16	46	35
1957.....	30,938	2,264	7	20	47	43
1958.....	24,774	2,432	10	27	57	47
1959.....	23,756	2,189	9	25	58	43
1960.....	24,352	1,761	7	20	56	36

[1] Boston, Mass., production and Bureau of Labor Statistics retail prices for the United States.
[2] Production of scrod haddock for April-September.
[3] Conversion factor 0.37 applied to fish when filleted.
[4] Price year March-February.

TABLE 19.--Landings and prices of halibut, and producers' margins for frozen halibut steak, 1950-60[1]

Year	Halibut landings		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round weight)	Steak[2]	Retail[3] (Steak)	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	7,384	1,968	27	49	74	66
1951.....	9,641	2,103	22	40	76	53
1952.....	11,299	2,564	23	42	75	56
1953.....	12,985	2,244	17	32	75	43
1954.....	15,986	3,119	20	36	75	48
1955.....	13,755	2,269	16	30	76	39
1956.....	13,526	3,427	25	47	84	56
1957.....	14,496	2,934	20	37	83	45
1958.....	15,161	3,715	25	45	89	51
1959.....	17,223	3,742	22	40	88	45
1960.....	15,722	2,911	19	34	90	38

[1] Seattle, Wash., production and New York City retail market prices.
[2] Conversion factor 0.54 applied to fish when steaked.
[3] Price year May-April.

TABLE 20.--Landings and prices of ocean perch, and producers' margins for frozen ocean perch fillets, 1950-60[1]

Year	Ocean perch landings		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round weight)	Fillet[2]	Retail[3] (Fillet)	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	128,511	6,035	5	15	(Not available)	
1951.....	184,366	9,167	5	16	46	35
1952.....	128,561	5,598	4	14	45	31
1953.....	93,271	3,610	4	12	44	27
1954.....	101,777	4,170	4	13	44	30
1955.....	89,303	3,460	4	12	42	29
1956.....	86,146	3,258	4	12	42	29
1957.....	69,208	2,693	4	13	44	30
1958.....	77,577	3,273	4	14	47	30
1959.....	61,478	2,549	4	13	47	28
1960.....	63,175	2,410	4	12	47	26

[1] Massachusetts production and Bureau of Labor Statistics retail prices for the United States.
[2] Conversion factor 0.31 applied to fish when filleted.
[3] Price year June-May.

TABLE 21.--Landings and prices of pollock, and producers' margins for frozen pollock fillets, 1950-60[1]

Year	Pollock landings[2]		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round weight)	Fillet[3]	Retail[4] (Fillets)	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....			No retail prices available			
1951.....			No retail prices available			
1952.....	6,707	234	3	9	27	33
1953.....	8,863	276	3	8	27	30
1954.....	6,583	240	4	9	30	30
1955.....	8,455	323	4	10	34	29
1956.....	7,871	237	3	8	32	25
1957.....	12,658	548	4	11	34	32
1958.....	14,490	728	5	13	36	36
1959.....	7,750	278	4	9	36	25
1960.....	9,521	366	4	10	36	28

[1] Massachusetts production and Baltimore retail prices.
[2] November-February.
[3] Conversion factor 0.40 applied to fish when filleted.
[4] Retail price year November-October.

TABLE 22.--Landings and prices of king salmon, and producers' margins for frozen salmon steak, 1950-60[1]

Year	King Salmon Landings		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round weight)	Steak[2]	Retail[3] (Steak)	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	8,820	2,265	26	39	81	48
1951.....	10,908	2,957	27	42	86	49
1952.....	11,618	2,908	25	38	85	45
1953.....	10,842	2,585	24	37	85	44
1954.....	9,268	2,494	27	41	89	46
1955.....	10,035	2,856	28	44	90	49
1956.....	8,291	2,677	32	50	97	52
1957.....	8,394	2,597	31	47	96	49
1958.....	7,227	2,500	35	53	108	49
1959.....	5,884	1,927	33	50	111	45
1960.....	4,636	1,827	39	60	128	47

[1] State of Washington production and New York City retail market prices.
[2] Conversion factor 0.6515 applied to fish when steaked.
[3] Price year May-April.

greater processing involved in marketing the latter products. It was noted, also, that this exception was caused by the more perishable nature of fresh fish and the greater total demand for frozen fish.

