FRESH AND CHILLED ATLANTIC SALMON FROM NORWAY

Determination of the Commission in Investigation No. 701–TA–302 (Final) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigation

USITC PUBLICATION 2371

APRIL 1991

Determination of the Commission in Investigation No. 731–TA–454 (Final) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigation

United States International Trade Commission
Washington, DC 20436

UNITED STATES INTERNATIONAL TRADE COMMISSION

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CONTENTS

CONTENTS

Tables

CONTENTS

Tables--Continued

CONTENTS

Tables--Continued

Figures

CONTENTS

Figures--Continued

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigations Nos. 701-TA-302 (Final) and 731-TA-454 (Final)

FRESH AND CHILLED ATLANTIC SALMON FROM NORWAY

Determinations

On the basis of the record[1] developed in the subject investigations, the Commission determines,[2] pursuant to sections 705(b) and 735(b) of the Tariff Act of 1930 (19 U.S.C. §§ 1671d(b) and 1673d(b)) (the act), that an industry in the United States is materially injured by reason of imports from Norway of fresh and chilled Atlantic salmon,[3] provided for in subheading 0302.12.00 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce to be subsidized by the Government of Norway and sold in the United States at less than fair value (LTFV).

Background

The Commission instituted the countervailing duty investigation effective June 26, 1990, following a preliminary determination by the Department of Commerce that imports of fresh and chilled Atlantic salmon from Norway were being subsidized within the meaning of section 703(a) of the act (19 U.S.C. § 1671b(a)). The Commission instituted the antidumping investigation effective October 1, 1990, following a preliminary determination by the Department of

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[1] The record is defined in sec. 207.2(h) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(h)).

[2] Acting Chairman Brunsdale dissenting.

[3] Atlantic salmon is the species Salmo salar. The product "fresh and chilled Atlantic salmon" refers to fresh whole or nearly whole Atlantic salmon, typically (but not necessarily) marketed gutted, bled, and cleaned, with the head on, and packed in fresh-water ice ("chilled"). Excluded are fresh Atlantic salmon that has been cut into fillets, steaks, and other cuts; Atlantic salmon that is frozen, canned, smoked, or otherwise processed; and other species of fish, including other species of salmon.

Commerce that the subject imports were being sold at LTFV within the meaning of section 733(a) of the act (19 U.S.C. § 1673b(a)).

Notice of the institution of the Commission's investigations and of a public hearing to be held in connection therewith was given by posting copies of notices in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing notices in the Federal Register on August 1, October 31, November 21, and December 27, 1990 (55 F.R. 31246, 45867, 48701, and 53203, respectively). The hearing was held in Washington, DC, on February 26, 1991, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF THE COMMISSION

On the basis of the record compiled in these investigations, the Commission determines that a domestic industry is materially injured by reason of imports of fresh and chilled Atlantic salmon from Norway that the Department of Commerce has determined to be subsidized and sold in the United States at less than fair value.

I. Like product and domestic industry

As a threshold matter in title VII investigations, the Commission must determine what constitutes the like product and domestic industry. The statute defines domestic industry as "the domestic producers as a whole of a like product. . . ."[1] "Like product," in turn, is defined as "a product which is like, or in the absence of like, most similar in characteristics and uses with" the articles subject to investigation.[2]

The Commission's decision concerning like product is factual and is made on a case-by-case basis.[3] The Commission traditionally has considered: (1) physical characteristics and uses, (2) interchangeability, (3) channels of distribution, (4) customer and producer perceptions, (5) common manufacturing facilities and employees, and (6) price.[4] No single factor is dispositive, and the Commission may consider other factors. The Commission has not drawn distinctions based on minor physical differences,[5] and instead has looked for

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[1] 19 U.S.C. § 1677(4)(A).
[2] 19 U.S.C. § 1677(10).
[3] E.g., Asociacion Colombiana de Exportadores de Flores v. United States (ASOCOLFLORES), 12 CIT ___, 693 F. Supp. 1165, 1169 & n.5 (1988); 3.5" Microdisks and Media Therefor from Japan, Inv. No. 731-TA-389 (Final), USITC Pub. 2170 (March 1989) at 6.
[4] E.g., Sweaters Wholly or in Chief Weight of Manmade Fibers From Hong Kong, the Republic of Korea, and Taiwan, Invs. Nos. 731-TA-448-450 (Final), USITC Pub. 2312 (Sept. 1990) at 4-5; Certain All-Terrain Vehicles from Japan, Inv. No. 731-TA-388 (Final), USITC Pub. 2163 (March 1989) at 4.
[5] See generally, S. Rep. 249, 96th Cong., 1st Sess. 90-1 (1979).

clear dividing lines between articles before considering them to be separate like products.[6]

In these investigations, the Department of Commerce has defined the imported merchandise subject to investigation as fresh and chilled Atlantic salmon. The definition excludes: (1) all other species of salmon, (2) frozen, canned, or smoked salmon, and (3) salmon processed beyond bleeding, gutting, and cleaning.[7]

In the preliminary investigations, the Commission found the like product to consist of fresh and chilled Atlantic salmon.[8] The Commission considered and rejected an argument by the Norwegian respondents that the like product should be broader than the articles investigated by Commerce to include fresh Pacific salmon along with Atlantic salmon. The Commission also decided that steelhead trout should not be part of the like product.

These two issues have again arisen in these final investigations. Petitioner Coalition for Fair Atlantic Salmon Trade urges the Commission to adopt its like product finding from the preliminary investigations and not include Pacific salmon.[9] In advocating a like product that encompasses Pacific

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[6] E.g., Sweaters at 5.

[7] See Final Determination of Sales at Less Than Fair Value: Fresh and Chilled Atlantic Salmon from Norway, 56 Fed. Reg. 7661 (Feb. 25, 1991); Final Affirmative Countervailing Duty Determination: Fresh and Chilled Atlantic Salmon from Norway, 56 Fed. Reg. 7678 (Feb. 25, 1991):

> The product covered by this investigation is the species Atlantic salmon (Salmo salar) marketed as specified herein; the investigation excludes all other species of salmon: Danube salmon, Chinook (also called "king" or "quinnat"), Coho ("silver"), Sockeye ("redfish" or "blueback"), Humpback ("pink"), and Chum ("dog"). Atlantic salmon is a whole or nearly-whole fish, typically (but not necessarily) marketed gutted, bled, and cleaned, with the head on. The subject merchandise is typically packed in fresh-water ice ("chilled"). Excluded from the subject merchandise are fillets, steaks, and other cuts of Atlantic salmon. Also excluded are frozen, canned, smoked or otherwise processed Atlantic salmon.

[8] Fresh and Chilled Atlantic Salmon from Norway, Inv. Nos. 701-TA-302, 731-TA-454 (Preliminary), USITC Pub. 2272 (Apr. 1990) at 5-12.

[9] Petitioner's prehearing brief at 5-27.

salmon and steelhead trout, respondents focus mainly on information regarding competition between Atlantic and Pacific salmon.[10] As in the preliminary investigations, we define the like product as fresh and chilled Atlantic salmon.

A. Atlantic versus Pacific salmon

Atlantic salmon is a single species of salmon found naturally in the Atlantic Ocean, although farms on both coasts raise Atlantic salmon. The term "Pacific salmon" includes five different species of salmon found naturally in the Pacific Ocean: chinook, coho, sockeye, pink, and chum.[11] The Pacific salmon species vary in size and differ from Atlantic salmon to varying degrees.[12]

Because the wild catch of Atlantic salmon is illegal, commercial production of Atlantic salmon in the United States is by means of farming. By contrast, nearly all Pacific salmon is harvested wild, which entails completely different processes, equipment, and employees.[13] Farmed Atlantic salmon generally is more consistent in quality and supply than wild Pacific salmon.[14]

As respondents observe, there is information indicating some similarities between Atlantic and Pacific salmon in terms of interchangeability and customer

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[10] Respondents' prehearing brief at 3-17.

[11] Atlantic and Pacific salmon each belong to a separate genus as well. Final Staff Report to the Commission, Memorandum OINV-O-043, March 18, 1991 (Report) at A-5.

[12] Report at A-5.

[13] We do not agree with respondents that the Commission should give production differences little weight because they result only from a legal prohibition on the wild catch of Atlantic salmon and not from inherent differences between the fish. Respondents' prehearing brief at 13-15. The ban on the wild Atlantic harvest is in place in both Norway and the United States and has a very concrete effect on how Atlantic salmon is produced. The production method, in turn, determines the supply of Atlantic salmon produced and some of the salmon's physical characteristics. Arguing that a difference must result from biological factors ignores the very real commercial distinctions that result from the legal prohibition on the wild harvest of Atlantic salmon.

[14] Report at A-9-10.

perceptions. When Pacific salmon is sold on the fresh market it passes through similar channels of distribution as Atlantic salmon.

Nevertheless, the information of record indicates that these similarities are limited. The vast majority of Pacific salmon is ultimately frozen or canned, and much of it is exported.[15] By contrast, nearly all the subject Atlantic salmon is sold in the United States fresh.[16] The fact that most Pacific salmon is not sold in the fresh market suggests limited interchangeability between Pacific salmon, as a whole, and Atlantic salmon.[17] Salmon destined for freezing or canning generally does not share similar distribution channels or end-users with salmon bound for the fresh market: the former is largely sold to further processors and resold in the lower-end of the market in value-added product form, whereas Atlantic salmon is sold largely for resale to restaurants, the so-called white tablecloth market.[18] Finally, Pacific salmon is priced lower than Atlantic salmon.[19]

In sum, based on the fact that: (1) Atlantic and Pacific salmon belong to different species and genera; (2) Atlantic and Pacific salmon are produced to a large extent in an entirely distinct manner using different equipment and workforces; (3) Atlantic and Pacific salmon, as a whole, have limited interchangeability; (4) Atlantic salmon passes through separate channels of

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[15] Report at A-5.

[16] Report at A-4; petitioner's prehearing brief at 9.

[17] There are also geographic and seasonal differences in the marketing of Atlantic and Pacific salmon. Most fresh Pacific salmon is sold on the West Coast, whereas most of the subject imports enter the United States in the East Coast. Report at A-12; Prehearing Report at A-25. Moreover, Pacific salmon generally is harvested in the summer months, whereas the subject imports are in the U.S. market year-round. Report at A-5, A-46 n.100.

[18] Report at A-20-21.

[19] Report at A-46. In the final investigations respondents assert that the fresh/frozen distinction is not meaningful for like product purposes because all salmon starts out fresh. Respondents' prehearing brief at 16. Thus respondents themselves are against defining the like product to include only Pacific salmon ultimately destined for fresh consumption.

distribution than most Pacific salmon; and (5) the prices for Atlantic and Pacific salmon differ appreciably, we determine that it would not be appropriate to define the like product as including Pacific salmon.

We have also determined not to include a smaller subset of Pacific salmon -- particular Pacific salmon species -- in our like product definition. Research studies and Commission questionnaire respondents frequently named chinook and coho as substitutes for Atlantic salmon.[20] However, as with Pacific salmon generally, the majority of chinook and coho is harvested wild,[21] is ultimately frozen or canned,[22] and is generally priced lower than Atlantic salmon.[23] Of course, because chinook and coho, which are most similar to Atlantic salmon, do not warrant inclusion in the like product, it follows that the Pacific species more distinct from Atlantic salmon -- sockeye, pink and chum -- should also not be included.[24]

B. Steelhead trout

Petitioner opposes inclusion of steelhead trout in the like product.[25] Respondents urge the opposite conclusion.[26] Steelhead is farmed on both coasts and is also harvested wild in the Pacific Ocean. The appearance of its meat is apparently similar to Atlantic salmon; in fact, steelhead has sometimes been marketed as "salmon trout."[27]

Some steelhead farmers also farm Atlantic salmon.[28] Steelhead producers view their product as interchangeable with Atlantic salmon.[29] However, few

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[20] Report at A-46.
[21] Report at B-47.
[22] Id.
[23] Compare Report at B-57-58 with Report at A-52-54.
[24] We have also determined not to define the like product to encompass farmed Pacific salmon.
[25] Petitioner's prehearing brief at 6, n.6.
[26] Transcript of the Commission's hearing, Feb. 26, 1991, (tr.) at 163.
[27] Report at A-6, n.15.
[28] Report at B-45, n.1.
[29] Report at A-47.

purchasers listed steelhead trout as a substitute for the subject product.[30] This may be because the amount of farmed steelhead is small compared to farmed Atlantic salmon.[31] Steelhead is consistently priced below Atlantic salmon.[32] Given that: (1) steelhead trout and Atlantic salmon differ in genus and species, (2) prices of Atlantic salmon and steelhead differ significantly, (3) few purchasers listed steelhead as a substitute for Atlantic salmon, and (4) steelhead trout is also captured wild, we determine not to include steelhead in the like product.[33]

C. Atlantic salmon smolt

Atlantic salmon smolt are the juvenile salmon end-product of the fresh-water stage of salmon farming. Commerce's description of the subject imports does not include smolt, only full-grown salmon. Thus an issue is whether firms that engage in only fresh-water production produce a product "like" the subject imports such that they should be included in the domestic industry.[34] The Commission decided to include these exclusively fresh-water producers in the domestic industry in the preliminary investigations.[35]

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[30] Report at A-47 n.106.

[31] Compare Report at B-47 with Report at A-23, Table 3.

[32] Report at A-46. Another fish, rainbow trout, belongs to the same species as steelhead trout. Trout that mature in the ocean are known as steelhead; if in fresh water, they are known as rainbow. Report at A-6. Rainbow trout are generally much smaller than steelhead, and no party has mentioned rainbow as being competitive with steelhead or Atlantic salmon.

[33] In any event, inclusion of steelhead would not have materially affected our analysis of material injury given the very small quantities of steelhead reported. Report at B-47.

[34] Salt-water producers that raise smolts into adult salmon for sale to consumers, as well as vertically integrated producers that engage in both the fresh- and salt-water stages of salmon production, are members of the domestic industry because these firms' final product is adult salmon, which is "like" the subject imports.

We note that some fresh-water growers specialize in production and sales of "eyed eggs" (a growth stage several stages prior to the smolt stage), although they also produce some smolt. Report at A-19. Like smolt, eyed eggs have no commercial use other than to become adult salmon.

[35] USITC Pub. 2272 at 14.

Petitioner asserts that the Commission should include smolt in the like product definition as a "semifinished" product.[36] Respondents have not addressed the issue in these final investigations.

We agree with petitioner that the "semifinished" product like product analysis supports inclusion of smolt in the like product definition.[37] Smolts are destined to become adult salmon. Smolts have no independent use other than to become adult salmon. Smolts, as salmon, clearly embody the essential characteristics of the adult salmon. It is true that raising smolts to become adult salmon is a costly process that adds substantial value to the smolts, and that adult salmon and smolts are not interchangeable.[38] Nevertheless, balancing the several factors, we conclude that smolts are encompassed in the like product definition along with adult salmon.[39]

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[36] Petitioner's prehearing brief at 28-32.

[37] In deciding whether semifinished or component articles are like the finished products to which they pertain, the Commission has examined several factors: (1) the necessity for and cost of further processing; (2) the degree of interchangeability of articles at the different stages of production; (3) whether the article at the earlier stage is dedicated to use in the finished article; (4) whether there are significant uses or independent markets for the finished and unfinished articles; and (5) whether the article at an earlier stage of production embodies or imparts to the finished article an essential characteristic or function. Tungsten Ore Concentrates from the People's Republic of China, Inv. No. 731-TA-497 (Preliminary), USITC Pub. 2367 (March 1991) at 8, n.16; Certain Laser Light-Scattering Instruments and Parts Thereof From Japan, Inv. No. 731-TA-455 (Final), USITC Pub. 2328 (Nov. 1990) at 11, n.36.

[38] In at least one prior investigation the Commission noted that one would not generally expect interchangeability between a "finished" and "semifinished" article, and thus lack of interchangeability was not reason enough alone not to include the semifinished article in the like product. Certain Granite from Italy & Spain, Inv. Nos. 701-TA-289 and 731-TA-381-382 (Final), USITC Pub. 2110 (Aug. 1988) at 9. n.26.

[39] As an alternative to a like product analysis, the issue could be treated as a question of domestic industry. The grower/processor provision added by the 1988 Act is not strictly implicated in this case. 19 U.S.C. § 1677(4)(E). Although adult salmon are not strictly speaking a "processed agricultural product" compared to smolts, application of that two-part analysis provides further support for including smolt producers in the domestic industry. In this case, there clearly is a single, continuous line of production from smolts to adult salmon. Evidence of a commonality of economic interest between fresh-

(continued...)

Having defined the like product as fresh and chilled Atlantic salmon, including Atlantic salmon smolts, we define the domestic industry as U.S. producers of that like product.

II. Material retardation

In the preliminary investigations the Commission determined that the domestic Atlantic salmon industry, though young, was "established."[40] Accordingly, the Commission determined that a material retardation analysis was inappropriate, and proceeded to consider the investigation under the standard of material injury. The Commission noted that it would reexamine the issue if presented with new information in final investigations.

In the final investigations, petitioner argued in passing that the Commission could reasonably find that the industry is not established.[41] Respondents asserted that the Commission should adhere to its decision in the preliminary investigations and find the industry to be established.[42]

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[39](...continued)
and salt-water producers includes the fact that: (1) a majority of production of Atlantic salmon is accounted for by vertically integrated firms that engage in both fresh- and salt-water production, and (2) two strictly fresh-water producers are members of the petitioning coalition. See Frozen Concentrated Orange Juice From Brazil, Inv. No. 731-TA-326 (Final) at 10-11; Fresh, Chilled, or Frozen Pork from Canada, Inv. No. 701-TA-298 (Final), USITC Pub. 2218 (Sept. 1989) at 4 (two-part test).

[40] USITC Pub. 2272 at 15-18. Material retardation and material injury/threat are mutually exclusive standards. See, e.g., Certain Copier Toner from Japan, Inv. No. 731-TA-373 (Preliminary), USITC Pub. 1960 (March 1987) at 10, n.26. To determine whether domestic producers have "stabilized" their operations and are therefore established, the Commission has looked at several aspects of domestic operations: (1) when the domestic industry began production; (2) whether the production has been steady or start-and-stop; (3) the size of domestic production compared to the size of the domestic market as a whole; (4) whether the domestic industry has reached a reasonable "break even point"; and (5) whether the activities are truly a new industry or merely a new product-line of an established firm. Benzyl Paraben from Japan, Inv. No. 731-TA-462 (Final), USITC Pub. 2355 (Feb. 1991) at 8.

[41] Petitioner's prehearing brief at 48, n.124.

[42] Respondents' prehearing brief at 47-50.

There is no additional information adduced in the final investigations that would persuade us to alter our original assessment that the industry is "established." Since the preliminary investigations, several firms that had recently begun production have now made their first commercial sales.[43] Although the largest U.S. producer, Ocean Products, Inc., whose financial condition the Commission found to be "precarious" in the preliminary investigations, eventually went out of business and sold its assets to Connors Brothers, Ltd. of Canada, we believe that fact is more properly addressed in our consideration of material injury to the domestic industry rather than as an indication of whether the industry is established.

Accordingly, we find that the domestic Atlantic salmon industry is established. We therefore consider whether the domestic industry is materially injured or threatened with material injury by reason of LTFV and subsidized imports from Norway.

III. Condition of the industry

The statute directs the Commission to consider a number of factors in examining the condition of the domestic industry.[44] Because the circumstances of each industry are unique, the Commission must evaluate the industry's performance "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[45]

In this investigation, we are mindful of several distinctive features of the U.S. Atlantic salmon industry. First, although we have found the industry

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[43] Report at A-18.

[44] 19 U.S.C. § 1677(7)(C)(iii).

[45] Id. The legislative history of the antidumping and countervailing duty laws indicates that the Commission must evaluate the industry's condition in relation to that particular industry, and not in relation to other industries or manufacturers as a whole. H.R. Rep. No. 40, 100th Cong., 1st Sess. 127 (1987); S. Rep. No. 71, 100th Cong., 1st Sess. 115 (1987); S. Rep. No. 249, 96th Cong., 1st Sess. 88 (1979).

to be "established" for purposes of the statute, the industry is nevertheless young and emerging.[46] Second, the Atlantic salmon industry is governed by a three-year production cycle. Some industries are such that firms can respond quickly to changing supply, demand, or other market conditions by adjusting output, employment, or prices. Unlike those industries, the supply of U.S. Atlantic salmon, and the corresponding level of labor and other resources necessary to produce that supply, are largely fixed by production decisions made in previous years. Domestic producers' output of adult salmon is essentially a function of the amount of "juvenile" Atlantic salmon produced in prior years.

The U.S. market for fresh and chilled Atlantic salmon grew strongly over the period of investigation. In terms of quantity, annual apparent consumption nearly doubled from 1987 to 1989 to exceed 40 million pounds.[47] The increase in value terms in that period was less dramatic, but still over 50 percent, surpassing $160 million in 1989. Sizable growth in both quantity and value terms continued in 1990.

From 1987 to 1989, U.S. firms' capacity to produce "juvenile" Atlantic salmon -- eyed eggs, fry, and smolt -- rose substantially, as did production.[48] However, the full-year 1990 saw a leveling off in capacity and production of juvenile Atlantic salmon.[49] U.S. production of adult Atlantic salmon expanded by over 200 percent from harvest season 1987-88 to 1989-90 to exceed 600,000 fish.[50]

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[46] See Report at A-18 (start-up dates for U.S. producers).
[47] Report at A-13, Table 1.
[48] Report at A-22, Table 2.
[49] Id.
[50] Report at A-23, Table 3. Reported capacity to produce adult round salmon tripled from harvest season 1987-88 to harvest season 1989-90, whereas reported capacity to produce gutted salmon saw only a slight increase over that period. Id. Because several firms indicated that determining salt-water capacity was

(continued...)

For eyed eggs, fry, and smolt, annual shipments in terms of quantity followed the same trends as production -- growth from 1987 to 1989, followed by a leveling off in 1990.[51] In terms of value, annual smolt shipments increased several-fold from 1987 to 1989 to $6.2 million, and increased further to $7.3 million in 1990.[52] For gutted Atlantic salmon, shipments tripled from 1.2 million pounds in 1987-88 to 3.6 million pounds in 1989-90.[53] In value terms, gutted Atlantic salmon shipments also increased, but at a lesser rate, not quite doubling from $5.6 million in 1987-88 to $10.8 million in 1989-90.[54] The disparity in trends between quantity and value reflects a significant drop in unit value of shipments from harvest seasons 1987-88 and 1988-89 to harvest season 1989-90.[55]

Employment indicators also reflected growth during the period of investigation. The number of production and related workers more than doubled from 117 in 1987 to 265 in 1989.[56] Hours worked and total compensation showed comparable increases from 1987 to 1989. Employment figures for January-September 1990 were higher than those for the same period in 1989.[57]

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[50](...continued)
largely theoretical, Report at A-23, n.60, we have viewed capacity and capacity utilization rates with caution in our analysis. However, capacity utilization for production of adult round Atlantic salmon was below 35 percent in 1989-90, and capacity utilization for adult gutted Atlantic salmon was below 60 percent in 1989-90. Report at A-23, Table 3.

[51] Report at A-25, Table 4. In fact, reported eyed egg shipments decreased in 1990.

[52] Id.

[53] Report at A-27, Table 5.

[54] Id. For calendar year 1990, U.S. shipments were 4.1 million pounds, with a value of $14.0 million. Memorandum INV-O-050 (March 22, 1991) at 1.

[55] Report at A-27. Because Atlantic salmon producers must market the salmon once it is harvested, inventories are not held. Report at A-24.

[56] Report at A-29, Table 6.

[57] Id.

The financial performance of the domestic industry stands in stark contrast to the production and trade figures.[58] From 1987 to 1988, the industry's financial condition improved markedly. Net sales jumped more than four times. After posting a large operating loss in 1987, the domestic industry recorded an overall operating profit in 1988.[59]

However, the financial state of the U.S. Atlantic salmon industry declined precipitously in 1989. Net sales decreased from 1988 to 1989 while cost of goods sold and general, selling and administrative costs increased. Operating losses in 1989 were enormous. U.S. producers experienced a severe negative cash flow in 1989. The number of firms reporting operating losses increased from 1988 to 1989.[60] For the period of January-September 1990, net sales were well above the level recorded in the same period in 1989; nevertheless, the industry recorded a significant operating loss and negative cash flow.

As a result of financial setbacks, the largest U.S. producer, Ocean Products, Inc., ceased operations.[61] In August 1990, Ocean Products sold its assets to a Canadian firm, Connors Brothers Ltd., at terms that for purposes of confidentiality we can only describe as unfavorable.[62] Connors Aquaculture, Inc. began operations in September 1990 using the assets purchased from Ocean Products.

Because the U.S. Atlantic salmon industry is young, it is not unexpected to find expansion in such factors as capacity, production, shipments, and employment, as was seen between 1987 and 1989.[63] However, as noted above the

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[58] Because certain financial data are confidential, our discussion is limited to general terms.

[59] Report at A-30, Table 7.

[60] Id.

[61] Report at A-31.

[62] Report at A-33.

[63] Steady or increasing employment is expected also because of the three-year production cycle, which requires continued labor to tend to fish "planted" in previous years. Tr. at 24.

increase in capacity and production of juvenile salmon largely leveled off since 1989. This has occurred despite increasing demand in the U.S. market in 1990. From our understanding of the production cycle, a flattening in growth of production of young salmon indicates that adult salmon production will flatten as well. Thus the U.S. industry is not presently on the road to further expansion to achieve economies of scale in production which might enable it to lower unit costs and reestablish operating profits.

On the financial side, the condition of the industry is dire. As we noted in the preliminary investigations, the financial performance of a newer industry may not be of a similar level or nature as a more mature industry due to start-up costs or other factors.[64] However, given that the industry was profitable in 1988, its more recent financial performance is worse than would be anticipated even taking into account start-up conditions. Moreover, the fact that in 1990 the industry continued to post a failing financial performance despite having been in operation for several years leads us to conclude that the industry is materially injured.

In sum, we find that the U.S. Atlantic salmon industry is experiencing material injury, based on its extremely negative financial performance, including the failure of its largest producer in 1990. We also note the leveling of growth in production of juvenile salmon, which suggests a stagnation in the growth of the industry, despite growing U.S. demand.

III. Material injury by reason of subject imports

In these final investigations, the Commission must determine whether there is material injury or the threat thereof to the domestic industry "by reason of" the imports under investigation.[65] The statute directs the Commission to

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[64] USITC Pub. 2272 at 21.
[65] See 19 U.S.C. §§ 1671d(b), 1673d(b).

consider: (1) the volume of imports, (2) their effect on prices for the like product, and (3) their impact on domestic producers.[66] The Commission may in its discretion consider additional economic factors not specifically enumerated in the statute.[67]

The Commission may consider whether causes other than the subject imports are responsible for injury, but it is not to weigh causes.[68] The Commission need not determine that imports are the principal or a substantial cause of material injury in order to reach an affirmative determination. "Any such requirement has the undesirable result of making relief more difficult to obtain for industries facing difficulties from a variety of sources; industries that are often the most vulnerable to less-than-fair-value imports."[69] Instead, the Commission must determine whether imports are a cause of material injury.[70]

Imports of Atlantic salmon from Norway surged from 1987 to 1989.[71] Imports rose from 7.6 million kilograms in 1987, to 8.9 million kilograms in

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[66] See 19 U.S.C. § 1677(7)(B)(i).

[67] 19 U.S.C. § 1677(7)(B).

[68] See, e.g., Citrosuco Paulista v. United States, 12 CIT ___, 704 F. Supp. 1075, 1101 (1988); Alternative causes may include:

> the volume and prices of imports sold at fair value, contraction in demand or changes in patterns of consumption, trade, restrictive practices of and competition between the foreign and domestic producers, developments in technology, and the export performance and productivity of the domestic industry.

S. Rep. No. 249, 96th Cong., 1st Sess. 74 (1979). Similar language is contained in the House Report. H.R. Rep. No. 317, 96th Cong., 1st Sess. 47 (1979).

[69] S. Rep. No. 249, 96th Cong., 1st Sess. 74-75 (1979).

[70] See, e.g., LMI - La Mettali Industriale, S.p.A. v. United States, 13 CIT ___, 712 F. Supp. 959, 971 (1989), citing, British Steel Corp. v. United States, 593 F. Supp. 405, 413 (CIT 1984); Hercules, Inc. v. United States, 11 CIT ___, 673 F. Supp. 454, 481 (1987). See also, Iwatsu Elec. Co., Ltd. v. United States, Ct. No. 90-01-00016, Slip Op. 91-10 (Feb. 15, 1991) at 8-9 (Causation standard is satisfied if "injury is attributable, at least in part, to [the subject] imports"); Maine Potato Council v. United States, 613 F. Supp. 1237, 1244 (CIT 1985) (The Commission must reach an affirmative determination if it finds that imports are more than a "de minimis" cause of injury.).

[71] Report at A-43, Table 17.

1988, and then jumped further in 1989 to 11.4 million kilograms, for an overall increase of fully 50 percent. In value terms, imports also increased sharply, but at a slower rate, from $74.4 million in 1987 to $93.7 million in 1989.

Despite increases in absolute terms, in terms of market penetration Norwegian imports fell steadily by quantity from more than 75 percent in 1987 to 60.2 percent in 1989.[72] A similar decline was posted in market penetration by value terms, from more than 75 percent in 1987 to 62.5 percent in 1989. In 1990, subject imports fell sharply to 7.7 million kilograms, valued at $66.4 million. Subject imports by volume and value accounted for 36.7 percent and 40.8 percent, respectively, of apparent U.S. consumption in 1990.[73]

We have given less weight to the recent decline in imports in 1990 because it appears to be largely the result of the filing of the petition and/or the imposition of provisional antidumping and countervailing duties.[74] The petition was filed in this investigation in February 1990; the Commission issued its preliminary determinations in April 1990; Commerce made its preliminary CVD determination in June 1990, imposing a 2.45 percent ad valorem provisional duty;[75] and Commerce rendered its affirmative preliminary antidumping duty determination in October 1990, imposing interim duties on most firms ranging from 1.6 to 4.9 percent.[76] The drop in subject imports has been most pronounced since July 1990, subsequent to Commerce's preliminary CVD

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[72] Report at A-45, Table 18.

[73] INV-O-050 at 1-2.

[74] See USX Corp. v. United States, 11 CIT 82, 655 F. Supp. 487, 492 (1987); Philipp Bros., Inc. v. United States, 10 CIT 485, 640 F. Supp. 1340, 1346 (1986)("The Commission may disregard or give little weight to tactical maneuvering after the filing of an antidumping petition."); Rhone Poulenc, S.A. v. United States, 8 CIT 47, 592 F. Supp. 1318 (1984). One reason we are rendering our final determinations more than a year after the filing of the petition is respondents' request that Commerce delay issuance of its final determinations. 55 Fed. Reg. 43154 (Oct. 26, 1990).

[75] 55 Fed. Reg. 26727 (June 29, 1990).

[76] 55 Fed. Reg. 40418, 40421 (Oct. 3, 1990).

determinations.[77] In view of the precipitous nature of the drop in subject imports by the end of 1990, from record levels in 1989, it is likely that the Commission and/or Commerce proceedings played a role in the import decline.

Respondents claim that the decline in Norwegian imports in 1990 was the result of the appreciation of the Norwegian kroner against the U.S. dollar, and the institution of a freezing program in Norway to reduce the amount of fresh Norwegian Atlantic salmon available for export.[78] Although it is possible that these factors may have played some role, they cannot entirely account for the drastic decline that occurred in the second half of 1990.

In any event, the statute does not require the subject imports to be increasing either absolutely or relatively; rather, the Commission must consider whether the subject imports are significant.[79] We find that the volumes of imports from Norway over the period of investigation, and the increases in those volumes from 1987 to 1989, are significant. The subject imports are particularly significant when viewed together with information concerning the nature of the U.S. industry, the industry's condition over the period and information on prices for the like product.

Public and questionnaire information reveal that prices for U.S. Atlantic salmon fell up to a third or even more between mid- to late-1988 and the end of

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[77] See Petitioner's prehearing brief at Exhibit 23.

[78] Respondents' prehearing brief at 61-64. The program is believed to have resulted in only a slight decrease in supplies of fresh Norwegian Atlantic salmon from 1989 to 1990. Report at A-39 n.84. The existence of the program does suggest some ability of the Norwegian industry to control its fresh Atlantic supplies in a given year to serve the industry's goals.

[79] 19 U.S.C. § 1677(7)(C)(i). See, e.g., Iwatsu Elec. Co., Ltd. v. United States, Ct. No. 90-10-16, Slip op. 91-10 (Feb. 15, 1991) at 18-19; USX Corp. v. United States, 11 CIT 82, 85, 655 F. Supp. 487, 490 (1987).

1989.[80] Prices rebounded during 1990, then fell back somewhat at the end of 1990, but generally remained at levels below those recorded in September 1988.

Prices for the like product closely tracked prices for Norwegian Atlantic salmon over much of the period. Beginning in the middle of 1988, prices for Norwegian Atlantic salmon started to drop and continued to fall even after U.S. Atlantic salmon had left the market in the spring of 1989.[81] Prices for Norwegian Atlantic salmon reached their lowest point at the end of 1989, then climbed somewhat in 1990.

Although other factors may have contributed, the decline in U.S. prices for Atlantic salmon in 1988 and 1989 was due in large part to oversupply in the U.S. market.[82] Imports from Norway accounted for a large portion of the increased imports in 1989.[83] This suggests that Norwegian Atlantic salmon played a role in the price decline.[84] It is true that Norwegian Atlantic salmon generally oversold the like product during much of the period of investigation.[85] This fact does not mean, however, that Norwegian Atlantic salmon did not contribute to the price decline for U.S. Atlantic salmon.

Indeed, U.S. and Norwegian Atlantic salmon exhibit a high degree of substitutability, as Atlantic salmon is a near-commodity type product.[86]

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[80] Report at A-52-54, A-59 Table 19. The public source is data published by Urner Barry. Although this includes both U.S. and Canadian Atlantic salmon, prices for Atlantic salmon from the two countries are believed to be comparable. Report at A-50-51 n.123.

[81] Report at A-52-54, A-59 Table 19.

[82] Memorandum INV-O-048 (March 21, 1991) at 3.

[83] Report at A-43, Table 17. Indeed, the amount of the increase in imports of Atlantic salmon from Norway alone was greater than the total amount of U.S.-produced salmon shipped in harvest seasons 1988-89 or 1989-90.

[84] Most analysts agree that the Norwegian industry's rapid growth in output resulted in a world oversupply of fresh Atlantic salmon in 1989. Report at A-38.

[85] Report at A-60-61, Tables 20-21. It appears that over much of the period of investigation the Norwegian imports were able to command a premium over U.S.-produced Atlantic salmon, due to such factors as marketing efforts and year-round availability. Report at A-46, n.111.

[86] INV-O-048 at 12.

Moreover, until late 1990 prices for Norwegian and U.S. Atlantic salmon followed a very similar pattern. In sum, given the sheer volume of the increase in Norwegian Atlantic salmon imports in 1989, falling prices for those imports, closely tracking U.S. and Norwegian Atlantic salmon price trends, and information suggesting significant substitutability between Norwegian and U.S. Atlantic salmon, we find that imports of Norwegian Atlantic salmon have significantly depressed prices for the like product.[87] The subject imports' presence in the marketplace, even at premium prices, acted to keep domestic producers from pricing to recover costs and meet cash flow needs as described below.[88]

Lower prices, in turn, have adversely affected U.S. producers.[89] Lower prices for the like product have meant lower sales revenues in 1989, which contributed to substantial gross and operating losses for the domestic industry.[90] Depressed prices have also exacerbated cash-flow pressures that are inherent in the Atlantic salmon industry. The fact that it takes several years to bring adult salmon to market means that producers must absorb significant feeding, labor and other costs well before receiving corresponding revenue on sales of grown fish. As an example of cash flow pressures, depressed prices for Atlantic salmon forced the largest producer, Ocean Products, to "front-load" its sales in the early part of the 1989-90 selling season in order to generate revenues to continue operations.[91] By not being

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[87] 19 U.S.C. § 1677(7)(C)(ii)(II).

[88] The degree of fungibility between the subject imports and the like product, and the significant volumes of subject imports, also suggests that the imports displaced some potential sales by U.S. producers. Cf. Granges Metallverken AB v. United States, 716 F. Supp. 17, 26 ("with fungible goods, [import] volume . . . may be the best indicator of lost sales.").

[89] 19 U.S.C. § 1677(7)(B)(i)(III).

[90] Report at A-30, Table 7.

[91] Tr. at 29, 34; petitioner's prehearing brief at 59. The Commission's determination is of course ultimately based upon the performance of the

(continued...)

able to retain and feed the Atlantic salmon until later in the season, Ocean Products could not reap the benefit of higher prices per pound that larger fish command.[92] It is likely that the leveling off of production of juvenile salmon in 1990 was a response to the depressed prices prevailing in 1989.[93] Moreover, there is record information to suggest that banks became more unwilling to provide financing to U.S. producers at least in part because of the low prices prevailing in the market or because of Norwegian oversupply, and that this reluctance continues.[94] Negative effects on the domestic industry's ability to raise capital, as well as on growth and cash flow, are among the factors the statute specifically directs the Commission to evaluate.[95] Thus in view of the particular nature of Atlantic salmon production in the United States,[96] the effects of the large increase in Atlantic salmon imports from Norway during the period of investigation through 1989 are being felt presently by the young U.S. industry in such forms as financial losses, a scaled-back size, and difficulty in obtaining capital.

Respondents claim that any injury being experienced by U.S. producers is a result of factors other than the subject Norwegian imports. Among the

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[91](...continued)
domestic industry as a whole. We have described above how the industry as a whole suffered a significant negative cash flow in 1989 and 1990.

[92] Indeed, the average weight of adult Atlantic salmon shipped by the U.S. industry as a whole declined significantly between harvest seasons 1988-89 and 1989-90. See Report at A-27, Table 5. Ocean Products' financial data for accounting year 1989 as well as 1990 are consistent with an affirmative finding in this case. Report at A-32, Table 9.

[93] Some U.S. producers scaled back planned expansions in production. Report at B-65; A-26 n.67; tr. at 24.

[94] Report at A-33; B-65; tr. at 19-23. See also tr. at 61. Atlantic salmon farming involves a significant original capital investment, and operating costs can be significant, especially in the off-season when the salmon must be fed and maintained but are not generally being sold. Transcript of staff conference, March 22, 1990 at 21, 36.

[95] 19 U.S.C. § 1677(7)(C)(iii)(III).

[96] 19 U.S.C. § 1677(7)(C)(iii) (Commission shall evaluate economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry.").

alternative causes they suggest are: (1) various U.S. industry production difficulties, (2) non-subject imports, (3) the inability of U.S. producers to market their product year-round, and (4) the effects of Pacific salmon.[97] Although some of these factors may have adversely affected the U.S. industry, we determine that an industry in the United States is materially injured by reason of subsidized and LTFV imports of fresh and chilled Atlantic salmon from Norway.

[97] Respondents' prehearing brief at 27-47.

DISSENTING VIEWS OF ACTING CHAIRMAN ANNE E. BRUNSDALE
Fresh and Chilled Atlantic Salmon from Norway
Invs. Nos. 701-TA-302 (Final) and 731-TA-454 (Final)

The majority finds that the domestic Atlantic salmon industry is being materially injured by dumped and subsidized Norwegian Atlantic salmon despite the Norwegians' rapidly declining and now miniscule market share, and despite prices charged by the Norwegians that are so high as to drive their fish off the American market. The majority's conclusion is unsupported by substantial record evidence and may well be contrary to law. Based on my review of the record in these investigations, I find that the domestic Atlantic salmon industry is not materially injured or threatened with material injury by reason of dumped and subsidized Atlantic salmon from Norway.[1]

I. The Domestic Atlantic Salmon Industry is Not Materially Injured by Reason of Norwegian Imports.

A. Volumes and Prices of LTFV and Subsidized Imports. The key fact in the record is that the heyday of Norwegian imports is over. The volume of those imports has fluctuated widely over the years of this investigation. They increased from 7.6 million kg in 1987 to 8.9 million kg in 1988 to 11.4 million kg in 1989 before shrinking to 7.7 million kg in 1990. A-43 (table 17). Monthly figures supplied by the petitioners show that imports from

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[1] I agree with the majority that fresh and chilled Atlantic salmon produced in this country is the like product to fresh and chilled Atlantic salmon imported from Norway, because its physical characteristics and uses are identical. I also agree that U.S. producers of the like product are the domestic industry, and that the domestic industry is already established in this country, so that material retardation is not at issue.

Norway have declined every month since July 1990, see Pet. Preh. Exh. 23; and our own staff told us at the final Commission briefing that almost no Norwegian salmon is entering the country now.

The surge of Norwegian salmon imports in late 1989 and early 1990 was directly related to the price of the fish. The largest Norwegian salmon sold for up to approximately $6.50/lb. in 1987 but only $3.62/lb. by the end of 1989, when the volume of imports was near its peak. A-54, A-59.[2] Prices for the small and medium weight classes showed a similar pattern.

The flood of imported salmon from Norway was not an exclusively American phenomenon. Most Norwegian production is for export and total Norwegian production jumped from 47.4 million kg in 1987 to 80.4 million kg in 1988. A-38. The initial forecasts for 1989 ranged up to 150 million kg, though the total harvest was 114.9 million kg, largely because tens of millions of kilograms of fish were left in the water to be harvested the following year. A-38, A-39. The downward pressure on prices was a global phenomenon, and so the Norwegian producers were hurt as well. In 1990, the Norwegians themselves began to cut back sales of fresh fish, even taking into account the fish left over from the year before. Through a price support system enforced by a state-sponsored monopsony the fresh fish harvest declined to under 110 million kg for all of 1990. A-39.[3]

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[2] Farmed Atlantic salmon is customarily sold in three weight classes: 4-6 pounds, 6-9 pounds, and 9-11 pounds. A-50, A-51.

[3] Respondent FOS has an exclusive right to regulate all first sales of Atlantic salmon under Norwegian law. In early 1990, it began to enforce a previously ineffective minimum price guarantee

These shifts in Norwegian production took place against the backdrop of a booming market for seafood in general, and Atlantic salmon in particular. American seafood consumption has risen by more than 40 percent in the last twenty years, and set a record in 1989. A-12. American consumption of Atlantic salmon has also increased from year to year, despite fluctuations in price. By 1990, it stood at almost 21 million kg, more than double consumption in 1987. Worldwide consumption of Atlantic salmon increased to over 235 million kg in 1990. Although Norway continued to be the world leader in Atlantic salmon farming (an industry it had invented), its share of the American market has fallen in each of the last several years, dropping from 72.9 percent in 1988 to 60.2 percent in 1989 to 36.7 percent in 1990. A-45 (table 18) and Memorandum INV-0-050. The domestic share has steadily increased, from negligible amounts before 1988 to 7 percent in 1988, 7.5 percent in 1989, and 9.0 percent in 1990. Id. The largest beneficiaries of the retreat of the Norwegian supply from the market have been producers in third countries, particularly Chile and Canada. By the fourth quarter of 1990, imports from both these countries exceeded those from Norway.

B. Effects on Domestic Prices and Sales. Nevertheless, the domestic industry claims that dumped and subsidized Norwegian imports are materially injuring it, relying for proof mostly on the extremely large quantity of imports in late 1989 and early

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to farmers by offering to buy and freeze fish at the minimum price. Fish that could fetch a higher price were sold fresh on the world market.

1990. As I have repeatedly stated in other cases, I frankly cannot tell what effect dumped or subsidized imports have on a domestic industry simply by looking at the trends in volume and price, whether in absolute or relative terms. Not all sales of dumped or subsidized goods harm a domestic industry. To do so, they must deprive the industry of sales revenue. Imports may, for example, meet the demand for low-quality, low-priced versions of domestically produced goods; or displace undumped and unsubsidized imports from other countries.

Deducing the effect of import sales requires a deeper understanding of the market for the products involved. Only by gauging the actual reactions of producers and consumers of a product to the imports being investigated can one begin to untangle causation from coincidence in the marketplace. And only by looking at both the demand and supply side can this be done. See generally Electrical Conductor Aluminum Redraw Rod from Venezuela, Inv. No. 701-TA-287 (Final), USITC Pub. 2103 at 45 (1988) (and cases cited therein).

(1) Demand for Atlantic Salmon. Consumers regard Atlantic salmon as a premium product; most Atlantic salmon is bought by the ultimate consumer in restaurants, and most of the rest is bought in stores. A-20, A-21. In both places, consumers have a wealth of choices. Although the closest substitutes for Atlantic salmon are several species of Pacific salmon, A-46, to some degree all seafood -- indeed all food -- competes.

The staff reviewed the professional literature and estimated a range for the elasticity of demand for Atlantic salmon of

between -1.0 and -2.5. Both petitioners' and respondents' estimates fell within this range. However, petitioners' estimate of -1.3 was for only a three month period. Memorandum INV-0-048, at 16. Given a longer timeframe, the elasticity of demand would be higher as buyers discovered lower priced salmon from other countries was an acceptable substitute. Because I must decide whether imports are causing material injury, I usually use estimates of elasticity for a one year period. This reduces the possibility that I might misconstrue the transitory effects of imports for more serious ones. I therefore conclude that an estimate toward the higher end of the staff's range, based on estimates for a full year, is more appropriate.

