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FISHERMEN'S GUARANTEE FUND:

AN ANALYSIS OF THE EFFECT OF INCREASED

FEES ON EARNINGS FROM VESSEL OPERATIONS

by

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U.S. NATIONAL MARINE FISHERIES SERVICE
ECONOMIC RESEARCH DIVISION

National Marine Fisheries Service

Economic Research Division

Fishermen's Guarantee Fund: An Analysis of the Effect of Increased Fees on Earnings from Vessel Operations

by Bruno G. Noetzel

March 21, 1973

1. Introduction

The Fishermen's Protective Act of 1967 (Public Law 90-482; 22 U.S.C. 1971-1977) and subsequent regulations provide for establishing in the Treasury of the United States of a separate account (the fund) for purposes outlined in section 7 of the Act. Revenues to the fund come from fees established by regulation and paid by the owners of vessels entering into agreements under this section. Responsibility for administration of section 7 of the Act is now vested in the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service.

In a memorandum (Memo) of March 6, 1973, from the Acting Chief, Financial Assistance Division, to the Associate Director for Resource Utilization it was stated that the fund has been insolvent since FY 1972, and that without increased revenue the fund cannot be operated properly. It was further stated that the fund's deficit condition has resulted from inadequate ($60K annually) appropriations to the fund. The real issue now is the source of increased revenues, which are needed to make the fund operative. The following analysis has been requested from the Economic Research Division by the Office of Resource Utilization, to assist the Office in deciding on the appropriate solution to the problem brought up in the FAD's memo.

2. Present Status of the Fund

a. Regulations Presently in Force

Under provisions of section 7(a) of the Act the Secretary, upon receipt of an application filed with him shall enter into an agreement with the owner of any vessel of the U.S. which is documented or certificated as a commercial fishing vessel. Such agreement shall provide that, if said vessel is seized by a foreign country and detained under the conditions of section 2 of this Act, the Secretary shall guarantee--

"(1) the owner of such vessel for all actual costs, except those covered by section 3 of this Act, incurred by the owner during the seizure and detention period and as a direct result thereof, as determined by the Secretary, resulting (A) from any damage to, or destruction of, such vessel, or its fishing gear or other equipment, (B) from the loss or confiscation of such vessel, gear, or equipment, or (C) from dockage fees or utilities;

"(2) the owner of such vessel and its crew for the market value of fish caught before seizure of such vessel and confiscated or spoiled during the period of detention; and

"(3) the owner of such vessel and its crew for not to exceed 50 per centum of the gross income lost as a direct result of such seizure and detention, as determined by the Secretary.

Subsection (c) of section 7 provides that "the Secretary shall from time time establish by regulation fees which shall be paid by the owners of vessels entering into agreements under this section. Such fees shall be adequate (1) <u>to recover the cost of administering</u> this section, and (2) <u>to cover a reasonable portion of any payments</u> made by the Secretary under this section. The amount fixed by the Secretary shall be predicated upon <u>at least 33 1/3 per centum of the contribution by the Government</u>. All fees collected by the Secretary shall be credited to a separate account established in the Treasury of the U.S. which shall remain available without fiscal year limitation to carry out the provisions of this section. All payments under this section shall be made first out of such fees so long as they are available, and thereafter out of funds which are hereby authorized to be appropriated to such account to carry out the provisions of this section."

Subsection (e) of section 7, as amended on October 27, 1972 (P.L. 92-594) reads as follows: "(e) The provisions of this section shall be effective until July 1, 1977."

Fees referred to in subsection (c) has been established by Rules and Regulations under Title 50 - Wildlife and Fisheries, Chapter II, Subchapter F - Aid to Fisheries, Part 258 - Fishermen's Protective Act Procedures as amended on June 28, 1972 (Fed. Reg. Vol. 37, No. 129, July 4, 1972):

§ 258.5 Fees

(a) The fees are established to provide for payment of the administrative costs and at least one-third of the estimated claims to be paid from the fund. They are set on the basis of anticipated losses projected from prior experience. The fees may be adjusted from time to time by amendment to this part at any time, after appropriate notice, in order to meet the requirements of the Act.

(b) Fees to be paid by an applicant for guarantee agreements executed on or after July 1, 1972, and covering the period terminating on February 8, 1973, unless extended, shall be as follows: For each vessel $60 plus $1.80 per gross ton as listed on the vessel's documents. Fractions of a ton are not included.

(c) No return of a fee or portion of a fee will be made after a guarantee agreement is executed by the Secretary. Failure to pay increased fees within 30 days of adjustment shall constitute a basis for termination of the guarantee agreement.