There is, however, another factor involved. Most freezing plants pack fish and shellfish when prices are seasonally low; therefore, purchases are restricted mainly to the months of peak production. Fishery products are frozen in large volume and then stored for future distribution. Thus frozen fishery products are not only less expensive than fresh products to store and transport, and in greater demand, but the raw material usually is purchased at lower prices. The end results are lower acquisition costs and more stable prices. Despite the fact that ex-vessel prices are low during the months of peak production, the savings occurring in marketing costs improve producers' margins for frozen fishery products.

Average producers' margins for all frozen fishery products declined from 52 percent in 1950 to 39 percent in 1955. A rising trend was then evident until those margins declined in 1959 and 1960 (fig. 6). The fishermen's share for haddock fillets has been increasing since 1950. Producers' margins have been stable for salmon steak and ocean perch fillets. There was no perceptible trend for cod or pollock fillets, and margins have fluctuated considerably. Downward trends in producers' margins were recorded for halibut steak and flounder fillets. The highest average fishermen's share was 50 percent for halibut steak;

Figure 10.--Preparation of fishery products for marketing requires the use of specialized equipment. Shown here is a plate-type quick freezer used by a New Bedford firm for freezing consumer-packaged scallop meats.

the lowest, 30 percent for ocean perch fillets.

A large market for frozen fishery products exists in the inland areas where fresh fish is largely unobtainable. Properly refrigerated frozen fish products have many advantages over fresh fish for both retailers and consumers. The frozen products can be stored easily, transported long distances, and held for long periods without serious loss of quality. Homemakers can easily prepare a dinner using frozen fish and shellfish from the many "convenience" items available in the retailer's display cabinets. Largely for these reasons, demand for frozen fishery products has been increasing since 1950.

Figure 12 illustrates an important change that has taken place in the production of frozen fish and shellfish. Salt-water fish, which comprised 85 percent of the total United States production of frozen fish and shellfish in 1944 and 74 percent in 1950, accounted for only 48 percent in 1960. Shellfish, especially shrimp, has become increasingly important during that period. In 1944 only 15 million pounds of shrimp were frozen, compared to 92 million pounds in 1960. Fresh-water fish accounted for a very small part of total U.S. frozen fish and shellfish production in 1944, and an even smaller part in 1960. Figure 13 shows the increase in total production of frozen fishery products.

Producers' Margins for Canned Fish

A relatively large capital investment is required to establish and maintain a fish cannery. Compared to other forms of processing, the canning process involves a large number of different operations. Tuna canning, for example, generally follows these principal steps: conveying the fish to the cannery, thawing frozen fish, butchering, precooking, cleaning, packing, adding oil and salt, exhausting, seaming, cleaning and retorting cans, labeling, boxing, and storing.