The consequence of such a high sensitivity of consumers to changes in the price of Atlantic salmon is that the volume of salmon sold in the American market will vary greatly with the price. Thus, in 1989, as the price of Atlantic salmon fell, consumption jumped to nearly 19 million kg, an increase of 54.9 percent from 1988. Because demand increased so much, total revenue increased as well, albeit by only 23.2 percent. A-18. By contrast, as prices for all Atlantic salmon rose throughout 1990, total demand rose to 20.7 million kg, an increase of only 9 percent from 1989.

(2) Supply of Atlantic Salmon. In contrast to the elasticity of demand, the elasticity of supply of Atlantic salmon is very low over periods shorter than a year. The reason lies in salmon biology -- it takes three years to bring a salmon from egg to market size, and there process cannot be rushed. A-6. There

is a little flexibility in choosing from month to month whether to harvest fish, but they all must be harvested when about three years old, or undergo a costly reconditioning process for sale no more than a year later. Pet. Preh. Br. Exh. 3. Both petitioners and respondents agreed with the staff's conclusion that the domestic supply elasticity is less than 0.5. I am inclined to think that it is closer to zero in the range of prices for salmon seen in the last few years. Other things being equal, such an inelastic supply means that the principal effect of the dumped and subsidized imports will be to suppress or depress prices for the domestic like product rather than decrease the quantity of sales made by the domestic industry.

I might therefore have agreed with the majority's decision had we voted on the question of material injury on the day the petition was filed in February 1990. At that time, the increased volume of Norwegian imports caused a decline in price, and hence revenue. As a result, the domestic industry probably did suffer a decline in revenue sufficiently large to be called material. But we must decide whether material injury is being caused as of the day of our determination, not the date of the petition. In the year between those two dates in this case, there has been a decisively important development -- the emergence of other nations as significant sources of salmon imports.

(3) Availability of Atlantic Salmon from Different Nations. The single most important fact in this case is that, even as the price of Norwegian fish became higher and higher in 1990, the price of domestically produced fish did not similarly increase.

Instead, imports of Atlantic salmon from other nations skyrocketed. By the end of 1990, both Chile and Canada were exporting more Atlantic salmon to the United States than was Norway. This development is, in turn, related to the elasticity of import supply and the substitutability of Atlantic salmon from different nations.

The elasticity of import supply is very high. The market for salmon is global, and producers in exporting nations are able to shift supplies fairly easily.[4] Nor is there much reason to doubt the existence of a high degree of substitutability between Atlantic salmon farmed in this country and Atlantic salmon farmed abroad. Atlantic salmon is the same species wherever grown, and most purchasers reported no great difference in sales terms or service. Memorandum INV-O-048 at 12. Staff therefore concluded that the elasticity of substitution between Norwegian and domestic salmon was between 3 and 6. I agree with petitioners that the right figure is probably at the higher end of this range. Staff also concluded that the substitution elasticity between Norwegian salmon and imports from other foreign nations was the same, and the substitution elasticity between domestic salmon and that of other foreign nations was even higher, in a range from 6 to 10.

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[4] There is some evidence in the record that Canadian producers of Atlantic salmon do not have the same flexibility in choosing their export market as do those of other salmon exporting countries, largely because almost all their exports go to the United States. Resp. Posth. Br. Exh. 1, at 5. However, this would not reduce the price suppressing effect Canadian Atlantic salmon would have on the American market; to the contrary, it would increase it since alternative markets are not as available.

Id. at 13 n.26.[5] These estimates correspond to the observed fact that as the price of Norwegian Atlantic salmon increased, its market share shrank to almost nothing; as well as to the close correlation between the price of domestic, Canadian, and Chilean Atlantic salmon, see A-57, A-58. I therefore agree with the staff's conclusion: "Atlantic salmon can be characterized an being a near-commodity type product." Memorandum INV-0-048 at 12.

Thus, I conclude that the Atlantic salmon industry in the United States is not materially injured by reason of dumped and subsidized imports from Norway. Imports from Norway are in sharp decline due to an increase in their price. Even if the price of Norwegian imports were increased by the amount of the dumping margin, the effect on the domestic industry would be nugatory. Almost all the resulting demand would be met, even as it is today being met, by imports that are not under investigation.

There are only two ways, I think, for the majority to avoid reaching the same conclusion.[6] The first is to assert that the domestic industry is harmed by the lingering effect of dumped and subsidized imports during late 1989 and early 1990. The second is to dismiss the recent retreat of Norwegian salmon from the U.S. market as a simple reaction, easily reversed, to this

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[5] The slightly lower substitution elasticity for Norwegian salmon is due to the Norwegians' earlier entry into the market with a consistent, year-round supply. It can be expected to increase as other nations' salmon farming industries advance.

[6] Since it is the usual practice of the Commission to neither circulate draft opinions nor discuss the case in conference (like a court), I must necessarily take the risk that some of the following discussion is dicta.

investigation. The first is contrary to law, the second contrary to fact.

(4) The "Lingering Effects" Theory. Sections 1671d and 1673d require the Commission to decide whether a domestic industry is materially injured by dumped imports. The use of the present tense is not accidental. As the Court of International Trade has held, an important factor for us to consider in interpreting the law "is the necessity and desirability wherever possible, of harmonizing this law with the international agreements it was intended to implement." Matsushita Elec. Indus. Co., Ltd. v. United States, 569 F. Supp. 853, 859 (1983). Those agreements include Article VI of GATT relating to antidumping measures. 19 U.S.C. Section 2503(a). The GATT is emphatic that dumped and subsidized imports must be causing injury, not a source of injury in the past. See Agreement on Interpretation and Application of Articles VI, XVI and XXIII of the GATT, Art 6. para. 4 (1979); Agreement on Implementation of Article VI of the GATT, Art. 3 para. 4 (evidence must show dumped imports are . . . causing injury), Art. 9 para. 1 (duties shall remain "in force only as long as . . . necessary to counteract dumping which is causing injury") (1979) (emphasis added).

The Federal Circuit agrees. It held, in Chaparral Steel Co. v. United States, 901 F.2d 1097, 1104 (1990), that "[t]he injury requirement mandates a determination of whether an industry suffers present material injury." (Emphasis in original.) The reason for the requirement that imports currently cause material injury is that the purpose of the antidumping and countervailing

duty laws is not to compensate domestic industries that have been harmed by dumped or subsidized imports. Rather, antidumping and countervailing duties "are intended merely to prevent future harm to the domestic industry by reason of unfair imports that are presently causing material injury." Id. at 1103.[7]

The Commission's decision in this case is similarly inconsistent with our own past decisions. In 12-Volt Motorcycle Batteries from Taiwan, Inv. No. 731-TA-238 (Final), USITC Pub. No. 2213 (Aug. 1989), for example, we noted "that the time period for which we collect data -- three years in most cases -- merely serves as a historical frame of reference for an analysis of the current condition of the domestic industry at the time of the Commission's determination." Id. at 11. We also pointedly wrote in that decision that our mission was "to determine whether a domestic industry is currently being injured by the LTFV imports." Id. at 10-11.

The Commission must therefore consider changed circumstances between the date of the petition and the date of the decision. We are not free to simply assume that imports that may once have caused injury continue to do so because no compensation was ever made to the domestic industry for the lost revenue it may have suffered in the past. This is obviously not to say that a respondent could avoid a finding of material injury on "vote day" by simply saying it had reformed and withdrawn from the American market. The transparency of that ploy would be reflected in a

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[7] Past sales may create present injury in some unusual circumstances; e.g., where they establish an exclusive channel of distribution through which future unfair imports may enter.

suppression of prices to the extent the market anticipated a resumption of unfair imports. The possibility of such a ruse in this case is one the petitioners raised, and it is the one to which I now turn.

(5) The Reason for the Decline of Imports from Norway. The Commission must always be aware that in title VII cases, as in particle physics, the act of observation may alter what is being observed. Or, as the Court of International Trade put it, "the antidumping order . . . can be presumed to distort the meaningfulness of observable data regarding present conduct in the United States." Matsushita, 569 F. Supp. at 862. It may be reasonable to presume that the very fact of the investigation provides a strong incentive for exporters to withdraw from the American market with the purpose of hoping for a negative vote.

The record in this case provides enough evidence to rebut this presumption. Most important, there was a similar antidumping investigation proceeding in the European Economic Community at about the same time as the one in this country. Yet, despite this, Norwegian exports of fresh salmon to the EC jumped during 1990, increasing almost 56 percent from 1989. See Resp. Preh. Br. Exh. 15. Petitioners, however, persist in explaining this as a reaction to the incentives created by the imposition last year of preliminary antidumping and countervailing duties on U.S. imports of Norwegian Atlantic salmon.

However, neither of these preliminary duties exceeded 3 percent ad valorem for most exporters, see Federal Register, vol. 55 no. 192, at 40421 (Oct. 3, 1990), and the preliminary

countervailing duty applied for only a short time, expiring in October 1990. A far more powerful explanation for the shift in exports of Norwegian Atlantic salmon from the U.S. to Europe is the large depreciation of the dollar against the Norwegian kroner. Between January and December 1990, the kroner appreciated 15 percent against the dollar, with much of that appreciation in the second half of the year. Salmon imports from Norway seemed to follow. They declined as the dollar declined, especially toward the end of the year. Pet. Preh. Br. Exh. 23. In contrast, the kroner depreciated a bit against the currencies of Norway's major customers in the EC. See Resp. Preh. Exh. 17. Norway's exports of salmon to those countries rose.

An interesting test of this hypothesis is in the U.S. sales record of Sea Star International. Sea Star was the one Norwegian exporter which was preliminarily found by the Department of Commerce not to be dumping salmon in the United States. Thus, after the preliminary countervailing duty was removed in October 1990, its salmon was entering the United States duty free. Nevertheless, its sales plummeted toward the end of the year. Resp. Preh. Br. at 63.

There is no reason to attribute to the several exporters of Norwegian salmon any sort of strategic behavior designed to deceive the Commission about their inclination to flood the American market had our vote gone the other way. A simpler, more likely explanation, is that the exporters were responding to the

relative price advantage they had in exporting to countries where the kroner's value was falling.[8]

C. Condition of the Domestic Industry. In addition to the volume of Norwegian Atlantic salmon imports and the impact they are having on the domestic price, Section 1677(7)(C) requires the Commission to evaluate a host of other factors bearing on the domestic industry. These are all consistent with the portrait of the American and world salmon market drawn above. Demand for the product continues to grow, but so too does the supply as the technology and knowledge needed to farm salmon spreads across the world. The output and sales of the domestic producers have grown remarkably over the last few years, as have employment, wages and growth. A-23 (table 3), A-29 (table 6); Memorandum INV-0-050 at 1.

On the other hand, the industry's cash flow and profits have been hurt by the increase in competition, and its return on investment has thus far been abysmal. A-30 (table 7). It is unclear how many of the domestic producers will survive, but the domestic industry as a whole has increased its market share, albeit more slowly in the last year. A-45 (table 18); Memorandum

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[8] Norway's "freezing program" has also decreased the supply of fresh salmon on the market. It also serves to enforce the minimum price program Norway has established, and so effectively functions to increase the price of fresh Norwegian Atlantic salmon. Petitioner is probably correct in contending that the freezing program, which appears to spend money transforming high priced fresh fish into lower priced frozen fish, is not a long run solution to the Norwegians' desire to reduce their output of fresh salmon to bolster its price. However, it need not continue for the long run, inasmuch as Norwegian Atlantic salmon output is destined to fall over the next few years. See part II, infra.

INV-0-050 at 1. This is likely to continue since domestic production of both salmon eggs and smolt continue to grow. A-22 (table 2). There seems to be a long learning curve in salmon farming, but the innovations we heard representatives of the domestic industry describe to us at the hearing bode well for the future.

II. The Domestic Atlantic Salmon Industry Is Not Threatened with Material Injury by Reason of Norwegian Imports.

Having decided that the domestic Atlantic salmon industry is not materially injured by reason of dumped and subsidized Norwegian salmon, I must also decide whether the domestic industry is threatened with material injury. The central fact in analyzing whether imports of Norwegian Atlantic salmon pose a "real" threat of "imminent" material injury, as Section 1677(7)(F)(iii) requires, is that the current high price of Norwegian Atlantic salmon seems likely to continue. The reason for this is the continuing decline in the amount of Atlantic salmon that Norway can produce, at least for the next two years. After the huge 1989 harvest, Norwegian fish farmers have assiduously cut back the number of eggs, fry and smolt they have produced. A-40 (table 15). Since these are the essential ingredients to the production of marketable salmon, it is virtually certain that Norway's output of salmon will decline.[9] And, since there is nothing in the

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[9] The staff defined capacity by reference to cage size, see A-39 n.86, leading to an apparently low capacity utilization rate. However, the importance of capacity utilization figures depends on how justified it is to assume that capacity can be used to make more of the product. In the salmon industry, the key factor of production is baby salmon. Norway's large amount of cage space presents no threat if, as the staff report shows, there will be

record to indicate that worldwide demand for salmon will not continue to grow, it is virtually certain that Norway's global market share will also decline.

This also means that any threat Norway might pose the domestic salmon industry is also likely to decline, unless there is some reason to think that exports of Norwegian Atlantic salmon are likely to be shifted from elsewhere to the United States. Petitioners suggested two possibilities. One was a shift in foreign exchange rates that would make exporting to the United States more attractive to Norwegian producers. Pet. Posth. Br. at 7. There is no evidence on the record to support this, much less to lead me to conclude that the probability of such a shift is "real" enough to make material injury "imminent."

The second, somewhat more plausible, possibility is that the EC's finding last year that Norway had dumped salmon (a finding that did not lead to the imposition of any antidumping duties) might be used in a renewed effort by European salmon producers to impose a duty on Norwegian Atlantic salmon. Id. at 9-10. However, the initial petition in the EC was dismissed in light of the Norwegian efforts to raise the price of its salmon. It also met with significant opposition from nations which consume large quantities of Norwegian salmon. There is nothing but speculation to support a different outcome should a petition be refiled in the near future.[10]

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fewer and fewer fish to grow in them.

[10] The remaining factors I must consider under Section 1677 (7)(F) are whether the subsidies the Department of Commerce found the Norwegian industry to receive are export subsidies, and whether there are any substantial increases in inventories of the like

I therefore find that Norwegian Atlantic salmon imports pose no threat of material injury to the domestic industry.

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product in the United States. The subsidies are not export subsidies, see A-2, and fresh salmon spoils too quickly to permit the accumulation of inventory.

Additional Views of Commissioner Lodwick

I fully join the majority's opinion in these investigations. I offer these comments to more fully address several issues.

Appropriateness of legislative language relating to the cattle cycle.

> "Because of the special nature of agricultural production including the cyclical nature of much of agricultural production, special problems exist in determining whether an agricultural industry is injured. For example, in the livestock sector, certain factors relating to state of a particular industry within that sector may appear to indicate a favorable situation for that industry when in fact the opposite is true. Thus gross sales and employment in the industry producing beef could be increasing at a time when economic loss is occurring, i.e. cattle herds are being liquidated because prices make the maintenance of the herds unprofitable." S. Rep. 96-249, 96th Cong., 1st Cong., 1st Sess. (1979) at 88.

There are some similarities and differences between the livestock sector, referred to in the legislative language, and the salmon industry. Whether or not a female is held back for breeding is just one characteristic of an agricultural industry that has a cyclical nature.[1] Other characteristics include a biological production lag, biological marketing constraints and cyclical prices and production as affected by producers' reactions to actual and expected prices.[2]

In the salmon industry, the production cycle involves 18 months from the time the female salmon spawns until the smolt are ready for sale and another 18 months before the smolt are ready for sale as finished salmon. One female salmon can spawn many eggs so few female

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[1] The Commission must also evaluate the industry's performance "within the context of the business cycle and conditions of competition that are distinctive to the affected industry".

[2] Kenneth L. Robinson and William G. Tomek, Agricultural Product Prices (Cornell University Press, 1981); p. 178-190.

salmon are held back and allowed to mature.[3] The salmon industry differs from the cattle industry in this respect.[4] This implies that the cyclical effect may not be pronounced in the salmon industry as it is in the cattle industry where significant numbers of the stock are sold or held back.[5] However, salmon producers like cattle producers must decide how large their stock should be and must decide how long they can hold that stock before selling.[6,7] It appears that salmon producers have some discretion when to market their salmon but at a cost and within a practical time period of less than a year.[8] Like a cattle producer, a salmon producer may liquidate part of his salmon stock by not buying replacement smolt or selling salmon at lower weights in order to maintain cash flows or sales.[9] This action may improve short term revenues and profit levels but effectively "mines" the producer's future sales of salmon and can be seen as producer or industry weakness. Conversely, if the operator feels that future discounted profits will be equal or greater than current profits, a salmon producer can purchase smolt for both replacement and expansion or hold finishing salmon longer for higher sales weights but may suffer short term cash flow constraints. Reduced current revenues while increasing salmon stocks may therefore be an indication of strength in the industry. This reduction or expansion of salmon stock is the type of situation referred to in the legislative language relating to the cattle cycle.

As indicated in the testimony, current prices and price expectations are very important in

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[3] Hearing transcript at 170.

[4] Respondents in their Posthearing Brief at Attachment 2.

[5] Arguably the cyclical effect in the salmon industry comes primarily from the production lags and marketing constraints as well as the production decisions made by salmon producers in reaction to actual and expected prices.

[6] Hearing transcript at 71 and at 89 to 90.

[7] Petitioner's Posthearing Brief at Exhibit 1-D.

[8] Hearing transcript at 82 to 83.

[9] Hearing transcript at 29.

salmon industry; they are also important in the cattle industry. In the cattle industry, there is a predictable long term cycle of changing prices and production levels that is about 10 years long on the average.[10] Cattlemen consider historical and expected prices and cattle numbers as well as current and expected feed prices in making their "sell, feed or breed" decisions. They also consider where the cattle industry is within its "production cycle". The upward phase of rising prices and cattle numbers is more predictable and is constrained biologically by the time it takes to produce more breeding stock and fed cattle. The downward phase is less predictable and is determined by price dynamics in the market.[11] Cyclical behavior in price variables is more irregular than in quantity variables as prices are affected by available stocks, changes in demand, seasonal elements and random events. It is difficult to isolate the cyclical price effect but understanding the lagged production responses to changes in prices and other variables is important.

Salmon Prices and Supply Response

Information gathered in this investigation suggests that U.S. and Norwegian producers are cutting back on their plans for expansion or are reducing the current production levels.[12] Contrast this situation to the growth of the industry during most of the 1980s.[13]

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[10] Kenneth L. Robinson and William G. Tomek, Agricultural Product Prices (Cornell University Press, 1981), p. 180.

[11] Ibid. at 179.

[12] Report at page 25 (Table 4) and page 41-42 (table 15 & 16).

[13] From Exhibit 2 and 5, Appendix 7, Appendices to Prehearing Brief of Norwegian Respondents. This information was from a Memorandum prepared for Ocean Products, Inc. in February 1990. On page 25 of this Memorandum, it was noted that the average price of U.S. East Coast Fresh Salmon, 6 to 9 lbs., was $4.31/lb. for the period 1983 to the end of 1989. It was also indicated in this Memorandum that during 1989, U.S. fresh salmon prices fell to $3.29/lb.

	Total World Farmed Production (mt)	Average Monthly Salmon Prices ($)#
1980	7,202	
1982	16,087	
1983		$ 4.25
1984	33,807	4.05
1985		4.20
1986	71,800	4.65
1987	80,400	4.17
1988	129,000*	5.44
1989	237,000*	4.05
1990	305,000*	3.75

* Projected
# Prices for the month of January for Norwegian salmon, 6-9 lbs.

Other than some moderate price declines in 1986 after a doubling of world production from 1984 to 1986, the falling prices in 1989 and 1990 have lead to the first major reduction in expansion plans in this industry in the 1980s.[14] Unlike the beef industry which has had many decades of production history, the emerging salmon industry is now experiencing its first production downturn after years of growth. As can be seen in tabulation above, salmon prices consistently stayed about $4.00 per pound until late in the decade and appear to have stimulated the expansion of the salmon industry. However after prices began to fall in 1988 and 1989, Norway's eyed egg, fry, and smolt production and their Atlantic salmon projected 1990 and 1991 harvests show marked declines after an almost tripling of its Atlantic salmon production from 1987 to 1990.[15] It should also be noted that some Norwegian farmers held fish back with prices near historical lows and that the Norwegian government implemented an "intervention plan" in early 1990 to stabilize prices.[16] As these figures tend to show, there is a clear link between

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[14] Mr. Steinsbo testified, "After 20 years of fast growing increase in the world production of salmon, this year and the next years to come, there will be a flattening out or even a reduction in salmon production in the world." Hearing transcript at 111.

[15] Report at pages 40-41 (Table 15 & 16).

[16] Report at A-38-39.

salmon prices and production decisions by salmon producers.[17] As theory would predict there is a positive correlation between price and quantity supplied.[18] However, given the biological time lag in production, price declines during 1988 and 1989 adversely affect revenues during that period and impacted production levels in the following periods.[19]

Recursive Price and Output Models

Several theories regarding the dynamic link between prices and quantities produced have been advanced in field of econometrics. These theories seek to explain the relationship between changes in output and price levels through time.[20]

One of the simplest, the "Cobweb" Model, states that current production levels are based on past prices.[21] Current production levels subsequently determine current prices which in turn set future production levels.[22] This would imply that if prices were falling, producers would

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[17] Hearing transcript at 135.

[18] Note the one year supply elasticity estimate of less than 0.5 for the U.S. industry and the import supply elasticity of 2.0 - 5.0. ITC Economics memo INV-O-048 at 7-11.

[19] This is again illustrated by the decline in Norwegian eyed egg and fry production beginning in 1987 to 1990 which did not manifest itself as declines in Norwegian harvests of fresh Atlantic salmon until the 1990 to 1991 time period. See Report at pages 41-42 (Tables 15 & 16).

[20] It is important to note that the models themselves do not fully explain the all of the behavior and relationships in the marketplace. Rather the models are developed to help explain and understand some of the behaviors and relationships in the marketplace. They can act as an "estimator" of certain relationships. The job of the analyst then involves choosing the best "estimator" or "estimators" to help understand the dynamics in the marketplace.

[21] Kenneth L. Robinson and William G. Tomek, Agricultural Product Prices (Cornell University Press, 1981), p. 182-189.

[22] That is:

$Q_t^{(s)} = f(P_{t-1})$,	Quantity supplied this period is function of last period's price.
$Q_t^{(s)} = Q_t^{(d)}$,	Quantity supplied this period equals this period's demand.
$P_t = f(Q_t^{(d)})$,	Price this period is a function of quantity demand this period.

(continued...)

respond by contracting their production a period later as the model assumes that one time period is required for production response.[23] This can continue until lower supply levels arrest price declines; production levels would then react by stabilizing or increasing if subsequently prices rise.[24] In the case of salmon, this theorem suggests that salmon producers in 1989 would cut back on planned replacement stocks if prices in 1989 were too seen to be low to justify continuing future production at current levels. This view ignores producer expectations about future price levels.

Another theory called the "Adaptive Expectations" model postulates that changes in Y, (i.e. changes in production) are related to changes in the "expected" level of an explanatory variable, X, (i.e changes in "expected" price).[25,26] The "expected level" of X is determined by an adjustment to the difference between the current observed value of X and the expected value of X in the previous time period. In, other words, producers adjust their production levels according to an expected price level which is a function of the difference between current prices and past prices. In the case of salmon, producers considering production levels in 1989 would have considered the salmon prices in 1989 and how those prices differed from price levels

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[22] (...continued)

$Q_{t+1}^{(s)} = f(P_t)$ Quantity supplied next period is a function of this period's price.

[23] This also implies that production plans for the next time period are based on current prices.

[24] This model does not account for nonproduction variables that also set prices in the current period or take into account the influence of expected prices. It also assumes that producers "do not learn" from past price behavior.

[25] Pindyck, Robert and Rubinfeld, Daniel L., Econometric Models & Economic Forecasts, 2d ed., McGraw-Hill Book Company, 1981, p. 234.

[26] Adaptive expectations is defined as: "The formation of expectations about the future value of a variable based only on previous values of the variable concerned. Economic agents adapt their future expectations about a variable in the light of their recent experience of the value of the variable." Pearce, David W., The MIT Dictionary of Modern Economics, 3rd ed., The MIT Press, 1986.

expected in the past. Since expected salmon prices would have been higher in 1988[27], than were the actual prices in 1989, it would have been rational for salmon producers to adjust their price expectations downward in 1989 and adjust their production levels accordingly. This theory allows producers to form price expectations but based only on current and previous prices. An examination of Ocean Products' and another producer's price projections shows that they used a variation of this type of analysis as both firms consistently adjusted, in 5 of 5 instances, their future year's price projection upward or downward depending on if the current year's actual price was higher or lower than the projected price for the current year.[28] That is:

$$P_{t+1}^* = P_t^* + @(P_t - P_t^*)$$

where P_{t+1}^* is next year's expected price, P_t^* is this year's expected price, P_t is this year's actual price, @ is an adjustment factor and $(P_t - P_t^*)$ is the difference between this year's actual price and this year's expected price.[29]

Another theory called the "Rational Expectations" model assumes that producers use a variety of information in determining their production levels.[30] This information may include information about actual and expected price and production levels industry wide or information

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[27] Expected 1988 prices would have been higher because of higher actual prices in 1988 and higher expected prices in previous years based on higher actual prices in those years than in 1989.

[28] Report at page A - 35.

[29] In Petitioner's Post-Hearing Brief in Exhibit 1, it is noted that Mr. Hirtle and Mr. McLernon indicate that current prices play a large role in forecasts of future prices.

[30] Rational expectations is defined as: "The application of the principle of rational minimizing behavior to the acquisition and processing of information for the purpose of forming a view about the future. It suggests that individuals do not make systematic forecasting errors; on the contrary, that their guesses are on the average correct. This the theory suggests that individuals use all the available and relevant information when taking a view about the future." Pearce, David W., The MIT Dictionary of Modern Economics, 3rd ed., The MIT Press, 1986.

about past, present and expected demand. It is difficult to readily identify variables and what weight they would carry in each producer's production level decisions. In the salmon industry, factors such as historical salmon prices, worldwide salmon production, regulatory and legal problems, biological and health problems, seasonal availability of salmon, Atlantic salmon substitutability, and consumer income and attitudes could be weighted heavily by the salmon producers in the consideration of current and future Atlantic salmon production decisions. U.S. producers considering purchasing replacement smolt or expanding their operations in 1989 may have taken many of these factors into account. U.S. salmon producers in 1989 were not only faced with declining prices for their finished products but also may have known that there was a worldwide oversupply due to expansion of Atlantic salmon fish farming abroad.[31]

This exhaustive narration of the various theoretical models linking price and production levels helps form a background by which to understand the nature of the decisions facing U.S. producers in 1989 and how they are still impacted by those decisions today.[32] All three of these models linking price and production decisions, under different behavioral assumptions, could have led a U.S. salmon producer in 1989 to continue to expect low prices beyond 1989 and/or to decide that production cutbacks or moderation of expansion plans would be the best course of action.[33] As can be seen by information detailed in the staff report[34], U.S. producers in general did precisely that despite growing U.S. demand.[35,36] The "Cobweb" theorem would lead a

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[31] Hearing transcript at 44.

[32] Implicit in this discussion is the assumption that adjustment by producers to changes in the marketplace need not be instantaneous. Adjustments by producers may take place over several time periods.

[33] Mr. Hirtle at Hearing transcript at 30.

[34] Report at 65.

[35] Report at 45.

[36] However, it is difficult to separate out the increase in demand for Atlantic salmon due to lower prices and that due to higher income levels or increased preference for Atlantic salmon.

producer in 1989 to continue to cut production as prices fell through the end of 1989. The effects of these production cuts, because of the 18 month production lag in the second stage of Atlantic salmon production, would affect Atlantic salmon output levels until mid 1991 or beyond. The "Adaptive Expectations" model would imply that producers would continually adjust their price expectations downward well past the end of 1989, affect their production decisions in 1989 and 1990 and influence the output of Atlantic salmon well into 1991.[37] Even the "Rational Expectations" model could lead a producer in 1989 to conclude that falling prices during 1989, the expansion of worldwide operations, and the continued dominance of Norwegian imports in the U.S. market would adversely affect Atlantic salmon prices well into 1990 and 1991.[38,39] It is important to again note that this was the first major price drop in the Atlantic salmon industry after 10 years of growth.[40] This implies that Atlantic salmon producers, unlike cattle producers, would have difficulty in estimating where prices would bottom out or if or when prices would ever rebound to previous levels as there have been no distinct price and production cycles in the past to rely on.[41]

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[37] Hearing transcript at 33.

[38] Hearing transcript at 37. ITC Economics memorandum INV-O-048 at page 13 indicated that the total demand elasticity for salmon to be between -1.0 and -2.5.

[39] Mr. McLernon stated, "Basically you try to analyze the market two years, anticipate the market two years in advance and make your calculations on whether you hold at that position or whether you decrease or whether you increase. And it is basically a function of learning the international marketplace: what is taking place around different countries in salmon farming." Mr. Hirtle added, ". . . we look at external factors, the most important being a two year forecast or even three year forecast as to what potential demands exist and what competitive supplies." Hearing transcript at 70.

[40] From Exhibit 2 and 5, Appendix 7, Appendices to Prehearing Brief of Norwegian Respondents. This information was from a confidential Memorandum prepared for Ocean Products, Inc. in February 1990.

[41] An eyeball estimate of the length of the downturn in cattle numbers reveals that it is about 4-5 years long. Kenneth L. Robinson and William G. Tomek, Agricultural Product Prices (Cornell University Press, 1981), p. 170.

1989 Price Effect

U.S. producers' price forecasts and production decisions in 1988 were strongly affected by a developing oversupply situation in the U.S. market, contributed to by the dominant position of Norwegian salmon in the U.S. market, which then resulted in U.S. Atlantic salmon prices to fall by over 30% from mid 1998 to the end of 1989.[42,43] This steep drop in prices adversely affected U.S. producers not only in maintenance of cash flows for their current production but also affected their decisions concerning future output.[44,45] There was considerable testimony that U.S. producers suffered from cash flow problems or were unable to get financing during 1989.[46,47]

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[42] Mr. Steinsbo, Managing Director of the Norwegian Fish Farmers Sales Organization notes, "Several factors came together in '89 with the unfortunate result of driving prices down for all varieties of salmon down sharply. . . . With the market already insecure with this low prices, salmon supplies began to increase in the summer and fall of '89. . . . In Norway, our percentage increase was smaller than most of the others. But because we were much larger, our tonnage increase was great. . . Although prices remained fairly steady at low levels throughout the summer of '89, by the fall, they began to fall sharply. In December, the price fall was severe. We searched for a way to put a halt to the price slide and to turn the situation around. To do this, we devised our freezing program." Hearing transcript at 108 to 109. Mr. Steinsbo would appear to suggest the Norwegian producers, given their large size in the world market ,do have some market power over prices and therefore devised a freezing program in an effort to "stabilize" prices by pulling excess supplies of fresh Atlantic salmon off the world market.

[43] Report at A - 38 notes that "Most analysts agree that the rapid increase in production by the Norwegian industry resulted in a worldwide oversupply of fresh supply of fresh Atlantic salmon in 1989.

[44] Economics Memorandum INV-O-048 at page 8 states, "Producers are more likely to sell smaller salmon during periods of falling prices than during periods of rising prices."

[45] An examination of the EC Commission Decision concerning a recent antidumping proceeding concerning EC imports of Atlantic salmon from Norway, reveals similar reactions by EC producers to falling prices in 1989. As EC prices for Atlantic salmon fell in 1989, EC producers had declining profits or had financial losses, stabilized the number of their employees and reduced their capital spending after a period of growth. See Respondents submission on March 18, 1991.

[46] Price variability is generally greater for agricultural commodities than for industrial products due to biological supply risks, lagged production response and the price inelasticity of supply and demand in agriculture. Price uncertainty can lead to unwillingness on the part of producers to make investments (internal capital rationing) or to lenders refusing to make loans (external capital rationing) because of the risks involved. Kenneth L. Robinson and William G. Tomek, Agricultural Product Prices, (Cornell University Press, 1990), p. 174.

The lack of cash flow or an inability to obtain financing adversely affects U.S. producers in two important ways.[48] One, to raise cash for current expenses, producers may have to market fish earlier than planned thereby recovering a lower than expected return.[49] Secondly, cash flow limitations hamper the producer's ability to replace and feed fish that have been sold.[50] If the producer is unable to buy and feed replacement stock, the future sales and production levels of that producer will decline and can adversely impact the producer.[51] If the producer has underutilized productive capacity that is being paid for but not being used, cash flows must be available to expand and feed the producer's salmon stock to lower per unit production costs[52] if economies of scale are available from increased production levels.[53]

In analyzing the financial implications for an U.S. industry characterized by biologically lagged production and that is financially vulnerable[54], the impact of low prices during one time period appears to have effects far beyond that initial time period. Because of drastically reduced

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[47] (...continued)
[47] Petitioner's Prehearing Brief at 44 to 45.

[48] The relationship between financing and production levels is also important in Norway as noted by Mr. Steinsbo, Managing Director of the Norwegian Fish Farmers Sales Organization, "We are confident that this reduction will take place. We have made recommendations to the farmers as to how many smolts they will release, and we have made recommendations to the banks in Norway as to the levels of smolt we believe it prudent for each farmer to finance. I believe the that the banks will follow our recommendation when financing smolt purchases by the farmers." Hearing transcript at 112 to 133.

[49] See Economics Memorandum INV-O-048 at page 8.

[50] Mr. Kassinger at hearing transcript at 60.

[51] Prehearing Brief of the Petitioner at 62.

[52] Petitioners argue: "For example, as a result of the disastrous 1989-90 season, virtually all U.S. growers in the spring of 1990 drastically cut their smolt plantings, which means that they will have far fewer fish to bring to market for the season that begins this fall. U.S. farmers have thus been denied not only the income they would have made from those fish, but also the economies of scale each grower would have experienced had it been able to expand production as planned." Petitioner's Post Hearing Brief at 3.

[53] Respondents Prehearing brief at 31.

[54] Many U.S. firms are recent entrants. Report at page A - 20.

revenue flows, the firms may liquidate part of its stock early to generate cash flows for current expenses such as feeding and debt service. This short run strategy while reducing current period cash flow problems has crippling long run effects. While liquidation of stock in the current period reduces some future variable costs such as feed, future revenues will be sharply lower and need to be able to cover future maintenance, replacement and debt servicing costs. Unless a firm has retained earnings from previous periods, can secure financing during the current period or receives higher prices in future periods, the firm which is unable to cover future costs with future revenues can simply liquidate itself in bankruptcy, which appears to be the direction Ocean Products was headed. As indicated in some of the testimony, the sharp drop in prices in 1989 has made lenders reluctant to increase their exposure until market prices show a permanent improvement. If prices do improve and/or firms can secure financing, this implies that firms with partially liquidated stocks may have difficulty in trying to cover additional debt and the costs of supporting stock replacements with reduced sales volumes for a period of time until replacement stocks mature to provide future sales revenues. Arguably, the impact of low prices during the current year is then reflected in current losses and reduced stocks while the impact in subsequent years is one of considerable financial losses and cash flow difficulties. It is not surprising that the U.S. industry, vulnerable before the price decline, continues to show considerable losses and negative cash flows well into the interim period.[55]

U.S. Firms' Experience and Response

The price drop in 1988 and 1989 had impacts extending well into 1991 and is adversely affecting U.S. producers' operations and their opportunities for growth. U.S. firms reacted in a variety of ways to the price decline. The largest U.S. firm, Ocean Products, terminated its

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[55] Report at page 30 (table 7).

production in 1990 and [* * * * * * *] to Conners Aquaculture. Ocean Products also suffered losses through the whole period.[56] [* * * * * * *] In describing the actual and/or negative effects of imports of Norwegian salmon on their growth, investment and ability to raise capital and/or existing development and production efforts, U.S. firms had the following comments:

1) [* * * * * * *][57]

It is implied by the description given by this producer that U.S. producers buying smolt from this company will not increase their production of Atlantic salmon until whole salmon prices are no longer "depressed". This particular smolt producer doesn't plan to increase their production levels until whole salmon prices change or an indirect type of response similar to that type of production response suggested in the "Cobweb" model.

2) [* * * * * * *][58]

In the response given by this producer, it is implied that banks in refusing financing before 1989, not only consider actual prices before 1989 but also considered other factors such as Norwegian production and its impact on price projections for 1989 and 1990, similar to the type of analysis done in a "Rational Expectations" model. However, in evaluating possible price rises after 1989, the banks appear to be willing to wait until prices actually rise, an approach suggested by the "Cobweb" or Adaptive Expectations" model. A most conservative approach by

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[56] Report at page 31 (table 8).

[57] Report at page 65.

[58] Ibid.

the banks indeed; refuse to lend money if prices are forecast to decline and only be willing to lend if prices have actually started to rise. This lending philosophy would heighten the effect of any actual or expected adverse price changes and impact financing in period before and after 1989.

3) [* * * * * * *][59]

This producer indicates low prices have not only affected the operation's expansion plans but also is concerned about viability of the current operational levels. This suggests that current prices are setting planned operational levels as would be suggested in the "Cobweb" theorem.

4) Maine Pride states, "Despite our size and capabilities, we have found it next to impossible to raise capital during the past two years. During this period, we have existed and today remain like almost every other farm on the Bay on the verge of insolvency. The main cause of our desperate condition today is Norway's massive dumping of its subsidized production in the U.S. market. That action, combined with Norway's substantial over production of Atlantic salmon, have made it impossible for even sizeable operations like Maine Pride to secure the investment and financing needed to succeed. . . . But news of the approaching and then actual Atlantic salmon glut of 1989 preceded me everywhere I looked for investors. . . . Another potential investor . . . withdrew about this time after concluding that the world market for Atlantic salmon would be glutted for years because of massive Norwegian over production. . . . Since our petition was filed a year ago, the Norwegians have raised their prices and since last fall have been much less visible in the U.S. market. But this retreat has not moved the banks and investors which companies like Maine Pride so desperately need. They know, as we do, that Norwegian production dramatically increased over the years. The fact that the Norwegian farmers now say that production will fall in the future to levels still well above 1989 is of little comfort. . . . Maine Pride's inability to raise capital and financing over the past two years has caused to slash our expansion plans. . . . The reason for this reduction, the fear and uncertainty caused by Norway's dumping. Instead of growing to out optimal efficient size, Maine Pride is quickly shrinking. . . . Unless prices return to 1989-90 levels when we should be forced to deplete our

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[59] Ibid.

stock sizing to raise cash, we plan to offer fish throughout 1991."[60]

This testimony by Maine Pride illustrates the lasting effect that price declines in 1989 and the Norwegian presence had on the U.S. Atlantic salmon industry. The price declines in 1989 and expectations about future prices have affected production level decisions and growth potential by U.S. producers due to their inability to secure financing for additional production in the years following 1989. Maine Pride also indicates that prices at the 1989-90 levels would force them to liquidate fish to raise cash thereby reducing the size of the operation and hurting their future sales. This roughly would suggest that prices averaging well above $4.00 lb. per lb. would cause firms to expand and prices averaging well below $4.00 per lb. would cause firms to reduce their production levels.

5) Mr. Hirtle, of Conners Aquaculture Inc., discusses Conners' purchase of Ocean Product's (OPI) assets.[61] "The key point of contention was how to value the inventory. We differed substantially with OPI's bargaining position regarding projected salmon selling prices. . . .,OPI's negotiating position was driven, of course, by their desire to salvage what they could for their investors. In contrast, our position was dictated by our experience with the price crash of the selling season just being completed, and our acute awareness of the amount of fish still in the water in Norway, including the smolts that would lead to continued high levels of production in future years. That reality continues to play a significant role in our business planning and execution. In any event, we ultimately agreed with OPI on a price reflecting more our assessment of the value of the business than theirs. It was considerably less than what Ocean Products wanted, but still very substantial."

Conners Aquaculture, in its price negotiation with Ocean Products, evaluated not just actual prices and expected prices but also Norwegian stocks during mid 1990 and those projected for the future. This type of "Rational Expectations" forecasting implied that Conners acquisition of a particular level of U.S. stock of salmon representing future U.S. Atlantic salmon

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[60] Hearing transcript at 21 to 25.

[61] Hearing transcript at 27 to 28.

sales was affected in part by expectations about Norwegian supplies and the possible price suppressing effect they would have into 1991 and beyond. However, the mechanism of Conners' purchase of Ocean Products inventories at a low price had the effect of transferring expected future losses by Ocean Products[62] to a single lump sum loss by Ocean Products investors at the time of the sale in mid 1990. This example illustrates how the overhang of Norway's supply of Atlantic salmon throughout the period of investigation has adversely U.S. production decisions and the actual and expected prices in the U.S. market.[63] Arguably, if Ocean Products had felt that Norwegian supplies would not be impacting the U.S. market beyond 1989 and 1990, they would not have sold their inventories are such low price projections.

Norwegian Withdrawal from the Market in Late 1990

Commissioner Rohr asked petitioners at the hearing, "In terms of benefits, were your volumes that you sold greater because of the Norwegian withdrawal, did you sell more; you said prices firmed, but have you increased your sales volume?"[64] Petitioners responded by stating they have better access to markets and that prices have firmed. Respondents, in their Posthearing Brief, state that, "If Norwegian imports truly had been a cause of material injury, 1990's increased overpricing and declining volumes of Norwegian salmon certainly would have had an obvious and easily identifiable impact. But Petitioner could identify no specific benefits."[65]

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[62] Future losses were expected if Ocean Products had retained their inventory of fish to then be sold at expected low prices when the fish mature.

[63] Hearing transcript at 31.

[64] Hearing transcript at 78.

[65] Norwegian Respondents Posthearing Brief at 1.

In evaluating this issue, it appears that a factor that was not addressed was the effect of Norwegian imports in 1989 had on the U.S. industry's ability to have Atlantic salmon available for sale in late 1990, at which time the Norwegian import prices rose. An inability of the U.S. industry to raise funds to put more smolt in the water in 1989 meant fewer Atlantic salmon to sell in late 1990. Arguably, U.S. producers could not immediately and significantly benefit from increased volumes and higher prices in late 1990 as they simply had few additional Atlantic salmon to sell because of the earlier impact of Norwegian imports on smolt plantings in 1989. Even if higher prices and reduced Norwegian imports in late 1990 would lead to increased financing for U.S. firms so they can increase the size of their operations, increased sales volumes of finished Atlantic salmon would not be realized until early 1992, a period beyond the scope of this investigation. Indeed, it could be argued, that even if salmon prices had reached $100 per pound in late 1990, the U.S. firms could not have brought significantly greater numbers of finished Atlantic salmon to market due to the 18 month biological lag in production and a biological constraint in marketing. Even though producers can adjust their production and marketing to some degree, the short run supply of salmon, like many other agricultural commodities, is relatively inelastic. [66]

Conclusion

In evaluating the impact that Norwegian imports had on the U.S. farmed Atlantic salmon industry, I find that the U.S industry is materially injured by reason of the subject imports. The impact of falling prices in 1989, due in part to the large volume of Norwegian imports at levels about 50% greater than they were in 1987, at considerably lower prices than in 1987,[67]

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[66] Note the one year supply elasticity estimate of less than 0.5 for the U.S. industry. ITC Economic memo INV-O-048 at 7-9.

[67] Report at page 43 (Table 17).

adversely impacted the fledgling U.S. industry's ability to compete in the U.S. market not only in 1989 but throughout the period of investigation. Though the Atlantic salmon producers do not hold back significant levels of stock for breeding, it still has some characteristics of a "cyclical agricultural industry", notably a biological time lag in production. U.S. producers basing their expanding production on nearly a decade of price levels near or above $4.00 per lb. before the precipitous price decline in 1989, not only lost revenues on sales in 1989 but more importantly were unable to secure financing for replacement or expansion smolt as lenders considered the overhang of Norwegian production and its effect on expected price levels into 1990 and 1991. The biological time lag in production and biological constraints in marketing served to amplify the effect of the price declines in 1989 as producers were painfully aware of supplies available worldwide, particularly in Norway, and the length of time before any funds invested in new production could be recovered. As a result, U.S. producers responded by curtailing production plans and are continuing to suffer financial losses despite declines in Norwegian shipments of Atlantic salmon to the U.S. and in Norwegian production Atlantic salmon in 1991.