(d) A guarantee agreement may, with the consent of the Secretary, be assigned to a new owner of a vessel if the ownership of that vessel is transferred during the period in which the agreement on that vessel is in force.

b. Agreements in FY 1973

For FY 1973, there are in effect 104 guarantee agreements with tuna vessel owners, and 67 with shrimp vessel owners. As of March 13, 1973, the tuna vessels fall in the following size categories:

100-499 gross tons	23 vessels (22 percent)
500-999 "	63 vessels (60 percent)
1,000-1,599 "	18 vessels (18 percent)

The size distribution of shrimp vessels is as follows:

less than 50 gross tons	4 vessels (6 percent)
50- 99 " "	34 vessels (51 percent)
100-149 " "	21 vessels (31 percent)
150-199 " "	8 vessels (12 percent)

The average fees paid amount to $1,496 for a tuna vessel, and $253 for a shrimp vessel, giving a total of $172,596 as revenue to the fund.

c. Past and Anticipated Claims

In the past 4 years (FY 1969 -- FY 1972) there were 63 seizures resulting in claims for a total amount of $632,588.17 (including 5 claims estimated at $47,600). All seizure cases involved tuna vessels only. Claims were based on provisions of paragraph (1) of section 7(a) of the Act ($1,889.22 per case), and of paragraph (3) of section 7(a) of the Act ($8,196.78 per case).

For FY 1973, the cost relating to 45 actual seizures through February 17, 1973, has been estimated by FAD (see memo) at $475,000 (based on average cost in the past).

d. Needs for Revenues through FY 1973

As indicated in FAD's memo, there was a deficit of $74,949.31 in the fund at the end of FY 1972. If appropriated, this amount plus the $241,000 appropriated during FY 1969 - FY 1972 brings the contribution to the fund by the Government up to 49.94 percent (as compared to 75 percent permitted by the Act).

For FY 1973, in addition to the appropriated $61,000 there is a need for further appropriation of $260,704 (based on estimated cost of claims). The total contribution to the fund by the Government will then be 67.73 percent, still within the limits provided by the Act.

With the two additional appropriations ($74,949 + $260,704) the Government's contribution to the fund over the entire 5 year period (FY 1969 - FY 1973) would be brought up to 63.78 percent.

3. Effect of Increased Fees on Vessel Earnings

While the contribution of the Government to the fund is limited to 75 percent of the cost, there is no explicit limit with regard to fees. The Act provides that "fees shall be adequate ... to cover a reasonable portion of any payments made by the Secretary...", and under the regulations presently in force "fees are established to provide for payment of... at least one-third of the estimated claims..." (see section 2a of this report). Fees may be adjusted at any time, after appropriate notice. Let us consider how increased fees would affect the earnings from vessel operations in the tuna and shrimp fisheries.

a. Earnings in Tuna Vessel Operations

The cost structure presented in table 1 is based on data for 1970 and 1971 on operations of two distinct groups of tuna seiners. The group of medium seiners contains vessels from 278 to 499 gross tons, the average vessel being 388 gross tons (8 vessel years of operations). This group is representative of the agreement vessels of less than 500 gross tons (22 percent of total - see section 2b of this report).

The group of large seiners is made up of vessels from 715 to 923 gross tons (average 765 gross tons). The cost structure for this group reflects data for 22 vessel years of operations. These costs are representative for agreement vessels in the size category from 500 to 999 gross tons (60 percent of total). Federal income tax as shown in table 1 is based on the corporate tax schedule: 22 percent of total taxable income, plus 26 percent surtax on the excess over $25,000 of taxable income. This tax schedule was chosen for reason of simplicity. The effects of increased fees on earnings will be discussed later on.

b. Earnings in Shrimp Vessel Operations

Table 2 presents the cost structure for shrimp trawlers, based on 40 vessel years of operation (1970-1971). This sample includes vessels from 57 to 149 gross tons (average size 90 gross tons), thus representing agreement vessels in the size categories 50-99 and 100-149 gross tons as shown before (82 percent of total). The average income before taxes was $5,439, or 7.9 percent of the gross revenue.

c. Effect of Increased Fees

Assume that the total amount of deficit (i.e., $74,949 + $260,704 = $335,653) has to be covered by increased fees only.

Case 1: Fees distributed equally (tuna and shrimp vessels).

It would require an increase by 194.6 percent of the present fees, i.e., the present fees would have to be almost trippled. The increment in fees would be distributed as follows:

Vessels Type	Vessels Number	Average gross tons	Present fees $	Increment in fees ($) per vessel	Increment in fees ($) Total
Tuna	23	330	654.30	1,273.26	29,285
Tuna	63	832	1,558.49	3,032.82	191,068
Tuna	18	1,273	2,350.50	4,574.07	82,333
Shrimp	67	107	253.02	492.37	32,988
				Total increment	$335,674

In this case the Government's contribution over the 5-year period ($302,000) would be 27.3 percent of the cost of claims. As for earnings from vessel operations, the increment in fees would cause a decrease in income before taxes by the following percentages:

medium tuna seiner	2.7	(or .3% of gross revenue)
large tuna seiner	1.8	(or .3% of gross revenue)
shrimp trawler	9.0	(or .7% of gross revenue)

Case 2: Fees raised for tuna vessels only.