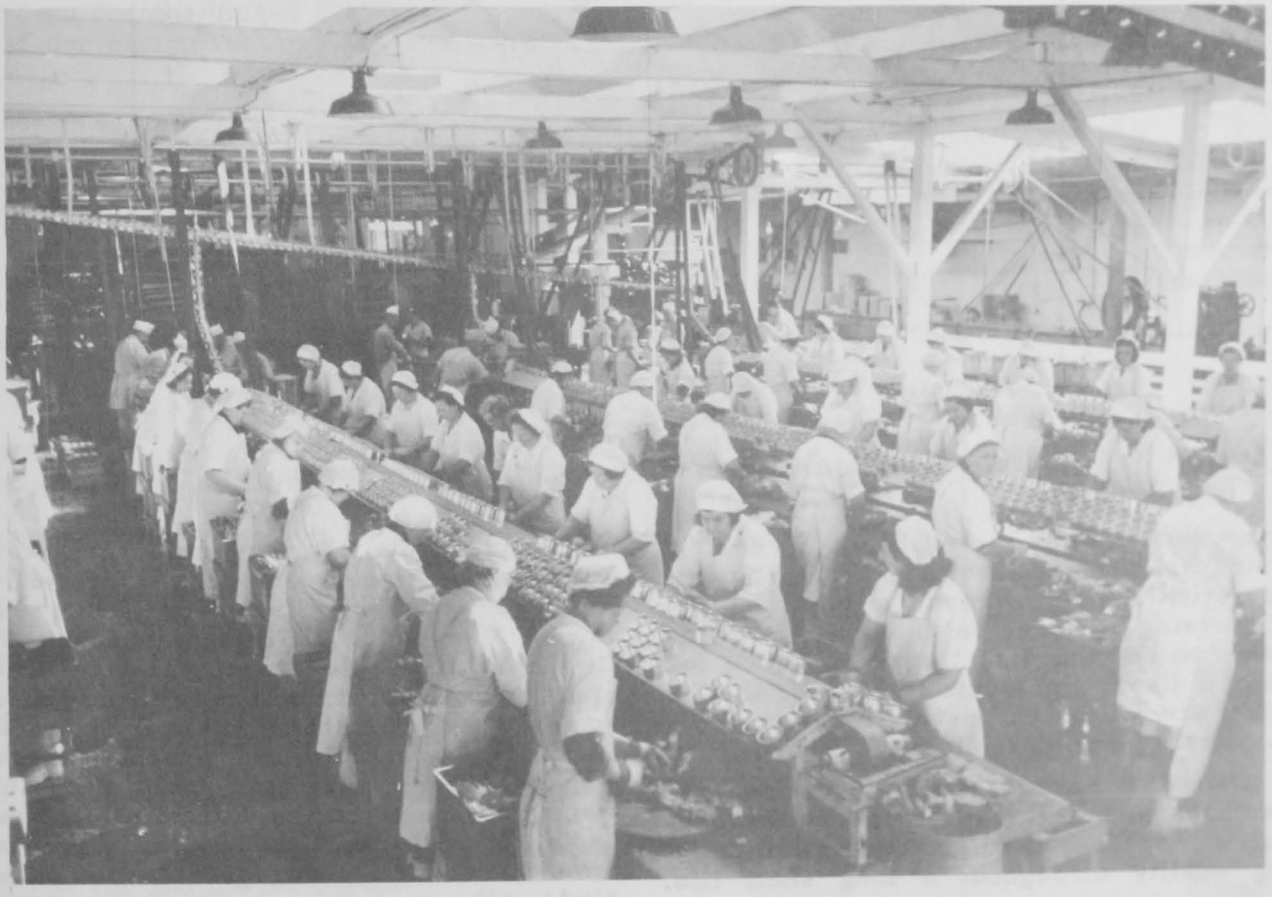

Figure 11.--High labor costs adversely affect producers' margins. Canning operations, for example, involve the use of large numbers of employees.

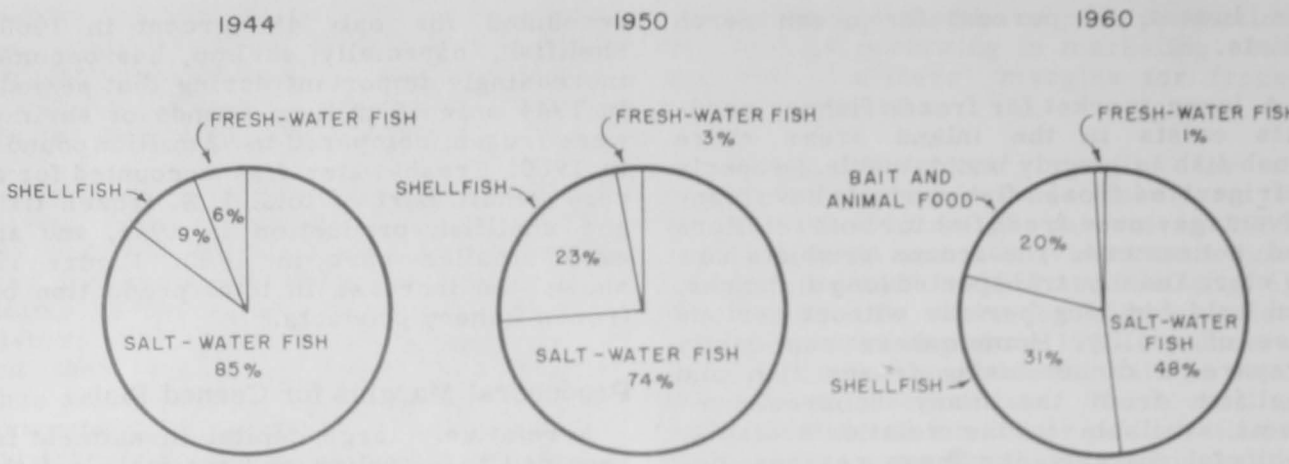

Figure 12.--Change in the percentage composition of frozen fish, 1944, 1950, 1960.