INFORMATION OBTAINED IN THE INVESTIGATIONS

Introduction

On June 26, 1990, the U.S. Department of Commerce (Commerce) notified the U.S. International Trade Commission (Commission) of its preliminary countervailing duty determination regarding imports of fresh and chilled Atlantic salmon (fresh Atlantic salmon)[1] from Norway. On October 1, 1990, Commerce notified the Commission of its preliminary antidumping determination regarding imports of the same product from Norway. The Commerce notices were published in the Federal Register on June 29, 1990 (55 F.R. 26727) and October 3, 1990 (55 F.R. 40418), respectively. Commerce preliminarily found that countervailable benefits were being provided to producers or exporters of fresh Atlantic salmon in Norway and that the subject imports were being, or were likely to be, sold in the United States at less than fair value (LTFV). Accordingly, effective June 26, 1990 and October 1, 1990, respectively, the Commission instituted investigations Nos. 701-TA-302 (Final) and 731-TA-454 (Final), under the relevant provisions of the Tariff Act of 1930, to determine whether an industry in the United States is materially injured or threatened with material injury, or whether the establishment of an industry is materially retarded by reason of imports of the subject products from Norway into the United States.[2]

Notice of the Commission's final investigations was given by posting copies of the notices of institution in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notices in the Federal Register on August 1, 1990 and October 31, 1990. Revised schedules were published on November 21, 1990 and December 27, 1990. Appendix A presents copies of the Commission's notices. The Federal Register published Commerce's final affirmative countervailing duty and antidumping determinations on February 25, 1991; these notices are presented in appendix B. The public hearing on these investigations was held on February 26, 1991. Appendix C presents a list of witnesses appearing at the hearing. The briefing and vote on these investigations were held on March 25, 1991, and the Commission's determinations were transmitted to the Secretary of Commerce on April 1, 1991.

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[1] Atlantic salmon is the species Salmo salar. The product "fresh and chilled Atlantic salmon" refers to fresh whole or nearly whole Atlantic salmon, typically (but not necessarily) marketed gutted, bled, and cleaned, with the head on, and packed in fresh-water ice ("chilled"). Excluded are fresh Atlantic salmon that has been cut into fillets, steaks, and other cuts; Atlantic salmon that is frozen, canned, smoked, or otherwise processed; and other species of fish, including other species of salmon. Imports are provided for in Harmonized Tariff Schedule of the United States (HTS) subheading 0302.12.00.

[2] On Aug. 6, 1990, Commerce notified the Commission of the extension of the deadline for the final countervailing duty determination to correspond with the deadline for the final antidumping determination (55 F.R. 32107, Aug. 7, 1990). On Oct. 26, 1990, Commerce published a notice postponing these deadlines to Feb. 15, 1991 (55 F.R. 43154, corrected by 55 F.R. 46699, Nov. 6, 1990).

Background

On February 28, 1990, counsel for the Coalition for Fair Atlantic Salmon Trade (the Coalition) filed a petition with the Commission and Commerce alleging that an industry in the United States is materially injured or threatened with material injury and that the establishment of an industry is materially retarded by reason of imports from Norway of fresh Atlantic salmon that were alleged to be subsidized by the Government of Norway and sold in the United States at LTFV. Accordingly, effective February 28, 1990, the Commission instituted investigations Nos. 701-TA-302 (Preliminary) and 731-TA-454 (Preliminary), under the relevant provisions of the Tariff Act of 1930. On April 16, 1990, the Commission determined that there was a reasonable indication that an industry in the United States was materially injured by reason of the subject imports. The Federal Register published these determinations on April 25, 1990 (55 F.R. 17507).

The Commission has conducted no previous investigations on fresh Atlantic salmon although reports were issued in 1921 and 1937 on "salmon" and "salmon and other fish," respectively. The Commission has conducted a number of countervailing duty and antidumping investigations regarding other fisheries products. One of the most recent (in 1985), on dried salted codfish from Canada, was also the Commission's most recent affirmative determination of material retardation (USITC Publication 1711).

Nature and Extent of the Subsidies and Sales at LTFV

Subsidies

In its final countervailing duty determination, Commerce found the following Norwegian Government programs to confer subsidies: Regional Development Fund loans and grants, National Fishery Bank of Norway loans, regional capital tax incentives, regional reduced payroll tax program, regional advanced depreciation of business assets program, and a Government Bank of Agriculture grant. These programs appear to involve production rather than export subsidies. Numerous other programs were found to be not countervailable. The aggregate estimated net subsidy was 2.27 percent ad valorem. The review period was calendar year 1989.

Sales at LTFV

On the basis of comparisons of U.S. prices and foreign market values, Commerce determined that fresh Atlantic salmon from Norway is being, or is likely to be, sold in the United States at LTFV. U.S. prices were purchase prices paid by unrelated U.S. purchasers. Foreign market value was based on data provided by seven Norwegian fish farmers and eight Norwegian exporters.[3] These exporters accounted for more than 60 percent of U.S. imports of fresh Atlantic salmon from Norway during Commerce's period of investigation (September 1, 1989 through February 28, 1990).

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[3] For one of these exporters, Hallvard Leroy A/S, Commerce disregarded the information submitted and relied on best information available.

Home market sales were judged not to constitute a viable basis for the calculation of foreign market value, and petitioner alleged that sales to third countries were made at prices below costs of production. Therefore, Commerce investigated production costs, using information provided by the fish farmers. For six of the exporters, over 90 percent of third-country sales were found to be below costs of production--Commerce based its dumping margin for these companies on constructed value. For a seventh exporter, Fremstad Group, Commerce based its dumping margin on both third-country sales and constructed value. Commerce's final dumping margins are presented in the following tabulation:

Exporter	Margin percentage
Salmonor A/S	18.39
Sea Star International	24.61
Skaarfish Mowi A/S	15.65
Fremstad Group A/S	21.51
Domstein and Co	31.81
Saga A/S	26.55
Chr. Bjelland	19.96
Hallvard Leroy A/S	31.81
All others	23.80

The Product

Description

The subject product in these investigations is fresh and chilled Atlantic salmon. Atlantic salmon is generally marketed by the producer as a chilled fresh whole adult fish, gutted and cleaned, with the head and tail left on. The scope of the investigation also includes fresh ungutted ("round") Atlantic salmon, as well as fresh Atlantic salmon that has had the head and/or tail removed. The subject product is highly perishable and is, therefore, usually packed in freshwater ice, refrigerated, or otherwise chilled. The term "fresh and chilled" refers to fresh fish, whether or not chilled, as distinct from frozen or otherwise further processed.[4] Excluded from the scope of these investigations are fresh Atlantic salmon fillets, steaks, or other cuts; Atlantic salmon that is frozen, canned, smoked, or otherwise further processed; and other species of fish, including other species of salmon.

Atlantic salmon are native to the northern Atlantic Ocean and to various freshwater bodies in North America and Europe.[5] In the natural state, females spawn in freshwater lakes and rivers, where the juvenile salmon remain until they reach the smolt (post-larval) stage, during which they migrate to salt

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[4] The term "further processing," as used in this report, refers to any and all treatment of the product beyond gutting, cleaning, removal of the head, tail, and/or fins, and packaging.

[5] American Fisheries Society, A List of Common and Scientific Names of Fishes from the United States and Canada, 4th ed. (1980), p. 19.

water.[6] During their adult life, wild Atlantic salmon return three or four times to their freshwater birthplace to spawn, and go back to the ocean afterwards. The commercial harvest of wild Atlantic salmon is banned in the United States and in most other countries in order to conserve the resource for the sportfishery.[7]

Salmon farming accounts for all commercial production of Atlantic salmon in the United States and by all major foreign suppliers.[8] Atlantic salmon is farm raised on both the east and west coasts of the United States. The fish are generally harvested once they have achieved a weight of somewhere between 4 and 11 pounds. Atlantic salmon is marketed by the producer as a fresh product, and its exclusive end use is for human consumption, usually in either fillet or steak form.

U.S. tariff treatment

Under HTS subheading 0302.12.00, U.S. imports of fresh Atlantic salmon are accorded duty-free entry under column 1-general (which covers imports from most-favored-nation sources, including Norway); column 2 imports are subject to a duty of 4.4 cents per kilogram. As of January 1, 1990, imports of the subject product are reported under HTS statistical reporting number 0302.12.0002 (Atlantic salmon, from the legal category fresh or chilled fish, excluding fish fillets and other fish meat of heading 0304). In 1989, imported fresh Atlantic salmon was reported under statistical reporting number 0302.12.0065 (salmon, other than steaks, not elsewhere specified or included, under the same legal category as in 1990).

Prior to the 1989 U.S. implementation of the HTS, the former Tariff Schedules of the United States (TSUS) provided for fresh Atlantic salmon in TSUS item 110.20. The product was reported under statistical annotation 110.2045 (salmon, "whole; or processed by removal of heads, viscera, fins, or any combination thereof, but not otherwise processed, fresh or chilled"), a basket category that covered all species of salmon. U.S. imports from Norway of fresh Atlantic salmon were also accorded duty-free entry under column 1 of the TSUS.

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[6] Landlocked Atlantic salmon strains do not naturally migrate to saltwater as described in this section but remain in fresh water.

[7] Petition, p. 12. Data presented in this report exclude the recreational catch of Atlantic salmon and other species.

[8] Iceland has recently begun ocean ranching of Atlantic salmon, whereby farm-raised smolt are released into the ocean to be harvested when they return to spawn.

Related species[9]

Atlantic salmon is the species Salmo salar, in the genus Salmo, which belongs to the biological family of finfish Salmoninae. Other members of the genus Salmo include various species of trout. The Pacific salmon species are in a separate genus, Oncorhynchus, also within the family Salmoninae. The rainbow/steelhead trout was originally classified as Salmo gairdneri, in the same genus as Atlantic salmon. However, as a result of further research, it was reclassified as Oncorhynchus mykiss, with the Pacific salmons, in 1989. Appendix D presents available data on these related species.

Pacific salmon.--The most common and commercially significant members of the Salmoninae family are the various species of Pacific salmon. Pacific salmon are native to the northern Pacific and some of its freshwater tributaries. A characteristic that distinguishes Pacific salmon from Atlantic salmon is that the former mature and return to their freshwater birthplace to spawn only once before dying. Species of Pacific salmon harvested in U.S. waters include Oncorhynchus tshawytscha (commonly referred to as chinook or king salmon), O. kisutch (coho or silver salmon), O. nerka (sockeye or red salmon), O. keta (chum or dogfish), and O. gorbuscha (pink salmon or humpback). The largest of the Pacific salmons, chinook, average 22 pounds in weight at maturity. Coho average 10 pounds, sockeye 6 pounds, chum 9 pounds, and pink salmon 4 pounds.[10]

The vast majority of Pacific salmon are harvested in coastal waters as the fish return towards their spawning grounds in the summer months. Depending on the species, method of capture,[11] and other factors, the fish will be marketed as either fresh, frozen, smoked, or canned either in the United States or abroad. About 95 percent of the Pacific catch is sold either frozen or canned; however, significant quantities of wild-caught chinook, coho, and chum are sold in the United States on the fresh market during the harvest season. A portion of this fresh product is marketed in the 4-to-11 pound range.

There is also some production of farmed adult chinook[12] on the west coast of the United States. Like Atlantic salmon, farmed chinook salmon are

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[9] See also American Fisheries Society, A List of Common and Scientific Names of Fishes from the United States and Canada, 4th ed. (1980), pp. 18-19.

[10] "Long Journey of the Pacific Salmon," National Geographic, July 1990, pp. 18-19. Sea-run fish vary considerably in size; for example, wild-caught chinook can weigh as much as 125 pounds. Ibid., p. 12.

[11] Most Pacific salmon are net-caught, a harvest technique that often causes significant scarring of the skin and bruising of the flesh (meat). In contrast, troll fishing, which is the traditional hook-in-mouth method as practiced by long-liners and other commercial fishermen, causes relatively little physical damage to the fish. The troll-caught fish, which is typically superior in appearance and yields more high-quality flesh per pound, can command a premium in the fresh market.

[12] All coho farmed in the United States and some chinook are sold as "pan-size" or "baby" fish, at one-half to three-quarters of a pound. These products do not generally compete with larger fish, including larger chinook and coho. Pan-size farmed chinook and coho are excluded from the data presented in this report.

harvested in the 4-to-11 pound range and sold primarily into the fresh fish market.

Steelhead trout.[13]--The rainbow/steelhead trout is now classified biologically with the Pacific salmons, but the steelhead variety has characteristics similar to Atlantic salmon. Natural freshwater strains attain a weight of only 1 to 3 pounds and are commonly referred to as rainbow trout.[14] Strains that migrate to salt water average 9 pounds and are known as steelhead trout.[15] Steelhead are native to the northern Pacific Ocean and certain of its freshwater tributaries; however, they were introduced into the northern Atlantic Ocean early in the 20th century. Like Atlantic salmon, and unlike Pacific salmon, steelhead trout can survive the spawning migration to fresh water and return afterwards to the sea. The limited wild steelhead population is harvested primarily in the recreational and Indian-treaty fisheries. Steelhead trout are farm-raised on both the east and west coasts of the United States and sold in the same size range as other farmed salmon, 4 to 11 pounds, primarily in the fresh fish market.

Aquaculture production[16]

Operations that farm Atlantic salmon typically rely on an enclosure system, in which salmon are raised from eggs through maturity in a series of tanks and pens. It takes about 3 years for an Atlantic salmon to grow from the egg stage to harvestable size. This period is divided into two halves, in the first, the salmon lives in fresh water; in the second, in salt water.

Atlantic salmon typically spawn in the late fall.[17] Brood stock are hand-massaged to strip the eggs (from the female) and milt (from the male). Around January, the fertilized ("green") egg will become an "eyed egg," with visible eyes and a yolk sac. Generally in early February, the eyed egg hatches and a tiny fish-like creature emerges; this "alevin" continues to feed from the yolk sac. About March, the yolk sac is consumed and the juvenile "fry" markings appear; at this point feeding begins and within a couple of months the fish is transferred from an incubator tank to a large freshwater "grow-out" tank. Over the summer the fry grows rapidly; by the fall it is referred to as a "parr."

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[13] Information on steelhead trout was obtained from Scott and Scott, Fishes of the North Atlantic, p. 127; "Long Journey of the Pacific Salmon," National Geographic, July 1990, pp. 18-19; and from U.S. growers and purchasers.

[14] Rainbow trout are farm-raised in Idaho and the Carolinas. No data on rainbow trout are presented in this report.

[15] The term "salmon trout" has also been used for marketing purposes.

[16] The aquaculture production process described in this section is based largely on information provided by petitioners; however, analogous methods are employed by other U.S. and foreign producers although growth cycles differ somewhat. Pacific salmon and steelhead trout are farmed similarly, but again, the growth cycle differs slightly.

[17] U.S. producers on the west coast and Norwegian producers initiate the production cycle somewhat earlier than described herein. Also, Norway has reportedly had some success in having fish spawn in the spring. Atlantic salmon raised in the Southern Hemisphere spawn in their fall. Some strains of Pacific salmon spawn in the summer months.

Parr remain in the freshwater tanks until they lose their juvenile markings and develop the silver skin which identifies a smolt. This typically occurs by the following April although the fish may smoltify earlier in warmer water.

In order for the juvenile salmon to develop properly and yield a flesh quality similar to wild salmon, the environment experienced by farmed salmon must simulate a natural environment; for that reason, the hatchery and freshwater grow-out tanks are set up with cold, quickly circulating fresh water, like a natural river current. Oxygen levels, water temperature, and biomass are monitored closely to avoid impairing the health or growth of the young fish. The diet of the fish changes as it grows; as a parr, its diet prepares it for the transfer to salt water. At each stage of the developmental process, fish of inferior size and/or health are eliminated ("culled").

At the end of the freshwater cycle, the salmon smolt is transferred to a cage-like pen located in salt water.[18] Successful salmon farming requires clean water, strong currents or tides, and water temperatures that remain above freezing. The pens must be able to be accessed and serviced 24 hours a day and are, therefore, usually placed in an area near land and protected from strong winds and seas. (Cobscook Bay in Maine and Puget Sound in Washington have many such protected coves, as do the coasts of Norway, Scotland, Canada, and Chile.) A pen is typically constructed of nets secured to a moored metal frame. An inner net holds the fish and an outer net protects them from predators. A typical site has a single system composed of an anchored metal frame with up to 10 attached pens. Nets are removed, repaired, and cleaned as necessary during the year. Using as few pens as possible makes it easier to feed the stock and to generally oversee their development; therefore, only some of the pens are initially filled with the newly arrived smolts.

Smolt are transferred to saltwater pens in the spring and remain there for about 18 months.[19] During the summer, the fish feed voraciously and gain weight rapidly; however, their appetite and weight gain fade in the winter. The farmer monitors fish growth and health continually. As the fish grow, some are removed and placed in empty pens to allow all the fish enough room to develop to harvestable size. Some producers separate the fish according to size to encourage uniform feeding and growth. Brood stock are selected at the end of the third year. These fish are left to mature[20] in their fourth year.

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[18] Atlantic salmon may also "grow-out" in fresh water, in which case a land-based system may be used.

[19] Chinook, which tend to grow somewhat more slowly, are usually harvested by the farmer after an average of 22 to 24 months in salt water. Current Developments in World Salmon Markets: Implication for the Canadian Salmon Farming Industry, Economic and Commercial Analysis Report No. 46 (Ottawa, Canada: Department of Fisheries and Oceans), p. 29.

[20] Salmon "reach maturity" when their reproductive organs develop fully. Until this point, their food intake converts primarily to edible flesh; however, in the mature salmon, flesh yield is reduced and the fish is not readily marketable.

The U.S. Atlantic salmon harvest generally starts in September and continues into the next spring.[21] This "season" is a function of both biological and market forces.[22] First of all, producers report that adult Atlantic salmon below 6 pounds are generally marketed with profit.[23] They usually achieve this minimum weight after their second summer in saltwater.[24] Also, wild Pacific salmon catches drop off by the beginning of fall. Thus, starting in September, the Atlantic salmon farmer has both a supply of marketable fish and substantial demand for this product. Because fish eat less during the winter, they may be held at relatively little cost (compared to summer months) to the producer and sold over a period of time. However, there are both biological and market constraints to the length of the harvest season.[25] First of all, the fish do continue to grow and there is also an optimal maximum weight (about 11 pounds) for marketable fish. Counsel for both parties have suggested that fish can normally be held about 3 months.[26] Second, once the early chinook runs begin in the spring, fresh Atlantics are competing with fresh chinook in west coast markets, and this competition will increase in the summer months. Finally, fish held into the summer must be fed more and they risk early maturation, which reduces their marketability. Atlantic salmon, unlike Pacific salmon, may be reconditioned (refattened) after spawning; however, this is not a particularly cost-effective procedure for the farmer.

Farmers harvest Atlantic salmon with a small purse seine, a cylindrical net with a draw-string at one end. The fish are entrapped by tightening the draw-string, closing off the bottom of the net, and hauling up the catch.[27] The fish are generally killed and bled at the pen site[28] and then transported (as "round" fish) to a facility where they are gutted, cleaned, and packed in freshwater ice. They are shipped to market in this chilled form.

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[21] Chinook tend to reach harvestable weight beginning in the spring and continuing into the fall; however, the harvest is concentrated in the spring and early fall to avoid competing with the wild harvest. Current Developments in World Salmon Markets: Implication for the Canadian Salmon Farming Industry, Economic and Commercial Analysis Report No. 46 (Ottawa, Canada: Department of Fisheries and Oceans), pp. 29-30.

[22] Atlantic salmon are, to some extent, harvested year-round, both in the United States and in other countries.

[23] Petitioners' prehearing brief, p. 51, fn. 131.

[24] Ibid., exh. 3.

[25] See discussion at pp. 82-83, 85-86, and 88-90 of the transcript of the Commission's hearing (transcript).

[26] Transcript of Commerce's hearing in its antidumping duty investigation, pp. 84-86 (presented in petitioner's prehearing brief as exh. 9.).

[27] This type of net harvesting does not usually cut or bruise the fish.

[28] Alternatively, the salmon may be sucked through a vacuum hose into a tank and transported live to a gutting and packing facility.

Substitute products[29]

What constitutes an acceptable substitute for fresh Atlantic salmon is largely a subjective matter, and perceptions differ according to the channel of distribution, level of trade, time of year, and area of the country. The individual seafood consumer often perceives Pacific salmon as identical, or nearly identical, to Atlantic salmon, as evidenced by the generic "salmon" label given to these products in some fish stores and restaurants. Within the industry, however, there are very different views of substitutability between and among species. There also appears to be some regional bias favoring Pacific salmon at the consumer level on the west coast.

Recent economic research on the effect of farmed salmon production on the Pacific fishing industry found high-value Pacific salmon (chinook, coho, and sockeye) to be substitutes for Atlantic salmon in the North American and European markets.[30] This conclusion is drawn in part from a survey conducted by the same researchers in which a majority of seafood wholesalers who handled both farmed Atlantic salmon and wild Pacific salmon judged fresh chinook to be a strong substitute for fresh Atlantic salmon, with one-half finding fresh coho and fresh sockeye to be strong substitutes. Chinook, coho, and sockeye were held to be either superior or comparable to Atlantic salmon in color, texture, and taste, but markedly inferior in consistency of supply and flesh quality, shelf life, and appearance. Wholesalers generally considered other fresh salmon and all frozen salmon to be poor substitutes for fresh Atlantic salmon.[31] An earlier study by NMFS considered Atlantic salmon, chinook, and coho to be competitive products.[32]

According to distributors, the end-user market with the strictest standards for substitutability is the "white-tablecloth trade" (high-end restaurants). These restaurants want a familiar, prestigious, fresh product, with good color, high flesh quality and yield and in consistent, abundant quantities. The white-tablecloth trade generally considers farmed Atlantic salmon to meet these criteria most closely. Although some restaurants may prefer Atlantic salmon from familiar suppliers (i.e., Norway, Scotland, and Ireland), questionnaire respondents generally indicated that Atlantic salmon from the various suppliers are substitutes.

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[29] The discussion in this section is based on published research and on information provided by a broad range of industry representatives in their questionnaire responses and in meetings with the Commission staff. Further discussion of the effect of price on substitutability is presented in the section of this report entitled "Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged Material Injury."

[30] R. Mittelhammer, M. Herrmann, and B. Lin, An Economic Analysis of the Pacific Salmon Industry: Effects of Salmon Farming, National Marine Fisheries Service (NMFS), 1990.

[31] M. Herrmann, B. Lin, and R. Mittelhammer, U.S. Salmon Markets: A Survey of Seafood Wholesalers, Alaska Sea Grant Report No. 90-01 (Fairbanks: University of Alaska, 1990).

[32] Aquaculture and Capture Fisheries: Impacts on U.S. Seafood Markets, April 1988, NMFS (NMFS 1988 report), pp. xi and 12.

According to questionnaire responses and staff discussions with industry representatives, the white-tablecloth trade generally considers fresh chinook to be a substitute for Atlantic salmon in terms of taste and customer acceptance, followed by fresh coho. On the west coast, fresh chinook and coho displace fresh Atlantic salmon on many restaurant menus during the summer months.[33] Troll-caught product is favored in the white-tablecloth market. Limited supplies of farmed chinook and coho also compete with fresh Atlantic salmon in the off season.[34] Industry sources indicated that chum and pink salmon are generally considered inferior in taste and not competitive either with Atlantic salmon or with higher-value Pacific species in the white-tablecloth market. Specialty seafood stores have standards similar to those of high-end restaurants.

Again according to industry sources and questionnaire responses, supermarket and grocery chains, which are referred to as part of the "retail" market, are end users with more willingness to accept substitutes for Atlantic salmon. During the summer months and particularly on the west coast, fresh Pacific species, especially chinook, coho, and chum, compete with Atlantic salmon in this market. However, because the Pacific species are not available fresh year-round in abundant quantities, retail-level competition is concentrated during the wild Pacific season. Retail buyers put less emphasis on certain quality factors than does the white-tablecloth trade. However, appearance is consistently important because the salmon is usually displayed raw. Thus, farmed and troll-caught Pacific salmon are more substitutable for farmed Atlantic salmon than are net-caught fish because of scarring, bruising, and other physical damage caused to the fish by nets.

Distributors noted that another segment of the retail market, low-end restaurant chains, accept net-caught salmon, including low-value chum and pink salmon, as substitutes for Atlantic salmon because food preparation often masks the inferior appearance and/or taste and texture of these products. Institutional food service markets are even willing to substitute frozen Pacific salmon. Finally, some Atlantic salmon is sold to smokers, who generally consider farmed and troll-caught Pacific salmon and steelhead trout, whether fresh or frozen, as substitutes for Atlantic salmon.

Sockeye is not usually considered to be a substitute for Atlantic salmon by the trade, but not because of inferior quality. Pacific salmon fishermen explained that sockeye has a distinctive taste that is so strongly favored by the Japanese that the bulk of the U.S. sockeye catch is exported to Japan at premium prices. Steelhead trout was also not generally specified as a

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[33] Although quantities may not be consistent throughout the entire season, these salmon species are more familiar to the local consumer and favored by many seafood lovers in terms of color and taste.

[34] Canada and Chile farm adult chinook and coho in significant quantities for export year-round to the U.S. market. Farmed Canadian chinook serves primarily west coast markets. Since 1989, the volumes of farmed Chilean adult coho available in the United States allow this product to compete strongly with farmed Atlantic salmon in major east coast markets, particularly at the height of the production season (January and February).

substitute for Atlantic salmon by distributors,[35] but, again, not because of quality differences. Farmed steelhead trout, like farmed Pacific salmon, offers competitive taste and flesh quality and yield, but only in small quantities. Also, steelhead is a lesser known fish at the consumer level. Finally, industry representatives overwhelmingly responded that frozen Pacific salmon is not substitutable for fresh Atlantic salmon except, perhaps, for smoking purposes.

The World Market[36]

Between 1950 and 1970, the world catch of fisheries products increased at a rate greatly exceeding population growth, and per-capita seafood consumption more than doubled. From 1970 to 1985, however, population growth slightly exceeded increases in the world catch. Increases in demand are projected to result in substantial shortfalls of supplies from natural marine stocks in the years to come. Aquaculture is seen as providing the required additional supplies. The predominant farm-raised species in the world is Atlantic salmon. Other important cultured fisheries products include catfish, chinook, coho, oysters, shrimp, and trout.

World production of farmed Atlantic salmon expanded rapidly in the 1980s, from less than 5 million kilograms (kg) in 1980, to over 235 million kg in 1990. This growth was led by Norway, the world's largest supplier of Atlantic salmon, still accounting for two-thirds of world production. The United Kingdom (specifically Scotland) is the second oldest and second largest producing country. These two suppliers have recently stabilized production levels. Newer, smaller suppliers continue to experience nearly exponential growth rates. Data on 1989 and 1990 world production of Atlantic salmon smolt (in thousands) and adults (in 1,000 kg) are presented in the following tabulation:[37]

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[35] Steelhead producers stated that steelhead trout is a substitute for Atlantic salmon.

[36] Information on the world market was obtained from "World Salmon Aquaculture," IFR 90/30, NMFS, May 1990; NMFS 1988 report; and from articles included as exhibits to the petition.

[37] These data are from the Norwegian Fishfarmers Sales Organization (FOS) 1990 fact sheet; "Global Trends for Farmed Salmon," Seafood International, February 1991; Minutes of the meeting of the International Salmon Farmers' Association, Sept. 4, 1990, Vancouver, British Columbia; "World Salmon Aquaculture," IFR 90/30, NMFS, May 1990; and Commission questionnaire responses. Some 1990 data are projections. For each country, the source deemed most reliable was used.

Country	1989 Smolt	1989 Adults	1990 Smolt	1990 Adults
Norway	66,000	114,900	60,000	157,900
The United Kingdom	22,000	28,600	24,000	32,000
Faroe Islands	5,000	7,500	8,000	12,000
Canada	3,500	5,500	5,100	9,800
Ireland	7,300	5,800	7,500	7,500
Chile	2,800	1,800	4,200	6,000
Iceland	10,000	1,600	10,000	4,000
Australia	1,000	1,500	1,000	2,700
The United States	3,900	1,500	4,300	2,500
Other countries	1,000	1,200	1,500	1,900
Total	122,500	169,900	125,600	236,300

Norway has contributed significantly to the development of salmon aquaculture in other countries by funding research, pioneering production techniques, and providing investment capital. Norwegian banks provide substantial financial support for salmon aquaculture in the United States and in other countries. The vast majority of Norwegian production of Atlantic salmon is exported. The European Community (EC) is by far the largest market for Norwegian exports, and the United States is Norway's second largest export market.

The U.S. Market

U.S. per-capita consumption of seafood has risen by more than 40 percent during the past 20 years, largely as a result of health and diet awareness and increases in income. U.S. consumption of edible seafood hit a record 15.9 pounds per person in 1989, up slightly from the previous record of 15.7 pounds per person in 1987.[38] Future increases are forecast.[39]

The United States is the second-largest national market for fresh Atlantic salmon in the world, surpassed only by France. U.S. demand is supplied predominantly by imports. During the period of investigation, Norway was the largest supplier to the United States, followed by Canada.[40] In 1990, both Chile and Iceland surpassed the United Kingdom as exporters of fresh Atlantic salmon to the United States.

The market for Atlantic salmon in the United States is concentrated heavily along the east coast.[41] The five largest ports-of-entry for imports from all countries in 1990 were New York (35.2 percent of total quantity), Portland, ME (17.1 percent), Miami (16.6 percent), Boston (10.0 percent), and Seattle (7.0 percent). Most importers defined their marketing area as either

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[38] Fisheries of the United States 1989, NMFS, May 1990, p. 73.

[39] NMFS 1988 report, p. vii.

[40] Monthly U.S. imports from Norway declined steadily during June-December 1990, being surpassed by both Canada and Chile in the last quarter of the year.

[41] Consumption of fresh Pacific salmon is similarly concentrated on the west coast.

local or regional, and imports supplied more than 90 percent of the market during the period of investigation.

Apparent U.S. consumption

Apparent U.S. consumption of fresh Atlantic salmon, as presented in this report, is calculated from questionnaire responses of U.S. producers and official import statistics, as adjusted.[42] As shown in table 1, apparent U.S. consumption increased strongly during the period of investigation. Such consumption increased from *** pounds and $*** in 1987 to 26.9 million pounds and $134.3 million in 1988, increases of *** percent and *** percent, respectively. Consumption jumped to 41.7 million pounds in 1989, a further 54.9-percent increase. However, in terms of value, consumption rose at less

Table 1
Fresh Atlantic salmon: U.S. shipments[1] of U.S. producers and of imports from Norway and all other countries and apparent U.S. consumption, 1987-89, January-June 1989, and January-June 1990

Item	1987	1988	1989	January-June-- 1989	1990
	Quantity (1,000 pounds)				
U.S. producers' U.S. shipments...	***	1,900	3,114	1,264	1,755
U.S. shipments of imports from--					
Norway.....	16,776	19,609	25,123	12,283	11,195
All other countries.....	4,400	5,406	13,468	6,902	13,552
Total imports.....	21,177	25,016	38,591	19,185	24,747
Apparent U.S. consumption.....	***	26,916	41,705	20,449	26,502
	Value (1,000 dollars)				
U.S. producers' U.S. shipments...	***	8,670	10,193	5,253	5,884
U.S. shipments of imports from--					
Norway.....	82,217	99,435	103,508	53,599	47,771
All other countries.....	19,973	26,244	51,804	27,992	48,079
Total imports.....	102,189	125,679	155,311	81,591	95,850
Apparent U.S. consumption.....	***	134,349	165,504	86,844	101,734

[1] Includes company transfers and open-market sales.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission and from official U.S. import statistics, as adjusted.

[42] No inventories of fresh Atlantic salmon are held, and importers reported no significant loss caused by spoilage after returns; thus, the volume of U.S. shipments of imports is assumed to equal the volume of U.S. imports. Import values were adjusted upward by 10.5 percent, the average of mark-ups reported by 23 importers.

than one-half that rate, 23.2 percent, to a total of $165.5 million. From January-June 1989 to January-June 1990, apparent consumption increased again by 29.6 percent in volume and by 17.1 percent in value.

U.S. producers

During the period of investigation, approximately 25 firms farmed Atlantic salmon in the United States. These firms include large integrated producers, freshwater producers of juvenile Atlantic salmon, and saltwater grow-out operations.[43]

The U.S. Atlantic salmon industry is concentrated in two small areas very distant from one another and in quite different markets (figure 1). Pacific salmon farming and ranching predate Atlantic salmon farming in the State of Washington; however, difficulties in raising Pacific salmon have led many farmers in the Puget Sound area to convert their operations to Atlantic salmon farming.[44] Salmon farming commenced in the Cobscook Bay area of Maine slightly later than it did on the west coast, and the majority of Maine producers are very new entrants into the industry. The northeast has recently surpassed the northwest in production totals.[45]

The farming of Atlantic salmon is a relatively new industry in the United States and requires extensive lead time. Anything other than small-scale entry into the industry also requires substantial capital investment. To assess petitioners' claims of material retardation, the term "producer," as used in the Atlantic salmon producers' questionnaire, was defined to include firms that have actively pursued substantial investment in production facilities without yet having begun the production cycle. This definition was intended to collect financial data relating to leases, permitting procedures, and other start-up costs incurred by firms considering entry into the industry. However, most of the firms identified by the petitioners as potential producers of Atlantic salmon provided negative responses to the questionnaire. Only *** reported the requested start-up cost data. Thus, this report contains little data on potential producers.

Producers in support of the petition represent roughly one-half of the U.S. industry, and firms in opposition account for about a third.[46] None of the Washington firms are members of the petitioning coalition, and half of these companies, including most of the Norwegian-owned ones, oppose the

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[43] In addition, a small number of independent firms gut, clean, and package Atlantic salmon, usually as a toll activity. The operations of independent processors are not included in the data presented in this report. ***.

[44] Atlantic salmon farming in the Pacific northwest is likely to remain limited to Washington because Alaska has a moratorium on fish farming, and Oregon restricts the introduction of non-native stocks.

[45] During the 1987/88 and 1988/89 harvest seasons, west coast producers sold *** and 3 times, respectively, as much fresh Atlantic salmon as did their east coast counterparts.

[46] Based on 1987-90 smolt production and the 1989/90 harvest. In the earlier harvest seasons, firms opposed to the petition produced more fresh Atlantic salmon than did firms in support.

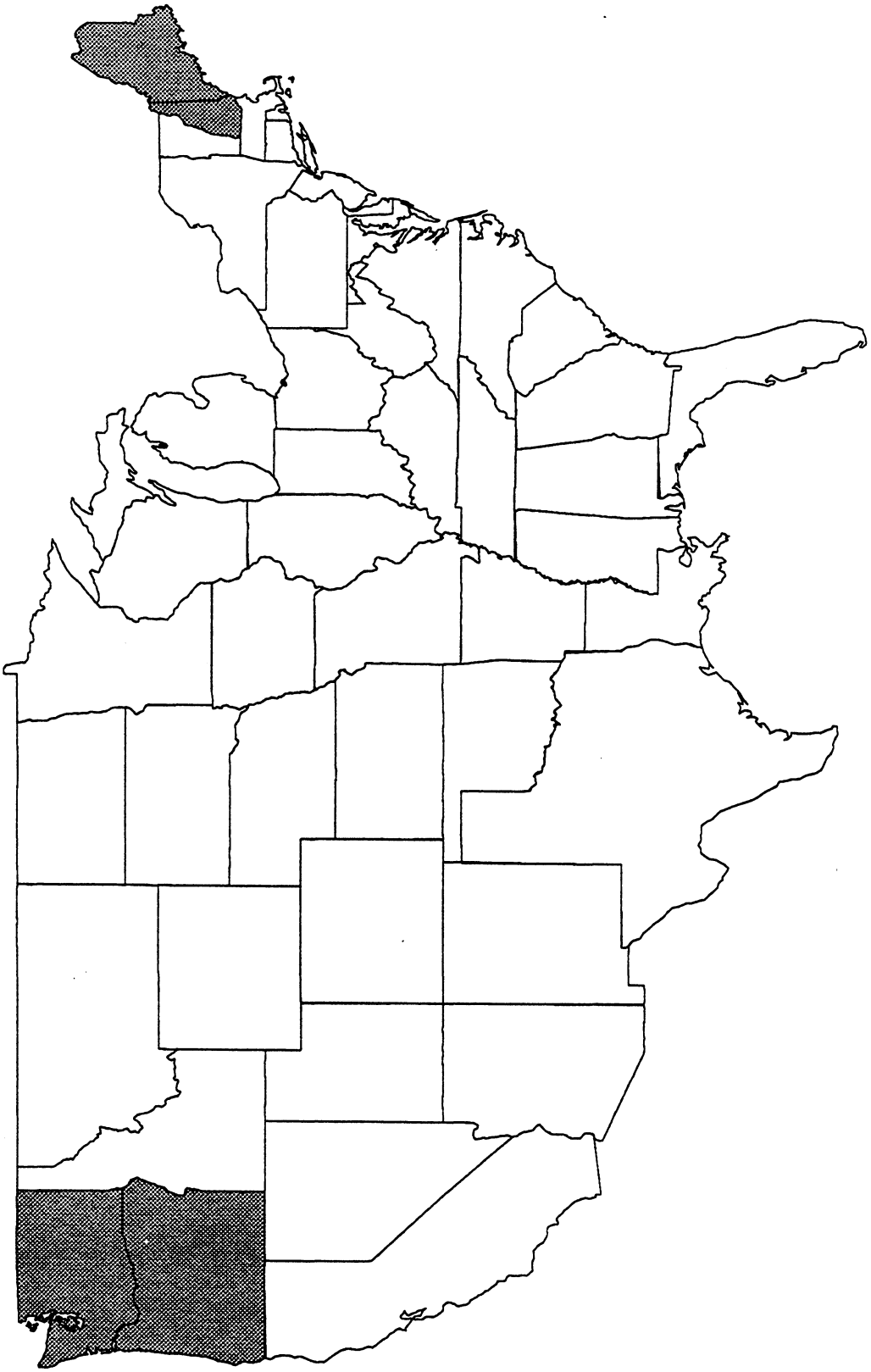


Figure 1.--Locations of U.S. Atlantic salmon producers

Figure 1.--Locations of U.S. Atlantic salmon producers--Continued

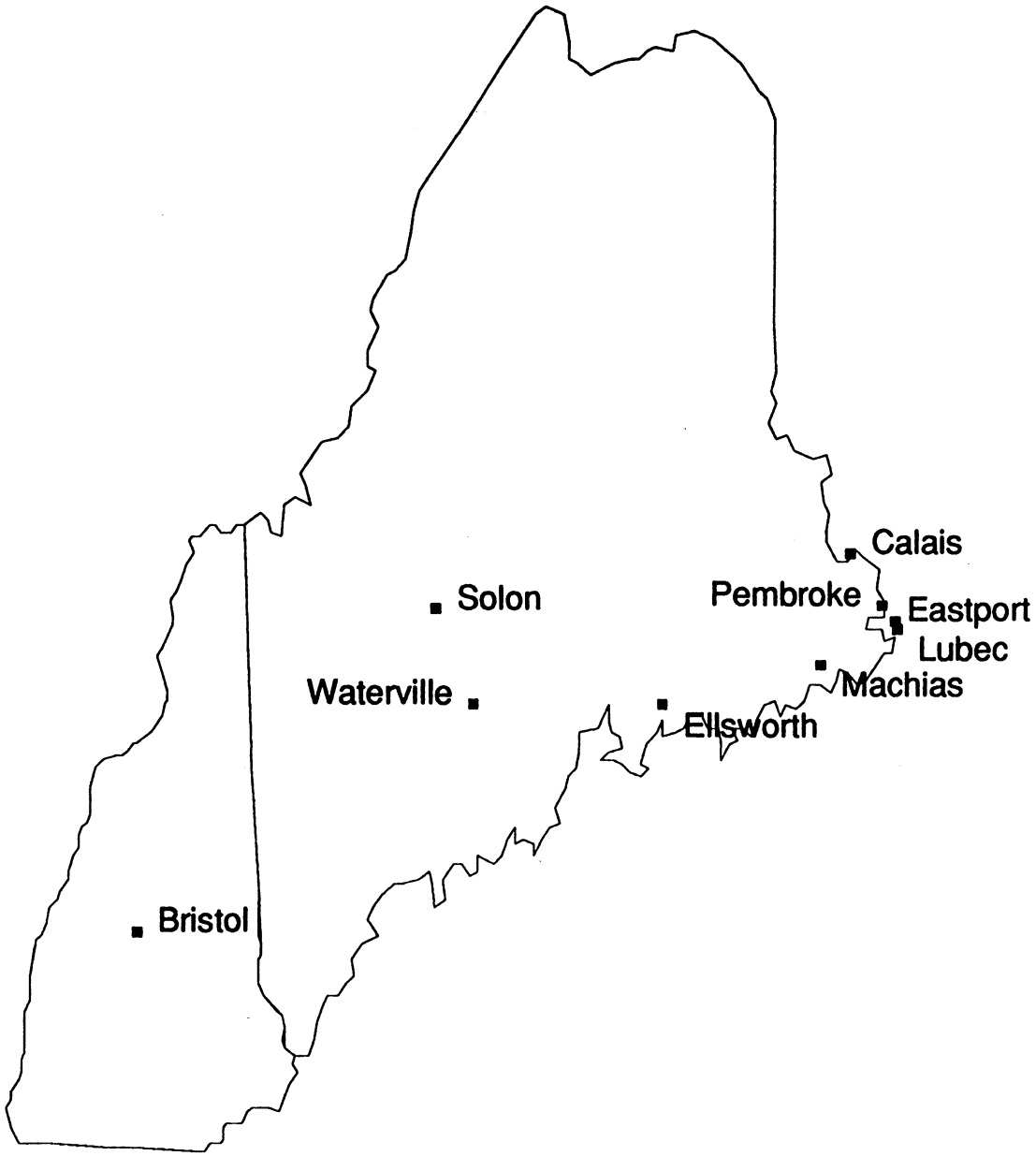
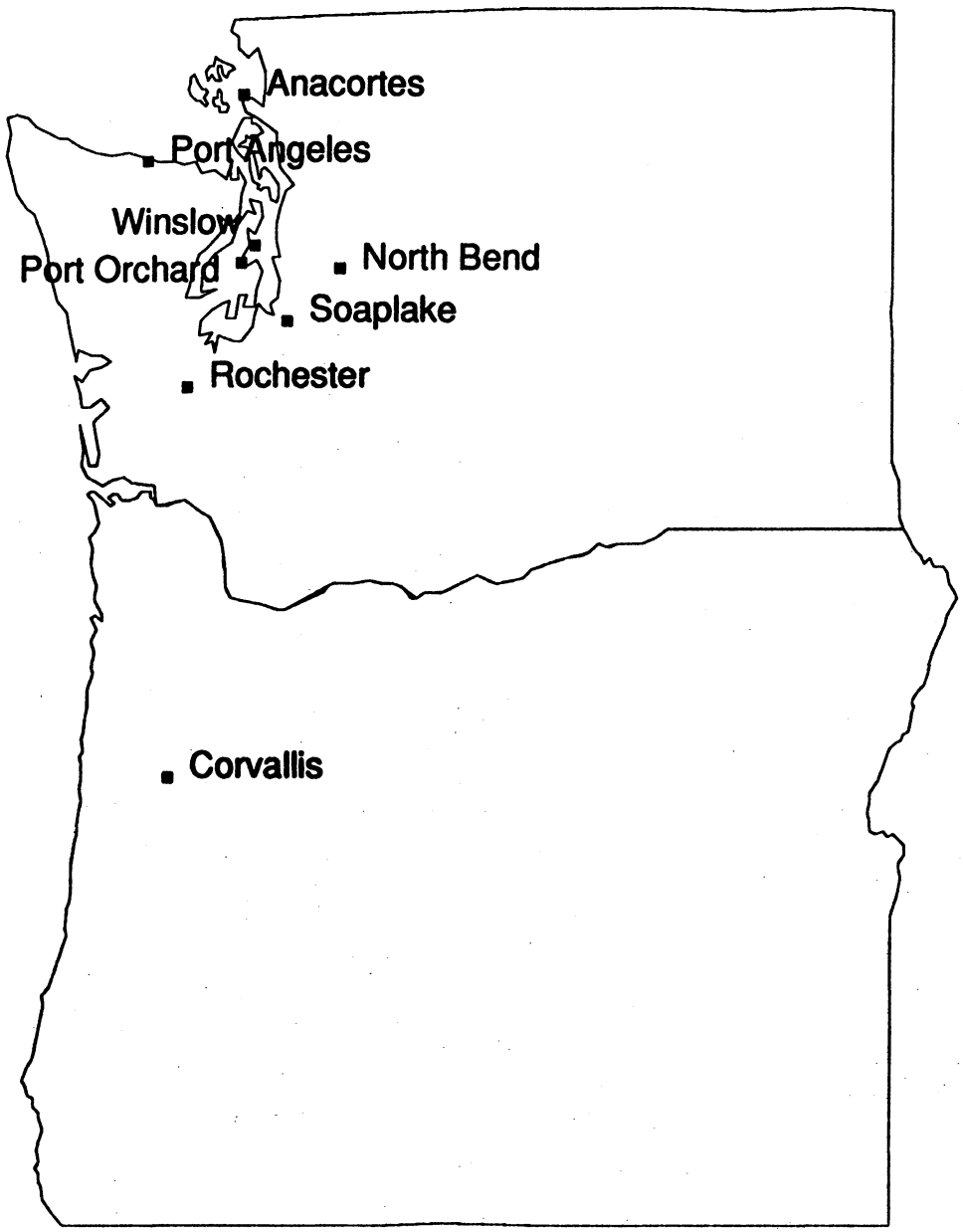


Figure 1.--Locations of U.S. Atlantic salmon producers--Continued



petition. ***. In contrast, nearly all of the Maine producers are represented in the petitioning coalition. The following tabulation lists all firms identified as current U.S. producers[47] of Atlantic salmon, by region, and presents their position on the petition and the years of start-up of operations and of commercial sales:[48]

Company	Position on the petition	Start-up of-- Freshwater facilities	Saltwater facilities	First sale
Northwest producers:				
Anadromous, Inc./Paradise Bay Seafarms, Inc.	***	***	***	***
FishPro, Inc.	***	***	***	***
Global Aqua--USA, Inc.	***	***	***	***
Olympic Seafarm, Inc.	***	***	***	***
Scan-Am Fish Farms	***	***	***	***
Sea Farm Washington, Inc.	***	***	***	***
Swecker Salmon Farm, Inc.	***	***	***	***
Tailfin, Inc.	***	***	***	***
Troutlodge, Inc.	***	***	***	***
Northeast producers:				
Atlantic Salmon (Maine), Inc.	***	***	***	***
East Coast Fish Farms	***	***	***	***
Friendship Fisheries	***	***	***	***
Kennebec Aquaculture	***	***	***	***
Maine Pride Salmon, Inc.	***	***	***	***
Maine Salmon, Inc.	***	***	***	***
Mariculture Products Ltd.	***	***	***	***
New England Fish Farming Enterprises, Inc.	***	***	***	***
New England Salmon Co.	***	***	***	***
Ocean Products, Inc./Connors Aquaculture, Inc.	***	***	***	***
Penobscot Salmon Co., Inc.	***	***	***	***
Sea Farm Maine, Inc.	***	***	***	***
Senorita Fisheries, Inc.	***	***	***	***
Treat's Island Fisheries	***	***	***	***

Ocean Products, Inc./Connors Aquaculture, Inc.--During the period of investigation, Ocean Products was the largest U.S. producer of fresh Atlantic salmon, accounting for *** percent of reported 1990 smolt production and *** percent of reported 1989 U.S. shipments of round adult Atlantic salmon. Ocean Products was established in 1982, commenced substantial production in

[47] Current producers include companies that are currently growing out smolt but have yet to market adult Atlantic salmon.