It would require an increase for tuna vessels by 215.8 percent of the present fees (present fees for tuna vessels would be more than trippled). The increment would be distributed as follows:

Vessels Type	Number	Increment in fees ($) per vessel	Total
Tuna	23	1,411.98	32,475
Tuna	63	3,363.22	211,883
Tuna	18	5,072.38	91,303
Shrimp	67	0	0
		Total increment	$335,661

Government's contribution remains unchanged (as in Case 1). Income before taxes for tuna vessels would decrease by:

medium seiner	3.0 percent	(or .3% of gross revenue)
large seiner	2.0 percent	(or .3% of gross revenue)

Assume that the total amount of deficit ($335,653) has to be covered partly by additional appropriations, and partly by increased fees, with the present fees being doubled.

Case 3: Fees distributed equally (as in Case 1).

Additional appropriations would amount to $163,207, which would raise the total Government's contribution to 42 percent of total cost of claims (from $302,000 to $465,207). The increment in fees would then be distributed as follows:

Vessels Type	Number	Increment in fees ($) per vessel	Total
Tuna	23	654.30	15,049
Tuna	63	1,558.49	98,185
Tuna	18	2,350.50	42,309
Shrimp	67	253.02	16,953
		Total increment	$172,496

These increased fees would cause a decrease in income before taxes by the following percentages:

medium tuna seiner	1.4	(or .14% of gross revenue)
large tuna seiner	.9	(or .14% of gross revenue)
shrimp trawler	4.7	(or .37% of gross revenue)

Case 4: Fees doubled for tuna vessels only.

Additional appropriations would amount to $180,160 (contribution up to $482,160, or 43.5 percent of total claim cost). The increment in fees would be distributed as in Case 3, except for shrimp trawlers, where there would be no increase in fees (the $16,953 would be appropriated). Changes in income before taxes for tuna vessels would be as in Case 3.

4. Summary

The anticipated deficit in the fund by the end of FY 1973 amounts to $335,653. Three solutions to the problem were analyzed.

Solution 1 - The total amount of deficit will be covered by additional appropriations. For the entire 5-year period the contribution by the Government would come up to 63.8 percent (i.e., below the 75 percent as the upper limit provided for in the Act).

Solution 2 - The total amount of deficit will be covered by increased fees from vessel owners, with no additional appropriations. Two cases were taken into account:

Case 1 - Where fees for tuna vessels and shrimp vessels will be increased in the same proportion (by 194.6 percent).

Case 2 - Where fees for shrimp vessels will remain unchanged, and fees for tuna vessels will be increased by 215.8 percent to cover the anticipated deficit.

In Case 1, income before taxes for a tuna vessel would decrease by 1.8 or 2.7 percent, depending on the size of vessel, and that for a shrimp trawler by 9.0 percent.

In Case 2 the income for a tuna vessel would decrease by 2.0 or 3.0 percent, depending on the size of vessel.

In both cases the result would be a contribution by the Government of 27.3 percent over the 5-year period. In the history of the fund no claim was made by shrimp vessel owners, and this is the reason for considering Case 2.

Solution 3 - The total amount of deficit will be covered partly by appropriations, and partly by doubling of fees. Two cases were analyzed:

Case 3 - Where additional appropriations will amount to $163,207, and fees will be doubled both for tuna and shrimp vessels.

Case 4 - Where fees for tuna vessels only will be doubled (fees for shrimp vessels remain unchanged), and additional appropriations will amount to $180,160. In Case 3, income before taxes for a tuna vessel would decrease by .9 or 1.4 percent (depending on the size of vessel), and for a shrimp vessel by 4.7 percent. The total contribution by the Government would come up to 42 percent.

In Case 4, the effect on earnings of tuna vessels would be the same as in Case 3 (.9 or 1.4 percent), and the contribution by the Government would be 43.5 percent.

Table 1.--Cost structure of tuna purse seiners in 1970 and 1971 (average per vessel and year)

	Medium seiner		Large seiner	
	$	%	$	%
Gross revenue	451,328	100	1,143,504	100
Trip expenses	61,935	13.8	148,823	13.0
Crew (shares & bonuses)	194,167	43.0	468,968	41.0
Repair & maintenance	45,830	10.2	77,907	6.8
Gear & supplies	20,786	4.6	23,150	2.0
Insurance	29,914	6.6	56,041	4.9
Payroll taxes	8,911	2.0	14,956	1.3
Miscellaneous	15,557	3.4	28,253	2.5
Interest	3,810	0.8	54,081	4.7
Depreciation	23,830	5.3	105,730	9.3
Total costs	404,740	89.7	977,909	85.5
Income before taxes	46,588	10.3	165,595	14.5
Corporate income taxes	15,862	3.5	72,986	6.4
Net after taxes	30,726	6.8	92,609	8.1

Table 2.--Cost structure of shrimp trawlers in 1970-71 (average per vessel and year)

	$	%
Gross revenue	68,938	100
Trip expenses	12,919	18.7
Crew (shares & bonuses)	23,131	33.6
Repair & Maintenance	8,483	12.3
Gear & supplies	4,651	6.7
Insurance	3,845	5.6
Payroll taxes	519	.8
Miscellaneous	1,195	1.7
Interest	1,510	2.2
Depreciation	7,245	10.5
Total costs	63,499	92.1
Income before taxes	5,439	7.9