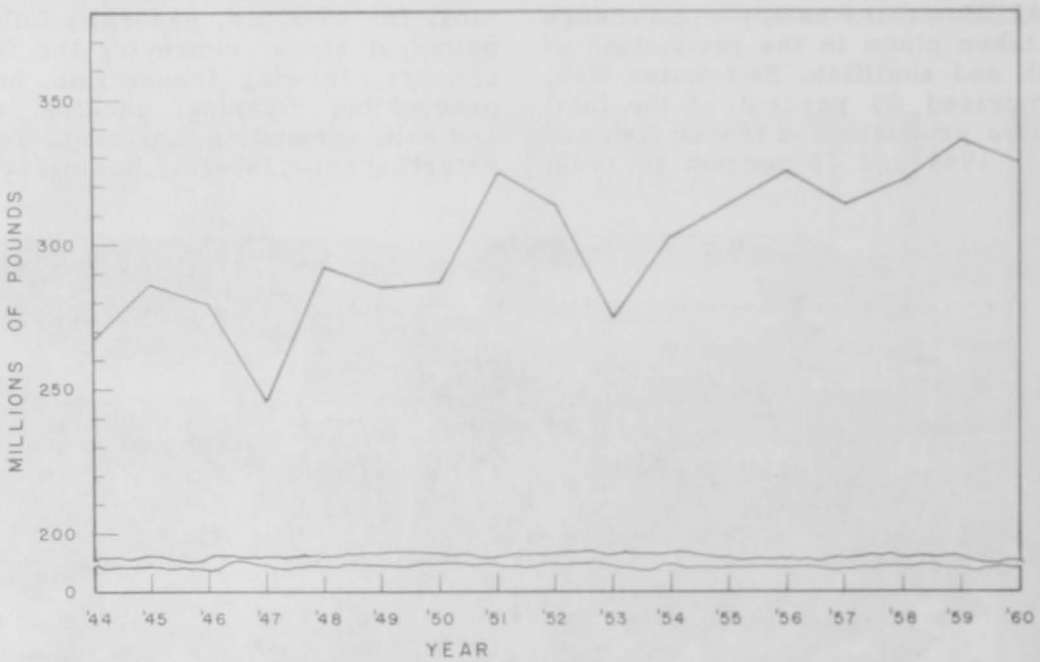

Figure 13.--United States production of frozen fish and shellfish, 1944-60.

Byproducts also are utilized. Freezing round fish does not require nearly as many operations. The end result of the extensive processing required in canning is that the fishermen's share of the retail price for canned fishery products is smaller than is the share obtained from such other products as fresh, unprocessed fish or shellfish.

Canned fishery products have the advantages of being transported without requiring special handling, and of maintaining quality throughout a long shelf life.

Producers' margins for canned tuna increased from 1950 to 1954, but declined after that (table 23). A general downward trend in the fishermen's share for canned pink salmon began in 1952 (table 24). During the period 1950-60, canners' costs in the United States rose with the higher costs of equipment replacement, increased wages, and increased marketing costs. (All fishery employees except cannery workers were exempted from minimum wage provisions in the Fair Labor Standards Act of 1938. This law has now been amended and its coverage extended to include all employees engaged in shore-based fishery occupations.) These added expenses increased the marketing margin

TABLE 23.--Landings and prices for yellowfin tuna, and procucers' margins for canned light meat tuna, 1950-60[1]

Year	Yellowfin tuna landings		Prices per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round weight)	Canned[2]	Retail (Canned)	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	92,424	14,242	15	36	94	38
1951.....	73,692	11,363	15	36	88	41
1952.....	125,429	19,805	16	37	87	43
1953.....	89,203	14,272	16	37	87	43
1954.....	67,061	11,514	17	40	90	44
1955.....	78,283	12,024	15	36	87	41
1956.....	92,065	12,447	14	31	80	39
1957.....	83,001	11,000	13	31	79	39
1958.....	80,783	10,906	14	31	81	38
1959.....	86,040	11,159	13	30	81	37
1960.....	168,536	20,966	13	29	80	36

[1] San Pedro, Calif., production of yellowfin and Bureau of Labor Statistics retail prices for the United States.
[2] Conversion factor 0.432 applied to fish when canned.