[48] The tabulation also indicates whether the firm is exclusively a freshwater producer (in which case its commercial sales are of smolt) or whether the firm operates saltwater facilities (in which case sales are of adult Atlantic salmon) and the ownership of companies opposed to the petition.

1986, and ceased operations in 1990. The firm operated 2 hatcheries, over 200 saltwater pens, and a processing plant in Eastport, ME, and had a corporate/ sales office in Portland, ME. Ocean Products bought and marketed Atlantic salmon raised by other saltwater growers and imported small amounts of *** from ***. The firm was a member of the coalition that filed the petition. On August 31, 1990, Ocean Products sold all of its assets, then proceeded to liquidate first its debt and then the company itself.[49]

Connors Aquaculture is a wholly owned U.S. subsidiary of Connors Brothers, Ltd., a Canadian firm engaged in a variety of fishery-related operations, including the farming of Atlantic salmon in New Brunswick. On August 31, 1990, Connors Aquaculture acquired the assets of Ocean Products and is now the largest U.S. producer of Atlantic salmon.[50] This firm has joined the petitioning coalition. Connors Brother's Atlantic salmon is being marketed through the newly formed Heritage Salmon Co., Inc., along with Pacific salmon produced by BC Packers, ***.

Other vertically integrated producers.--Among other integrated producers in Maine are Coalition members Maine Pride Salmon (Maine Pride) and Mariculture Products. These producers are ***. Maine Pride is a majority British-owned holding company, with four operating subsidiaries, each of which is a typical small saltwater cage facility. The company provides the investment and working capital, owns the equipment and the fish, markets the harvest, and provides technical support to each site lessee/manager.[51] Mariculture Products is ***. A fourth integrated producer in Maine is Atlantic Salmon (Maine), which is ***. There are also three vertically integrated west coast producers: Sea Farm Washington[52] and Global Aqua-USA (Global Aqua), which are ***, and Paradise Bay Seafarms (Paradise Bay), ***.[53]

Freshwater producers.--Five producers reported operating only freshwater facilities. Swecker Salmon Farm is ***. *** are primarily producers of eyed eggs for grow-out by other Washington State farmers, but these two firms also raise some fish to the smolt stage. These three Washington firms are ***. In

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[49] On Oct. 4, 1990, *** informed the Commission staff that his company would be unable to provide a questionnaire response in the final investigations. However, the company was requested to provide the following documentation: a "Summary Descriptive Memorandum," dated February 1990, that provides a detailed description of the company and its operations; fiscal 1990 and interim fiscal 1991 financial data; information regarding the sale of assets and disposition of sales' proceeds; and any corrections to data reported in the preliminary questionnaire. The requested documentation was provided and no corrections to the preliminary submission were reported. Certain minor adjustments to the preliminary questionnaire data were made based on information presented in the "Summary Descriptive Memorandum." The data for Ocean Products presented in this report are based on its preliminary questionnaire response and on these additional documents.

[50] Connors Brothers did not buy Ocean Products but, rather, bought its assets. Therefore, Connors Aquaculture was unable to provide data relating to the operations of Ocean Products.

[51] Transcript, pp. 18-19 and 22.

[52] * * * * * * *

[53] * * * * * * *

Maine, Coalition member New England Fish Farming Enterprises (NEFFE) was established in *** and ***. ***.

Saltwater growers.--A number of firms purchase smolt and operate only saltwater grow-out facilities. The independent saltwater growers in Maine are small family-owned and operated farms that maintain a small number of fish cages. These farming operations are financed with personal savings or debt, and the owners rely on a variety of income sources, including the farming of steelhead trout. Independent saltwater growers in Washington operate on a larger scale than do their Maine counterparts. Many of the Washington Atlantic salmon farmers also raise, or have raised, chinook, coho, steelhead trout, and other species of fish.

U.S. importers and purchasers

Approximately 100 firms imported fresh Atlantic salmon from Norway during the period of investigation. Importers are generally wholesale seafood brokers or large distributors who resell to smaller distributors and retail customers. Importers' questionnaires were sent to 61 firms; 26 importers, accounting for slightly over one-half of U.S. imports of fresh Atlantic salmon from Norway in 1989, provided information on the subject imports.

There are thousands of purchasers of Atlantic salmon in the United States. In the preliminary investigations, producers and importers were asked to identify their major purchasers. Most of the firms identified were distributors that also import directly. Other major purchasers identified include restaurant, supermarket, and grocery store chains. Purchasers' questionnaires were sent to 55 firms; 20 purchasers provided information on U.S.- and Norwegian-produced fresh Atlantic salmon.

Channels of distribution

U.S. producers and importers compete in similar markets for sales. Principal channels of distribution are regional and national distributors (some of whom are also importers), retail chains, and smokers. Distributors resell to individual restaurants and seafood stores. Producers and importers reported their 1989 sales by market, as shown in the following tabulation (as a percent of the total):

	Market		
Supplier	Distributors	Retail chains	Other[1]
U.S. producers.....	***	***	***
U.S. importers.....	63.0	34.5	2.5

[1] Includes smokers and caterers.

Petitioners estimate that 60 percent of Atlantic salmon is directed to the restaurant trade, primarily at the high end, with the balance split between

retail fish markets and supermarkets.[54] Respondents place the high-end share of the market for Norwegian Atlantic salmon at 80 percent, and the low-end share at 20 percent.[55]

Consideration of Material Injury to, and Material Retardation of, an Industry in the United States

Information presented in this section of the report is based on the questionnaire responses of 22 producers of Atlantic salmon,[56] accounting for the vast majority of U.S. shipments of Atlantic salmon during the period of investigation. Coverage of the U.S. Atlantic salmon industry is estimated to be near 95 percent. As appropriate, data are presented separately by stage of production.[57]

The Commission also gathered data on Pacific salmon and steelhead trout. These data are presented in appendix D.

U.S. production, capacity, and capacity utilization

U.S. capacity and production rose strongly during most of the period 1987-90, as producers responded to increased demand for the subject product. The number of fish declines from one stage of development to the next because of mortality and culling.

Freshwater operations.--Table 2 presents capacity and production data for juvenile Atlantic salmon in hatcheries and freshwater grow-out tanks. Eyed eggs typically develop in January,[58] and remain in the incubators until they become fry, some two months later. The producer then transfers the fry to freshwater grow-out tanks where they mature into smolt by the next spring. Although some eyed eggs, fry, and parr are sold, the capacity of most freshwater producers is generally constrained by their capacity to produce smolt.[59]

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[54] Transcript at p. 66.

[55] Ibid., p. 148.

[56] Twenty-one firms responded to the Commission's Atlantic salmon producers' questionnaire in the final investigations. Ocean Products was not sent a questionnaire in the final investigations; its preliminary questionnaire response was used along with supplemental documentation.

[57] "Production" as used in this report generally refers to the development of fish to a certain stage of maturity. It is also used in reference to processing activities.

[58] *** reported eyed eggs capacity and production in December; however, these data are presented as part of the following calendar year's capacity and production.

[59] * * * * * * *
Therefore, the capacity data reported understate somewhat the actual capacity of hatchery and freshwater tanks.

Table 2
Atlantic salmon eyed eggs, fry, and smolt: U.S. capacity, production, and capacity utilization, 1987-90

Product and item	1987	1988	1989	1990
Eyed eggs:[1]				
Capacity (1,000s)	***[2]	19,300[2]	24,250	28,250
Production (1,000s)	***[2]	9,432[2]	14,804	15,044
Capacity utilization (percent)	***	48.9	61.0	53.3
Fry:				
Capacity (1,000s)	2,585[2]	9,385	13,840	13,050
Production (1,000s)	1,675[2]	6,825	8,920	8,894
Capacity utilization (percent)	64.8	72.7	64.5	68.2
Smolt:				
Capacity (1,000s)	930[2]	2,340	6,692	6,790
Production (1,000s)	339[2]	1,545	3,885	4,342
Capacity utilization (percent)	36.5	66.0	58.1	63.9

[1] In the United States, eyed eggs generally develop in January. These data include some west coast production of eyed eggs in December of the previous year.

[2] *** did not provide eyed egg data for 1987 and 1988, and fry and smolt data for 1987. This firm accounted for *** and *** percent, respectively, of the reported capacity and production of eyed eggs in 1989; *** and *** percent, respectively, of the reported capacity and production of fry in 1988; and *** and *** percent, respectively, of the reported capacity and production of smolt in 1988.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Producers reported "typical" mortality rates for eyed eggs, fry, and smolt all averaging near 25 percent. "Atypical" mortality of juveniles resulted from such factors as overcrowding, disease, warm water temperature, and poor water quality. In addition, inferior and surplus juveniles are culled, accounting for a further decrease in population.

The number of companies reporting freshwater production capacity rose from 6 in 1987 to 11 in 1990. During the first three years, reported capacity to produce, and production of, eyed eggs doubled; and capacity and production of fry and smolt increased at rates of twofold to fourfold. Then, in 1990, industry-wide freshwater production levels stabilized. Individual producers generally increased capacity utilization over time. However, entry into the industry and atypical mortalities hindered significantly improved capacity utilization rates for eyed eggs and fry.

Saltwater operations.--In the United States, the Atlantic salmon harvest typically commences in September and continues into April. As appropriate to this industry, the data presented in table 3 are on a "harvest season" basis. Each period covers from July through the following June.

Table 3
Adult round and gutted Atlantic salmon: U.S. capacity, production, and capacity utilization, harvest seasons 1987/88-1989/90

Product and item	Harvest season--[1] 1987/88	1988/89	1989/90
Adult round Atlantic salmon:			
Capacity (1,000s)[2]	530	851	1,641
Production (1,000s)	179	423	620
Capacity utilization (percent)[2]	29.2	46.8	33.0
Adult gutted Atlantic salmon:			
Capacity (1,000s)[3]	***	***	***
Production (1,000s)	180	350	670
Capacity utilization (percent)[3]	***	***	***

[1] Data cover a 12-month period from July through June.
[2] One firm, accounting for *** percent of the value of shipments during the period, did not report capacity; capacity utilization is computed from the data of firms providing both capacity and production.
[3] Four firms, accounting for *** percent of the value of shipments during the period, did not report capacity; capacity utilization is computed from the data of firms providing both capacity and production.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Three firms reported harvesting Atlantic salmon in the 1987/88 season; this figure increased to 10 in 1989/90. Saltwater productive capacity[60] and production of adult fish more than tripled during the period of investigation as Ocean Products expanded saltwater operations and new producers entered the industry. Production and permitting difficulties encountered by most producers hindered further expansion.[61] First of all, farmers in both Maine and Washington reported a shortage of quality Atlantic salmon smolts in the years preceding 1989. Partly because of this shortage, three firms raised a strain of landlocked salmon that failed to reach ideal marketable weight in their third year and were sold, still underweight, in the fourth year. In addition, west coast producers have been particularly plagued by "alga bloom."[62] Three firms lost *** to a bloom in September 1989, and two other producers suffered

[60] Several producers noted that their calculation of saltwater capacity was very theoretical. Although pen space clearly is the final constraint on capacity, production is more frequently limited by such factors as smolt transfer survival rates; losses to predators, algae, and disease; and allocation of cage space to other species (and their survival rates).
[61] Production problems and startup operations are the major reasons for the relatively low saltwater capacity utilization ratios. An Ocean Products' official indicated that pens stocked with adult fish must be emptied to receive the new smolt each spring. (See p. 56 of the conference transcript.)
[62] The alga Primnesium parvum is deadly to fish at the high concentrations present when it "blooms." Blooms typically occur in warm, brackish water.

*** losses in a July 1990 bloom. Finally, because of the environmental impact of salmon farming, there are extensive and costly permitting requirements for the establishment of either freshwater or saltwater production facilities in both Maine and Washington. These requirements are relatively more burdensome in Washington than in Maine, and for saltwater farmers in both states. Producers reported that the cost of obtaining leases and permits has delayed entry into, and further expansion of, the industry.[63]

Production of gutted fish, which is actually a better measure of harvests,[64] shows that the number of Atlantic salmon harvested nearly doubled in each season during the period of investigation. Only *** reported processing capacity, and capacity utilization reflects only their operations. (Processing plants operate seasonally and, therefore, well below capacity.) Other firms' reported production of gutted Atlantic salmon represents toll production by independent processors.

U.S. producers' shipments and inventories

Shipment quantities mirror production quantities. The majority of trade in "intermediate products" is transferred within a vertically integrated production process, whereas the subject final product is sold almost entirely on the open market. This discussion is presented in terms of U.S. shipments; however, available data on company transfers and domestic shipments are also presented. U.S.-produced Atlantic salmon is not known to be exported.

"Inventories," in the usual sense of the word, are not held by the industry.[65] Therefore, meaningful inventory-to-shipment ratios cannot be calculated.

Freshwater operations.--Eleven producers provided usable data on shipments of juvenile Atlantic salmon (table 4).[66] U.S. shipments of these products

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[63] At present, the establishment of saltwater grow-out facilities requires the approval of federal, state, and local authorities. The applicant must provide extensive documentation proving that the lease site is suitable for fish farming. Typically, environmental groups and shoreline residents oppose the permit application, resulting in further legal expenses for the applicant. *** reported costs of *** over *** years to obtain and defend approval for one site. *** reported costs-to-date in excess of *** for a site that ***. In contrast, the average investment for Maine finfish permits was only $47,750 over 16 months. (An Aquaculture Development Strategy for the State of Maine, a report commissioned by the Maine State Planning Office and Department of Marine Resources (State of Maine report), p. 61.)

[64] Two firms reported "production" of adult Atlantic salmon in the period when the fish achieved a marketable weight; however, some salmon were harvested in a later period.

[65] So-called swimming inventories, which include smolt and parr, are more comparable to "work-in-progress" than to finished inventories.

[66] Producers were asked to report, as "shipments" of eyed eggs, the hatching of the eggs. "Shipments" of fry correspond to the transfer of juveniles to freshwater growout tanks. Smolt were considered "shipped" when they were transferred to saltwater.

Table 4
Atlantic salmon eyed eggs, fry, and smolt: U.S. producers' U.S. shipments,[1] 1987-90

Product and item	1987	1988	1989	1990
U.S. shipments of eyed eggs:[2]				
Company transfers (1,000s)	***[3]	***[3]	***	***
Domestic shipments (1,000s)	***[3]	***[3]	***	***
Total U.S. shipments:				
Quantity (1,000s)	2,850[3]	7,332[3]	14,304	12,224
Percent change in quantity	(4)	157.3	95.1	-14.5
U.S. shipments of fry:[2]				
Company transfers (1,000s)	***[3]	***	***	***
Domestic shipments (1,000s)	***[3]	***	***	***
Total U.S. shipments:				
Quantity (1,000s)	1,675[3]	6,825	8,920	8,894
Percent change in quantity	(4)	307.5	30.7	-0.3
U.S. shipments of smolt:				
Company transfers:				
Quantity (1,000s)	***[3]	***	2,098	1,545
Value (1,000 dollars)	***[3]	1,620	3,346	2,327
Unit value (per smolt)	***	***	$1.59	$1.51
Domestic shipments:				
Quantity (1,000s)	***[3]	***	1,802	2,277
Value (1,000 dollars)	***[3]	703	2,841	5,008
Unit value (per smolt)	***	***	$1.58	$2.45[5]
Total U.S. shipments:				
Quantity (1,000s)	306[3]	1,435	3,900	3,822
Percent change in quantity	(4)	369.5	171.7	-2.0
Value (1,000 dollars)	465[3]	2,323	6,186	7,335
Percent change in value	(4)	399.9	166.3	18.6
Unit value (per smolt)	$1.52	$1.62	$1.59	$2.04
Percent change in unit value	(4)	6.5	-2.0	28.7

[1] Excludes donations and paybacks of juvenile Atlantic salmon to public wild salmon enhancement programs.

[2] Only quantity data were requested for shipments of eyed eggs and fry.

[3] *** did not provide eyed egg data for 1987 and 1988, or fry and smolt data for 1987. This firm accounted for *** percent of reported U.S. shipments of eyed eggs in 1989, *** percent of shipments of fry in 1988, and *** percent of smolt shipment volumes in 1988 (*** percent in terms of value).

[4] Cannot be calculated.

[5] * * * * * * *

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Note.--Percentage changes are computed from the unrounded figures.

increased in volume more than fourfold during 1987-89 and then declined somewhat in 1990, concurrent with the expansion and subsequent stabilization of production levels. Declines in 1990 eyed egg and fry shipments are partly due to production difficulties encountered by several individual firms. The reason for the 1990 decline in smolt shipments is ***.[67] The aggregate value of smolt shipments continued to rise in 1990. ***.

U.S. shipments of smolt, by firm, and position in the investigations, are shown in the following tabulation (in thousands of pounds):

Company	1987	1988	1989	1990
In support of the petition:				
* * * * * * *				
Total in support.....	***	***	1,944	1,770
Opposed to the petition:				
* * * * * * *				
No position taken:				
* * * * * * *				

Saltwater operations.--In the United States, Atlantic salmon are typically harvested from September through April.[68] Ten producers reported shipments of harvested adult salmon, which are subsequently gutted and packaged by, or for, the farmer. Despite the various production problems encountered, the quantities of adult Atlantic salmon harvested nearly doubled in volume each harvest season during the period of investigation. These data are presented in table 5.

From the 1987/88 season to the 1988/89 season, U.S. shipments of gutted fresh Atlantic salmon increased from 1.2 million pounds to 2.2 million pounds, and from $5.6 million to $9.3 million, percentage changes of 83.2 and 67.5, respectively. In the 1989/90 season, quantities shipped similarly increased by 63.9 percent; however, the value of such shipments rose at a much lower rate, 16.0 percent. Future increases in shipments are forecast. In Maine, where the 1988 harvest was an estimated 1 million pounds with a wholesale value of $4.2 million, the projections for 1992 are 22 million pounds with a value of $88 million.[69]

The 1989/90 season ended "prematurely," according to industry witnesses. Reportedly, the lower prices that prevailed during the fall of 1989 forced producers to "front-load" their sales, i.e., harvest and sell larger-than-expected quantities of smaller-than-desireable fish earlier in the harvest season to maintain revenues.[70] Unit values of U.S. producers' shipments of gutted fresh Atlantic salmon fell sharply in July-December 1989 but rebounded

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[67] * * * * * * *

[68] Data in this section are also presented on a "harvest season" basis, with each period covering July through the following June.

[69] State of Maine report, p. 32.

[70] Transcript, pp. 34-35.

Table 5
Adult round and gutted Atlantic salmon: U.S. producers' U.S. shipments, harvest seasons 1987/88-1989/90

Product and item	Harvest season--[1] 1987/88	1988/89	1989/90
U.S. shipments of adult round Atlantic salmon:[2]			
Quantity (1,000s)	180	351	681
Value (1,000 dollars)	3,631	7,304	9,110
U.S. shipments of adult gutted Atlantic salmon:			
Quantity (1,000 pounds)	1,201	2,200	3,605
Value (1,000 dollars)	5,572	9,332	10,824

[1] Data cover a 12-month period from July through June.
[2] Consists almost entirely of company transfers, which are subsequently gutted and packaged by, or under toll agreement for, the farmer.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

somewhat in the first half of 1990, as shown in the following tabulation (in dollars per pound):

U.S. shipments of gutted fresh Atlantic salmon	1987 Jan.-June	1987 July-Dec.	1988 Jan.-June	1988 July-Dec.	1989 Jan.-June	1989 July-Dec.	1990 Jan.-June
Unit value	***	***	$4.76	$4.36	$4.16	$2.67	$3.35

U.S. shipments of gutted adult Atlantic salmon, by firm, and position in the investigations, are shown in the following tabulation (in thousands of pounds):[71]

* * * * * * *

Employment

Employment in the production of fresh Atlantic salmon increased strongly during the period of investigation, but not quite at the rates of production or shipments. The reason is that the long growth cycle of the salmon demands labor input years before any product is marketed. Although the type of labor activity varies seasonally, there is sufficient year-round demand that most workers are permanent employees. The work force is not unionized, and non-

[71] On a calendar-year basis, producers in support of the petition shipped *** pounds in 1988 and *** pounds in 1989. Producers opposed shipped *** pounds in 1988 and *** pounds in 1989. Those taking no position shipped *** pounds in 1988 and *** pounds in 1989.

wage benefits are not significant. Feeding, harvesting, caring for nets, transferring and handling fish, and processing all demand considerable semiskilled manual labor; the industry is just beginning to introduce some labor-saving machinery. According to one researcher, labor accounts for up to 15 percent of the cost of raising Atlantic salmon from the smolt stage.[72]

Salmon farming is important to the economy of the Cobscook Bay area, although the textile industry is somewhat larger in terms of number of workers. Tourism and other fisheries also offer seasonal employment. The herring fishery and canning operations, formerly predominant, have almost disappeared from the area, as has the herring.[73] According to a study commissioned by the State of Maine, "[a]quaculture, especially finfish culturing, can be expected to generate direct and indirect (spin-off) income in other sectors of the economy at a higher rate than traditional fisheries" (where every dollar of landed value creates $2.85 in direct and indirect income).[74] The Atlantic salmon industry is not a major source of employment in the Puget Sound area.

Fourteen producers, accounting for the vast majority of reported production, provided the data on employment presented in table 6.[75] The number of persons employed, hours worked, and total compensation paid all more than doubled from 1987 to 1989, and hourly compensation increased steadily. Less complete interim data show continued expansion of employment. Smaller producers indicated that the majority of their labor was supplied by owners and family members and was unpaid. Meaningful productivity ratios and unit labor costs could not be calculated.

***. No other producer reported such reductions-in-force.

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[72] E. A. Needham, "Salmon production costs worldwide" (text of a speech), Sept. 1990.

[73] Transcript, pp. 13-18 and discussions with producers and other area residents, Mar. 12-13, 1990.

[74] State of Maine report, p. 75.

[75] Calendar-year data for Ocean Products were estimated by staff based on the fiscal-year data provided in its preliminary questionnaire response. Interim period data exclude *** firms that did not provide usable interim data.

Table 6
Atlantic salmon: Average number of production and related workers, hours worked,[1] total compensation paid, and hourly total compensation,[2] 1987-89, January-September 1989, and January-September 1990[3]

Item	1987	1988	1989	January-September-- 1989	January-September-- 1990
Production and related workers:					
Number	117	196	265	164	175
Percentage change	(4)	66.8	35.5	(4)	6.7
Hours worked:					
Quantity (1,000)	194	345	514	145	162
Percentage change	(4)	77.9	48.7	(4)	12.0
Total compensation paid:					
Value ($1,000)	1,395	2,702	4,082	1,368	1,590
Percentage change	(4)	93.7	51.1	(4)	16.2
Hourly total compensation:					
Amount	$7.51	$8.05	$8.10	$10.24	$10.53
Percentage change	(4)	7.1	0.6	(4)	2.8

[1] Includes unpaid labor hours.
[2] Based on companies providing data on both paid hours worked and total compensation paid.
[3] Calendar-year data for Ocean Products were estimated by staff based on the fiscal-year data provided in its preliminary questionnaire response. Interim period data exclude *** firms that did not provide usable interim data.
[4] Cannot be calculated.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Note.--Percentage changes are computed from the unrounded figures.

Financial experience of U.S. producers

Eleven producers of Atlantic salmon supplied income-and-loss data on their Atlantic salmon operations. These firms accounted for the vast majority of reported U.S. production of smolt and adult salmon during the period of investigation. *** are integrated producers that accounted for the majority of reported U.S. production of Atlantic salmon in 1989. Their financial data are included in the aggregate data in table 7, but are also discussed separately in this section. *** sold *** smolts *** and ***. *** produce and sell only juvenile Atlantic salmon. Selected data of these producers are presented separately in this section. Other producers, who started production at various stages in the Atlantic salmon growth cycle and some of whom had no commercial sales, supplied limited investment data.

Operations on adult Atlantic salmon.--Income-and-loss data on operations producing adult Atlantic salmon are presented in table 7. Net sales jumped from $*** in 1987 to $9.1 million in 1988 and then declined by 10 percent to $8.2 million in 1989. For January-September 1989 and 1990, *** did not provide data; however, *** full-year fiscal data are included in those periods. During

Table 7
Income-and-loss experience of U.S. producers[1] on their Atlantic salmon operations, accounting years 1987-89, January-September 1989, and January-September 1990

Item	1987	1988	1989	January-September--[2] 1989	1990
	Value (1,000 dollars)				
Net sales	***	9,108	8,205[3]	7,964[3]	***
Cost of goods sold	***	5,841	8,817[3]	8,403[3]	***
Gross profit or (loss)	***	3,267	(612)	(439)	***
General, selling, and administrative expenses	***	2,690	3,681	2,944	***
Operating income or (loss)	***	577	(4,293)	(3,383)	***
Start-up expenses	***	***	***	***	***
Interest expense	***	1,224	1,908	1,766	***
Other income or (loss), net	***	***	***	***	***
Net income or (loss) before income taxes	***	(567)	(6,501)	(5,414)	***
Depreciation and amortization included above	***	1,516	2,143	1,920	***
Cash flow[4]	***	949	(4,358)	(3,494)	***
	Share of net sales (percent)				
Cost of goods sold	***	64.1	107.5	105.5	***
Gross profit or (loss)	***	35.9	(7.5)	(5.5)	***
General, selling, and administrative expenses	***	29.5	44.9	37.0	***
Operating income or (loss)	***	6.3	(52.3)	(42.5)	***
Net income or (loss) before income taxes	***	(6.2)	(79.2)	(68.0)	***
	Number of firms reporting				
Gross losses	***	***	***	***	***
Operating losses	***	***	***	***	***
Net losses	***	***	***	***	***
Data	3	5	6	5	6

[1] These firms are ***.

[2] * * * * * * *

[3] * * * * * * *

[4] Cash flow is defined as net income or loss plus depreciation and amortization.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

this period, net sales of reporting firms rose by *** percent from $8.0 million in 1989 to *** in 1990.

The industry reported aggregate operating losses throughout the period covered by the investigations, except in 1988 when reported sales peaked. In 1988, *** responding firms reported gross profits; ***. The aggregate operating loss was $4.3 million, or 52.3 percent of net sales, in 1989, when *** reporting firms sustained operating losses. During January-September, such losses were $***, or *** percent of net sales in 1990 compared with $3.4 million, or 42.5 percent of net sales in 1989. The industry reported net losses throughout the period of investigation, because of operating losses and/or significant interest expense. Key financial data by firm are presented in table 8.

Table 8
Selected financial data of U.S. producers on their Atlantic salmon operations, by firms, accounting years 1987-89, January-September 1989, and January-September 1990

Item	1987	1988	1989	January-September-- 1989	1990
*	*	*	*	*	*	*

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Ocean Products, Inc.--Ocean Products grew, processed, and sold primarily fresh Atlantic salmon. The company was formed in 1982 and began commercial sales in 1984. As indicated in the "U.S. producers" section of this report, Ocean Products sold all of its assets and ceased operations on fresh Atlantic salmon in August 1990. Income-and-loss data of Ocean Products are shown in table 9. Net sales of fresh Atlantic salmon in terms of both number of fish and pounds *** from fiscal year 1987 to 1989 and further increased by *** percent in pounds in fiscal year 1990. Net sales value rose by *** percent from $*** in 1987 to $*** in 1988, but declined slightly to $*** in 1989, in spite of increasing sales in pounds. Net sales $*** in 1990. The average price per pound declined from $*** in 1987 to $*** in 1989 and *** in 1990. The increase in sales reflects the relatively recent entry of this firm into the fresh Atlantic salmon industry in the United States and the expansion of operations from its initial development phase.

Table 9
Income-and-loss experience of Ocean Products, Inc., on its operations producing Atlantic salmon, accounting years ended June 30, 1987-90

Item	Audited 1987	1988	1989	Unaudited 1990
*	*	*	*	*

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Ocean Products reported operating and net losses ***. Ocean Products provided its break-even price levels on the basis of actual production levels for marketing season 1989/90 and on the basis of projected production levels for marketing season 1990/91. These data are shown in the following tabulation:

Size of fish	1989/90	1990/91
*	*	*

***.[76]

The net losses in absolute dollars increased from $*** in 1987 to $*** in 1988. However, net loss margins declined during the same period from *** percent to *** percent. In 1989, net losses jumped to $***, which exceeded revenues by *** percent. Of this total loss, $*** (*** percent) relates to a reduction of inventories to net realizable value, partly because of declining market prices of Atlantic salmon at that time. As reflected in the audited statement, accounting rules require recognition of the loss in the year in which the inventory value (normally based on cost) exceeds the net realizable value (basically net sales value) of the product. Ocean Products reported *** in its fiscal year 1990 ***.

The balance sheet of Ocean Products as of the end of its last four complete fiscal years (ending June 30 of 1987-90) is presented in table 10.

* * * * * * *

[76] Petitioner's postconference brief, p. 24, fn. 9.

Table 10
Balance sheet of Ocean Products, Inc., as of June 30, 1987-90

(In thousands of dollars)

Item	1987	1988	1989	1990
*	*	*	*	*

Source: Compiled from the Annual Reports and internal financial statements submitted by Ocean Products.

* * * * * * *[77]

***.--

* * * * * * *

Table 11
Income-and-loss experience of ***

Item	1987	1988	1989	1990
*	*	*	*	*

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

* * * * * * *

[77] * * * * * * *

Table 12
Balance sheet of ***

(In thousands of dollars)

Item	1987	1988	1989	1990
*	*	*	*	*	*	*

Source: Compiled from the financial statements submitted by ***.

* * * * * * *

Operations on Atlantic salmon smolt.--*** are smolt producers that raise salmon from the egg stage to the smolt stage for sale to commercial fish companies. *** provided its financial statement for ***. Selected data are presented in the following tabulation:

* * * * * * *

Selected income-and-loss data for *** are shown in the following tabulation:

* * * * * * *

***. Selected data are presented in the following tabulation:

* * * * * * *

***.--

* * * * * * *

Table 13
Income-and-loss experience of ***

Item	1987	1988	1989	1990
*	*	*	*	*	*	*

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

* * * * * * *

Table 14
Balance sheet of ***

(In thousands of dollars)

Item	1987	1988	1989	1990
*	*	*	*	*	*	*

Source: Compiled from the financial statements submitted by ***.

* * * * * * *

Sales and gross profit projections.--The Commission requested from U.S. producers their initial projections for sales and gross profitability for their fiscal years 1987-90. Four producers (***) supplied projections for 1990, whereas only two producers, ***, provided such data for more than one period. Projections and actual figures for these two firms are shown in the following tabulations:

* * * * * * *

Investment in production facilities.--Most of the U.S. producers, who commenced their production at various stages in the Atlantic salmon growth cycle, provided very limited data with respect to their investment in assets and capital expenditures. Their total assets, including inventories, as of the end of accounting year 1990 are presented in the following tabulation (in thousands of dollars):

Company and location	Total assets as of the end of accounting year 1990
* * * * * * *	
Total investments.....	60,579

Research and development expenses.--Three U.S. producers provided data with respect to research and development expenses. *** stated that the company spent approximately ***. *** incurred research and development expenses of ***; *** spent ***.

Impact of imports on capital and investment.--The Commission requested U.S. producers to describe any actual and/or potential negative effects of imports of fresh Atlantic salmon from Norway on their growth, investment, ability to raise capital, and/or existing development and production efforts. Their responses are shown in appendix E.

Consideration of the Question of Threat of Material Injury

Section 771(7)(F)(i) of the Tariff Act of 1930 (19 U.S.C. § 1677(7)(F)(i)) provides that--

> In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of any merchandise, the Commission shall consider, among other relevant factors[78]--
>
> (I) If a subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the subsidy is an export subsidy inconsistent with the Agreement),
>
> (II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,
>
> (III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,

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[78] Section 771(7)(F)(ii) of the act (19 U.S.C. § 1677(7)(F)(ii)) provides that "Any determination by the Commission under this title that an industry in the United States is threatened with material injury shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."

(IV) the probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise,

(V) any substantial increase in inventories of the merchandise in the United States,

(VI) the presence of underutilized capacity for producing the merchandise in the exporting country,

(VII) any other demonstrable adverse trends that indicate the probability that the importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury,

(VIII) the potential for product-shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 701 or 731 or to final orders under section 736, are also used to produce the merchandise under investigation,

(IX) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both), and

(X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.[79]

The available information on the nature of the subsidies (item (I) above) is presented in the section of this report entitled "Nature and Extent of the Subsidies and Sales at LTFV;" information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV) above) is presented in the section entitled "Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged

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[79] Section 771(7)(F)(iii) of the act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other GATT member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

Material Injury;" and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts (item (X)) is presented in the section entitled "Consideration of Material Injury to, and Material Retardation of, an Industry in the United States." U.S. importers do not hold inventories of the subject product (item (V)). Available information on foreign producers' operations, including the potential for "product-shifting" (items (II), (VI), (VIII), and (IX) above); on any other threat indicators, if applicable (item (VII) above); and on any dumping in third-country markets follows.

The Norwegian industry[80]

Norway has traditionally had a large fisheries sector that contributes significantly to the national economy and greatly to export earnings. As overexploitation reduced certain fish and shellfish populations and as demand for fishery products grew, Norway pioneered the development of aquaculture technology in the early 1970s. The Norwegian Atlantic salmon industry is characterized by many small, independent producers. Government policy encourages decentralization and discourages vertical integration. Typically, smolt producers, saltwater farmers, and exporters are unrelated entities. In 1990, about 12,000 persons were employed in the industry. Production levels and industry development are controlled at the national level. There are also a number of government-sanctioned regulatory groups. The FOS controls the sale of product by the farmer to the exporter and establishes minimum prices.

The Government of Norway permitted farmers to expand their salmon farms from 3,000 cubic meters each to 8,000 cubic meters in the early 1980s, and to 12,000 cubic meters in 1988. Also, the number of salmon farms increased from 5 in 1971 to nearly 800 in 1990. As a result, Norwegian production of farmed salmon nearly doubled every two years during the past two decades.

Most analysts agree that the rapid increase in production by the Norwegian industry resulted in a worldwide oversupply of fresh Atlantic salmon in 1989. Production increased from 47.4 million kg in 1987 to 80.4 million kg in 1988, a 69.5 percent jump. Then, early in 1989, Norway's harvest for that year was forecast as high as 150 million kg, representing a further 86.6 percent increase.[81] World prices for Atlantic salmon fell in 1989. FOS minimum prices were adjusted downward twice during the course of the year; however, some Atlantic salmon was sold below such prices in the EC.[82] Near the end of the year, with prices near historical lows, some Norwegian farmers delayed harvesting fish. Some 35 to 40 million kg of marketable fish were left in the

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[80] Except as noted, information on the Norwegian industry is drawn from "Norwegian Salmon Farming, 1988-89," IFR-90/03, NMFS; "Norwegian Salmon Industry," an address delivered on May 8, 1990 at the Salmon '90 trade show by Odd Steinsbo, Managing Director of FOS; and the 1990 FOS fact sheet.

[81] The Norwegian harvest season is concentrated during the August-May period. (Jeffrey S. Neeley, letter to Lynn Featherstone dated Jan. 18, 1991.) However, because fish are harvested yearround, Norwegian harvest data are generally presented on a calendar year basis.

[82] See respondent's prehearing brief, p. 51.

water,[83] and the 1989 harvest ended up totalling 114.9 million kg, still 42.9 percent higher than in 1988.

Early 1990 harvest projections for Norway were again 150 million kg. On January 4, 1990, the Norwegian Government implemented an "intervention plan" designed to stabilize prices. The plan undertook to eliminate sales below the minimum price by guaranteeing that FOS would pay this price when the export market would not. The "surplus" fresh Atlantic salmon would be frozen. The freezing program initially provided for freezing up to 40 million kg of Atlantic salmon; however, by the end of the year nearly 50 million kg had been frozen. Although the 1990 harvest was a record 157.9 million kg, fresh fish supplies declined slightly from 1989 because of the freezing program.[84] Norwegian fishery industry officials expect the program to continue through the first half of 1991.[85]

Current annual freshwater capacity is estimated at about 100 million smolt, and saltwater grow-out capacity is estimated to be near 180 million kg. The industry is operating well below capacity[86] and further additions to capacity are unlikely in the current market. Additional licenses have been granted but are not being used, further licensing has been suspended, and farming of other fish and shellfish species is increasing. The 73 million smolt produced in 1988 was a record, resulting in a peak 1989/90 harvest. Smolt production fell to 66 million in 1989 and 60 million in 1990, which suggests that harvests will decline by about 10 percent in both the 1990/91 and 1991/92 seasons.

Prior to 1990, Norway exported, on average, more than 85 percent of its Atlantic salmon harvest as fresh fish. An industry marketing organization promotes Norwegian salmon abroad. In 1990, the five largest markets were: France (30.3 percent by volume), Denmark (20.2 percent), Spain (9.3 percent), the Federal Republic of Germany (9.2 percent), and the United States (8.1 percent).[87] Exports to Japan and other European countries accounted for the remaining one-quarter of export shipments.

Data provided to date by respondents in these investigations are presented in tables 15 and 16. These data do not differ materially from those available from other sources. Reported data indicate that the number of hatch-house operations in Norway remained in the range of 30-50 firms, and that they

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[83] Because of biological constraints, the bulk of these fish likely were harvested in the first 3 months of 1990. See the section of this report entitled "Aquaculture production."

[84] The magnitude of this decline depends on the amount of Atlantic salmon frozen in 1989. These quantities are believed to have been minimal.

[85] Transcript, pp. 110-111.

[86] Norwegian capacity data are calculated on the basis of actual physical tank and pen space. As U.S. industry representatives have noted in their questionnaire responses, actual production levels are further constrained by smolt availability and other factors. Norwegian officials note that smolt availability is currently being controlled at levels below physical capacity. Transcript at pp. 117-118.

[87] These data include frozen Atlantic salmon. In 1989, the United States was Norway's third largest national market, with 12.9 percent of total volumes.

operated well below their reported aggregate capacity of 900 million eyed eggs throughout the period of investigation. The number of fry and smolt producers peaked in 1988 at 370 and declined thereafter. Production of fry has fallen steadily since 1987, and is projected to continue to decline through 1991. As noted above, smolt production peaked in 1988; however, 1990 and 1991 levels are still projected to remain above those of 1987. Data on these freshwater operations are presented in table 15.

Table 15
Atlantic salmon eyed eggs, fry, and smolt: Norwegian capacity, production, and capacity utilization, actual 1987-89 data, and projected 1990-91 data

Product and item	1987	1988	1989	1990[1]	1991[1]
Eyed eggs:					
Capacity (1,000,000s)	900	900	900	900	900
Production (1,000,000s)	220	200	157	126	[2]
Capacity utilization (percent)	24	22	17	14	[3]
Fry:					
Capacity (1,000,000s)	[2]	[2]	[2]	[2]	[2]
Production (1,000,000s)	170	155	140	110	90
Capacity utilization (percent)	[3]	[3]	[3]	[3]	[3]
Smolt:					
Capacity (1,000,000s)	120	140	140	100-120	100-120
Production (1,000,000s)	43	73	66	60	50-60
Capacity utilization (percent)	36	52	47	50-60	42-60

[1] Projected.
[2] Not reported.
[3] Cannot be calculated.

Source: Compiled from data submitted by counsel for the Norwegian respondents.

There were well over 700 saltwater Atlantic salmon farming operations during the period of investigation; no increases were projected for 1990-91. Saltwater capacity rose by 39.3 percent from 1987 to 1989 but is expected to stabilize in 1990-91 (table 16). Harvests more than doubled from 1987 to 1989, with a further increase of 39.1 percent forecast for 1990; however, production of salmon is forecast to decline by 12.5 percent in 1991. Saltwater capacity utilization nearly doubled from 1987 to 1989 and was projected to peak in 1990. Norway exported about 80 percent of its 1987-89 harvests to countries other than the United States. Then, in 1990, Norway froze about 15 percent of its harvest (Norwegian frozen production is included in home-market shipment data) and again exported 80 percent of its fresh production to other markets.

Table 16
Fresh Atlantic salmon: Norwegian saltwater capacity, harvests, capacity utilization, home-market shipments, and exports to the United States and all other countries; actual 1987-89, January-September 1989, and January-September 1990 data; and projected 1990-91 data

(In millions of pounds, except as noted)

Item	1987	1988	1989	1990[1]	1991[1]	Jan.-Sept.-- 1989	1990
Capacity	280	320	390	390	390	293	293
Harvest	104	176	253	352	308	167	258
Capacity utilization (percent)	37	55	65	90	79	57	88
Shipments:							
Home-market shipments[2]	5	16	20	90	(3)	21[4]	95[4]
Exports to the United States	18	23	31	21	(3)	23	19
Exports to all other countries	80	137	203	241	(3)	124	144
Total shipments	104	176	253	352	(3)	167	258

[1] Projected.
[2] Includes product that is delivered for freezing.
[3] Not reported.
[4] Interim home-market shipments exceed full-year data because the former include frozen product consumed in Norway.

Source: Compiled from data submitted by counsel for the Norwegian respondents.

Note.--Because of rounding, figures may not add to the totals shown.

Antidumping proceeding in the EC

On February 2, 1990, the EC published, in the Official Journal of the European Communities, a notice of initiation of an antidumping proceeding concerning imports of fresh Atlantic salmon from Norway (No. C 25/6). On March 16, 1991, the EC published a notice terminating the investigation (No. L 69/32).[88] According to the latter notice, the EC found dumping in the amount of 11.3 percent, and determined that "the fall in the price of Norwegian imports [coincided] with the injury caused to the Community industry." However, the EC declined to impose antidumping duties, noting that Norway had "undertaken to combat factors which might disturb the balance of supply and demand." Also, according to an Irish industry official, EC member states other than the United Kingdom and Ireland opposed the EC Commission's proposed antidumping duty.[89]

[88] See David Palmeter, letter to Rebecca Woodings dated Mar. 18, 1991 (at attachment).
[89] "Global Trends for Farmed Salmon," Seafood International, February 1991, p. 55. The termination notice also discusses input from consumer groups.

According to a Norwegian official, Norway has agreed to work with the EC to avoid "significant and unwarranted price reductions" caused by instabilities in supply and demand.[90] ***.[91] ***.[92]

Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged Material Injury[93]

U.S. imports

In 1990, the United States imported 19.1 million kg of fresh Atlantic salmon. Norway supplied 40.3 percent of the total, followed by Canada (25.6 percent), Chile (21.3 percent), Iceland (5.3 percent), the United Kingdom (4.7 percent), and Ireland (1.7 percent). Imports from all sources were valued at $150.1 million during this period, with Norway accounting for 44.3 percent of the total, Canada for 24.4 percent, Chile 18.2 percent, Iceland 4.7 percent, the United Kingdom 5.5 percent, and Ireland 1.9 percent. Other countries, in the aggregate, accounted for 1.0 percent, by volume and value, of total imports. In prior years, imports from Norway accounted for a larger share of total import supplies.