TABLE 24.--Landings and prices of pink salmon, and producers' margins for canned pink salmon, 1950-60[1]

Year	Pink salmon landings		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round weight)	Canned[2]	Retail[3] (Canned)	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	85,728	6,767	8	12	53	23
1951.....	113,666	13,137	12	17	60	28
1952.....	79,510	7,502	9	14	54	26
1953.....	62,677	5,196	8	12	52	23
1954.....	88,692	7,908	9	13	53	25
1955.....	96,496	8,568	9	13	58	22
1956.....	102,151	9,256	9	14	61	23
1957.....	54,083	5,881	11	16	63	25
1958.....	120,698	11,055	9	14	62	23
1959.....	48,047	4,921	10	15	62	24
1960.....	52,577	6,815	13	19	66	29

[1] Alaskan production of pink or humpback salmon and Bureau of Labor Statistics retail prices for the United States.
[2] Conversion factor 0.67 applied to fish when canned.
[3] Price year May-April.

and in so doing lowered the producers' margins.

Another cause of the decline in producers' margins, especially for canned tuna, has been the serious competition from foreign products. Although the supply of canned tuna has greatly increased over the past few years, the increase in supply has resulted from United States processors using imported tuna, primarily from Japan, rather than domestically caught tuna for canning (fig. 14). In 1959, for the first time, more canned tuna was produced from imported than from domestic tuna.

Since only the usable portion of the tuna is shipped, United States canneries benefit from reduced shipping costs. Also, the extensive use of imported cooked loins results in a substantial saving in labor costs of cannery personnel employed in the butchering, precooking, and cleaning operations. The amount of imported canned tuna has increased, whereas the pack from the domestic catch has remained static. The declining demand for the domestic catch by the canneries is reflected in lower producers' margins. In recent years domestic fishermen have stopped using the hook-and-line method of catching tuna, and were able to lower their costs by utilizing the more efficient and competitive purse seine method of fishing.

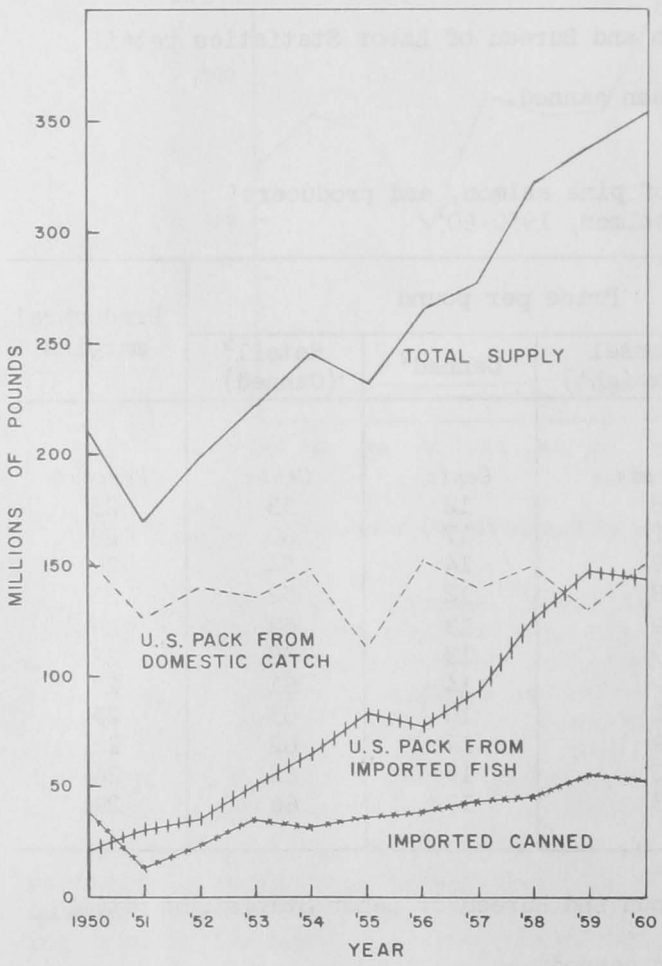

Figure 14.--U.S. supply of canned tuna, 1950-60.

Imports have not had as serious an effect on producers' margins for canned salmon as they had on margins for canned tuna. Salmon runs have declined, causing the production of canned salmon to decrease. This fact is reflected in the statistics shown in table 25. As the salmon runs declined in volume, fishermen's ex-vessel prices increased. Retail prices, however, increased more than did ex-vessel prices. Thus producers' margins declined for this product.