Prior to 1989, fresh whole salmon of all species was classified in a single TSUS item. Although most suppliers of salmon products to the United States produced and exported primarily Atlantic salmon during these years, two major ones, Canada and Chile, are known to have exported mostly Pacific salmon. In this report, 1987-88 U.S. imports of fresh Atlantic salmon are estimated based on available information.[94] In 1989, "fresh whole salmon not elsewhere specified or included" was provided for in HTS statistical reporting number 0302.12.0065; however, since all species of Pacific salmon were elsewhere specified, imports under this number are believed to include only the subject product.[95] In 1990, fresh Atlantic salmon was provided for in its own HTS statistical number, 0302.12.0002; however, imports under HTS statistical number 0302.12.0062 are also believed to be the subject product.[96]

U.S. imports from Norway.--As shown in table 17, U.S. imports from Norway of fresh Atlantic salmon increased from 7.6 million kg, valued at $74.4

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[90] Kjell Raasok, Fisheries Counselor, Royal Norwegian Embassy, letter to Kenneth R. Mason dated Feb. 14, 1991.

[91] ***.

[92] * * * * * * *

[93] See app. F for a discussion of factors identified by U.S. Atlantic salmon producers as having had an impact on their operations during 1987-90.

[94] 1987-88 data were estimated by calculating the ratios of fresh whole Atlantic salmon to all fresh whole salmon as observed in 1989 U.S. import data, and applying those ratios to comparable country-specific 1987 and 1988 quantity and value data for all fresh whole salmon. For Canada and Chile, further adjustments were made using port-of-entry import data and foreign production data, respectively.

[95] The only other species provided for under this HTS number, Danube salmon, is an obscure species not known to be imported into the United States.

[96] See Theodore W. Kassinger, letter to Lynn Featherstone dated Jan. 17, 1991; and transcript, pp. 159-160.

Table 17
Fresh Atlantic salmon: U.S. imports from Norway, Canada, Chile, Iceland, the United Kingdom, Ireland, the Faroe Islands, and all other countries,[1] 1987-90

Source	1987[2]	1988[2]	1989	1990[3]
	Quantity (1,000 kg)			
Norway	7,610	8,895	11,396	7,699
Canada	700	1,137	2,958	4,889
Chile	42	118	557	4,077
Iceland	78	322	472	1,012
The United Kingdom	529	353	1,011	901
Ireland	47	310	426	333
The Faroe Islands	-	35	478	53
All other countries	600	177	207	133
Total	9,606	11,347	17,505	19,098
	Value (1,000 dollars)[4]			
Norway	74,404	89,987	93,672	66,440
Canada	5,719	10,499	22,145	36,636
Chile	316	962	3,876	27,296
Iceland	792	3,061	3,262	7,084
The United Kingdom	5,588	4,122	9,167	8,288
Ireland	471	3,058	3,486	2,887
The Faroe Islands	-	349	3,472	415
All other countries	5,189	1,699	1,473	1,064
Total	92,479	113,737	140,553	150,110
	Unit value (dollars per kg)			
Norway	$9.78	$10.12	$8.22	$8.63
Canada	8.17	9.23	7.49	7.49
Chile	7.58	8.19	6.95	6.70
Iceland	10.14	9.52	6.91	7.00
The United Kingdom	10.57	11.69	9.07	9.20
Ireland	10.10	9.88	8.19	8.66
The Faroe Islands	(5)	10.08	7.26	7.87
All other countries	8.64	9.62	7.13	7.99
Average	9.63	10.03	8.03	7.86

[1] Includes imports from countries where no Atlantic salmon industry is known to exist. This product is believed to be misreported.

[2] 1987-88 data were estimated by calculating the ratios of fresh whole Atlantic salmon to all fresh whole salmon as observed in 1989 U.S. import data, and applying those ratios to comparable country-specific 1987 and 1988 quantity and value data for all fresh whole salmon. For Canada and Chile, further adjustments were made using port-of-entry import data and foreign production data, respectively.

[3] Includes imports under HTS statistical number 0302.12.0062, "fresh and chilled salmon not elsewhere specified or included," which are believed to be Atlantic salmon.

[4] Landed, duty-paid value.

[5] Not applicable.

Source: Compiled from official U.S. import statistics, adjusted as specified.

million, in 1987 to 8.9 million kg, valued at $90.0 million, in 1988, representing increases of 16.9 percent by volume and 20.9 percent by value. Unit values increased from $9.78 per kg to $10.12 per kg, or by 3.5 percent. Then, in 1989, imports increased to 11.4 million kg and $93.7 million, up by 28.1 percent in volume but by only 4.1 percent in value as unit values fell by 18.7 percent to $8.22. This trend reversed in 1990, with imports from Norway down by 32.4 percent in volume and by 29.1 percent in value and with unit values up 5.0 percent.

The five largest ports-of-entry for Norwegian product in 1990 were: New York (55.8 percent of total quantity), Boston (20.8 percent), Los Angeles (7.7 percent), Miami (4.5 percent), and Chicago (3.6 percent). Most importers defined their marketing area as either local or regional; therefore, the large majority of Norwegian Atlantic salmon is marketed on the east coast. Norway supplied this market year-round during the period of investigation. In 1989, imports from Norway were fairly steady in supply throughout the year, declining from 1.0 million kg in January to a low of 778,000 kg in August and peaking at 1.1 million kg in December. In 1990, monthly import levels fluctuated in this same range through July, and then fell steadily to a total of only 189,000 kg in December.[97]

U.S. imports from other countries.--Compared to imports from Norway, U.S. imports from other major suppliers have increased at a much steeper rate as these countries developed their salmon farming industries. During the period of investigation, imports from Canada and Ireland increased sixfold, imports from Iceland were up twelvefold, and imports from Chile jumped nearly one hundredfold. Imports from the United Kingdom and the Faroe Islands fluctuated strongly but increased less dramatically overall.

Unit values of imports from all countries generally mirrored the unit value trends of imports from Norway during 1987-89; however, in 1990, Norwegian unit values rose appreciably while the unit values of imports from the next three largest suppliers were stable, continued to fall, and rose marginally, respectively. The unit values of imports from Canada remained about 10 percent less than those of imports from Norway in terms of landed, duty-paid value, which pulled down the average unit value of aggregated imports to below the Norwegian unit value. In fact, this is due to lower transportation costs from Canada. On an f.o.b. (customs) transaction value basis, 1989 Norwegian unit values were 21.0 percent less than Canadian unit values and 4.7 percent below the average of imports from all countries.[98] By either measure, imports from Chile generally had the lowest unit value, whereas Scottish salmon was the most expensive.

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[97] According to industry sources, this decline has continued into 1991. Urner Barry Publications, Inc. (Urner Barry), which monitors and publishes U.S. seafood prices, has had no quotes for Norwegian Atlantic salmon in its recent "Seafood Price-Current" publications because, according to ***, there was no product in the market to quote.

[98] In 1990, the customs unit value of imports from Norway was 15.5 percent less than that of imports from Canada and 0.9 percent less than that of imports from all sources.

Market penetration by the subject imports

Market penetration is calculated on a calendar year basis from U.S. producers' reported U.S. shipments and estimated U.S. shipments by importers. Imports dominated the U.S. market for fresh Atlantic salmon, averaging a near-95-percent market share, with Norway accounting for a majority of total supply during 1987-89 (table 18). Market penetration by imports from Norway decreased steadily during the period of investigation as imports from all other countries nearly tripled their market share both in terms of quantity and value. U.S. producers also tripled their market share from 1987 to 1989.

Table 18
Fresh Atlantic salmon: Apparent U.S. consumption and shares of consumption supplied by Norway, all other countries, and U.S. producers, 1987-89, January-June 1989, and January-June 1990

Item	1987	1988	1989	January-June-- 1989	1990
			Quantity		
Apparent U.S. consumption (1,000 pounds).....	***	26,916	41,705	20,449	26,502
Shares of apparent consumption supplied by--					
Norway (percent).....	***	72.9	60.2	60.1	42.2
All other countries (percent)....	***	20.1	32.3	33.8	51.1
All imports (percent).....	***	92.9	92.5	93.8	93.4
U.S. producers (percent).....	***	7.1	7.5	6.2	6.6
Total (percent).....	100.0	100.0	100.0	100.0	100.0
			Value		
Apparent U.S. consumption (1,000 dollars).....	***	134,349	165,504	86,844	101,734
Shares of apparent consumption supplied by--					
Norway (percent).....	***	74.0	62.5	61.7	47.0
All other countries (percent)....	***	19.5	31.3	32.2	47.3
All imports (percent).....	***	93.5	93.8	94.0	94.2
U.S. producers (percent).....	***	6.5	6.2	6.0	5.8
Total (percent).....	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission and from official U.S. import statistics.

Note.--Because of rounding, figures may not add to the totals shown.

Prices and marketing characteristics

Among the components of demand for fresh Atlantic salmon is the demand for both further processed and fresh retail Atlantic salmon products. Factors that affect these components are the prices of substitute products, consumer income, and consumer attitudes. An increase in the price of substitute products or in

consumer income increases demand for Atlantic salmon.[99] Demand for fresh Atlantic salmon has also increased as consumers have shifted from red meats to seafood.

Additional factors that affect the demand for fresh Atlantic salmon include the consistency of its quality and the continuity of its supply. These salmon are nearly uniform in appearance and taste, guaranteeing the purchaser the same product over time. Moreover, increased farming of Atlantic salmon in some countries has enabled its marketing on a year-round basis.[100]

Substitutes for Atlantic salmon and the effect on price.--The closest substitutes for Atlantic salmon include various species of Pacific salmon as well as steelhead trout.[101] These products are typically less expensive than Atlantic salmon. A review of the economic literature regarding the demand for salmon indicates some disagreement over the degree of substitutability between Atlantic salmon and these other products, specifically the three high-value species of Pacific salmon: chinook, coho, and sockeye. However, more recent economic studies have indicated strong substitutability between Atlantic salmon and these species of Pacific salmon.[102]

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[99] Economic studies have estimated that the income elasticity for salmon is greater than 2.00. These studies include: B. Lin, M. Herrmann, T. Lin, and R. Mittelhammer, "Forecasting the Price of Farmed Atlantic Salmon: An Integrated Econometric and Time Series Approach," Agribusiness, vol. 5, No. 5, 1989; and P. Bird, "Econometric Estimation of World Salmon Demand," Marine Resource Economics, vol. 3, No. 2, 1986.

[100] Both U.S. and Norwegian producers sell Atlantic salmon in the United States year-round. Although current U.S. Atlantic salmon sales are still small during the summer months, Norwegian product is sold throughout the year. During 1989, U.S. monthly imports of Norwegian salmon as a percentage of annual imports from Norway ranged between 7 percent and 10 percent. U.S. quarterly imports of Norwegian salmon as a percentage of annual imports from Norway ranged between 23 percent and 28 percent.

At the hearing, two U.S. producers, Connors Aquaculture and Maine Pride, reported that during 1991 they will be producing Atlantic salmon year-round. Prior to 1990, U.S. producers generally sold this product during autumn through spring. Previously, some U.S. producers did not have the experience or the capacity to operate year-round and they did not want to compete against the large supply of wild Pacific salmon caught and marketed at lower prices during the summer months.

[101] Substitute products for fresh salmon also include other sources of protein, provided by both seafood and nonseafood products. See app. G for indexes of ex-vessel prices for all edible finfish, including the various species of Pacific salmon, and for all shellfish during 1986-89.

[102] R. Mittelhammer, M. Herrmann, and B. Lin, An Economic Analysis of the Pacific Salmon Industry: Effects of Salmon Farming, NMFS, 1990; M. Herrmann, B. Lin, and R. Mittelhammer, U.S. Salmon Markets: A Survey of Seafood Wholesalers, Alaska Sea Grant Report No. 90-01 (Fairbanks: University of Alaska, 1990); and ***. Earlier studies that disagree over the level and degree of substitutability between the various salmon species include: NMFS 1988 report; Dunn, Leitz, and Harri, "The Salmon Aquaculture Industry in Canada;" P. Bird, "Forecasting the Price of Farmed Atlantic Salmon: An

(continued...)

Most of the U.S. producers, importers, and purchasers of Atlantic salmon that responded to the Commission's questionnaire reported at least one Pacific salmon species as a substitute for Atlantic salmon.[103] They indicated that the high-value Pacific salmon, primarily chinook and coho, are most substitutable for Atlantic salmon.[104] U.S. processors of the three high-value Pacific salmon agreed that their products closely compete with Atlantic salmon. Although most questionnaire respondents reported that these Pacific salmon products are marketed primarily during the summer months, they also indicated that coho salmon is competitive on a year-round basis because it is farmed by Chile and Canada and sold in the United States during other parts of the year. Some U.S. producers, importers, purchasers, and processors stated that Atlantic salmon will become increasingly competitive with fresh wild salmon as the year-round supply of farmed salmon increases and if the price of farmed salmon subsequently declines.[105]

U.S. producers of farmed steelhead trout reported that their product is a close substitute for Atlantic salmon.[106] They stated that the price for steelhead trout is pegged to the Atlantic salmon price minus a discount. These

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[102] (...continued)
Integrated Econometric and Time Series Approach," Agribusiness, vol. 5, No. 5, 1989; B. Lin, M. Herrmann, T. Lin, and R. Mittelhammer, "Econometric Estimation of World Salmon Demand," Marine Resource Economics, vol. 3, No. 2, 1986; and E. Hempel, "Marketing Farmed Salmon," Aquaculture, A Review of Recent Experience, OECD.

[103] This includes 7 of 10 U.S. producers, 14 of 23 importers, and 14 of 19 purchasers. *** reported steelhead trout as a substitute for Atlantic salmon. The two U.S. producers that reported no substitute products were *** and ***. *** also reported that grocery chains will promote Atlantic salmon or any other salmon depending on size and prices available.

[104] Only a few U.S. producers, importers, and purchasers of Atlantic salmon specifically cited sockeye as a substitute for Atlantic salmon. Because most sockeye is exported to Japan and Europe where it is in greater demand and can receive a higher price, it does not compete to a large degree in the U.S. market with Atlantic salmon. But economic studies have indicated that sockeye does compete with Atlantic salmon in Japan and Europe.

[105] The petitioner argued that farmed Atlantic salmon does not compete with wild Pacific salmon because U.S.-produced Atlantic salmon is priced higher than Pacific salmon and is sold generally during autumn and winter months, whereas Pacific salmon is sold primarily during the summer months. However, respondents noted that Norwegian-produced Atlantic salmon is supplied year-round and competes directly with the Pacific salmon. Moreover, petitioner did acknowledge that during the summer months, retailers such as grocery store chains substitute the Pacific product for the imported Atlantic product because of the lower price (conference transcript, p. 87). Purchasers of Pacific salmon also reported that Norwegian-produced Atlantic salmon competes directly with some species of Pacific salmon and that the increased availability of Norwegian salmon during the summer and autumn of 1989 adversely affected their sales of the Pacific salmon product. (Conversations with purchasers of Pacific salmon at the Boston International Seafood Show, Mar. 20, 1990.)

[106] Three purchasers of Atlantic salmon also cited steelhead trout as a substitute for Atlantic salmon.

producers commented that the price decline for Atlantic salmon during 1989 caused the price for steelhead trout to decline as well.

Frozen salmon has also been cited in some articles and questionnaire responses as a substitute for fresh salmon.[107] During the preliminary investigations, both the petitioner and respondent argued that frozen salmon does not compete with fresh Atlantic salmon in the United States, primarily because stocks of frozen Atlantic salmon are negligible. However, during the final investigations, respondents argued that frozen salmon does compete with fresh Atlantic salmon.[108] Frozen salmon is comprised primarily of Pacific salmon, sold mostly in overseas markets and priced below fresh salmon. Industry sources reported that changes in consumption patterns among these products have been mostly one way, with fresh salmon replacing frozen salmon in retail markets as more consumers desire fresh product.[109]

Other factors affecting price.--There are several factors that determine the selling price for both wild and farmed salmon, including the type or species of salmon, its size, its channel of distribution, whether fresh or frozen, its source or country of origin, and the quality of product. The price of wild salmon is also influenced by the method of catching the fish.

In general, Atlantic salmon is more expensive than Pacific salmon; larger, heavier salmon are more expensive per pound than smaller salmon; and fresh salmon is more expensive than frozen salmon. Salmon sold to the white-tablecloth restaurant trade is more expensive than salmon sold to retailers because these restaurants demand a higher quality salmon product without any cuts or bruises.[110]

Purchaser questionnaire responses indicated that Scottish and Irish Atlantic salmon are the most expensive in the U.S. market, whereas Chilean and Canadian Atlantic salmon are the least expensive. Norwegian Atlantic salmon is also considered by purchasers to be a higher priced product and is typically

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[107] Most questionnaire responses stated that frozen salmon did not substitute for fresh Atlantic salmon or did so in limited instances only, such as for processing applications like smoking, depending on their respective prices. Five of 9 U.S. producers, 1 of 20 importers, and 5 of 17 purchasers of Atlantic salmon responding to this question reported that frozen salmon was substitutable for fresh salmon in at least some instances, primarily smoking operations.

[108] Transcript, p. 108.

[109] One U.S. producer of Atlantic salmon, ***, reported that frozen Norwegian Atlantic salmon is now being sold in the United States at prices $1 to $3 below fresh Norwegian Atlantic salmon prices.

[110] At the preliminary conference, petitioner estimated that the overall difference in price between the low-priced retail channel and the high-priced restaurants was 5 percent or less. Restaurants are also more likely to emphasize the producing country of the salmon, e.g., Norwegian salmon, similar to the marketing of Maine lobster, and attach a higher price and image to its label.

more expensive than U.S.-produced Atlantic salmon.[111] Atlantic salmon that is inspected and given a USDA Grade A designation is priced higher than salmon that is not inspected, even though it may be of equal quality.[112]

Within the Pacific salmon category, sockeye is priced the highest and pink salmon is priced the lowest. Chinook is the second highest priced Pacific salmon, followed by coho and chum. Troll-caught fish are generally more expensive than gillnet- or purse seine-caught fish because the latter two methods of catching the fish often damage the exterior of the fish.[113]

Market factors.--According to questionnaire responses, Atlantic salmon from both U.S. producers and importers is sold primarily on the spot market. Salmon prices are determined daily over the phone, whereby buyers compare competitive quotes before making a final purchasing decision. The product is usually bought by a "first receiver," a regional distributor or local wholesaler, who distributes it to the retail and restaurant trade. Some large restaurant and retail chains may also buy directly from the producer. Buyers typically look for specific salmon sizes in certain price ranges. Because availability of some specific species of salmon is largely seasonal, a buyer may purchase different types of salmon during the year.

During the final investigations, three U.S. importers of Norwegian Atlantic salmon, ***, reported selling some Atlantic salmon on a contract basis at a fixed price.[114] During the preliminary investigations, *** also reported selling Atlantic salmon on a contract basis.[115] *** reported that there are generally two types of contracts in the salmon market, both to the retail channel of distribution. The first type is arranged by retailers who want to guarantee a specific supply of salmon from one week to one month in advance of a special they intend to advertise.[116] The second type is negotiated by

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[111] Some of the reasons cited by U.S. importers and purchasers for this price differential between Norwegian and U.S. Atlantic salmon include the following: the Norwegian product is available year-round; its delivery is more reliable than that of U.S. producers; its overall consistency and quality are superior; and promotional efforts by the Norwegians have differentiated their salmon as a premium product.

[112] Ocean Products reported during the preliminary investigations that approximately *** percent of its salmon received the grade A classification. This inspection system started in ***.

The Norwegians grade their fish in three categories: superior, ordinary, and production. The salmon is graded according to its appearance: the more bruises and other surface defects, the lower the grade. The Norwegians export only the two higher grades, superior and ordinary, to the United States. According to the petition, the superior grade accounts for about 70 percent of Norwegian production and ordinary grade accounts for about 20 percent.

[113] Gillnet-caught salmon represent almost all of the wild Pacific salmon catch. According to *** of NMFS, troll-caught Pacific salmon represent approximately 2 percent of the total U.S. wild salmon catch. For a comparison of prices by the method of catching wild Pacific salmon, see app. D, figs. D-7 through D-11.

[114] * * * * * * *

[115] * * * * * * *

[116] * * * * * * *

retailers who want to guarantee a longer supply pipeline of salmon with 3- to 4-month fixed-price contracts.

* * * * * * *[117]

U.S. producers of Atlantic salmon in Maine typically quote their product f.o.b. Portland, ME, or Logan Airport, Boston, MA,[118] whereas U.S. producers in Washington quote their product both f.o.b. airport and delivered. U.S. importers generally quote their product f.o.b. warehouse or airport.[119] Atlantic salmon is harvested just prior to shipping, and order lead times generally range from 1 day to 5 days for spot orders and from 2 weeks to 3 weeks on contract orders. U.S. producers' sales terms range from net 15 days to net 30 days, whereas U.S. importers' terms range from net 7 days to net 30 days.[120]

Salmon distribution is made by truck or air, and product is typically in transit less than 3 days. Although U.S. producers and importers reported that transportation costs are important to their purchasers and represent between 3 and 8 percent of the overall delivered price of the salmon, 16 of the 19 U.S. purchasers that responded to the Commission's questionnaire reported that transportation costs are not important.

U.S. producers and importers reported that, because of transportation costs, the U.S. market can be characterized as an east coast and a west coast market. U.S. producers and importers tend to sell only in their coastal region. Additional transportation costs to supply product to the other coast would make the price uncompetitive with local producers and importers.[121]

Salmon price data.--The Commission collected price data from published sources for Atlantic salmon, Pacific salmon, and steelhead trout, and requested additional data from U.S. producers, importers, and purchasers of Atlantic salmon and from U.S. producers of farmed chinook and steelhead trout.[122]

Published price data for three different weight categories of Norwegian and U.S./Canadian Atlantic salmon are presented on a weekly basis from January 1987 to December 1990.[123] The three weight categories are 4 to 6 pounds (2 to 3 kg),

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[117] ***.

[118] ***.

[119] U.S. producers and importers reported that, although currently small, there is a growing trend for selling Atlantic salmon on a delivered basis.

[120] Two U.S. importers, ***, reported sales terms with price discounts for prompt payment. ***.

[121] ***.

[122] The Commission received only limited questionnaire pricing data from U.S. producers of farmed chinook salmon and steelhead trout. These data are presented in app. D, table D-3.

[123] Urner Barry publishes pricing data for Atlantic and Pacific salmon sold in the U.S. market. In its publication, it presents a combined east coast U.S./Canadian price for top-quality Atlantic salmon sold to first receivers. *** reported that the price for Atlantic salmon is similar for all U.S. and Canadian producers. There are no significant differences in transportation

(continued...)

6 to 9 pounds (3 to 4 kg), and 9 to 11 pounds (4 to 5 kg).[124] Published price data for selected U.S., Canadian, and Chilean Pacific salmon and for U.S. steelhead trout are also presented on a semiweekly basis from January 1988 to December 1990.[125]

The Commission requested U.S. producers and importers to provide monthly price data from September 1988 through October 1990 for their largest sale of fresh Atlantic salmon to their largest customer within four channels of distribution covering three weight categories. The four channels of distribution were regional distributors, grocery chains, restaurant chains, and further processors. The three weight categories were 4 to 6 pounds (2 to 3 kg), 6 to 9 pounds (3 to 4 kg), and 9 to 11 pounds (4 to 5 kg). For each product, producers and importers were requested to report the quantity and net f.o.b. shipping point price during the middle of the month (the 10th to the 20th).

Five U.S. producers and 14 U.S. importers reported pricing data for the selected Atlantic salmon from September 1988 through October 1990.[126] The responding U.S. producers accounted for nearly 88 percent of all reported U.S.-produced domestic shipments of salmon in 1989. The responding U.S. importers accounted for over 42 percent of all reported imports of Norwegian salmon in 1989.

Published price trends for fresh Atlantic salmon.--Overall, prices for fresh Atlantic salmon were lower during 1989 and 1990 than during 1987 and 1988. However, prices for 6 to 9 pound and 9 to 11 pound Norwegian Atlantic salmon were slightly higher at the end of 1990 than at the beginning of 1987. Prices for 4 to 6 pound Norwegian Atlantic salmon were slightly lower at the end of 1990 than at the beginning of 1987. Prices for Norwegian Atlantic salmon fluctuated widely for the three size categories from 1987 through mid-1988, before declining between 40 percent and 50 percent through the end of 1989 (figures 2-4). Prices increased between 15 and 29 percent during the first quarter of 1990 and between 10 and 12 percent during the third quarter, before declining slightly (between 2 and 7 percent) during the fourth quarter.

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[123] (...continued)
costs because both U.S. and Canadian producers of Atlantic salmon are located in the same general area of Maine and New Brunswick. Moreover, there is no duty on salmon traded between these two countries. Urner Barry does not present a U.S. price separately because it would violate confidentiality requirements.

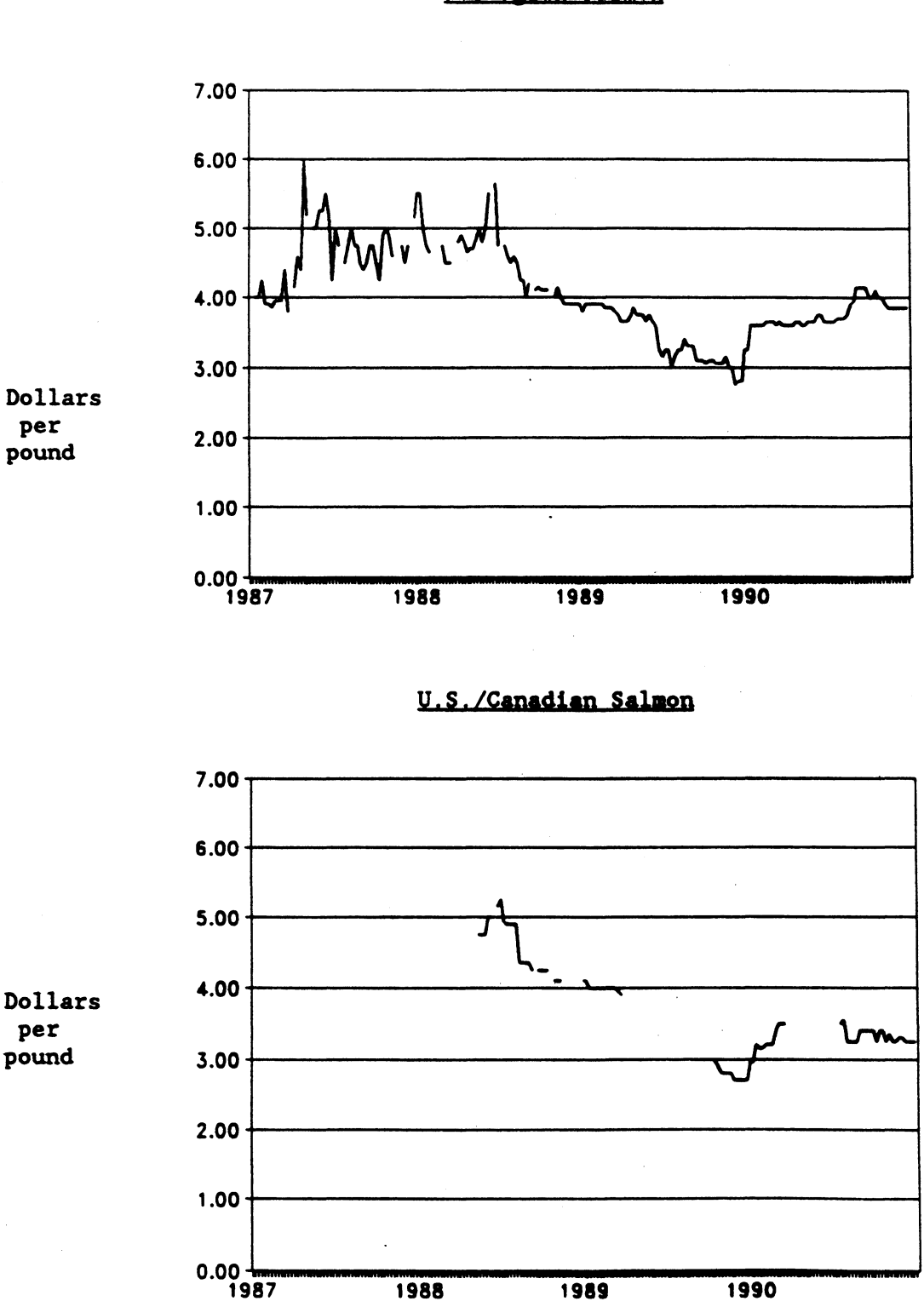
U.S. producers, importers, and purchasers contacted during the investigations reported that although specific Urner Barry prices may not exactly resemble current market conditions, the trend of Urner Barry prices over the period of investigation was a good approximation of Atlantic salmon prices in the United States.

[124] Norwegian salmon is sold in weight categories measured in kilograms, whereas U.S.-produced salmon is sold in weight categories measured in pounds.

[125] Prices for Pacific salmon are published by Urner Barry and by NMFS. These data are presented in app. D.

[126] Ocean Products ceased operations on Aug. 31, 1990. Pricing data from its preliminary questionnaire have been used in these final investigations.

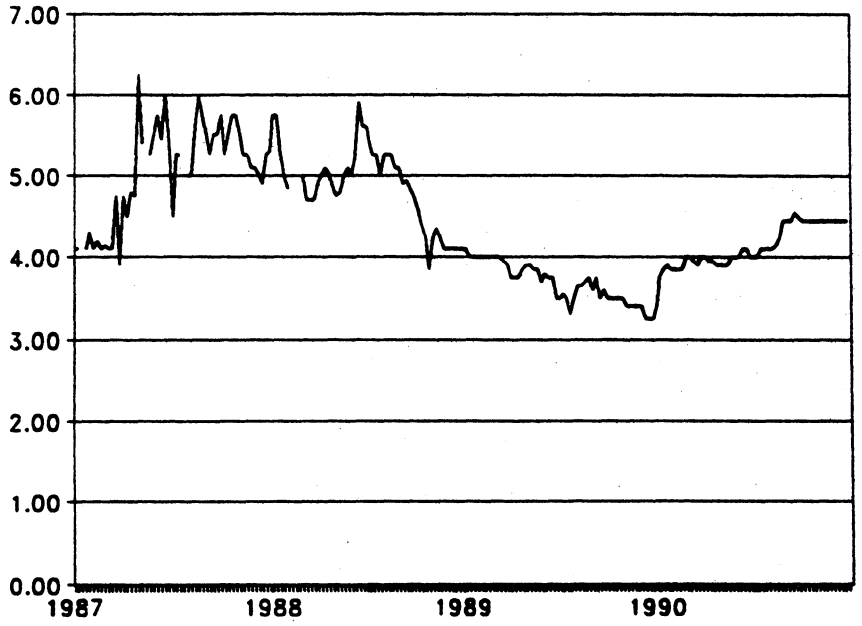
Figure 2.--Fresh Norwegian- and U.S./Canadian-produced Atlantic salmon published prices, 4 to 6 pounds (2 to 3 kilograms), sold in the U.S. market, weekly, January 1987-December 1990



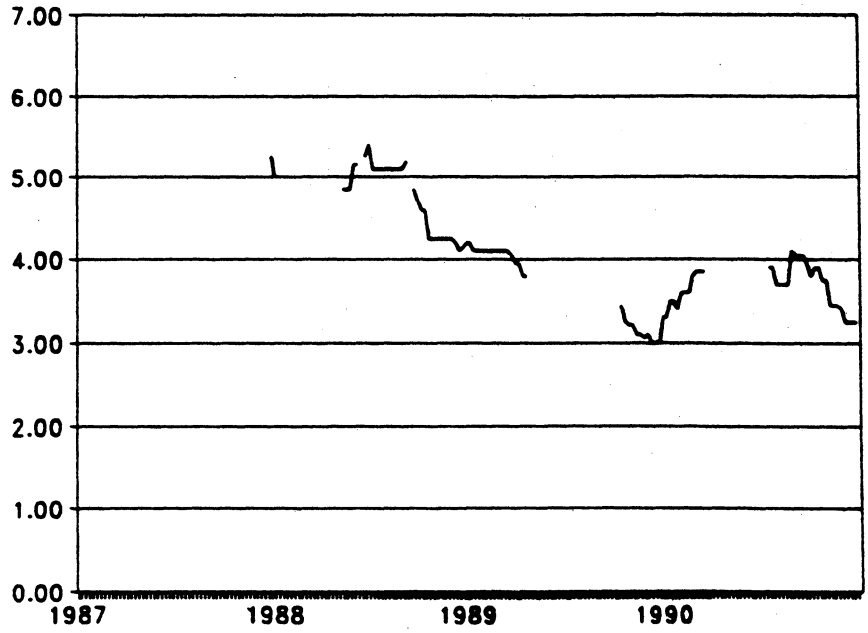
Source: Urner Barry Publications, Inc.

Figure 3.--Fresh Norwegian- and U.S./Canadian-produced Atlantic salmon published prices, 6 to 9 pounds (3 to 4 kilograms), sold in the U.S. market, weekly, January 1987-December 1990

Norwegian Salmon



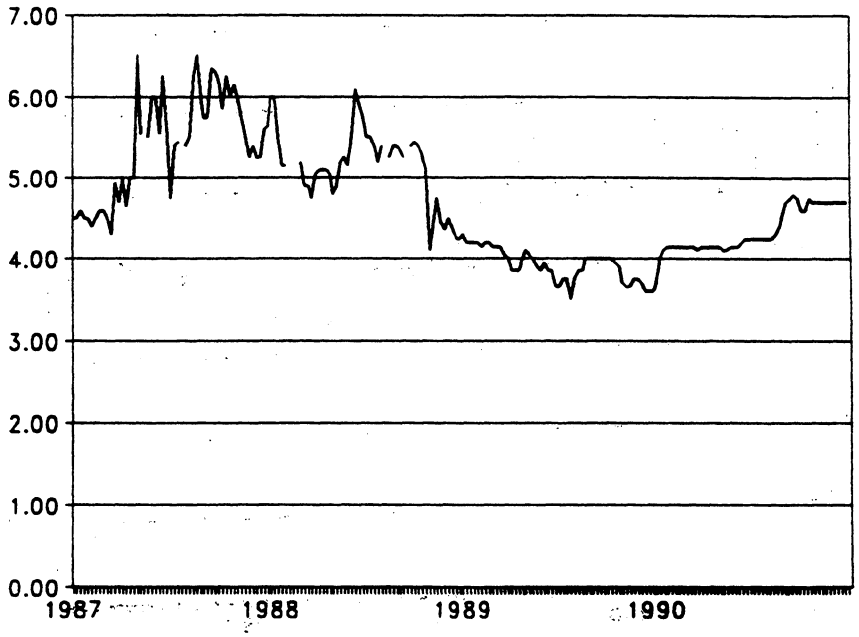
U.S./Canadian Salmon



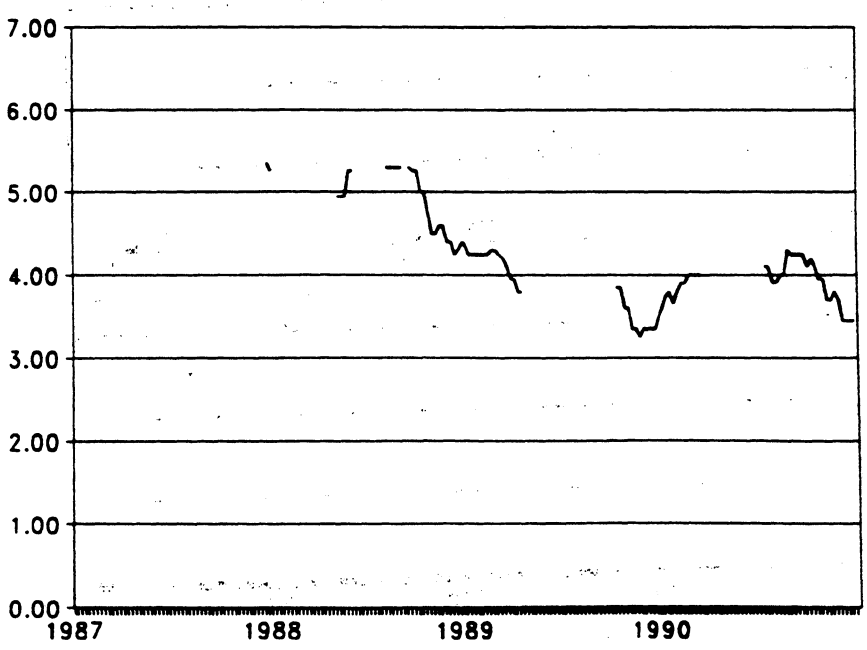
Source: Urner Barry Publications, Inc.

Figure 4.--Fresh Norwegian- and U.S./Canadian-produced Atlantic salmon published prices, 9 to 11 pounds (4 to 5 kilograms), sold in the U.S. market, weekly, January 1987-December 1990

Norwegian Salmon



U.S./Canadian Salmon



Source: Urner Barry Publications, Inc.

Published prices for U.S./Canadian-produced Atlantic salmon were lower at the end of 1990 than in mid-1988. Published prices for U.S./Canadian production began to be reported in mid-1988 when production reached a measurable level. This production, however, is seasonal, and thus far has been too minimal during the summer months for published prices to be reported.[127] Overall, prices for U.S./Canadian-produced Atlantic salmon in each size category generally declined from mid-1988 through 1989, before rising during the first quarter of 1990. Prices for 4 to 6 pound Atlantic salmon stayed relatively level through the remainder of 1990, whereas prices declined for 6 to 9 pound and 9 to 11 pound Atlantic salmon.

U.S./Canadian and Norwegian price trends for Atlantic salmon were similar from mid-1988 through mid-1989 (figures 5-7). In 1990, the two trends began to diverge, and U.S./Canadian prices seem to have followed Chilean Atlantic salmon prices more closely (figures 8-10). Industry sources reported that when Norway increased its price in 1990 and subsequently reduced supply to the U.S. market, Chile increased its exports of Atlantic salmon to the United States at lower prices. The price differential in 1990 between Norwegian and U.S./Canadian prices may have also been influenced by long-term fixed-price contracts signed by Ocean Products in late 1989.

Industry sources have cited a variety of reasons for the price decline during 1989 for Atlantic salmon. These reasons include, among others, the overproduction of Atlantic salmon by countries, including Norway, an increased number of producing countries in the market, the high wild salmon catch during the summer of 1989, increased inventories of wild salmon in Japan and North America during 1988-89, negative publicity of ocean pollution, and early marketing of Canadian farmed salmon before an expected December freeze.

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[127] Two U.S. producers, Connors Aquaculture and Maine Pride, reported that they will be producing Atlantic salmon year-round beginning in 1991. Transcript, p. 91.

Figure 5.--Fresh Norwegian- and U.S./Canadian-produced Atlantic salmon published prices, 4 to 6 pounds (2 to 3 kilograms), sold in the U.S. market, weekly, January 1987-December 1990

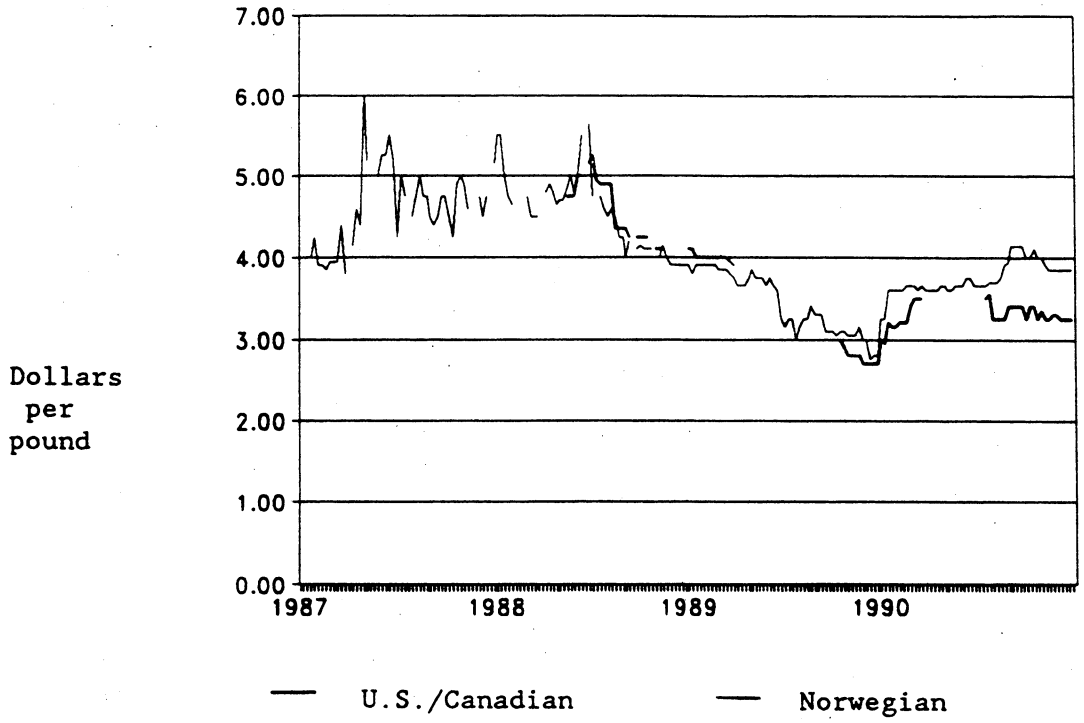
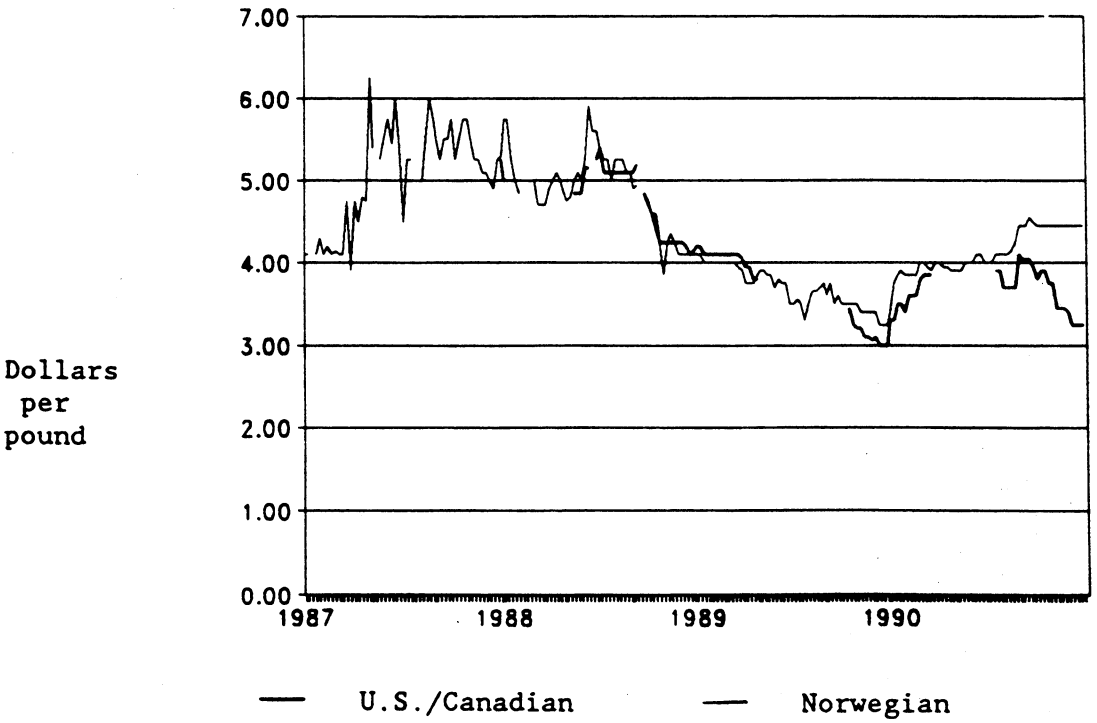


Figure 6.--Fresh Norwegian- and U.S./Canadian-produced Atlantic salmon published prices, 6 to 9 pounds (3 to 4 kilograms), sold in the U.S. market, weekly, January 1987-December 1990



Source: Urner Barry Publications, Inc.

Figure 7.--Fresh Norwegian- and U.S./Canadian-produced Atlantic salmon published prices, 9 to 11 pounds (4 to 5 kilograms), sold in the U.S. market, weekly, January 1987-December 1990

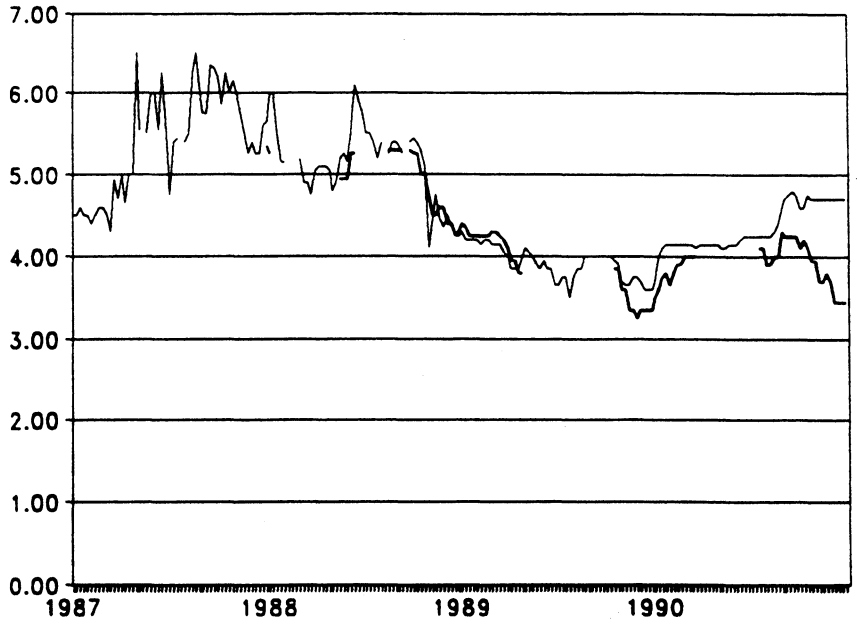
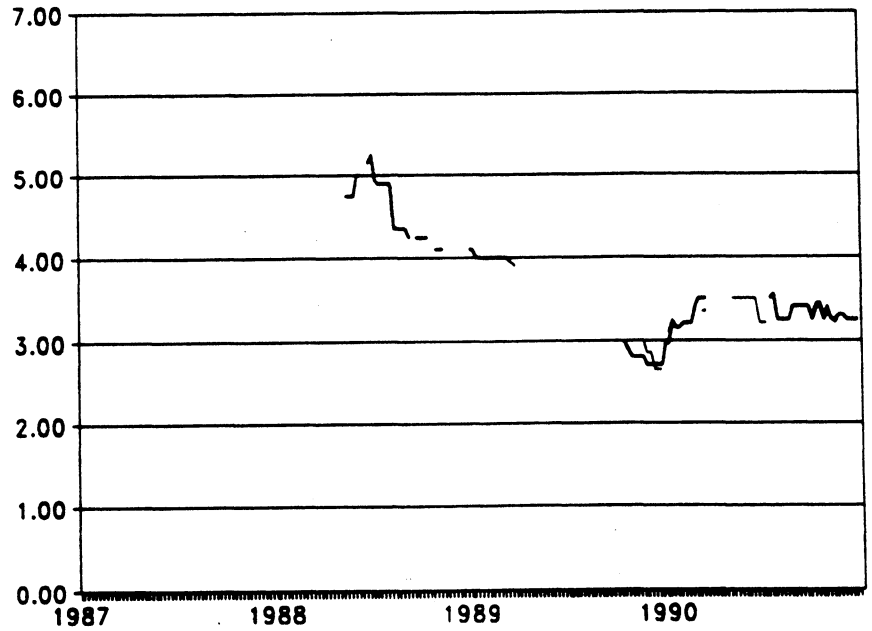


Figure 8.--Fresh Chilean- and U.S./Canadian-produced Atlantic salmon published prices, 4 to 6 pounds (2 to 3 kilograms), sold in the U.S. market, weekly, January 1987-December 1990



Source: Urner Barry Publications, Inc.

Figure 9.--Fresh Chilean- and U.S./Canadian-produced Atlantic salmon published prices, 6 to 9 pounds (3 to 4 kilograms), sold in the U.S. market, weekly, January 1987-December 1990

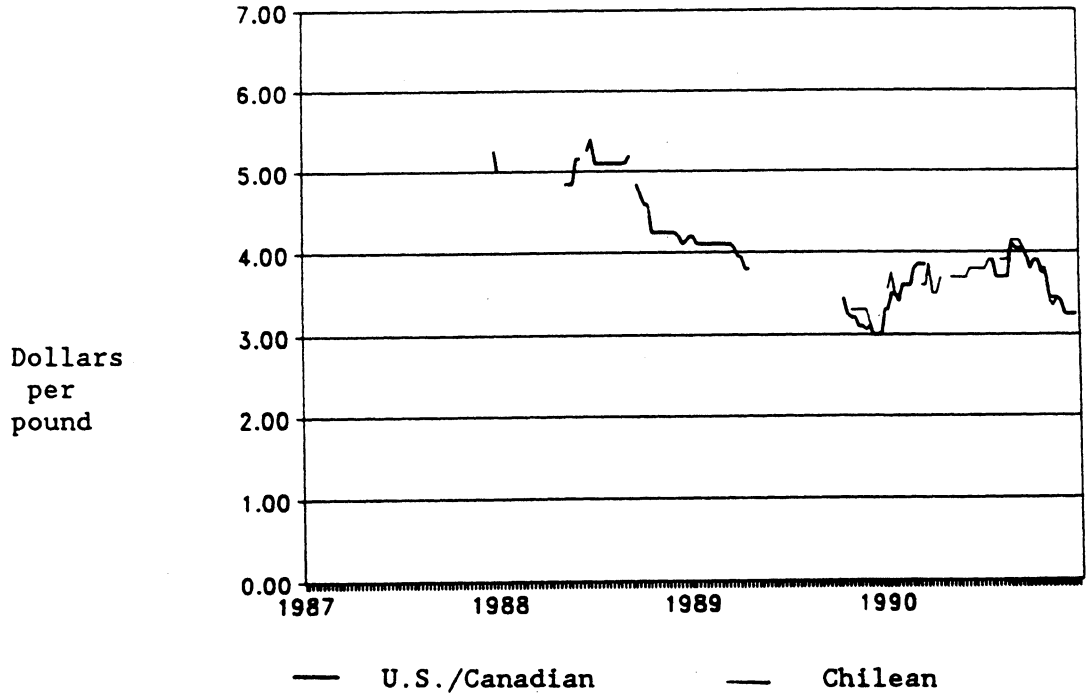
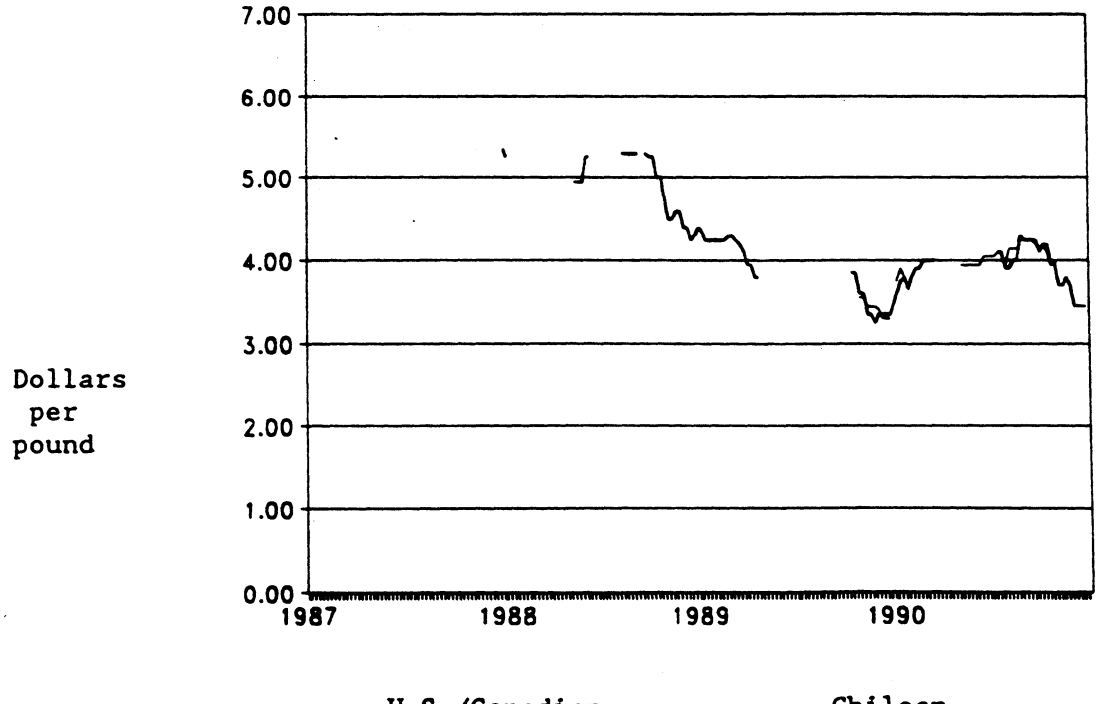


Figure 10.--Fresh Chilean- and U.S./Canadian-produced Atlantic salmon published prices, 9 to 11 pounds (4 to 5 kilograms), sold in the U.S. market, weekly, January 1987-December 1990



Source: Urner Barry Publications, Inc.

Questionnaire price trends for fresh Atlantic salmon.--Monthly net f.o.b. price data collected through questionnaires for U.S.- and Norwegian-produced Atlantic salmon generally showed the same decline in price as the published price data. Prices generally declined between 20 and 34 percent during September 1988-November/December 1989 for most salmon sizes in each channel of distribution, then increased between 5 and 33 percent during 1990 (table 19). In nearly all weight categories and distribution channels, prices were lower in October 1990 than in September 1988. In each distribution channel, salmon in higher weight categories fetched higher prices on a per-pound basis. Moreover, the price of salmon was higher to restaurants than in the other channels.

Table 19
Fresh Atlantic salmon: Weighted-average net U.S. f.o.b. prices reported by U.S. producers and importers of Norwegian Atlantic salmon, by channels of distribution, by weight categories, and by months, September 1988-October 1990

* * * * * * *

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

U.S. producers provided nearly complete price series in the *** channels of distribution, whereas U.S. importers of Norwegian salmon provided complete price series in the regional distributor, restaurant, and further processor channels. U.S. producers' sales of Atlantic salmon were more concentrated in the lower weight categories than were U.S. importers' sales of Norwegian-produced Atlantic salmon. However, U.S. producers have increased the percentage of salmon sold in the higher weight categories during the period of investigation.

U.S. producers of Atlantic salmon provided four relatively complete price series: ***. Prices to *** fluctuated during the 26-month period, although prices for both sizes reached a low point during *** of 1989. In the *** channel, prices for *** pound salmon fluctuated during late 1988, before declining by *** percent during 1989. These prices increased by *** percent during January and February 1990. In the *** channel, prices for *** pound salmon declined by *** percent during 1989, before increasing by *** percent during the first 2 months of 1990.

U.S. importers of Norwegian Atlantic salmon provided seven complete price series: ***. In each of these price series, prices declined fairly steadily through 1989, before increasing through October 1990.

In the *** channel, prices for *** pound salmon fluctuated downward by *** percent between September 1988 and November 1989, before rising by *** percent through October 1990. Prices for both *** pound salmon and *** pound salmon showed net declines of *** percent between September 1988 and December 1989, before rising by *** percent and *** percent, respectively, through October 1990. In the *** channel, prices for *** pound salmon showed a net decline of

approximately *** percent between September 1988 and December 1989, before increasing by over *** percent through August 1990. In the *** channel, prices for *** pound salmon declined by nearly *** percent during 1989, before rising by over *** percent through October 1990. Prices for *** pound salmon and *** pound salmon showed net declines of *** percent and *** percent, respectively, through 1989, before increasing by *** percent and *** percent, respectively, through 1990.

Price comparisons between U.S. producers and importers of Norwegian Atlantic salmon.--The reported sales information for U.S. producers' and importers' monthly shipments to their largest customer during September 1988-October 1990 resulted in 70 direct price comparisons within three channels of distribution and three weight categories (table 20). *** of these comparisons were based on prices of one U.S. producer and *** were based on prices of one U.S. importer.

Table 20
Fresh Atlantic salmon: Average margins of underselling (overselling) by imports from Norway, by channels of distribution, by weight categories, and by months, September 1988-October 1990

* * * * * * *

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Similar to published price data and to reports from industry representatives, Norwegian importers' prices were generally higher than U.S. producers' prices. There were only 14 instances of underselling, where U.S. importers' prices were less than those of U.S. producers. In these 14 instances, U.S. importers' prices were less than U.S. producers' prices by margins that ranged between less than 1 percent and 11 percent.

There were 56 instances where U.S. importers' prices were above those of U.S. producers. In these 56 instances, U.S. importers' prices exceeded U.S. producers' prices by margins that ranged between less than 1 percent and 51 percent.

Purchaser price comparisons between U.S.-produced and imported Norwegian Atlantic salmon.--Nearly all of the 19 purchasers that responded to the Commission's questionnaire reported that Norwegian Atlantic salmon is more expensive than U.S.-produced Atlantic salmon. Eight of these purchasers also reported pricing information for their largest monthly purchase of U.S.-produced and imported Norwegian Atlantic salmon during September 1988-October 1990.[128] The reported purchase price information from these purchasers

[128] The 8 purchasers include 4 distributors, 3 retailers, and 1 processor.

resulted in 90 direct price comparisons (table 21).[129] The direct price comparisons included 22 instances of underselling, in which prices for the imported Norwegian product were less than those for the U.S.-produced Atlantic salmon by margins ranging between 0.2 percent and 20.0 percent. There were 60 instances where prices for the imported Norwegian product were above those of the U.S.-produced Atlantic salmon by margins that ranged between 0.5 percent and 50.9 percent.[130]

Table 21
Fresh Atlantic salmon: Total observations and range of margins of underselling and overselling between the U.S.-produced and imported Norwegian product reported by U.S. purchasers, by companies, September 1988-October 1990

Purchaser	Observations of overselling	Observations of underselling	Range of overselling margins	Range of underselling margins
*	*	*	*	*	*	*

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

General purchaser questionnaire information.--Nineteen purchasers responded to the Commission's questionnaire concerning their buying practices for Atlantic salmon and the U.S. market. These purchasers included 11 distributors or wholesalers, 4 supermarket retailers, 3 restaurants or food service outlets, and 1 processor. Thirteen of these purchasers reported buying both U.S.-produced and imported Norwegian salmon, whereas 5 purchasers reported buying Norwegian salmon and no U.S.-produced product, and 1 purchaser reported buying U.S.-produced salmon and no Norwegian product.

The three major factors considered by these purchasers when buying Atlantic salmon are the price, quality, and availability of the product.[131] Most reported that they have shifted suppliers due to these factors, primarily price. Some purchasers reported that they stopped buying Norwegian salmon when its price increased relative to prices from other suppliers such as Chile and Canada. Most of the purchasers stated that they did not compete against their suppliers for sales of Atlantic salmon. Eighteen of the 19 purchasers reported that they always knew the country of origin of the Atlantic salmon they

[129] These 90 instances of direct price comparisons represent only 37 percent of all possible price comparisons, that is, where purchasers reported prices for either U.S.-produced or imported Norwegian Atlantic salmon.

[130] There were 8 instances where prices for U.S.-produced and imported Norwegian Atlantic salmon were the same.

[131] All 19 purchasers cited price, 16 cited quality, and 14 cited availability.

purchased, and 14 purchasers reported that their customers were also aware of the country of origin.

Seventeen purchasers stated that they made regular purchases of Atlantic salmon, and 11 reported buying this product on a daily basis. Thirteen purchasers indicated that this purchasing pattern has not significantly changed over the past 3 years. Five companies also stated that they increased the quantity purchased over this period. Purchasers reported that they typically contact between one and five suppliers when buying Atlantic salmon.

Lost sales and lost revenues

During the final investigations, the Commission received no lost sales or lost revenues allegations. During the preliminary investigations, two U.S. producers, ***,[132] reported to the Commission that they had lost sales and revenues because of the Norwegian product. However, these producers also stated that, because of the nature of the salmon market, it was very difficult to isolate specific instances of lost sales and revenues.

During the preliminary investigations, *** reported that it makes hundreds of quotes each day; some are accepted and some are rejected. Buyers rarely told *** what firm actually received the business and at what price. *** also stated that in order to compete in the marketplace, it was forced to sell its Atlantic salmon at or below Norwegian prices. When it quoted prices over the phone, the purchasers used Norwegian prices as a yardstick. Both producers stated that the price decline in early 1989 was caused by the increased supply of Norwegian salmon and by a decline in the Norwegian price. The two firms argued that the difference between their quote of a price at the beginning of a period and any subsequent selling price during the period constituted lost revenues.[133]

During the preliminary investigations, *** named specific purchasers who could illustrate lost sales and lost revenues because of the imported Norwegian product. *** listed *** purchasers as examples of lost sales and *** purchasers as examples of lost revenues.[134] It also provided quantities sold during the period to these purchasers. *** listed *** purchasers to illustrate lost sales and *** for lost revenues.

Commission staff contacted six of these purchasers during the preliminary investigations.[135] Because no specific instances of head-to-head competition were provided by U.S. producers, these purchasers provided general market information and, where possible, specific comments on the role of Norwegian salmon in the U.S. market.

All of these purchasers commented that they generally do tell potential vendors if their prices are not in line with the marketplace. However, all purchasers stated that the market price is a result of supply and demand for

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[132] * * * * * * *

[133] * * * * * * *

[134] Four purchasers were listed for both lost sales and lost revenues.

[135] * * * * * * *

salmon and not clearly determined by any specific source of salmon. The six purchasers stated that an oversupply in the U.S. market in 1989 caused the price decline for Atlantic salmon. Salmon producers in most parts of the world, including the United States and Norway, doubled their production, far surpassing world demand for this product. Two purchasers commented that the high volume production of Pacific salmon (both farmed and wild) in 1989 also pushed prices downward. One purchaser commented that frozen salmon export markets also indirectly exacerbated the decline in the price for fresh salmon. Countries that usually imported U.S. frozen salmon started purchasing from other sources. This caused more U.S. salmon to be diverted from the frozen to the fresh market.

All six of these purchasers stated that they buy salmon from more than one source to insure a steady supply of this product. One purchaser, ***, commented that it had not purchased Norwegian Atlantic salmon for a long period of time and is sourcing its product solely from U.S. and Canadian producers. It varies its purchases depending on the price and the supply in the market. Another purchaser, ***, reported that while it purchases on the spot market from a variety of suppliers, it bought *** primarily because of the importer's *** that assisted *** in the sale of this product. Four purchasers stated that the Norwegian price for Atlantic salmon is typically higher than the U.S. price, whereas one purchaser reported that prices varied between the two sources depending on their relative supply in the marketplace. Although four of these purchasers commented that the quality of the domestic salmon was similar to that of the Norwegians, two purchasers stated that the U.S. product was not red enough and was a softer fish. One purchaser remarked that some of its customers specifically request imported salmon (whether from Norway or other sources) because of these perceived differences. Two purchasers reported that the year-round availability of the Norwegian salmon is also an advantage.

Exchange rates

Quarterly data reported by the International Monetary Fund indicate that during January 1987-December 1990 the nominal value of the Norwegian krone fluctuated, appreciating overall by 20.0 percent relative to the U.S. dollar (table 22).[136] Adjusted for movements in producer price indexes in the United States and Norway, the real value of the Norwegian currency showed an overall appreciation of 19.7 percent relative to the dollar for the period.

[136] International Financial Statistics, March 1991.

Table 22
Exchange rates:[1] Indexes of nominal and real exchange rates of the Norwegian krone and indexes of producer prices in the United States and Norway,[2] by quarters, January 1987-December 1990

Period	U.S. producer price index	Norwegian producer price index	Nominal exchange rate index	Real exchange rate index[3]
1987:				
January-March.....	100.0	100.0	100.0	100.0
April-June.....	101.6	100.0	104.8	103.1
July-September.....	102.8	100.9	104.5	102.7
October-December....	103.3	101.9	108.7	107.2
1988:				
January-March.....	103.9	104.6	110.5	111.3
April-June.....	105.5	105.6	112.5	112.5
July-September.....	107.1	107.4	102.9	103.3
October-December....	107.6	107.4	106.4	106.3
1989:				
January-March.....	109.9	110.2	104.6	104.9
April-June.....	111.9	112.0	100.4	100.5
July-September.....	111.5	113.0	100.0	101.3
October-December....	111.9	113.0	102.7	103.8
1990:				
January-March.....	113.5	114.8	107.7	108.9
April-June.....	113.3	113.9	108.4	109.0
July-September.....	115.3	116.7	114.3	115.6
October-December....	118.8	118.5	120.0	119.7

[1] Exchange rates expressed in U.S. dollars per Norwegian krone.
[2] Producer price indexes--intended to measure final product prices--are based on period-average quarterly indexes presented in line 63 of the International Financial Statistics.
[3] The real exchange rate is derived from the nominal rate adjusted for relative movements in producer prices in the United States and Norway.

Note.--January-March 1987 = 100.

Source: International Monetary Fund, International Financial Statistics, March 1991.

APPENDIX A

THE COMMISSION'S FEDERAL REGISTER NOTICES

[Investigation No. 701-TA-302 (Final)]

Fresh and Chilled Atlantic Salmon From Norway; Countervailing Duty Investigation

AGENCY: United States International Trade Commission.

ACTION: Institution of a final countervailing duty investigation.

SUMMARY: The Commission hereby gives notice of the institution of final countervailing duty investigation No. 701-TA-302 (Final) under section 705(b) of the Tariff Act of 1930 (19 U.S.C 1571d(b)) (the act) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the Untied States is materially retarded, by reason of imports from Norway of fresh and chilled Atlantic salmon,[1] provided for in subheading 0302.12.00 of the Harmonized Tariff Schedule of the United States (previously under item 110.20 of the former Tariff Schedules of the United States), that have been found by the Department of Commerce, in a preliminary determination, to be subsidized by the Government of Norway. The Commission will make its final injury determination within forty-five days after notification of Commerce's final subsidy determination (see sections 705(a) and 705(b) of the act (19 U.S.C. 1671d(a) and 1671d(b))).

For further information concerning the conduct of this investigation, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, part 207, subparts A and C (19 CFR part 207), and part 201, subparts A through E (19 CFR part 201).

EFFECTIVE DATE: June 26, 1990.

FOR FURTHER INFORMATION CONTACT: Rebecca Woodings (202-252-1192), Office of Investigations, International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-252-1810. Persons with mobility inmpairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-252-1000.

SUPPLEMENTARY INFORMATION:

Background.—This investigation is being instititued as a result of an affirmative preliminary determination by the Department of Commerce that certain benefits which constitute subsidies within the meaning of section 703 of the act (19 U.S.C. § 1671b) are being provided to manufacturers, producers, or exporters in Norway of fresh Atlantic salmon. The investigation was requested in a petition filed on February 28, 1990, by the Coalition for Fair Atlantic Salmon Trade. In response to that petition the Commission conducted a preliminary countervailing duty investigation and, on the basis of information developed during the course of that investigation, determined that there was a reasonable indication that an industry in the United States was materially injured by reason of imports of the subject merchandise (55 FR 17507, April 25, 1990).

Participation in the investigation.—Persons wishing to particiapte in this investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules (19 CFR 201.11), not later than twenty-one (21) days after the publication of this notice in the **Federal Register**. Any entry of appearance filed after this date will be referred to the Chairman, who will determine whether to accept the late entry for good cause shown by the person desiring to file the enty.

Public service list.—Pursuant to secion 201.11(d) of the Commission's rules (19 CFR 201.11(d)), the Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entires of appearance. In accordance with § 201.16(c) and 207.3 of the rules (19 CFR 201.16(c) and 207.3), each public document filed by a party to the investigation must be served on all other parties to the investigation (as identified by the public service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate of service.

Limited disclsure of business proprietary information under a protective order and business proprietary information service list.—Pursuant to § 207.7(a) of the Commission's rules (19 CFR 207.7(a)), the Secretary will make available business proprietary information gathered in this final investigation to authorized applicants under a protective order, provided that the application be made not later than twenty-one (21) days after the publication of this notice in the **Federal Register**. A separate service list will be maintained by the Secretary for those parties authorized to receive business proprietary information under a protective order. The Secretary will not accept any submission by parties containing business proprietary information without a certificate of service indicating that it has been served on all the parties that are authorized to receive such information under a protective order.

Hearing, staff report, and written submissions.—The Commission will hold a hearing in connection with this investigation at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC; the time and date of the hearing will be announced at a later date. The prehearing staff report in this investigation will be placed in the nonpublic record, and a public version will be issued thereafter, both prior to the hearing, pursuant to section 207.21 of the Commission's rules (19 CFR § 207.21). The dates for filing briefs and other written submissions will also be announced at a later date.

Authority: This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.20 of the Commission's rules (19 CFR 207.20).

By order of the Commission.

Kenneth R. Mason,

Secretary.

Issued: July 23, 1990.

[FR Doc. 90-17932 Filed 7-31-90; 8:45 am]

BILLING CODE 7020-02-M

[1] Atlantic salmon is the species Salmo salar. The product "fresh and chilled Atlantic salmon" refers to fresh whole or nearly whole Atlantic salmon, typically (but not necessarily) marketed gutted, bled, and cleaned, with the head on, and packed in ice ("chilled"). Excluded from the investigation are fresh Atlantic salmon that has been cut into fillets, steaks, etc.; Atlantic salmon that is frozen, canned, smoked, or otherwise processed; and other species of fish, including other species of salmon.

[Investigations Nos. 701-TA-302- (Final) and 731-TA-454 (Final)]

Fresh and Chilled Atlantic Salmon From Norway

AGENCY: United States International Trade Commission.

ACTION: Institution of a final antidumping investigation and scheduling of a hearing to be held in connection with both the subject investigations.

SUMMARY: The Commission hereby gives notice of the institution of final antidumping investigation No. 731-TA-454 (Final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) (the act) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Norway of fresh and chilled Atlantic salmon,[1] provided for in subheading 0302.12.00 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce, in a preliminary determination, to be sold in the United States at less than fair value (LTFV). The Commission also gives notice of the scheduling of a hearing in connection with this antidumping investigation and with the countervailing duty investigation regarding imports of fresh and chilled Atlantic salmon from Norway, investigation No. 701-TA-302 (Final), which the Commission instituted effective June 26, 1990 (55 FR 31246, August 1, 1990). The schedules for the subject investigations will be identical, pursuant ot Commerce's alignment of the final countervailing duty and LTFV determinations (55 FR 32107, August 7, 1990). Commerce is scheduled to make its final countervailing duty and LTFV determinations on or before February 8, 1991, and the Commission will make its final injury determinations within 45 days after receipt of Commerce's final determinations (see sections 735(a) and 735(b) of the act (19 U.S.C. 1673d(a) and 1673(b))).

For further information concerning the conduct of these investigations, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, part 207, subparts A and C (19 CFR part 207), and part 201, subparts A through E (19 CFR part 201).

EFFECTIVE DATE: October 1, 1990.

FOR FURTHER INFORMATION CONTACT: Rebecca Woodings, (202-252-1192), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-252-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-252-1000.

SUPPLEMENTARY INFORMATION:

Background.—The subject antidumping investigation is being instituted as a result of an affirmative preliminary determination by the Department of Commerce that imports of fresh and chilled Atlantic salmon from Norway are being sold in the United States at less than fair value within the meaning of section 733 of the act (19 U.S.C. 1673b). The Commission instituted the subject countervailing duty investigation on June 26, 1990. The investigations were requested in a petition filed on February 28, 1990, by the Coalition for Fair Atlantic Salmon Trade. In response to that petition the Commission conducted preliminary countervailing duty and antidumping investigations and, on the basis of information developed during the course of those investigations, determined that there was a reasonable indication that an industry in the United States was materially injured by reason of imports of the subject merchandise (55 FR 17507, April 25, 1990).

Participation in the investigations.—Any person having already filed an entry of appearance in the countervailing duty investigation is considered a party in the antidumping investigation. Any other persons wishing to participate in these investigations as parties must file an entry of appearance with the Secretary of the Commission, as provided in § 201.11 of the Commission's rules (19 CFR 201.11), not later than twenty-one (21) days after the publication of this notice in the **Federal Register**. Any entry of appearance filed after this date will be referred to the Chairman, who will determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Public service list.—Pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d)), the Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to these investigations upon the expiration of the period for filing entries of appearance. In accordance with §§ 201.16(c) and 207.3 of the rules (19 CFR 201.16(c) and 207.3), each public document filed by a party to the investigations must be served on all other parties to the investigations (as identified by the public service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate of service.

Limited disclosure of business proprietary information under a protective order and business proprietary information service list.—Pursuant to § 207.7(a) of the Commission's rules (19 CFR 207.7(a)), the Secretary will make available business proprietary information gathered in these final investigations to authorized applicants under a protective order, provided that the application be made not later than twenty-one (21) days after the publication of this notice in the **Federal Register**. Any person having already been authorized to receive business proprietary information in the countervailing duty investigation need not reapply to receive such information in the antidumping investigation. A separate service list will be maintained by the Secretary for those parties authorized to receive business proprietary information under a protective order. The Secretary will not accept any submission by parties containing business proprietary

[1] Atlantic salmon is the species Salmo salar. The product "fresh and chilled Atlantic salmon" refers to fresh whole or nearly whole Atlantic salmon, typically (but not necessarily) marketed gutted, bled, and cleaned, with the head on, and packed in fresh-water ice ("chilled"). Excluded are fresh Atlantic salmon that has been cut into fillets, steaks, and other cuts; Atlantic salmon that is frozen, canned, smoked, or otherwise processed; and other species of fish, including other species of salmon.

information without a certificate of service indicating that it has been served in all the parties that are authorized to receive such information under a protective order.

Staff report.—The prehearing staff report in these investigations will be placed in the nonpublic record on January 25, 1991, and a public version will be issued thereafter, pursuant to § 207.21 of the Commission's rules (19 CFR 207.21).

Hearing.—The Commission will hold a hearing in connection with these investigations beginning at 9:30 a.m. on February 14, 1991 at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on February 4, 1991. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on February 7, 1991 at the U.S. International Trade Commission Building. Pursuant to § 207.22 of the Commission's rules (19 CFR 207.22) each party is encouraged to submit a prehearing brief to the Commission. The deadline for filing prehearing briefs is also February 7, 1991. If prehearing briefs contain business proprietary information, a nonbusiness proprietary version is due on February 8, 1991.

Testimony at the public hearing is governed by § 207.23 of the Commission's rules (19 CFR 207.23). This rule requires that testimony be limited to a nonbusiness proprietary summary and analysis of material contained in prehearing briefs and to information not available at the time the prehearing brief was submitted. Any written materials submitted at the hearing must be filed in accordance with the procedures described below and any business proprietary materials must be submitted at least three (3) working days prior to the hearing (see § 201.6(b)(2) of the Commission's rules (19 CFR 201.6(b)(2))).

Written submissions.—Prehearing briefs submitted by parties must conform with the provisions of § 207.22 of the Commission's rules (19 CFR 207.22) and should include all legal arguments, economic analyses, and factual materials relevant to the public hearing. Posthearing briefs submitted by parties must conform with the provisions of § 207.24 (19 CFR 207.24) and must be submitted not later than the close of business on February 20, 1991. If posthearing briefs contain business proprietary information, a nonbusiness proprietary version is due February 21, 1991. In addition, any person who has not entered an appearance as a party to the investigations may submit a written statement of information pertinent to the subject of the investigations on or before February 20, 1991.

A signed original and fourteen (14) copies of each submission must be filed with the Secretary to the Commission in accordance with § 201.8 of the Commission's rules (19 CFR 201.8). All written submissions except for business proprietary data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any information for which business proprietary treatment is desired must be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Business Proprietary Information." Business proprietary submissions and requests for business proprietary treatment must conform with the requirements of § 201.6 and 207.7 of the Commission's rules (19 CFR 201.6 and 207.7).

Parties which obtain disclosure of business proprietary information pursuant to § 207.7(a) of the Commission's rules (19 CFR 207.7(a)) may comment on such information in their prehearing and posthearing briefs, and may also file additional written comments on such information no later than February 25, 1991. Such additional comments must be limited to comments on business proprietary information received in or after the posthearing briefs. A nonbusiness proprietary version of such additional comments is due February 26, 1991.

Authority: These investigations are being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.20 of the Commission's rules (19 CFR 207.20).

Issued: October 24, 1990.

By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 90-25727 Filed 10-30-90; 8:45 am]

BILLING CODE 7020-02-M

[Investigations Nos. 701-TA-302 (Final) and 731-TA-454 (Final)]

Fresh and Chilled Atlantic Salmon From Norway

AGENCY: International Trade Commission.

ACTION: Revised schedule for the subject investigations.

EFFECTIVE DATE: October 29, 1990.

FOR FURTHER INFORMATION CONTACT: Rebecca Woodings (202–252–1192), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202–252–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–252–1000.

SUPPLEMENTARY INFORMATION: Effective June 26, 1990 and October 1, 1990, respectively, the Commission instituted the subject investigations and, effective October 1, 1990, the Commission established a schedule for their conduct (55 FR 31246, August 1, 1990 and 55 FR 45867, October 31, 1990 respectively). Subsequently, the Department of Commerce revised the date for its final determinations in the investigations from February 8, 1991 to February 15, 1991. The Commission, therefore, is revising its schedule in the investigations to conform with Commerce's new schedule.

The Commission's new schedule for the investigations is as follows: requests to appear at the hearing must be filed with the Secretary to the Commission not later than February 8, 1991; the prehearing conference will be held at the U.S. International Trade Commission Building on February 13, 1991; the prehearing staff report will be placed in the nonpublic record on January 31, 1991; the deadline for filing prehearing briefs is February 12, 1991 (nonbusiness proprietary version due February 13, 1991); the hearing will be held at the U.S. International Trade Commission Building on February 19, 1991; the deadline for filing posthearing briefs is February 25, 1991 (nonbusiness proprietary version due February 26, 1991), and the deadline for Parties to file additional written comments on business proprietary information is March 4, 1991 (nonbusiness proprietary version due March 5, 1991).

For further information concerning these investigations see the Commission's notices of investigation cited above and the Commission's Rules of Practice and Procedure, part 207, subparts A and C (19 CFR part 207), and part 201, subparts A through E (19 CFR part 201).

Authority: These investigations are being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.20 of the Commission's rules (19 CFR 207.20).

Issued: November 13, 1990.

By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 90–27422 Filed 11–20–90; 8:45 am]

BILLING CODE 7020–02–M

[Investigations Nos. 701-TA-302 (Final) and 731-TA-454 (Final)]

Fresh and Chilled Atlantic Salmon From Norway

AGENCY: United States International Trade Commission.

ACTION: Revised schedule for the subject investigations.

EFFECTIVE DATES: November 30, 1990.

FOR FURTHER INFORMATION CONTACT: Rebecca Woodings (202-252-1192), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-252-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-252-1000.

SUPPLEMENTARY INFORMATION: Effective June 26, 1990 and October 1, 1990, respectively, the Commission instituted the subject investigations and, effective October 29, 1990, the Commission established a revised schedule for their conduct (55 FR 31246, August 1, 1990; 55 FR 45867, October 31, 1990; and 55 FR 48701, November 21, 1990; respectively). Subsequently, respondents requested a further revision of the schedule. Having granted this request, the Commission is further revising its schedule in the investigations as follows: Requests to appear at the hearing must be filed with the Secretary to the Commission not later than February 15, 1991; the deadline for filing rehearing briefs is February 20, 1991 (nonbusiness proprietary version due February 21, 1991); the prehearing conference will be held at the U.S. International Trade Commission Building at 9:30 a.m. on February 21, 1991; the hearing will be held at the U.S. International Trade Commission Building at 9:30 a.m. on February 26, 1991; the deadline for filing posthearing briefs is March 4, 1991 (nonbusiness proprietary version due March 5, 1991), and the deadline for Parties to file additional written comments on business proprietary information is March 11, 1991 (nonbusiness proprietary version due March 12, 1991).

For further information concerning these investigations see the Commission's notices of investigation and initial revised schedule cited above and the Commission's Rules of Practice and Procedure, part 207, subparts A and C (19 CFR part 207), and part 201, subparts A through E (19 CFR Part 201).

Authority: These investigations are being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.20 of the Commission's rules (19 CFR 207.20).

Issued: December 17, 1990.

By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 90-30271 Filed 12-26-90; 8:45 am]

BILLING CODE 7020-02-M

APPENDIX B

COMMERCE'S FEDERAL REGISTER NOTICES

International Trade Administration

[A-403-801]

Final Determination of Sales at Less Than Fair Value: Fresh and Chilled Atlantic Salmon from Norway

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: The Department of Commerce (the Department) has determined that imports of fresh and chilled Atlantic salmon (salmon) from Norway are being, or are likely to be, sold in the United States at less than fair value. The Department has notified the International Trade Commission (ITC) of its determination and has directed the Customs Service to continue to suspend liquidation of all entries of Atlantic salmon from Norway. The ITC will determine, within 45 days of publication of this notice, whether these imports materially injure, or threaten material injury to, the U.S. industry.

EFFECTIVE DATE: February 25, 1991.

FOR FURTHER INFORMATION CONTACT: Louis Apple, Tracey E. Oakes, David C. Smith or Edward Easton, Office of antidumping investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone: (202) 377-1769, 377-3174, 377-3798, or 377-1777, respectively.

SUPPLEMENTARY INFORMATION:

Final Determination

We determine that imports of Atlantic salmon from Norway are being, or are likely to be, sold in the United States at less than fair value, as provided in section 735 of the Tariff Act of 1930, as amended (19 U.S.C. 1673d(a)) (the Act). The estimated weighted-average margins are shown in the "Continuation of Suspension of Liquidation" section of this notice.

Case History

Since publication of the preliminary determination on October 3, 1990 (55 FR 40418), the following events have occurred. On October 5, 1990, counsel for respondents requested that we postpone our final determination until not later than 135 days after the date of publication of the preliminary determination in accordance with section 735(a)(2) of the Act.

We verified questionnaire responses in Norway from October 29 to November 20, 1990. Petitioner and respondents submitted comments for the record in case briefs dated January 14, 1991 and in rebuttal briefs dated January 22, 1991. We held a public hearing on January 23, 1991 in which petitioner and respondents participated.

At the hearing, the Department requested additional submissions on the issue of "perishability", which all parties submitted on January 29, 1991.

Scope of Investigation

The product covered by this investigation is the species Atlantic salmon (Salmo salar) marketed as specified herein; the investigation excludes all other species of salmon: Danube salmon; Chinook (also called "king" or "quinnat"); Coho ("silver"); Sockeye ("redfish" or "blueback"); Humpback ("pink"); and Chum ("dog"). Atlantic salmon is a whole or nearly-whole fish, typically (but not necessarily) marketed gutted, bled, and cleaned, with the head on. The subject merchandise is typically packed in fresh-water ice ("chilled"). Excluded from the subject merchandise are fillets, steaks, and other cuts of Atlantic salmon. Also excluded are frozen, canned, smoked or otherwise processed Atlantic salmon. Atlantic salmon is currently provided for under the harmonized tariff schedule (HTS) subheading: 0302.12.00.02.9. Prior to January 1, 1990, Atlantic salmon was provided for under HTS subheadings 0302.12.00.60.8 and 0302.12.00.65.3. The HTS subheadings are provided for convenience and customs purposes. The written description remains dispositive as to the scope of the product coverage.

Period of Investigation

The period of investigation (POI) is September 1, 1989 through February 28, 1990.

Such or Similar Comparisons

For the purpose of this investigation, we have determined that all Atlantic salmon comprises a single category of such or similar merchandise. Product comparisons were made on the basis of grade of salmon (superior, ordinary) and weight bands. We compared U.S. sales of gutted Atlantic salmon to sales of gutted Atlantic salmon sold in third countries because only gutted merchandise is sold in the United States. In addition, U.S. sales were compared only to sales of identical weights and grades of merchandise sold in the third country markets.

Best Information Available

For some companies, as specified elsewhere in this notice, the Department used best information available (BIA)

for portions of the response. For one company, Hallvard Leroy, we relied only on BIA. At verification, we had found that Hallvard Leroy had weight averaged reported prices of U.S. sales. Because this is not in accordance with the instructions provided to the company and because it could have a significant impact on the fair value calculations (potentially shielding margins), we have used only BIA for this company. As BIA, we have assigned Hallvard Leroy the highest rate found for any of the seven exporters for which a margin was calculated.

Fair Value Comparisons

To determine whether sales of Atlantic salmon from Norway to the United States were made at less than fair value, we compared the United States price (USP) to the foreign market value (FMV), as specified in the "United States Price" and "Foreign Market Value" sections of this notice.

United States Price

We based the USP on purchase price, in accordance with section 772(b) of the Act, because all sales by all exporters were made directly to unrelated parties prior to importation into the United States. We calculated USP for the exporters as follows. Salmonor. We calculated purchase price based on airpacked, c.i.f. prices to unrelated customers in the United States. We made deductions, where appropriate for airfreight, inland insurance, rebates, and Norwegian export duties in accordance with section 772(d)(2) of the Act.

Sea Star International

We calculated purchase price based on airpacked, c.i.f. prices to unrelated customers in the United States. We made deductions, where appropriate, for airfreight, handling, inland insurance, discounts, and Norwegian export duties, in accordance with section 772(d)(2) of the Act. For Sea Star International, we lowered each United States gross price by $.05 because at verification we found that Sea Star applied a systematic, improper rounding-up technique for reporting the U.S. gross unit prices. The maximum amount of that rounding is $.05. For Sea Star sales which we were able to verify as accurate, we used the reported prices.

Skaarfish Mowi

We calculated purchase price based on airpacked, c.i.f. prices to unrelated customers in the United States. We made deductions, where appropriate, for airfreight, inland insurance, foreign inland freight, and Norwegian export duties, in accordance with section 772(d)(2) of the Act.

Fremstad Group

We calculated purchase price based on airpacked, c.i.f. prices to unrelated customers in the United States. We made deductions, where appropriate, for airfreight, inland insurance, export taxes, and discounts in accordance with section 772(d)(2) of the Act.

Domstein

We calculated purchase price based on airpacked, c.i.f. prices to unrelated customers in the United States. We made deductions, where appropriate, for airfreight, inland insurance, discounts, handling, custom fees, and Norwegian export duties, in accordance with section 772(d)(2) of the Act.

Saga

We calculated purchase price based on airpacked, c.i.f. prices to unrelated customers in the United States. We made deductions, where appropriate, for airfreight, inland insurance, discounts, foreign inland freight and Norwegian export duties, in accordance with section 772(d)(2) of the Act.

Chr. Bjelland

We calculated purchase price based on airpacked, c.i.f. prices to unrelated customers in the United States. We made deductions, where appropriate, for airfreight, inland insurance, and Norwegian export duties, in accordance with section 772(d)(2) of the Act.

Foreign Market Value

Market Viability

In order to determine whether there were sufficient sales of Atlantic salmon in the home market to serve as the basis for calculating FMV, we compared the volume of home market sales to the volume of third country sales, in accordance with section 773(a)(1) of the Act. We did not consider home market sales to other exporters in the viability calculation because the ultimate destination of the merchandise is not known. For six respondents, the volume of home market sales was less than five percent of the aggregate volume of third country sales. In the case of Sea Star, all of its home market sales were to other exporters or to related customers. Because we had no home market sales from which to determine whether Sea Star's sales to related customers were at arms length, we selected third country sales to determine FMV.

Therefore, for these seven respondents, we determined that home market sales did not constitute a viable basis for calculating FMV, in accordance with 19 CFR 353.48. In selecting third country markets for computing FMV, we considered the criteria set forth in 19 CFR 353.49(b). Because similarity of merchandise was not an issue for six of the respondents, we selected third countries having the largest sales volumes. For one respondent, similarity was an issue in selecting the third country market for computing FMV (see Exporter-Specific Comment 1 for Chr. Bjelland). The volume of sales to the third country we selected was "adequate" within the meaning of 19 CFR 353.49(b)(1).

Cost of Production

Petitioner alleged that respondents' third country sales of Atlantic salmon were made at prices below the cost of production (COP). Based on petitioner's allegation, we gathered and verified data on production costs. Because the growth cycle of the subject merchandise is approximately 18 to 24 months, we requested production costs for the previous two to three years, as applicable, which were incurred on the salmon delivered to and accepted by an exporter during the POI.

We calculated the COP of salmon sold by each exporter based on the sum of the following: (1) The simple average of responding farmers' COPs (which included the cost of materials, fabrication, processing and packing, wellboat services, general expenses of the farmer, freight costs, Fiskeoppdrettemes Salsgag (FOS) and Norske Fiskeoppdrettemes Forening (NFF) fees); and (2) the exporter's selling, general and administrative expenses. The total cost of production was calculated on a Norwegian kroner per kilogram (NOK/kg) basis. To calculate the amount of direct selling expenses incurred by the exporter, we applied a cost-based percentage of total direct selling expenses, adjusted for verification changes, to the farmers' COP. In all cases, for salmon sold on or after January 1, 1990, a five NOK/kg cost was added to the COPs (see Farm-Wide Comment 3).

We compared third country weighted average monthly prices of gutted merchandise to the COP because only gutted merchandise is sold in the U.S. market. If over 90 percent of a respondent's sales were at prices above the COP, we did not disregard any below-cost sales because we determined that the respondent's below-cost sales were not made in substantial quantities over an extended period of time. If between ten and 90 percent of a respondent's sales were at prices below

the COP, we disregarded only the below-cost sales. In such cases, we determined that the respondent's below-cost sales were made in substantial quantities over an extended period of time. If less than ten percent of respondent's sales were at prices above the COP, we disregarded all sales and calculated FMV based on constructed value (see the company specific sections below).

The COP data submitted by the farmers and exporters were relied upon, except in the following instances where the costs were not appropriately quantified or valued.