Producers' Margins for Shellfish

Fishermen have received a consistently higher margin for shellfish than for fish. The level of producers' margins for all shellfish included in this report was relatively stable from 1950 to 1954, ranging from 49 percent in 1954 to 53 percent in 1952. Beginning in 1954, the fishermen's share increased rapidly reaching 58 percent of the retail price in 1956. Producers' margins, however, have been declining since that time (fig. 6).

Producers' margins have been increasing for both oysters and frozen shrimp. The opposite is true for fresh sea scallops, whereas the producers' margins for lobsters have maintained a fairly stable level. Wide yearly variations occurred in the levels of producers' margins for fresh shrimp and crab meat (tables 26-29).

Strong demand helps maintain high producers' margins for shellfish. In some instances--lobsters, for example--shell fish are considered delicacies and command high prices on the retail market. In view of this fact, it is not surprising that research by the Bureau of Commercial Fisheries (1955) has shown that families with incomes in excess of $5,000 a year serve fresh or frozen shellfish more frequently than do those with lower incomes. The search for new products that will stimulate consumption of shellfish among low-income families is an important aspect of this industry.

TABLE 25.--Supply of canned salmon, 1950-60

Year	United States pack		Canned imports		Total supply	Canned exports	Total available for U. S. consumption
	Weight	Ratio to total supply	Weight	Ratio to total supply			
	Million pounds	*Percent*	*Million pounds*	*Percent*	*Million pounds*	*Million pounds*	*Million pounds*
1950.....	206.9	99.8	0.4	0.2	207.3	1.7	205.6
1951.....	223.0	99.7	0.6	0.3	223.6	2.1	221.5
1952.....	214.3	95.7	9.5	4.3	223.8	1.4	222.4
1953.....	187.8	93.9	12.2	6.1	199.9	2.3	197.7
1954.....	199.8	94.6	11.4	5.4	211.2	7.3	203.9
1955.....	157.8	91.4	14.6	8.6	172.5	10.4	162.1
1956.....	168.2	85.4	28.8	14.6	197.1	5.2	191.8
1957.....	153.9	86.3	24.4	13.7	178.3	6.7	171.6
1958.....	179.1	86.0	29.2	14.0	208.4	9.2	199.1
1959.....	118.3	79.2	31.1	20.8	149.5	13.8	135.7
1960.....	136.0	87.7	19.1	12.3	155.1	11.9	143.2

TABLE 26.--Landings and prices of blue crabs, and producers' margins for fresh crabmeat, 1950-60[1]

Year	Blue crab landings		Price per pound			Producers' margins
	Quantity	Value	Ex-vessel (Round weight)	Picked Meat[2]	Retail (Picked)	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Cents*	*Percent*
1950.....	73,918	2,652	4	28	89	31
1951.....	64,757	2,370	4	29	104	28
1952.....	61,036	2,449	4	32	92	35
1953.....	58,697	2,648	5	36	112	32
1954.....	51,543	2,086	4	32	89	36
1955.....	42,119	2,339	6	44	122	36
1956.....	46,953	3,278	7	55	106	52
1957.....	53,249	3,197	6	47	124	38
1958.....	44,849	2,488	6	44	123	36
1959.....	42,335	3,221	8	60	113	53
1960.....	66,338	3,535	5	42	120	35
+						

[1] Chesapeake Bay area production of blue crabs, hard, and Baltimore retail market prices.

[2] Conversion factor 0.127 applied to picked crab meat.

TABLE 27.--Landings and prices of oysters, and producers' margins for shucked fresh oysters, 1950-60[1]

Year	Oysters landings[2]		Price per pound		Producers' margins
	Quantity	Value	Ex-vessel	Retail	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Percent*
1950.....	29,954	11,095	37	72	51
1951.....	29,598	11,969	40	81	49
1952.....	34,418	14,877	43	85	51
1953.....	36,945	14,727	40	84	48
1954.....	41,587	18,860	45	85	53
1955.....	39,227	17,802	45	87	52
1956.....	37,064	18,692	50	98	51
1957.....	34,234	17,191	50	104	48
1958.....	37,530	20,795	55	98	56
1959.....	33,322	20,607	62	107	58
1960.....	27,111	19,310	71	114	62

[1] Chesapeake Bay area production and Baltimore retail market prices for standard grade oysters.