Safish

(1) Smolt costs were increased to include a prepayment made in 1987 for the 1988 year class, because smolt costs were specifically identified to each year class;

(2) Feed, direct labor and overhead cost were revised due to an adjustment to salmon inventory quantities used to calculate the per unit production cost;

(3) General and administrative (G&A) and interest expenses were adjusted to reflect cost per kilogram by dividing total 1989 G&A and interest expenses by the total kilograms of salmon sold in 1989 for all year classes (see Farm-Wide Comment 7); and

(4) Packing and processing and freight costs for gutted salmon were adjusted to reflect a cost per gutted kilogram rather than a cost per round kilogram.

Hofa

(1) Feed, direct labor and overhead were adjusted for the following: (a) Adjustments submitted by the company at the beginning of verification to the ending inventory quantity of salmon; (b) an insurance indemnity received by Hofa for large losses of the 1988 year class due to disease;

(2) Depreciation expense was adjusted to reflect the amount of ordinary depreciation recorded on the company's audited financial statements (see Farm-Wide Comment 5);

(3) G&A and interest expenses were adjusted to reflect the cost per kilogram by dividing total 1989 G&A and interest expenses by the total kilograms of 1988 year class salmon sold (see Farm-Wide Comment 7); and

(4) Wellboat costs for gutted salmon were adjusted to reflect a cost per gutted kilogram rather than a cost per round kilogram.

Bremanger Fiskeindustri

(1) Feed costs for 1988 were reduced for discounts that had been recorded as interest income;

(2) Overhead was adjusted for insurance expenses that were not included in the farming costs for 1988, depreciation expense that was not included in the farming costs for 1989 (as BIA, an amount was calculated based on the useful life of the assets as reported on the financial statement) and depreciation expense submitted for 1988 farming costs by the respondent was not used because it was not based on actual costs incurred (as BIA, the Department recalculated depreciation expense based on the useful life of the assets as reported on the financial statement);

(3) G&A expenses were revised using the highest G&A of the other farmers as BIA, because these expenses did not include services provided by a related party (R. Domstein & Co.);

(4) Interest expense was adjusted to include all of Bremanger's interest expense allocated to the salmon farm in 1989 including certain mortgage expenses excluded by the respondent divided over total kilograms of salmon sold in 1989 (see Farm-Wide Comment 7);

(5) Costs for packing and processing, performed by a related company, were not used because they could not be verified (as BIA, the FOS price list was used as the basis for the cost of packing and processing gutted salmon); and

(6) Wellboat costs for gutted salmon were adjusted to reflect a cost per gutted kilogram rather than a cost per round kilogram.

Midnor

(1) Labor for 1988 was adjusted to include all labor costs including labor costs excluded by the respondent incurred during 1988 which had not been capitalized as part of the construction costs for an on-shore facility;

(2) G&A and interest expenses were adjusted to reflect the cost per kilogram by dividing total 1989 G&A and interest expenses including certain mortgage expenses excluded by the respondent by the total kilograms of 1988 year class salmon sold (see Farm-Wide Comment 7);

(3) Certain categories of cost for 1988 were reclassified from factory overhead to SG&A expense; and

(4) A clerical error in 1989 submitted G&A expenses was corrected.

Bremnes

(1) Material costs were adjusted to reflect a purchase of feed recorded in the 1989 financial statements but excluded from the submission, and a fee which was included in material costs on the 1989 financial statements but excluded from the submission; and

(2) G&A and interest expenses were adjusted to reflect cost per kilogram by dividing total 1989 G&A and interest expenses by the total kilograms of salmon sold in 1989 for all year classes (see Farm-Wide Comment 7).

Austevoll

(1) The cost of cultivation of the 1988 year class was reduced by the amount of an insurance indemnity received due to losses from disease; and

(2) G&A and interest expenses were adjusted to reflect cost per kilogram by dividing total 1989 G&A and interest expenses by the total kilograms of salmon sold in 1989 for all year classes (see Farm-Wide Comment 7). In calculating the exporters' selling, general and administrative expenses we did not include movement charges such as inland freight, insurance, and export duties. We recalculated the remaining direct selling expenses as a percentage of cost of goods sold attributable to sales of salmon to the third country or home market during the POI.

Foreign Market Value

In accordance with section 773(e) of the Act we calculated foreign market value based on constructed value (CV) when there were insufficient sales above the COP in the third country and when there were no identical third country comparisions. In this case, the COP data submitted by the respondents were used in the CV calculations. The CV for salmon sold by each exporter included the sum of the following: (1) The simple average of the responding farmers' COPs (the cost of materials, fabrication, processing and packing, wellboat services, general expenses of the farmer, freight costs, and FOS and NFF fees); and (2) the exporters' selling, general and administrative expenses, profit, and packing. The exporter's direct selling expenses were calculated as a percentage of cost of goods sold and applied to the farmers cost of production. In all cases: (1) Actual general expenses were used, because the total of the farmer's and exporter's general expenses exceeded the statutory minimum requirement of ten percent of the sum of materials and fabrication, and (2) imputed credit expenses were included in selling expenses. Interest expenses were reduced for the portion related to credit activities in order to avoid overstating credit expenses.

For all exporters, profit equal to the statutory minimum eight percent of the cost of production was applied (see Farm-Wide Comment 4). In all cases, for salmon sold on or after January 1, 1990, a five NOK/kg cost was added to the

CV before profit. (see Farm-Wide Comment 3).

We calculated FMV for the exporters as follows.

Salmonor

Over 90 percent of this exporter's sales were below the cost of production, and we based FMV on constructed value. Because all comparisons involved purchase price sales, we made circumstance of sale adjustments, where appropriate, for Norske Ferskfiskomsetnings Landsforening (NFOL) dues, Fresh Fish Export Committee (FFEC) fees, credit, warranty, and export credit insurance expenses.

Sea Star

Over 90 percent of this exporter's sales were below the cost of production, and we based FMV on constructed value. Because all comparisons involved purchase price sales, we made circumstance of sale adjustments, where appropriate, for NFOL dues, FFEC fees, credit, and export credit insurance expenses. Where commissions were paid in the third country and not in the U.S. market, we allowed an adjustment of the lesser of U.S. indirect selling expenses or total average third country commissions in accordance with the Department's regulations.

Skaarfish Mowi

Over 90 percent of this exporter's sales were below the cost of production, and we based FMV on constructed value. Because all comparisons involved purchase price sales, we made circumstance of sale adjustments, where appropriate, for NFOL dues, FFEC fees, credit, and warranty expenses. Where commissions were paid in the U.S. and not in the third country market, we allowed an adjustment of the lesser of indirect selling expenses or U.S. commissions in accordance with the Department's regulations.

Fremstad

Seventy-five percent of sales were below the cost of production. We based FMV on constructed value for comparison categories where there were below cost sales and for comparison categories for which there were no matching third country sales. For all other comparison categories we used third country sales prices for our comparisons. When we used third country prices, we made deductions, where appropriate, for inland freight, inland insurance, Norwegian export duties, rebates, credit expenses, FFEC fees, and NFOL dues. Because all comparisons involved purchase price sales, we made circumstance of sale adjustments, where appropriate, for NFOL dues, FFEC fees, credit, and warranty expenses.

Domstein

Over 90 percent of this exporter's sales were below the cost of production, and we based FMV on constructed value. Because all comparisons involved purchase price sales, we made circumstance of sale adjustments, where appropriate, for NFOL dues, FFEC fees, credit, and warranty expenses. If commissions were paid in both markets, we deducted weighted average third country commissions and added the U.S. commission. If commissions were paid on U.S. sales only, we allowed an adjustment for the lesser of U.S. commissions or indirect selling expenses. If commissions were paid on the third country sales only, we allowed an adjustment for the lesser of third country commissions or indirect selling expenses. Finally, certain direct selling expenses classified as indirect selling expenses were removed from the calculation of indirect selling expenses.

Saga

Over 90 percent of this exporter's sales were below the cost of production, and we based FMV on constructed value. Because all comparisons involved purchase prices sales, we made circumstance of sale adjustments, where appropriate, for NFOL dues, FFEC fees, credit, and warranty expenses. Where commissions were paid in the third country and not in the U.S. market, we allowed an adjustment of the lesser of indirect selling expenses or average third country commissions in accordance with the Department's regulations.

Chr. Bjelland

Over 90 percent of this exporter's sales were below the cost of production, and we based FMV on constructed value. Because all comparisons involved purchase price sales, we made circumstance of sale adjustments, where appropriate, for NFOL dues, FFEC fees, credit, and export credit insurance expenses. Where commissions were paid in the U.S. and not in the home market, we allowed an adjustment for the lesser of home market indirect selling expenses or U.S. commissions, in accordance with the Department's regulations.

Currency Conversion

When calculating foreign market value, we made currency conversions in accordance with 19 CFR 353.60, using the exchange rates certified by the Federal Reserve Bank of New York.

Verification

As provided in 19 CFR 353.36(a)(1), we verified all information used in reaching our final determination in this investigation. We used standard verification procedures, including examination of relevant accounting records and original source documents provided by respondents.

Interested Party Comments

I. Farm-Wide Comments

Comment 1

Petitioner argues that the respondents did not disclose until verification significant information regarding methodology and certain costs which should have been disclosed in the responses. For example, respondents did not disclose the use of a surrogate period for calculating smolt costs and failed to identify all related parties. Petitioner argues that the new information submitted at verification constituted a basic change in methodology which should have been disclosed prior to verification. Therefore, the Department should reject all of the responses and use, as BIA, the highest reported cost of the farmers, adjusted for additional costs discovered at verification.

Respondents state that the farmers had no cost accounting system in place and had very minimal resources available for conducting the verifications. Respondents argue that the petitioner has ignored the fact that the farmers answered every question "which had any substantive bearing on the case."

DOC Position

The Department discovered deficiencies in the respondents' submissions during verification. However, the Department concluded that these deficiencies were not of such significance as to be considered a substantially revised or new response. Therefore, with the exception of one farmer (see Nordsvalaks Comment 1), the responses have been used, as adjusted, in the final determination.

Comment 2

Petitioner alleges that the omission of January and February 1990 costs for six of the seven farmers significantly understates the costs for sales made during the POI. Petitioner argues that, if the Department uses the verified cost data, it should adjust these costs by using the highest 1989 COP calculated

for any farmer, and average this figure with each individual farmer's verified cost for the first four months of the POI.

Respondents argue that it was not possible to accurately determine costs for January and February 1990, because the accounting records of certain farmers had not been closed. Therefore, the farmers calculated costs and production quantities over the two-year period, 1988 and 1989, and so matched costs with production accurately. Respondents also argue that any increased costs and quantities during those two months are in direct proportion to the increased growth of the fish, resulting in no change to the per kilogram cost of salmon.

DOC Position

For those respondents which were unable to provide costs for January and February 1990, *i.e.*, all farmers except Hofa, we used BIA. As BIA, we calculated a cost per kilogram based on respondent's methodology which captured costs over the two-year period, 1988 and 1989, and allocated these costs over the gross production for these two years. The petitioner's claim that costs would have been higher in the months of January and February 1990, except for the five NOK/kg freezing fee, was not supported by the information on the record for Hofa.

Comment 3

Petitioner argues that the five Norwegian kroner/kilogram (five NOK/kg) fee paid by the farmers to FOS, the Norwegian fish farmers' sales organization, should be included in the cost of production for those sales made on or after January 1, 1990. Petitioner asserts that the charge is equivalent to a tax collected on sales, which is normally included as a cost of production, and the fact that this tax was imposed to finance FOS's freezing intervention program should not be a consideration in determining the cost of the product under investigation.

Respondents claim that the freezing charge assessed by FOS is a cost for a production that is not under investigation, *i.e.*, frozen salmon. Respondents argue that this cost would probably be included as a cost of producing frozen salmon if this were an investigation of frozen salmon; therefore, it cannot logically be included as a cost of producing fresh salmon. While respondents agree that the freezing charge is assessed on all sales of fresh salmon beginning January 1, 1990, they argue that the method in which a charge is calculated is irrelevant, and the fact that the fee is a tax assessed on sales of fresh fish is also irrelevant. Therefore, respondents argue that this charge should not be included in the cost of production.

DOC Position

The Department agrees with petitioner. This fee is a five NOK/kg charge assessed on all sales of fresh salmon. Therefore, the amount of the fee incurred by each salmon farmer is completely a function of the amount of fresh salmon it sells. The fact that FOS uses this money to finance a freezing plan is not the deciding factor. The Department considers this fee to be a general expense and included it as a cost of producing the fresh salmon.

Comment 4

Petitioner argues that the respondents' refusal to submit CV information, on the basis of a claim that CV is not relevant in this case, is justification for rejecting the responses of all farmers. Petitioner states that the respondent does not determine what is and what is not relevant in an investigation, because that is the role of the Department itself. Furthermore, the Department does not have all of the necessary information, such as related party transfer prices and profit, to calculate CVs.

Respondents argue that the farmers did not submit CV information because there was no need for it. Respondent states that the Department's memorandum of August 20, 1990 set forth the proposed methodology and that memorandum did not stipulate that CV would be used. Respondent states that the statute requires that only one amount for general expenses (which is not less than 10 percent of the cost of manufacturing) and one amount for profit (which is not less than 8 percent of the sum of the cost of manufacturing and general expenses) be included in CV. The statute does not allow for the addition of statutory minimums at two different levels in the calculation of total constructed value, therefore, all CV information is irrelevant for the farmers.

DOC Position

The Department used information submitted for the calculation of cost of production when constructed values were required. In those cases where sales were found to be below cost and constructed value was used as FMV, BIA was used when the respondent did not use the proper costs for related party transactions. We combined the SG&A of the farmer and the exporter for the statutory ten percent test. As we found the total SG&A amount to be above ten percent in all instances, we used actual SG&A for our CV calculations. For profit, we used the statutory eight percent minimum. This was reasonable given that almost all third country sales were made at prices below the cost of production.

Comment 5

Petitioner argues that respondents' submissions included an amount for depreciation expense that was less than that reported in the financial statements prepared according to Norwegian generally accepted accounting principles (GAAP). Petitioner states that several farmers did not provide any information about the useful life of the assets, and those that did submit such information provided no independent support for the claimed periods. As such, depreciation expense should be taken from the financial statements.

Respondents claim that a certain portion of depreciation on the financial statement is tax-related accelerated depreciation and is reported in the financial statements as a separate non-operating item. Respondents argue that only the portion of depreciation expense shown in the financial statements as "ordinary depreciation" should be included in the cost of production and that inclusion of tax-related depreciation would be distortive.

DOC Position

The Department used the "ordinary depreciation" reported on the respondents' financial statements. This "ordinary depreciation" was based on the assets' historical cost and useful life in accordance with Norwegian GAAP. While the accelerated depreciation taken for tax purposes also appears on the financial statement, it is not based on the useful life of the assets. The tax-related accelerated depreciation does not appear to be a current cost but an appropriation to an account that reflects the difference between the "ordinary depreciation" and that used by the company for tax purposes. Because the historical value of the assets and the ordinary depreciation calculated on this historical value were not affected by the tax-related depreciation in this case, we did not include the tax-related depreciation in COP.

Comment 6

Petitioner states that wellboat fees should be calculated on a gutted weight basis, not on a round weight basis. Furthermore, several farms did not report freight costs.

Respondents state that most of the farmers have properly reported processing fees and wellboat fees on a gutted weight basis by converting round

weight to gutted weight at a rate of 90 percent.

DOC Position

The Department made adjustments where necessary to calculate processing and wellboat costs on a gutted weight basis and to reflect the inclusion of freight where appropriate.

Comment 7

Petitioner argues that the inclusion of general expenses as a manufacturing cost and, thus, part of the classification inventory value, is inconsistent with the Department's standard practice and with generally accepted accounting principles. Petitioner claims that none of the farmers demonstrated that their G&A costs were clearly related to production. Generally accepted accounting principles stipulate that G&A expenses shall be period charges except for the portion of such expenses that is clearly related to production. Therefore, 1989 G&A expenses should be allocated over 1989 production.

Respondents argue that the general expenses of the fishfarmers include very few selling expenses as most of the selling function is handled by the exporter, and that the remaining general and administrative expenses relate solely to production operations, *i.e.*, cultivating fish. Respondent asserts that an allocation of 1989 G&A expenses based on 1989 production would be distortive because more than one year class is under production during each year because the cultivation process requires 18 to 24 months. Because materials, labor and overhead for 1988 and 1989 were used to calculate costs, G&A expenses allocated over 1988 and 1989 production should also be included in the cost of production.

DOC Position

We agree with petitioner and have calculated both G&A and interest expenses as period expenses for the year 1989. This methodology attributes G&A and interest expenses to salmon sold during 1989 from both 1988 and 1989 year classes. G&A and interest expenses were calculated as a per-kilogram cost by dividing the relevant costs incurred in 1989 by the number of kilograms of salmon sold in 1989.

Two farms, Midnor and Hofa, began operations in 1988 and had no sales in the first half of 1989. Thus, a G&A and interest expense cost per kilogram of fish sold in 1989 was not representative of such expenses that would occur in the production of salmon in the ordinary course of business. The Department used the sales of the 1988 year class in the first half of 1990 as best information available for sales in the first half of 1989, in order to normalize these expenses for Midnor and Hofa.

Comment 8

Petitioner proposes that the Department calculate for each farm average cost figures for both gutted and round fish. Because a five NOK/kg fee was imposed on all sales of fresh salmon made on or after January 1, 1990, petitioner also proposes that the Department calculate separate COPs for the first four months of the POI and the final two months, after imposition of the fee. The Department should next recalculate the sales prices reported by each farmer to the exporters. (Hereafter, the farmer to exporter prices will be referred to as the exporter's "acquisition prices" or "AP".) These prices should then be weight-averaged for both gutted and round fish for each of the two sub-periods of the POI. Petitioner argues that it is necessary to weight-average the acquisition prices since large salmon has a higher per-unit price than smaller salmon. Comparing average costs with APs would result in below-cost sales for the smaller salmon and above-cost sales for the larger salmon. Therefore, the four separate average costs should be compared to four separate average APs and the higher of the two figures should be deemed the exporter's COM. The Department should then add the verified SG&A of each exporter to the gutted and round average costs for both sub-periods of the POI.

DOC Position

The Department calculated one simple average cost of production for gutted fish based on the adjusted costs of production of all seven farmers included in the investigation. We did not compare the farmers' cost of production to the APs because we determined that APs were not relevant to the COP analysis (see Exporter-Wide Comment 1). Therefore, no APs have been used for purposes of the final determination. Instead, we calculated the simple average of the seven farmers' individual costs of production for gutted fish (we did not calculate a simple average cost of production for round fish because no sales of round fish were used in our comparisons) and added the exporter-specific SG&A expenses to determine COP of fish sold by each exporter for the first sub-period of the POI (September 1 through December 31, 1989). We did the same for the second sub-period of the POI (January 1 through February 28, 1990), but also added the FOS fee of five NOK/kg. to COP (see Farm-Wide Comment 3). The COPs were then compared to the exporter's monthly weighted average third country prices.

II. Farm-Specific Comments

Safish

Comment 1

Petitioner argues that Safish submitted a materially revised cost of production submission at verification. Petitioner asserts that it is the Department's well-established practice not to accept material changes to responses at verification and, thus, the Department should have rejected the submission at verification to the extent the resubmitted costs are lower.

Respondent maintains that, at the beginning of verification, Safish informed the Department of an inventory error it had discovered and provided the Department with a corrected calculation of the quantity produced.

DOC Position

The Department agrees with the respondent. At the beginning of verification, the respondent submitted revised inventory information. The revisions were supported by detailed farm inventory records. This revision was not so significant as to constitute a new response. Therefore, the Department used this information as the basis for calculating the cost of production.

Comment 2

Petitioner argues that Safish's audited financial statement casts serious doubt on the reliability of its production costs as submitted to the Department. Specifically, petitioner claims that the results on Safish's income statement do not reflect the costs and selling prices submitted to the Department. Additionally, petitioner argues that Safish's 1989 Management Report lists a "calculated cost of production" at odds with the cost of producing round salmon as reported to the Department. Petitioner also argues that Safish failed to disclose a method of calculating costs of producing salmon for inventory purposes, even though specifically requested to do so by the Department. Petitioner concludes that these factors warrant rejection of Safish's cost response in its entirety.

Respondent claims that the Department verified Safish's cost of production based on a complete review of its operations and accounting records.

DOC Response

The Department agrees with the respondent. The response to the

Department's questionnaire was prepared by utilizing the company's accounting records, general ledgers and financial statements which were audited according to Norway's generally accepted accounting principles. Additionally, the management study does not support the petitioner's claim regarding the reported cost of production, because after minor adjustments, both amounts were comparable.

Bremnes

Comment 1

Petitioner argues that Bremnes' entire response be rejected and BIA used in the final determination because of the substantial adjustments which were made to actual costs for the submission and not disclosed to the Department until verification. Furthermore, Bremnes did not disclose to the Department until verification the use of surrogate costs for the 1987 smolt class. Petitioner argues that this data constitutes new information which should not have been accepted by the Department at verification.

Respondent argues that it answered exactly what the Department asked for in the questionnaire: An explanation of the differences between the response and the cost accounting system, not the difference between the response and the financial statements. Because Bremnes had no cost accounting system in place, it was required to perform an entry-by-entry analysis of the financial records in order to prepare the submission. Respondent claims that the Department verified each adjustment and petitioner has no basis on which to make its assertion that Bremnes' response is not credible.

DOC Position

The Department did discover deficiencies in Bremnes' submission. However, based on information provided at verification, we were able to make necessary adjustments. These adjustments were not so significant as to warrant the use of BIA for the entire response.

Comment 2

Petitioner argues that the Department should reject Bremnes' material costs in their entirety and use as BIA the average feed cost of NOK 10.92/kg from the 1988 Norwegian Directorate of Fisheries Study because of inconsistent year-end adjustments which lowered the feed costs. Petitioner asserts that it is impossible to determine how many one-sided adjustments could have been made. If the Department does add back this cost to materials, it should allocate the full amount to salmon farming.

Respondent argues that this one expenditure was excluded from the COP because it was a prepayment. Respondent claims that this purchase represented costs for a period subsequent to the period for which costs were calculated. Respondent states that at verification it showed that the purchase was from a supplier other than its normal supplier, that it was in addition to the regular purchases made in December, and that delivery did not begin until Feburary 1990. Therefore, respondent contends that it has properly been excluded from the COP.

DOC Position

We agree with petitioner in part. The Department increased 1989 material costs for this purchase of feed. The respondent documented at verification that the invoice for this purchase of feed was recorded in 1989, the period for which costs were calculated. Respondent's cost methodology calculated a per-kilogram production cost over a two-year period based on costs for 1988 and 1989 and production quantity for 1988 and 1989. The methodology did not include adding material expenses incurred in 1987 for feed used during 1988 at the beginning of the period for which costs were calculated, *i.e.*, January 1, 1988. Therefore, the respondent's adjustments to year-end purchases have understated the total quantity of feed used and was not in accordance with the methodology used to calculate production costs.

Comment 3

Petitioner argues that the respondent's exclusion of an expense classified as materials on the financial statements should be rejected. Petitioner states that the information on the record does not support the respondent's claim that this expense was, in fact, not a materials cost. Petitioner contends that since the amount is treated as a materials expense in the company's books, it should be included in the cost of production.

Respondent argues that it properly excluded a payment in 1989 because it was misclassified as a material costs in the company's books. Respondent states that it provided documentation at verification which detailed the nature of the fee and the propriety of its exclusion.

DOC Position

We agree with the petitioner. The documentation submitted at verification did not substantiate respondent's claim. The Department calculated material costs according to the company's accounting records and financial statements.

Comment 4

Petitioner argues that respondent disclosed at verification substantially new information regarding the methodology it used to calculate smolt costs. Because this new information was disclosed at verification, the Department did not have sufficient time to analyze the methodology. Furthermore, respondent's smolt costs are unreasonable when compared to the averages reported in the Norwegian Directorate of Fisheries. Petitioner contends that the surrogate costs should be rejected and BIA used instead.

Respondent contends that it did not have full cost data for 1987 nor an established smolt cost accounting system. However, the use of 1988 smolt costs did not understate Bremnes' cost of production. Respondent states that it supplied the Department with information that the smolt feed remained constant from 1987 to 1988 and the quantities of smolt delivered in 1988 were higher than that delivered in 1989. Therefore, its methodology did not understate costs.

DOC Position

The Department used the data submitted by respondent to calculate smolt costs. At verification, we analyzed respondent's methodology and through testing concluded that there was no basis to determine that smolt costs were understated.

Comment 5

Petitioner contends that the selling expenses of the Leroy Aqua Group (LAG), a cooperative comprised of many fish farmers, should have been included in Bremnes' COP. Because Bremnes did not provide this information, the Department should reject the response as unreliable. Alternatively, petitioner contends that the fees paid to LAG are selling expenses which should be added to COP or deducted from the sales prices.

Respondent argues that payments to LAG were properly excluded from Bremnes' COP.

DOC Position

Bremnes submitted documentation at verification to support its claim that fees paid to LAG should not be included in its COP, and we have not included them.

Nordsvalaks

Comment 1

Petitioner asserts that Nordsvalak's failure to report crucial related-party information rendered its response unverifiable, and that the Department should use as BIA the highest verified cost of production for any farmer.

Respondent claims that the failure to report the existence of Furberg & Yttersian (F&Y) resulted because the Department's questionnaire requested information only on related input suppliers, and not on "sister companies." Respondent claims further that the information submitted was verifiable and that the 50/50 split of costs between Nordsvalaks and F&Y is the same as an allocation of costs within a company. Lastly, respondent asserts that the Department *did* verify Nordsvalaks' response. To support this argument, respondent compares the time spent at the verification of Nordsvalaks to time spent for verification of other respondents in this proceeding.

DOC Position

We agree with the petitioner. The Department's questionnaire *does* specifically request information on relationships such as that between Nordsvalaks and F&Y. These parties, owned one by a husband and the other by the husband and his wife, maintained that although they kept separate books and records, costs and expenses were shared.

Section 773(e)(4) of the Act, a copy of which was included at Attachment A to the questionnaire, indicates that "members of a family, including brothers, sisters, spouse" are considered related

The Department did not verify the major elements of the Nordsvalaks response. The existence of this second, related company presented the question of whether all costs and expenses were appropriately allocated between these two entities. In effect, only part of a whole farm was reported in the respondent's submission. Since these companies essentially operated as one company, the verification of Nordsvalaks' submission could not be completed without accepting an entirely new response, including F&Y's data, and so we terminated the verification.

Midnor

Comment 1

Petitioner argues that the Department should adjust net production quantity for Midnor to December 1989 year-end quantities.

Respondent states that at verification Midnor provided revised ending inventory figures for the 1988 year class of salmon and that this information should be taken into account in the calculation of production quantities and per-kilogram cost of production.

DOC Position

The Department agrees with both parties and has adjusted the cost of production to reflect the actual verified ending inventory quantity.

Comment 2

Petitioner claims that Midnor's failure to identify a related supplier undermines the credibility of Midnor's response and that the Department should use BIA in the final determination.

Respondent argues that Midnor's relationship with the supplier is insignificant. Respondent further asserts that transactions were recorded at fair market value.

DOC Position

The Department agrees with the respondent in part. The relationship is not a significant related supplier relationship for cost of production considerations as defined in our cost of production questionnaire. For CV, we tested the prices and found them to fairly reflect the amount usually reflected in the market under consideration in accordance with section 773(e)(4) of the Act. With the exception of processing costs (discussed below), the Department used the verified costs for transactions between the parties.

Comment 3

Petitioner claims that Midnor has not followed a consistent methodology in allocating costs for the year class of 1988 over the production period. Petitioner also asserts that the Department should not exclude those costs incurred for 1988.

Respondent claims that the inconsistency in treatment of costs for 1988 and 1989 should be remedied by correcting the 1989 allocation to resemble 1988 allocations rather than by including those costs incurred in 1988 which had been excluded for the response.

DOC Position

We have modified the calculation of cultivation costs to treat all classifications of 1988 costs in the same manner as they are treated for 1989 costs.

Comment 4

Petitioner claims respondent's failure to provide evidence of actual payment of processing fees should be viewed by the Department as additional evidence of the overall unreliability of the submission and that respondent's submission should be disregarded.

Respondent claims that its submitted processing cost is supported by the FOS price list which was included as a verification exhibit.

DOC Position

For the final determination, the Department has used, as best information available, the processing fees as supported by the FOS price list.

Comment 5

Petitioner claims that the respondent failed to report interest expense for Midnor in the manner requested by the Department and that the Department should ignore respondent's calculations and resort to BIA.

Respondent claims that its calculation of interest expense is justified because of its unusual (start up) situation.

DOC Position

The Department has calculated interest expense based only on 1989 costs incurred divided by the total kilograms of 1988 year class salmon sold. (See Farm-Wide Comment 7).

Bremanger Fiskeindustrie

Comment 1

Petitioner argues that the web of interrelationships between Bremanger Fiskeindustrie A/S (Bremanger) and the exporter R. Domstein & Co. (Domstein) makes it nearly impossible to determine actual production costs for the group. Petitioner further states that these interrelationships create major problems in verifying the accuracy of transfer prices, because transfer prices for certain goods and services can be adjusted by over- or under-pricing other goods and services. Because of the extent of the interrelationships, complete cost of production data should have been supplied for all related parties. Given this lack of information, the petitioner claims that the Department has no choice but to use best information available in determining the cost of production of the group.

Petitioner further argues that Bremanger failed to include in general expenses an amount for services rendered by Domstein for which remuneration was not made by Bremanger. At the very least, Bremanger's general expense should be increased to reflect this omission. The failure to include these expenses should also be weighed by the Department in determining whether Bremanger's

submission should be rejected as unverified.

Petitioner asserts that, despite the fact that Domstein in essence owns Bremanger, the calculation of Bremanger's own interest expense was not based on a Domstein business group basis. Petitioner holds that it is the Department's standard policy to allocate total group interest expenses by total group cost of sales. In its final determination, should the Department accept Bremanger's response, it must adjust interest expenses to the highest amount reported by a responding company.

Respondent argues that Bremanger's salmon farm operates independently of Domstein, with day-to-day decisions and operational record keeping performed by Bremanger's employees. Respondent maintains that general expenses reported in Bremanger's response properly were based upon Bremanger's accounting records. Although Domstein provides limited bookkeeping support, Bremanger provides electronic data processing (EDP) services for the entire Domstein business group without remuneration. In the response, EDP services were allocated to Bremanger operations, *i.e.*, fish farming and fish processing. Therefore, imputing general expenses to Bremanger from Domstein's operations would overstate Bremanger's COP for salmon.

Moreover, respondent argues that Bremanger is a company within the non-consolidated Domstein business group and operates as a separate and distinct enterprise. No consolidated financial statements are prepared. Bremanger incurs its own interest expense and records this expense in its statements in accordance with Norwegian generally accepted accounting principles. Therefore, in accordance with past Department practice on this issue, the Department should calculate cost on the basis of interest expense as reported on Bremanger's financial statements.

DOC Position

The Department agrees with petitioner in regards to exclusion of G&A expenses and with the respondent in regards to which company's interest expense should be used in the calculation. Because Bremanger did not compensate Domstein for administrative services, the Department did not use Bremanger's submitted G&A expenses and used, as BIA, the highest G&A expense of any other farmer. The Department disagrees with the respondent that including an amount for Domstein's services would overstate Bremanger's general expenses. The assertion that Bremanger provides EDP services for the entire Domstein business group was neither reported in the questionnaire responses nor supported by evidence on the record.

Domstein does not own Bremanger, although common control does exist. The Department used Bremanger's interest expenses rather than interest expense incurred by Domstein for computing the COP. However, the Department adjusted this interest expense to include all of Bremanger's interest expense allocated to salmon operations in 1989 (see Farm-Wide Comment 7). The Department did not accept respondent's exclusion of certain mortgage expenses because the Department recognizes the fungible nature of interest expense.

Comment 2

Petitioner argues that Bremanger did not provide accurate data concerning its production quantities and, thus, the Department has no choice but to use the best information available.

Respondent argues that the per-kilogram cost of salmon should be calculated on the basis of the kilograms delivered to and accepted by the exporter.

DOC Position

The Department agrees with respondent and has used the quantity of salmon delivered to and accepted by the exporter to determine COP. In order to determine this amount, the Department relied on the quantities reported by processors, which agreed with the quantities accepted by the exporter.

Comment 3

Petitioner argues that in the absence of compelling reasons and supporting information to justify departure from Norwegian GAAP, Bremanger's recalculation of depreciation expenses must be denied.

Respondent asserts Bremanger prepared its finacial statement for tax purposes. Depreciation of farming equipment was based upon the shortest period allowed under Norwegian tax law rather than on the basis of the economic useful life of those assets. Respondent maintains that a tax life of three years contrasts sharply with the real useful life of the assets in question. For example, in the United States, single purpose agricultural or horticultural structures are assigned a useful life of 15 years by the Internal Revenue Service (IRS). The respondent claims that the Department itself uses the IRS Class Life Asset depreciation system for determining the useful life of assets in numerous countervailing duty cases. For this reason, Bremanger conservatively depreciated its equipment over the ten year period established for agricultural equipment and machinery generally, and did not separate out single purpose assets, including cages and fish feeding equipment, which under U.S. Law are depreciated over 15 Years.

DOC Position

The Department agrees with the petitioner and has not accepted the respondent's recalculation of depreciation expense only for the purposes of the submission in a manner contrary to what is recorded for "ordinary depreciation" on the financial statements. For the final determination, the Department used the "ordinary depreciation" based on the useful life of the assets as reported on the company's financial statement (see Farm-Wide Comment 5).

Comment 4

Petitioner argues that 1988 insurance fees and 1989 depreciation expenses that had been omitted from the response should be included in Bremanger's overhead amounts for the final determination.

Respondent maintains that it provided at the start of verification the inadvertently omitted costs for the 1988 insurance and 1989 depreciation expenses.

DOC Position

The Department has included such costs in the cost of production.

Comment 5

Petitioner argues that the processing of Bremanger's fish was performed by companies related to Domstein, and, thus, to Bremanger. Accordingly actual costs of processing should have been submitted so that the Department could have determined whether they were at or above the proces paid by Bremanger for these services. The Department should consider this omission in determining whether to reject as unverified the responses of both Bremanger and Domstein.

Respondent maintains that although the processing costs of Bremanger's processors and the prices its processors charged to unrelated customers where not available to Bremanger during verification, Bremanger documented that it was charged the reference price established by FOS for packing and processing.

DOC Position

For COP, actual costs were submitted but could not be verified. Therefore, the

Department has used, as BIA, the FOS price list to determine processing costs.

Comment 6

Petitioner argues that the Department determined at verification that the cost for wellboat transportation has not been calculated on a gutted basis. Moreover, petitioner holds that there is nothing on the record which indicates that Domstein paid for freight costs incurred by Bremanger. Accordingly, the Department should make the adjustment for gutting, and should at least use the highest freight rate incurred by Domstein as BIA in the final determination.

Respondent claims that, in Bremanger's case, all freight costs are paid by the exporter. Since these amounts are reported in the exporter's response, the inclusion of this amount in Bremanger's response would result in double counting of freight expense.

DOC Position

The Department agrees with the petitioner in regards to wellboat transportation fees. Wellboat fees were adjusted by the Department to reflect a per-gutted kilogram charge (see Farm-Wide Comment 6). According to Domstein's verified questionnaire response, Domstein pays for all trucking, brokerage, and handling from the processing plant to any delivery point in the third country, as stipulated by the terms of sale. Thus, freight costs were not included in Bremanger's costs.

Hofa

Comment 1

Respondent argues that the proper calculation of the per kilogram costs of salmon requires that the costs be calculated on the basis of the kilograms delivered and accepted by the exporter.

DOC Position

The Department has calculated the cost of production based on the quantity of salmon delivered to and accepted by the unrelated exporter. The quantity of salmon accepted by the exporter was supported by documents provided by that exporter.

Comment 2

Petitioner argues that the Department should adjust net production quantity by the amount of the overstatement internally reported by the respondent for the ending inventory.

Respondent states that at verification Hofa provided revised ending inventory figures for the 1988 year class which were verified and that this information should be taken into account in the calculation of production quantities and the cost of production.

DOC Position

The Department has adjusted the cost of production to reflect the actual verified ending inventory quantity.

Comment 3

Petitioner argues that Hofa under reported its "ordinary depreciation" for 1988 by not including depreciation incurred during the first half of 1988 for equipment that was rented to another producer. Petitioner maintains that the respondent did not provide evidence at verification that it was reimbursed for the use of its capital equipment, and argues that this situation is analogous to "idle" equipment which, under standard Department practice, must be fully depreciated during the relevant period.

Respondent maintains that Hofa properly reported depreciation for the last six months in 1988. The 1988 year class entered the sea in the fall of 1988. Prior to that period, Hofa did not use its equipment for farming. Rather, during the first half of 1988, it rented its equipment to another farm, a fact that the Department verified.

DOC Position

The Department agrees with the respondent. The Department verified that respondent received rental income for the equipment and such income and associated depreciation were not included in the cost of production.

Comment 4

Petitioner argues that, in calculating its cost of smolts, Hofa used transfer prices rather than actual production costs incurred by its related supplier. Petitioner maintains that the price paid to Hofa's related supplier for smolts is below the company's production costs, which is the appropriate benchmark to use unless Hofa can demonstrate that the prices paid are above the supplier's costs. Given Hofa's failure to supply the actual costs for the smolt purchased from its related supplier, the Department should use, as best information available, the higher of (1) the appropriate FOS minimum price in effect pre-August 15, 1988, (2) the highest calculated smolt costs submitted in this investigation, or (3) the transaction prices reported by Hofa.

Respondent indicates that Hofa provided invoices for smolt sales to unrelated purchasers and FOS price lists to demonstrate that the prices it paid to a related smolt supplier in the fall of 1988 were at or above market prices. Respondent further claims that, given the high price for these smolt, there is nothing to suggest these sales by the related company to Hofa were distress sales made below its cost of production and, thus, there exists no reason to reject these verified costs.

DOC Position

The Department accepted Hofa's purchase price as the appropriate cost of smolt for the final determination for both the calculation of cost of production and constructed value. Because the supplier does not own more than fifty percent of Hofa, the purchase price is the appropriate determinate of the cost of smolt for the cost of production. For constructed value, we used the transfer prices reported by Hofa because they were comparable to the prices in Norway for similar qualities and sizes of smolt.

Comment 5

Petitioner argues that the Department should not allow the cost of production to be offset by the proceeds of an insurance indemnity that is allegedly related to losses due to disease for the following reasons: (1) This information was submitted well after the Department's standard deadline for accepting new information, and (2) the verification exhibits indicate that the amount of the insurance settlement was based partly on the market value of the lost production and not on the cost associated with the losses.

Respondent maintains that Hofa properly offset its cost for salmon by insurance proceeds received to avoid the economic distortion that otherwise would result. Additionally, respondent disagrees with petitioner's argument that this offset should be rejected because it was partly based upon the market value and not upon the costs associated with the loss. Respondent argues that the record shows that, even if some profit element were included in the insurance valuation of the fish, the insurance settlement was well below the insurance valuation for loss and the portion of the settlement directly related to the lost fish was well below the cost of production as set forth in Hofa's response.

DOC Position

The Department agrees with the respondent. Although the amount of the indemnity was submitted at the beginning of verification, the company's responses to the Department's questionnaire reported that the 1988 year class had suffered great losses due to disease and also that the company incurred insurance expenses. After examination of the documents

supporting the receipt of the insurance indemnity, the Department included the proceeds as an offset to production costs for the 1988 year class. The Department notes that the proceeds were lower than the actual cost of production for the losses incurred.

Austevoll

Comment 1

Petitioner argues that they have reason to believe that Austevoll misreported certain data to FOS. Petitioner calls for the use of BIA (the highest verified COP of any other farm) if it is determined that Austevoll misreported its sales to FOS.

Respondent argues that the petitioner offers no support or evidence that its claim is true other than a general statement from an exporter that it may have under reported its sales to FOS.

DOC Position

We tested quantities reported by Austevoll to the Department against those reported to FOS and noted no discrepancies.

Comment 2

Petitioner argues that the Department should reject Austevoll's claim for an offset to the cost of cultivation for the estimated losses resulting from the infectious anemia syndrome (ILA) disease which infected the 1988 class. Petitioner states the respondent did not establish that the disease affecting the 1988 year class was "extraordinary." Petitioner states that Austevoll supplied neither industry nor government reports regarding the costs incurred in dealing with the ILA disease, nor any information as to the costs incurred by a Norwegian farmer affected by an "ordinary" level of ILA disease. Furthermore, Austevoll's 1989 financial statement did not list any extraordinary expenses from ILA disease. Since Austevoll did not treat these expenses as extraordinary according to Norwegian GAAP, the Department should also not consider them to be extraordinary for this investigation.

Respondent argues that, because a large portion of the stock died prior to harvesting and the remainder had to be slaughtered prematurely, Austevoll's sales and costs should be excluded from the investigation. The ILA disease also affected the quality of the stock which was sold in two ways: (1) The output of superior quality fish decreased substantially; and (2) the fish continued to experience a degradation of the flesh even after being sold, which required Austevoll to pay refunds to customers. Thus, Austevoll contends the ILA disease-related expenses are extraordinary. Respondent argues that it is the Department's normal practice to disregard sales of damaged merchandise and sales made outside of the ordinary course of trade; therefore, Austevoll should be excluded from the investigation.

DOC Position

We agree with the petitioner in part. Austevoll's claim that the extent to which the ILA disease affected its 1988 year class of salmon was extraordinary was not supported by the evidence on the record. In order for a particular item to be classified as extraordinary, it must be unusual in nature and infrequent in occurrence. In the fish farming industry, disease is an expected occurrence. Respondent submitted no independent data regarding ILA disease in general or the extent to which other farmers in Norway suffered from this disease, and no data was submitted regarding ordinary or abnormal levels of disease. Therefore, respondent was unable to support its claim that the extent to which the ILA disease affected its 1988 year class was extraordinary.

The Department disagrees with the respondent's claim that Austevoll's sales and costs should be excluded from the investigation. Austevoll's 1988 year class was sold in the ordinary course of trade. The fact that the disease resulted in the production of a larger proportion of "ordinary" quality salmon than would have been produced absent the disease does not lead to the conclusion that the sale of the "ordinary" quality salmon is outside the ordinary course of trade. The portion of the salmon stock which lived did enter the market.

Comment 3

Petitioner argues that, if an offset is allowed for the ILA disease, the method in which Austevoll calculated the offset is not acceptable. The major portion of the offset represents the "declared value" of the fish on the insurance policy, which is based upon the market value of the fish which includes lost revenues. Petitioner claims that the market value of fish as recognized by insurance companies is much higher than the average selling prices for 1989 which Austevoll reported. Also, the market value of fish does not represent the actual costs incurred by a farmer that has been affected by ILA disease. Petitioner states that only the actual costs incurred by the farmer should be considered in an adjustment for the affects of ILA disease, not unrealized profits. Respondent argues that, if Austevoll's sales are not excluded from the investigation, it should be allowed an offset for the effects of the ILA disease as submitted because it meets the criteria set forth for extraordinary items: The impact of the disease was unusual in nature, infrequent in occurrence, and the effect that it had on the 1988 year class was material. Respondent argues that it should be allowed an offset as calculated by its claim filed with its insurance company.

DOC Position

We agree with petitioner in part. The Department agrees that the method by which respondent calculated the offset did not reflect the actual loss incurred from the disease. The respondent based its offset on the total amount of the claim filed with its insurance company. Included in this calculation are amounts for the lost revenue from fish mortalities and from fish downgraded in quality because of the disease. Certain actual expenses which were paid by Austevoll, such as an additional sanitary fee paid to the exporter, were also included in this calculation. The basis of the respondent's offset bore little relationship to the actual costs incurred by Austevoll, whether in treating this disease, in cultivating the salmon which died, or in protecting the remainder of the stock from contracting the disease. We allowed a reduction to total costs for the amount of the actual reimbursement received from the insurance company.

Comment 4

Petitioner argues that the respondent withheld significant information concerning its methodology for smolt costs. The respondent's use of cost data of the calendar year 1988 as a surrogate for the actual costs incurred in 1987 and 1988 to raise the 1987 smolt year class was not disclosed in any of its submissions. The Department first learned of this information at verification. Petitioner argues that the Department clearly asks for detailed explanations of methodology in its questionnaire in order to analyze the information prior to verification and the Department should not be surprised with new information at verification. Petitioner suggests that Austevoll's smolt costs be rejected and the highest smolt cost of the other farms be used as BIA.

Respondent argues that Austevoll used the smolt production costs for the calendar year 1988 as a surrogate for the actual production costs of the 1987 smolt year class because of the difficulties in allocating costs among different year classes and the lack of complete data for 1987 smolt production costs.

Austevoll claims its methodology does not understate costs and, in fact, overstated costs. Austevoll stated that it showed at verification that the per-unit costs for feed and roe was lower in 1987 than 1988. Therefore, Austevoll's methodology should be accepted for the final determination.