[2] Production in pounds and value of meats.

TABLE 28.--Landings and prices of shrimp, and producers' margins for large shrimp (21-25 count), 1950-60[1]

Year	Shrimp landings[2]		Price per pound		Producers' margins
	Quantity	Value	Ex-vessel	Retail	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Percent*
1950[3]	15,752	7,341	47	79	59
1951[3]	20,063	9,785	49	81	60
1952[3]	20,542	10,680	52	85	61
1953[3]	23,260	14,707	63	108	58
1954[3]	24,570	11,895	48	98	49
1955[3]	22,006	12,075	55	89	62
1956	21,639	14,398	67	99	68
1957	18,591	13,765	74	115	64
1958	17,428	13,138	75	114	66
1959	18,224	10,248	56	109	51
1960	18,166	10,793	59	96	61

[1] Gulf area production and Boston retail market prices.
[2] Heads-off weights and prices.
[3] Estimated.

TABLE 29.--Landings, prices, and producers' margins for fresh chicken lobsters, 1950-60[1]

Year	Lobster landings		Price per pound		Producers' margins
	Quantity	Value	Ex-vessel	Retail	
	Thousand pounds	*Thousand dollars*	*Cents*	*Cents*	*Percent*
1950	18,353	6,412	35	63	56
1951	20,760	7,214	35	63	56
1952	20,036	8,512	42	84	50
1953	22,300	8,411	38	76	50
1954	21,668	8,087	37	75	49
1955	22,718	8,716	38	70	54
1956	20,572	9,120	44	85	52
1957	24,403	8,954	37	82	45
1958	21,312	10,445	49	92	53
1959	22,329	11,253	50	97	52
1960	24,014	10,967	46	94	49

[1] Maine production and Boston retail market prices.

SUMMARY

A producer's margin is the share he receives of the retail price that the consumer pays for the product. In this report the margin is expressed as a percentage of the retail price. Conversion factors are used to make adjustments in ex-vessel prices in order to compensate for the changes occurring in the product during processing, and thus permit calculation of the producers' share of retail prices. The marketing margin is defined as the difference between the price a consumer pays for a pound of fish or shellfish and the price the fishermen receives for the same quantity. This report gives the reader an overall picture of the relative size of producers' margins in a wide variety of circumstances.

Any costs that influence marketing margins also affect producers' margins, since the two are interrelated. Such costs as (1) wages, (2) transportation, (3) packaging, and (4) storage have been increasing. Mark-up policies followed by wholesalers and retailers influence producers' margins also.

Other factors affecting the level of producers' margins include (1) fluctuations in retail prices, (2) changes in the types and costs of marketing services, (3) amount of processing necessary to market the product, (4) marketing costs, (5) changes in supply and demand, and (6) the channels of distribution necessary for marketing fishery products.

The trends in the producers' margins for various species of fresh, frozen, and canned fish and shellfish were discussed. The main cause of declining producers' shares for fresh fish has been the shift in consumer preference from fresh to frozen fish. Ease and length of storage and transportation have made frozen products more attractive to retailers, and the lesser amount of preparation needed has caused consumers to prefer frozen fishery products. Another factor helping to account for the higher margins for frozen fish as compared to fresh fish is the policy of processors buying large quantities of fish and shellfish during the peak production months. This results in lower acquisition costs for the raw material and more stable prices for the processed products. These savings in marketing costs help keep retail prices low and thus improve producers' margins.

Compared to other forms of processing, canning involves a large number of different operations. The added cost lowers producers' margins for canned fishery products. Increasing production costs, and greater competition from foreign producers in the tuna industry, and declining salmon runs which resulted in very high retail prices have been the chief causes of the declining trends in producers' margins for canned tuna and canned salmon. The domestic tuna industry is becoming more competitive with its foreign counterparts through the increased use of the purse seine fishing method.

Fishermen receive higher margins for shellfish than for fish. A strong demand helps maintain high producers' margins for shellfish. These high margins also reflect payment for services fishermen perform prior to lending their catches.

ACKNOWLEDGMENT

All data used in computing producers' margins were prepared by Bureau of Commercial Fisheries personnel, except data specifically credited.

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GPO 937100