DOC Position

We agree with respondent. The Department used 1988 smolt production costs as best information available. In testing the 1987 smolt cost elements during verification, there was no indication that the total smolt cost was understated.

Comment 5

Petitioner argues that Austevoll did not provide any support that the processing fees charged by its related party were at arm's length or were above the related party's cost of production. Therefore, the Department should use BIA for the final determination and base processing costs on the higher of (1) the highest verified processing costs, (2) Austevoll's submitted prices for processing, or (3) the FOS minimum processing prices.

Respondent argues that its processing fees were set forth in the FOS invoices and were properly reported.

DOC Position

We agree with respondent. We used Austevoll's reported processing charges since they agreed to those reported on FOS invoices.

Comment 6

Petitioner argues that the Department should base its calculation of wellboat expenses on the higher of Austevoll's reported transfer price or the highest wellboat expense of any other farmer. Austevoll based its wellboat costs on an internal transfer price used for cost accounting purposes rather than on actual costs of its wellboat operations.

Respondent contends that the market price for wellboat costs that it used as the basis for its internal cost for wellboat operations reflected the actual costs of Austevoll's use of its wellboat and was properly included in COP.

DOC Position

We agree with respondent. After testing the actual costs to the submitted costs, the Department determined that the submitted costs reflected the actual costs of the wellboat operation. Therefore, no adjustment was made.

III. Exporter-Wide Comments

Comment 1

Petitioner argues that the Department should base COP on the higher of: (1) The costs of production of the farm to which the exporter has been linked, or (2) the weighted-average acquisition price the exporter paid the farmer. Petitioner also argues that an average COP would not be representative since the sample selection process was not adjusted to take account of size differences between farms.

Respondents argue that the cost of production of the farms should be based on an average of all the farmers' costs weighted by production volume. Linking an exporter to a farmer would not be representative of the exporter's costs since each exporter bought salmon from a large number of farms during the POI. They also argue that acquisition prices are not relevant to the COP analysis.

DOC Position

First, the Department agrees with respondents' position that acquisition prices are not relevant to the cost of production analysis. In determining whether exporters' sales were made at less than cost, we looked at the "cost of producing the merchandise," in accordance with section 773(b) of the Act. As described in the Foreign Market Value section of this notice, the "cost of producing" the merchandise included the sum of the farmers' COP plus the exporters' general, selling and administrative expenses, profit and packing.

Second, a discussion of the background of the investigation is required to comment on the issue of an average COP as opposed to exporter-farmer specific COPs. The Department intended to construct a sample of farms which supplied each of the individual exporters during the POI. This methodology was designed to arrive at representative costs for each of the eight exporters based on their own experiences. In order to construct this sample, the Department asked the respondents to provide a separate list of farms which supplied each of the eight exporters during the POI. The Department randomly selected eleven farms from the lists and sent cost questionnaires to those farms. However, approximately two weeks after the questionnaires were sent, the respondents informed the Department that the lists used to select the sample were flawed because they contained farms that had not sold to the exporters during the POI. In fact, four of the eleven farms selected by the Department did not sell to the exporters during the POI. The Department decided not to select four additional farms from what was then known to be a flawed list. Moreover, given the time constraints, the Department decided to proceed with the information submitted from the seven remaining farms to avoid difficulties in meeting the statutory deadline for our final determination.

Given the constraints of the sample, the Department used an average of the seven farms' costs to arrive at an average farm COP in Norway. We disagree with the petitioner that averaging does not result in a representative COP. (The Department notes that the sample contains small, medium and large producers as well as farms from both the northern and southern regions of Norway.) To the contrary, this is the most reasonable methodology to determine the cost of producing salmon in Norway in circumstances where a great number of producers (more than 700 in this case) must be investigated in a relatively short period of time. Since four of the eleven farms were eliminated from the sample, we can not arrive at exporter-specific costs by linking exporters to specific farmers. The eleven were chosen to achieve geographic balance between northern and southern farms for exporters who purchased from farms in both these areas. The absence of costs from the four missing farms would skew individual exporter results. We also note that each exporter bought salmon from a large number of farmers during the POI. Therefore, we have concluded that an average of the COP from the seven farms is the most representative of the costs of Atlantic salmon from Norway.

We agree with the petitioner that weight averaging the costs of the farmers would skew the results. Bremnes, one of the seven sampled farms, is one of the largest farms in Norway. Based on public information on the record of this case (response of the Government of Norway to the countervailing duty questionnaire (C-403-802)), the largest farms in Norway produce a very small proportion of total salmon production. However, Bremnes' production constitutes a large proportion of the combined production of the seven farms. Therefore, weight averaging would result in a COP which disproportionately reflects the costs of the largest farms in Norway. In view of this, a simple average of costs is more representative of industry-wide costs then a weighted average.

Comment 2

Respondents contend that farmed salmon is a highly perishable product

that is sold into a market that the seller cannot control. Specifically, respondents allege that when salmon approaches maturity, the color of the flesh changes and it loses value. Consequently, farmers must sell or suffer the loss of their crops.

Respondents assert that Atlantic salmon is also a perishable commodity for the exporters. Respondents further argue that the Department should conclude that sales of Atlantic salmon were not sold below the cost of production over an extended period of time and in substantial quantities, and were at prices which would permit recovery of all costs within a reasonable period of time. Respondents argue that if the Department continues to apply a COP test to determine whether substantial quantities of sales were made below the cost of production, the Department should apply a 50/90/10 test, rather than the 10/90/10 test. (Under the 10/90/10 test, the Department would not disregard sales if less than 10 percent were below cost, disregard only the below cost sales if between 10 and 90 percent were below cost, and disregard all sales if more than 90 percent were below cost).

In past cases the Department has applied the 50/90/10 test in cases involving highly perishable agricultural products. Under a 50/90/10 test, the Department would not disregard any less than cost sales unless more than 50 percent of sales were below cost. Respondents contend that the Department will not find more than 50 percent of sales below the cost of production.

Respondents claim that sales below cost did not occur over an extended period of time, based on an examination of average cost, average fair market value, and average profit on a monthly basis for each exporter. They argue that the information demonstrates that each exporter made a profit in at least two of the six months during the period of investigation with every company showing a profit in the last month of the investigation. The existence of profits in some months for all companies precludes a finding of sales below cost over an extended period of time.

Furthermore, respondents argue that any sales below cost by the exporters were at prices that would permit recovery of all costs within a reasonable period of time. As evidence of their assertion, respondents rely upon monthly data which indicate a return on sales above cost, by weight band, for a majority of exporters. In addition, virtually all below cost sales occurred on sales of smaller fish which do not command high market prices but which bear the same cost per kilogram as the larger fish.

Petitioner challenges respondents' assertions that they lack the ability to control the time of sale of the farmed salmon. Rather, petitioner contends that the Norwegian salmon farmer has the option of delaying harvest of the salmon. Petitioner noted that farmed salmon can be kept in the water for eight to ten months after the onset of maturity and that such "held over" salmon would at least retain value since they regain their color and could weigh more than at the onset of maturity. Petitioner cited a January 1990 study by the National Oceanic and Atmospheric Administration reporting that Norwegian farmers carried over 30,000 metric tons in inventories of fresh harvestable salmon from 1989 to 1990. Accordingly, petitioner supports the 10/90/10 test for cost analysis.

Petitioner further states that respondents failed to produce documentation to support data indicating profitable months during the POI. In addition, exporters' audited financial statements for the year ending 1989 reflect net losses. Each of these facts, petitioner argues, undermines the credibility of respondents' assertion that below cost sales did not exist over an extended period of time. Finally, petitioner disputes respondents' claims that sales in later months are above costs, indicating the recovery of costs.

DOC Position

We agree with petitioner that fresh salmon is not a perishable commodity for purposes of the cost analysis. Norwegian Atlantic salmon farmers have the ability to control the time of sale of their output by "holding over" inventory and, since January 1990, by freezing fresh salmon. Regarding respondents' assertion that salmon is perishable in the hands of the exporters, the Department found at verification that the opposite is true. Exporters coordinate their salmon requirements in weekly telephone conferences with their customers, with farmers, and with other exporters. By doing so, exporters can communicate their salmon requirements two weeks into the future to the farmers so that farmers can begin to "starve" (prepare for harvest) the salmon two weeks prior to harvest. Accordingly, there appears to be no perishability problem at the exporter level. Therefore, the Department applied the 10/90/10 test applicable to non-perishable products for purposes of determining whether below-cost sales were in substantial quantities.

Regarding the extended period of time during which below cost sales occurred, respondents' reliance on average prices and costs is misplaced. Section 773(b)(1) of the Act allows us to disregard sales at less than cost if they are made over an extended period of time. Thus, the focus is on the individual sales below costs, not whether the average price of all sales is above or below cost. An examination of below cost sales reveals that they took place throughout the POI, as opposed to being concentrated in only a short period of time. Therefore, the Department concludes individual sales at prices below cost occurred over an extended period of time. Similarly, to be disregarded, the price of below-cost sales also must be insufficient to recover all costs in a reasonable period of time. An average price, which includes both above and below cost prices is not relevant to this determination. In order for prices below cost in the POI to recover all costs, there would need to be evidence that costs in a reasonable time would decline sufficiently for prices below POI costs to exceed future costs to a degree that would permit not only recovery of future costs but recovery of current losses. We have examined costs of producing salmon over a two year period and have found no evidence of either costs expensed in the POI which should be reallocated to a future time, thus lowering POI costs, nor of any other evidence that current costs are aberrational and expected to decline. In the absence of evidence that current below-cost prices will recover future and current costs, the Department concludes that below-cost prices will not recover all costs in a reasonable period of time.

Comment 3

Respondents suggest that the Department's usual practice of comparing U.S. prices to a weighted average FMV covering the entire period of investigation would result in an inherently unfair comparison of "apples to oranges" or "fish to fowl." Respondents note that the International Trade Commission, in its preliminary determination in this case, stated that fresh salmon prices fluctuated "widely" from 1987 through mid-1988 and that thereafter salmon prices declined 50 percent through the end of 1989 before recovering somewhat in the first quarter of 1990. They point out that the Department has previously based FMV on both daily and monthly averages, respectively, in Certain Fresh Winter Vegetables from Mexico; Final Determination of Sales at Less Than Fair Value, 45 FR 20512, 20515 and Fall Harvested Round White Potatoes; Final Determination of Sales at Less Than

Fair Value, 48 FR 51669. With respect to the appropriate time frame on which to base the fair value comparisons, respondents suggest that daily or weekly average FMVs be used because it would provide the Department with the most "contemporaneous" foreign sales. Respondents argue in the alternative that monthly averages should be used.

Citing Certain Fresh Cut Flowers from Mexico Final Results of Antidumping Administrative Review, 55 FR 12696, 12897, respondents suggest that fairness requires that the Department calculate United States Price "on an average basis comparable to that utilized for FMV." Respondents note that in that case, the Department was obliged to "take into account" price distortions resulting from the perishable nature of the product.

Petitioner suggests that where FMV is based on home market or third country net prices, the Department should follow its standard price-to-price methodology. With respect to U.S. price, petitioner contends that, at least when FMV is based on constructed value, the Department should use weighted-average U.S. prices by invoice across all weight bands. Petitioner feels that weighted-average U.S. invoice prices are comparable to "single average costs" and that weighted-average prices reflect commercial reality, since a single invoice to a customer covers many weight bands.

DOC Position

To examine the question, we collected gross price information for each exporter for each month of the POI. We aggregated all weights of gutted salmon for purposes of comparing monthly price fluctuations in the same market. The Department used gross prices to minimize exchange rate effects (several exporters had mixed currencies in their databases).

We noted two discernible trends. First, there was a significant increase from month to month in FMVs from September through December, with another notable increase in January, 1990, continuing into February. Second, there was a steady *decrease* in U.S. price from September to December, with a large, pronounced increase in U.S. price in January, 1990 and continuing in February. For these reasons, *i.e.*, because the time of sale is closely connected to the prices charged, the Department agrees with respondent that a "narrower" window should be used for fair value comparisons, and, accordingly, weight-average FMV by month. The Department did not average U.S. price, following its normal practice of comparing individual U.S. prices to weight-average home market or third country prices. Also, vegetables and flowers were highly perishable products, dominated by sales at auction, and having significant price fluctuations each day. Salmon shares none of these characteristics and, therefore, averaging to eliminate the distortions is unnecessary.

Comment 4

Petitioner contends that the Department should base the foreign market value on constructed value instead of third country prices in Europe because substantial evidence exists from a European Community (EC) preliminary antidumping investigation of salmon from Norway that third country prices are below the fair market value. The failure of the EC to arrive at a final determination in its separate investigation of salmon from Norway should not diminish the significance of the preliminary finding of dumping in the EC. The Department should recognize the practical contradiction of using the price of products sold below fair market value as the average fair market price and should use constructed value as the fair market value.

Respondents contend that any evidence of dumping in the comparison market should have no bearing on the U.S. investigation conducted by the U.S. Department of Commerce. Respondents argue that U.S. law does not contemplate consideration of whether third country prices are below fair market value as determined by a different antidumping authority. Respondents also point out that during this investigation, petitioner has consistently maintained that because EC and U.S. investigations significantly differ, information obtained in the EC investigation cannot be used for the purpose of the U.S. investigation. Therefore, any E.C. preliminary finding of dumping is irrelevant for the purpose of the U.S. antidumping analysis.

DOC Position

The statute does not preclude the Department from using third country sales solely because an authority other than the Department has found or may find that they are at dumped prices.

Comment 5

Respondent argues that fees paid to the NFOL, ECFF and the Norwegian Government for health inspections may either be classified as direct selling expenses or taxes. If the Department classifies the fees as direct selling expenses, it should deduct the expenses from third country prices. If, however, the Department classifies the fees as taxes, no adjustment should be made to the gross unit price and no amount should be added to the COP.

Petitoner contends that the fees discovered at verification, such as the NFOL fee, the ECFF fee, and the NOG health certificate fee should not be deducted from FMV because respondents failed to report the expenses incurred. Petitoner states that the cumulative effect of the individual fees will have a significant effect on the overall margins. In addition, petitioner argues that the fee for NOG health inspections must be added to the exporters' cost of production.

DOC Position

At verification, the Department discovered that the exporters pay certain fees to two organizations that were not reported, or only partially reported, in the responses. Payments to the NFOL represent mandatory payments to the exporters' organization by all exporters who are members of the NFOL. The amount of the fee payable varies with the quantity of the merchandise purchased by the exporter. Similarly, the ECFF fee, which varies with the volume of the merchandise exported, is paid by all exporters on export sales to all markets. Therefore, both of the fees represent variable costs attributable to the subject merchandise.

The Department has characterized the fees as direct selling expenses because the fees represent variable costs and are paid by the exporters on sales of the subject merchandise. Consequently, the Department has made a circumstance of sale adjustment to foreign market value to reflect the payment of fees on shipments to the U.S. and third country markets and has included the total expenses attributable to salmon sales in the COP.

Certain exporters incurred expenses related to inspection and certification of merchandise destined for the European Community. The Department has determined that this adjustment to foreign market value constitutes an insignificant adjustment under 19 CFR 353.59. Therfore, we have disregarded the adjustment relating to health certification fees incurred on goods sold to those third countries.

Comment 6

Petitioner objects to all respondents' overall methodology of averaging certain expenses in the foreign market such as movement, insurance, duties and fees to the extent that the costs are to be deducted from individual sales prices. Petitoner argues that the averaging techniques employed results

in margin distortions by causing a higher FMV in sales in the less frequent but higher weight bands and a lower FMV in sales of more frequent, lower weight bands.

Respondents contend that the averaging methods employed constitute reasonable methodologies for allocating expenses that are, by their nature, averages.

DOC Position

We have accepted all movement, insurance, duty and fee averages since verification substantiated that the average amounts reported were reasonable in relation to the sale specific charges we observed. In some instances, our verification findings changed the reported charges.

Comment 7

Petitoner argues that the Department should use actual processing costs, where available, in lieu of the standard fee listed on the FOS schedule.

Respondents assert that the Department should use actual costs for Chr. Bjelland and Skaarfish, two exporters which demonstrated lower processing costs for merchandise processed in-house than charged for unrelated packers, which charge the FOS fee.

DOC Position

Although the Department verified lower in-house processing costs for some exporters, the Department was unable to verify either whether the charge was always passed to the farmer or whether the exporter at times bore the cost. One exporter, Chr. Bjelland, reported in its May 16, 1990 response that it "buys fish from the farmers at an ex-cage" price. On July 27, Chr. Bjelland reported that "[a]ll charges applicable to transporting the merchandise to Chr. Bjelland's distribution warehouse, including standard packing (which includes processing) are included in the exporter's cost of purchasing the merchandise." Because of the conflicting accounts, the Department applied, as BIA, the FOS fee in its build-up of the farmer's COP and CV.

Comment 8

Petitioner contends that some respondents have improperly claimed warranty expenses relating to rebate payments or total write offs on specific sales. Petitioner recommends that where information does not exist to deduct only the proper amount for each sale, the Department should reduce the U.S. price by the amount claimed and should disallow an adjustment for warranty expenses to the FMV.

Respondents challenge petitioner's assertions that warranty expenses are improperly reported. Respondents claim that the nature of the business practice in the salmon industry prevents maintenance of warranty expense records as typically maintained in other industries. Respondents state that the claimed expenses represent complaints based on quality, incorrect shipments, or unilateral refusals to pay. All exporters derived warranty adjustments by totalling the expenses of the types described above and allocating the expenses over market specific sales.

DOC Position

Regarding the treatment of warranty expenses, the Department's practice is to allow only expenses related to quality based complaints. In this case, for those exporters that claimed only warranty expenses as defined by the Department, we have allowed the circumstance of sale adjustment. For those exporters who claimed warranty expenses which included unilateral price deductions, we disallowed the claim in the third country market and applied the full amount claimed in the U.S. market in making circumstance of sale adjustments. We did this because we were unable to segregate the warranty only portion of the claimed expense.

IV. Exporter-Specific Comments

Domstein

Comment 1

Petitioner recommends that the Department either disallow completely or allow only the lowest charges incurred for miscellaneous freight charges incurred on third country sales. Petitioner's position is based on verification findings that the charges were not fixed charges as originally reported but related to terminal costs that varied in amount.

Respondent states that the fixed rate submitted represents the average expense incurred. Respondent claims that Domstein's accounting department derived the average amount and documented the calculations in an accounting study.

DOC Position

The Department agrees with the petitioner. At verification the Department requested documentation to support the amount claimed in the submissions. Domstein offered only documentation that indicated miscellaneous charges at varying amounts. Domstein did not offer any further documentation, despite our inquiries. Therefore, because neither the expense nor a reasonable estimation of the average amount claimed was documented, the Department has disallowed Domstein's claimed miscellaneous freight expenses.

Comment 2

Petitioner states that on U.S. sales with unreported payment dates, the Department should treat the unpaid amount as a discount unless Domstein can demonstrate that the outstanding balance is collectible. Respondent argues that no evidence exists which indicates that the outstanding payments represent discounts. Respondent recommends that the Department either exclude the sales with open paydates or apply the average paydate as in the preliminary determination.

DOC Position

The Department agrees with the respondent. At verification, the Department reviewed sales and payment records for those sales with unreported paydates. The review included examination of computer sales data files and payment records. No evidence exists which suggests that Domstein extended a discount to the purchaser. In addition, the Department thoroughly investigated the discounts claimed and found no discrepancies. Therefore, because substantial payment was received and no evidence of a lack of good faith by the exporter to accurately report discounts exists, as BIA the Department has not treated the unpaid amount as a discount and has assigned the average credit period of all sales to the ten transactions with missing paydates to calculate a credit expense.

Comment 3

Domstein urges the Department to use the verified selling expenses. In the preliminary determination, the Department applied BIA to calculate the commission offset for sales in which a commission was paid in only one market because Domstein did not report indirect selling expenses.

DOC Position

At verification, Domstein provided information total indirect selling, general and administrative expenses incurred for the year ending 1989. We have used that information in our final determination to calculate the commission offset.

Saga

Comment 1

Petitioner contends that the Department should reject the Saga's third country sales listing and base

Saga's FMV on the higher of the FMV calculated for another exporter or the FMV in the petition. Petitioner's contention is based on findings at verification of one invoice of frozen salmon and two to three credit notes erroneously included in the third country database as third country sales. Petitioner characterizes the database as unusable because of the potentionally pervasive inclusion of other credit notes and sales of frozen salmon which it describes as typcially lower in price.

Respondents disputes petitioner's assertion that the mistakes in quantity arising from the inclusion of frozen salmon sales and credit notes warrant a rejection of the response. Respondent notes that the original invoice erroneously recorded the sale of fresh salmon as frozen salmon. The mistake was detected upon review of shipping documents. Furthermore, the Department's random sampling techniques did not detect any other sales of frozen salmon reported in the database. With respect to the credit notes, respondent submitted two out of three of the credit notes erroneously reported as sales to the Department at the beginning of verification. Credit notes were easily detectable upon review of the database because the quantity of goods reported was a single unit, an unlikely amount for a sale.

DOC Position

The Department agrees with respondent. We concluded at verification that the errors in the sales data did not jeopardize the credibility of the third country sales data submitted. The respondent reported the missing credit notes to the Department at the beginning of verification. We verified the amount of the credit notes and the deduction from the corresponding sale. Random sampling did not identify additional unreported credit notes. With respect to the erroneously reported sale of frozen fish, the mischaracterization of the sale as frozen instead of fresh merchandise was an error on the actual invoice. All documentation indicated that the inclusion of the sale was an isolated error.

Comment 2

Petitioner contends that Saga's fees paid to the ECFF were actually .09 percent rather than .1 percent of CIF value. Petitioner requests that the Department adjust the amount deducted to reflect the actual fees paid.

Respondent states that the fee is based on FOB, not CIF, value and argues that petitioner's calculation of the fee is erroneous.

DOC Position

The Department agrees with the respondent. The verification exhibits clearly show that the fees paid to the ECFF were .1 percent of the FOB value on exports to all markets. The Department has adjusted the foreign market value and U.S. price to reflect the payment of these fees.

Comment 3

Petitioner states that Saga's claim for NFOL fees is overstated by .25 percent because the actual NFOL fee fell by .25 percent in January and February 1990.

Saga contends that it did not originally report the NFOL fee and asserts that these fees are paid upon the acquisition of the fish, and not as a charge on the export sale.

DOC Position

In the final determination, the Department calculated NFOL fees as .1 percent of the CIF value for the months of September through December 1989 and .075 percent of the CIF value for the months of January and February 1990 (see Eporter-Wide Comment 6).

Skaarfish

Comment 1

Petitioner suggests that Skaarfish intentionally included sales to customers outside of France to ensure that France was the selected third country. Petitioner hypothesizes that the misreported sales could have been sold to Germany. Petitioner states that sales to Germany were approximately 10 percent higher than sales to France. Petitioner argues that the Department's inability during verification to authenticate the total amounts reportedly sold in each market (United States and France) lends credibility to his assertion. Petitioner requests that the Department apply BIA as the highest calculated FMV for another exporter, or information alleged in the petition.

Respondents argue that the German sales were ultimately destined for Austria and Switzerland and the misreported French sales were actually shipped to Belgium. Respondents point out that they were prepared to prove the destination of the shipments in question at verification.

DOC Position

During verification, the Department verified the total quantity and value of merchandise sold during the POI. We attempted to verify the quantity and value sold to each market through the accounting ledgers. Skaarfish officials, however, explained that the accounting system precluded tabulation of sales information for a specific market for a specified period of time. Faced with this situation, we selected invoices from the invoice ledger. We found no improperly reported or unreported sales. Therefore, no reasonable basis exists for the Department to apply the BIA. Accordingly, we have accepted the sales reported by Skaarfish as the appropriate third country market sales.

Fremstad

Comment 1

Petitioner asserts that Fremstad averaged charges per kilogram for each U.S. destination, that such averaging is distortive, and that Fremstad could have submitted air freight charges on a per sale basis. Petitioner urges the Department to use the highest per kilogram charge as best information available.

Fremstad asserts that it does not know in advance what its air freight expense will be when it sells salmon to the United States. It estimates the amount on the basis of experience. Accordingly, Fremstad asserts that average air freight charges per destination are closer to its selling practices that sale-by-sale amounts would be.

DOC Position

Fremstad's reported charges, as corrected by information received verification, were used in recalculating airfreight charges. The average charges per destination, as corrected, were a reasonable method for reporting the charges as the variation in actual charges by destination was not signficant.

Chr. Bjelland

Comment 1

Respondent argues that the Department should use Spain, and not Germany, as the relevant third country market for fair value comparisons. Respondents notes that 19 CFR 353.49(b) requires; *inter alia*, that we choose a third country to which merchandise is exported which is "more similar" to the United States. Failing that, the Department is to select the third country with the largest volume of sales of "any country" other than the United States.

DOC Position

19 CFR 353.49(b) does not specify a hierarchy for the selection of a third country market. The Department considers all of the listed criteria in deciding which is the appropriate third country market for comparison purposes. In this instance, the

Department determined that German sales represented the most appropriate combination of similar merchandise (over 95 percent of U.S. sales would have identical matches; Spain has considerably fewer), quantity, and similarity of market conditions (there are no pronounced differences on the record between the German and U.S. markets). Accordingly, we selected Germany as the third country market to be used for comparison purposes.

Comment 2

Respondent has repeatedly argued that if the Department uses Germany for fair value comparisons, it must make a level of trade adjustments because sales to Germany include sales to "a distributor" as well as to wholesalers. (Sales in the U.S. market are to wholesalers.) Chr. Bjelland argues that the claim is "documented and verified" by reference to two invoices, Exhibit G–2 and Exhibit G–4, that the Department verified. Chr. Bjelland argues that those verification exhibits show that the same size and quality salmon was sold to two different German purchasers on roughly the same date for different prices. They argue that Exhibit G–4 represents a sale to a "wholesaler" who paid less than did the "distributor" reflected in Exhibit G–2.

DOC Position

We disagree with respondent's assertion that a level of trade adjustment has been "documented and verified" and decline to make an adjustment. Respondent fails to note that the "distributor", just two weeks later, paid less for the same size quality salmon than did the "wholesaler". Respondent has made no attempt to show any pattern of higher-priced sales to the claimed distributor, other than a single unlabelled sheet of paper quoting prices, without reference to either the size or condition of the salmon. Nor has respondent shown that the price difference offered as quantification of the claim is not simply an example of the price fluctuations occurring in the period of investigation.

Salmonor

Comment 1

Petitioner objects to Salmonor's having reported different interest rates for U.S. and third country credit expense adjustments while using average days over all sales for all markets. Petitioner asserts that if uniform credit days are relied upon, a single interest rate should be used for both markets as well. Salmonor asserts that the short-term credit rates for different currencies were verified and that the credit days did not vary between markets.

DOC Position

We verified the actual interest rates, which varied during the POI, in the third country and U.S. markets. Reported interest rates in the response were slightly different than the verified rates. The fact that average credit days is the same for both markets has no bearing on the interest rates we used. We recalculated credit charges using the verified interest rates in effect during the POI.

Comment 2

Petitioner asserts that the total rebates reported exceeded the amount verified and urged the Department not to deduct certain rebates.

Salmonor asserts that the Department verified all rebates.

DOC Position

We recalculated the rebate amount in accordance with the information that we verified.

Sea Star (SSI)

Comment 1

Petitioner asserts that the Department should use the lowest interest rate in effect during the POI as the best information available to determine credit costs. In addition, Petitioner urges the Department to use a 30-day payback term as best information available.

SSI asserts that the lowest interest rate was in effect for only 42 days during the POI and that its application for the entire period would be distortive. SSI also objects to a 30-day payment term inasmuch as we verified average credit days by examining monthly accounts receivable balances and average daily accounts receivable and average daily receipts per customers.

DOC Position

We recalculated SSI's credit expenses using the verified interest rates in effect during the period of investigation. We used the average payment periods per customer in the recalculation.

Comment 2

Petitioner asserts that SSI misreported inland freight charges to France and that the lower freight rates claimed for a large purchaser were incorrect.

SSI asserts that the difference between the reported inland freight charges to France and the corrected figure is inconsequential. With respect to the different rates charged to the large purchaser, SSI asserts that the Department should use the rate reported as the most accurate approximation.

DOC Position

We recalculated SSI's inland freight using an average of the verified rates for its largest French customer for the POI. This amount was used as BIA as it closely approximates the interest rates for all purchasers.

Comment 3

Petitioner objects to SSI's use of average airfreight charges. SSI asserts that the average charges on a per destination basis bear a much closer resemblance to how SSI does business than a sale-by-sale reporting of airfreight.

DOC Position

We received corrected average airfreight charges per destination at verification. We were able to verify the accuracy of these charges. The average rates were a reasonable method for reporting the charges as the variation in actual charges was not significant.

Continuation of Suspension of Liquidation

In accordance with 19 CFR 353.15(a)(3)(i), we are directing the United States Customs Service to continue to suspend liquidation of all entries of Atlantic salmon from Norway, as defined in the "Scope of Investigation" section of this notice, that are entered, or withdrawn from warehouse, for consumption on or October 3, 1990, the date of publication of the preliminary determination notice in the **Federal Register**. For Sea Star, the United States Customs Service will suspend liquidation of all entries of salmon from Norway, as defined in the "Scope of Investigation" section of this notice, that are entered or withdrawn from warehouse, for consumption on or after the date of publication of this final determination in the **Federal Register**. The United States Customs Service shall continue to require a cash deposit or posting of a band equal to the estimated amounts by which the FMV of the Atlantic salmon from Norway exceed the U.S. prices, as shown below.

Manufacturer/producer/exporter	Margin percentage
Salmonor A/S	18.39
Sea Star International	24.61
Skaarfish Mowi A/S	15.65
Fremstad Group A/S	21.51
Domstein and Co.	31.81
Saga A/S	26.55
Chr. Bjelland	19.96
Hallvard Leroy A/S	31.81
All others	23.80

If the Department publishes an antidumping duty order covering Atlantic salmon from Norway, the Department will instruct the U.S. Customs Service to reduce the dumping deposit by the amount of the countervailing duty deposit attributable to the export subsidies found in the concurrent countervailing duty investigation covering the subject merchandise. This supsension of liquidation will remain in effect until further notice.

ITC Notification

In accordance with section 735(d) of the Act, we have notified the ITC of our determination. In addition, pursuant to section 735(c)(1) of the act, we are making available to the ITC all nonprivileged and nonproprietary information relating to this investigation. We will allow the ITC access to all privileged and business proprietary information in our files, provided the ITC confirms in writing that it will not disclose such information, either publicly or under administrative protective order, without the written consent of the Deputy Assistant Secretary for Investigations, Import Administration.

The ITC will determine, within 45 days from the date of this final determination, whether there is material injury, or threat of material injury, to the domestic industry. If the ITC determines that material injury, or threat of material injury, does not exist, the proceeding will be terminated and all securities posted as a result of the suspension of liquidation will be refunded or cancelled. However, if the ITC determines that material injury, or threat of material injury, does exist, the Department will issue an antidumping duty order directing Customs officials to assess antidumping duties on salmon from Norway entered, or withdrawn from warehouse, for consumption on or after the effective date of the suspension of liquidation, equal to the amount by which the FMV exceeds U.S. price.

This determination is published pursuant to section 735(d) of the act (19 U.S.C. 1673d(d)).

Dated: February 15, 1991.

Eric I. Garfinkel,

Assistant Secretary for Import Administration.

[FR Doc. 91-4392 Filed 2-22-91; 8:45 am]

BILLING CODE 3510-DS-M

[C-403-802]

Final Affirmative Countervailing Duty Determination: Fresh and Chilled Atlantic Salmon From Norway

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: We determine that benefits which constitute subsidies within the meaning of the countervailing duty law are being provided to producers or exporters in Norway of fresh and chilled Atlantic salmon, as described in the "Scope of Investigation" section of this notice. The estimated net subsidy is 0.71 Norwegian Kroner (NOK) per kilogram for all producers or exporters in Norway of fresh and chilled Atlantic salmon.

EFFECTIVE DATE: February 25, 1991.

FOR FURTHER INFORMATION CONTACT: Beth Graham or Rick Herring, Office of Countervailing Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone: (202) 377-4105 or 377-3530.

SUPPLEMENTARY INFORMATION:

Final Determination

Based on our investigation, we determine that certain benefits which constitute subsidies within the meaning of section 701 of the Tariff Act of 1930, as amended (the Act), are being provided to producers and exporters in Norway of fresh and chilled Atlantic salmon. For purposes of this investigation, the following programs are found to confer subsidies:

- Regional Development Fund Loans and Grants
- National Fishery Bank of Norway Loans
- Regional Capital Tax Incentive
- Reduced Payroll Taxes
- Advance Depreciation of Business Assets
- Government Bank of Agriculture Grants

We determine the estimated net subsidy to be NOK 0.71 per kilogram (2.27 percent *ad valorem*) for all producers or exporters in Norway of fresh and chilled Atlantic salmon. The *ad valorem* rates cited throughout this notice have been calculated based on the total sales value of fresh and chilled Atlantic salmon. The *ad valorem* rates listed throughout this notice are provided only for reference. The cash deposit rate is based only on the calculated per kilogram rate.

Case History

Since the publication of the Preliminary Affirmative Countervailing Duty Determination: Fresh and Chilled Atlantic Salmon from Norway, (55 FR 26727 June 29, 1990) (Preliminary Determination) in the Federal Register, the following events have occurred. We conducted verfication of the questionnaire responses of the Government of Norway from September 3 to September 17, 1990. On October 28, 1990, we terminated suspension of liquidation in accordance with article 5, paragraph 3 of the Agreement on Interpretation and Application of articles VI, XVI, and XXIII of the General Agreement on Tariffs and Trade (the Subsidies Code).

Both counsel for respondent and the Norwegian Embassy requested a public hearing in this investigation. Case briefs were filed by petitioner and respondents on December 10 and rebuttal briefs were filed on December 14, 1990. The hearing was held on December 17, 1990.

Scope of Investigation

The product covered by this investigation is the species Atlantic salmon (Salmo salar) marketed as specified herein; the investigation excludes all other species of salmon: Danube salmon, Chinook (also called "king" or "quinnat"), Coho ("silver"), Sockeye ("redfish" or "blueback"), Humpback ("pink"), and Chum ("dog"). Atlantic salmon is a whole or nearly-whole fish, typically (but not necessarily) marketed gutted, bled, and cleaned, with the head on. The subject merchandise is typically packed in fresh-water ice ("chilled"). Excluded from the subject merchandise are fillets, steaks, and other cuts of Atlantic salmon. Also excluded are frozen, canned, smoked or otherwise processed Atlantic salmon. Atlantic salmon is currently provided for under HTS sub-heading 0302.12.0002.9. Prior to January 1, 1990, Atlantic salmon was provided for under the following HTS sub-headings 0302.12.0060.8 and 0302.12.0065.3. The HTS sub-headings are provided for convenience and customs purposes. The written description remains dispositive as to the scope of the product coverage.

Analysis of Programs

Due to the large number of producers and exporters of salmon in Norway, we solicited information from the Norwegian Government on an aggregate or industry-wide basis, rather than from the individual companies involved in the production or exportation of salmon from Norway. Consequently, our

subsidy calculations are based on the total amount of benefits provided to the salmon industry and the total volume of salmon sales as reported by the Government of Norway.

For purposes of this final determination, the period for which we are measuring subsidies ("the review period") is calendar year 1989. This review period corresponds to the Government of Norway's fiscal year.

It was not possible, given the number of producers in Norway, to obtain the total amount of tax benefits provided to all Norwegian salmon producers. Therefore, to develop information on the usage of the tax programs alleged to benefit producers of Atlantic salmon in Norway, the Government of Norway surveyed producers located in the counties of Rogaland and Nord-Trondelag. To increase the number of surveyed producers, we requested that the Government of Norway also include producers in the county of Troms. Tax data from salmon producers in all three counties were used as the basis for calculating the countervailable benefits conferred upon the Norwegian salmon industry.

Based on our analysis of the petition, responses to our questionnaires, verification and written comments from respondents and petitioner, we determine the following:

I. Programs Determined To Confer Subsidies

We determine that subsidies are being provided to producers or exporters in Norway of fresh and chilled Atlantic salmon under the following programs during the review period.

1. Regional Development Fund Loans and Grants

The Regional Development Fund (RDF) was established in 1961 to maintain and strengthen the economic base and to increase employment in regions with low levels of economic activity. The program covers 83 percent of the country, but only 36 percent of the population. Eligibility for RDF assistance is contingent upon geographic location. Only producers or manufacturers located in underdeveloped regions of Norway are eligible for assistance.

The RDF provides loan guarantees, long-term loans and grants. Loan guarantees under the RDF are discussed in section II.1. of this notice. RDF loans are provided for capital investment and are made in Norwegian kroner. We verified that the average effective interest rate on outstanding RDF loans during the review period was 11.98 percent.

Loans to salmon producers were written-off by the RDF during the review period. Exclusive of those written-off loans, there were outstanding loans to salmon producers for which no interest was paid during the review period. The written-off loans and the non-payment of interest are discussed in section II.2. of this notice.

To determine whether loans under this program were provided on terms inconsistent with commercial considerations, we selected as our benchmark the national average long-term interest rate charged by commercial banks for corporate lending. We selected a national average rate because our analysis is on an industry-wide level, rather than on a company-specific basis. We also used an average corporate borrowing rate because, according to the Government of Norway, there are no statistics available on the average cost of borrowing for the salmon industry. During 1989, the effective interest rate on long-term corporate borrowing from commercial banks was 14.9 percent. During verification, we found that fish farmers were required to pay the normal commercial interest rate plus 0.75 percent on their loans. Therefore, we have added 0.75 percent to the average corporate borrowing rate of 14.9 percent to more accurately reflect the commercial lending rate available to the fish farming industry during the review period. Comparing the benchmark of 15.65 percent to the rate charged under the RDF program, we determine that RDF loans were provided on terms inconsistent with commercial considerations.

Because loans provided under this program are limited to producers and exporters located only in specified regions of Norway and are provided on terms inconsistent with commercial considerations, we determine them to be countervailable.

Since the interest charged on RDF loans is variable, we could not employ our normal long-term methodology since we cannot calculate a future benefit stream over the term of the loan. Therefore, we used our short-term loan methodology and subtracted interest paid on RDF loans in 1989 from the interest that would have been paid at the benchmark rate of 15.65 percent.

We divided the interest payment differential calculated on outstanding loans by the total volume of fresh and chilled Atlantic salmon sold during the review period to calculate an estimated net subsidy of NOK 0.08 per kilogram (0.25 percent *ad valorem*).

The RDF also provides both investment and business development grants. Investment grants can be made for the acquisition of new buildings and equipment. These grants are provided on minimum investments of NOK 70,000. Business development grants are provided for surveys and planning, product development, market surveys, marketing, initiation of new business undertakings, training, and financial assistance for new enterprises. These grants can cover a maximum of 50 percent of the external costs of the project. Both investment and business development grants were provided to salmon producers during the review period.

Because grants under the RDF are limited to producers and exporters located only in specified regions of Norway, we determine them to be countervailable.

Our policy with respect to grants is to (1) Expense recurring benefits to the year of receipt, and (2) allocate nonrecurring benefits over the useful life of assets in the industry, unless the sum of grants provided under a particular program is less than 0.5 percent of a firm's total or export sales (depending on whether the program is a domestic or export subsidy). We expensed RDF business development grants in the year of receipt because we consider these grants to be recurring since a firm can apply, and expect to receive these grants year-after-year. We determine that RDF investment grants are nonrecurring because a firm cannot qualify to apply for, and receive these grants year-after-year.

We calculated the benefit for the review period from the investment grants using the interest rate on long-term commercial bonds in Norway as a discount rate and our declining balance methodology as described in the Subsidies Appendix attached to the notice of Cold-Rolled Carbon Steel Flat-Rolled Products from Argentina: Final Affirmative Countervailing Duty Determination and Countervailing Duty Order (49 FR 18006, April 26, 1984), and used in prior investigations (see, *e.g.*, Final Affirmative Countervailing Duty Determination: Oil Country Tubular Goods From Canada, 51 FR 15037, April 22, 1986). The average useful life of assets in the fish farming industry is ten years. Thus, we aggregated the investment grants received by salmon producers for each year for the last ten years and divided the grants received in each of these years by the total value of salmon sales in that year. For each year, the result was greater than 0.5 percent, therefore, we allocated the grants over the ten year period using our declining balance methology. We added the result

of this calculation to the amount of business development grants disbursed during the review period and divided by the total volume of fresh and chilled Atlantic salmon sold during the review period to obtain an estimated net subsidy of NOK 0.47 per kilogram (1.50 percent *ad valorem*). The total estimated net subsidy for RDF loans and grants is NOK 0.55 per kilogram (1.75 percent *ad valorem*).

2. National Fishery Bank of Norway Loans

The National Fishery Bank of Norway (NFB) granted loans for the financing of fish farms from 1974 through 1987. On January 1, 1988, the Norwegian Bank for Industry took over the administration of new loans to the fish farming industry. (For information on loans from the Norwegian Bank for Industry, see section II.3. of this notice.) Loans which had been granted to fish farmers through 1987 are still administered by the NFB. The NFB provided long-term loans for investment in production equipment and buildings. The interest rates charged on outstanding loans are set by the Norwegian legislature and can vary over time. In 1989, the interest rate charged on outstanding loans under this program was set at 11.5 percent.

Loans to salmon producers were written off during the review period. Exclusive of those written-off loans, there were outstanding loans to salmon producers for which no interest was paid during the review period. The written-off loans and the non-payment of interest are discussed in section II.2. of this notice.

To determine whether loans under this program are provided on terms inconsistent with commercial considerations, we used the same benchmark referred to under the Regional Development Fund program (see section I.1 of this notice). Comparing this benchmark to the interest rate on outstanding loans under this program, we find that loans under this program are provided on terms inconsistent with commercial considerations.

Because the NFB's lending was limited to the fishing industry and its loans were provided on terms inconsistent with commercial considerations, we determine the program to be countervailable.

Since the interest rates for NFB's loans are variable, we calculated the benefits conferred under this program in the same manner as previously described under the Regional Development Fund program (see, section I.1. of this notice). We divided the interest payment differential calculated on outstanding loans by the total volume of fresh and chilled Atlantic salmon sold during the review period to calculate an estimated net subsidy of NOK 0.01 per kilogram (0.03 percent *ad valorem*).

3. Regional Capital Tax Incentive

The aim of this program is to encourage investment in regions in northern Norway with a weak industrial base and considerable unemployment. Funds set aside by the taxpayer under this program are deducted from taxable income. These funds must then be invested in capital assets. The maximum amount allowed to be deducted is 15 percent of taxable income. The minimum amount is NOK 15,000.

Within five years of setting aside funds under this program, 100 percent of the fund must be invested. The investment must be in assets for use in the taxpayer's own business. When setting up the fund, an amount corresponding to 40 percent of the fund must be placed in a special interest-bearing account in a local bank. This account is used to secure taxes that would have to be paid on the fund in the event that the taxpayer does not meet the obligations for investment under the program. In the year when the fund is wholly or partly invested, a fixed percentage of the invested amount must be deducted from the depreciable value of the purchased asset. Income tax is never paid on the remaining percentage of the invested amount provided the purchased asset is kept in the taxpayer's business for a specified number of years.

Because this program is limited to assets maintained in the region of northern Norway, we determine the program to be countervailable. To calculate the benefit, we took the total amount of funds deducted from taxable income by salmon producers and exporters and multiplied that amount by the tax rate of 50.8 percent to determine the amount of tax savings provided in 1989 under this program. We divided the tax savings by total volume of fresh and chilled Atlantic salmon sold during the review period to calculate an estimated net subsidy of NOK 0.02 per kilogram (0.06 percent *ad valorem*).

As is our established policy, we did not take into account the reduction of the depreciable value of purchased assets in this calculation because we consider this to be a secondary tax effect. (See, *e.g., Final Affirmative Countervailing Duty Determination; Certain Fresh Atlantic Groundfish From Canada (Groundfish)* 51 FR 10041, March 24, 1986.)

4. Reduced Payroll Taxes

Under the National Insurance Act, employers are liable for the payment of payroll taxes which are based on a percentage of the wages paid in the course of a year. The employer pays this tax six times a year. Since 1975, the amount of contributions have been geographically differentiated depending upon the municipality in which the employee resides. The program is aimed at encouraging employment of persons living in underdeveloped regions of Norway. In 1989, Norway was divided into four zones. The tax rate in each of the zones is 16.7 percent, 13.2 percent, 10 percent and 2.2 percent in Zones one, two, three, and four, respectively. We verified that the weighted-average payroll tax rate for Norway in 1989 was 15.6 percent.

Because this program provides a benefit to specific regions in Norway, we determine it to be countervailable. To calculate the benefit, we multiplied the amount of wages paid by salmon producers and exporters in Zones two, three, and four by their respective payroll tax rates. We then multiplied the wages paid in each of these zones by 15.6 percent, the weighted-average payroll taxes paid in Zones two, three, and four and the amount of payroll taxes that would have been paid at the weighted-average rate. We divided the result by total volume of fresh and chilled Atlantic salmon sold during the review period to obtain an estimated net subsidy of NOK 0.13 per kilogram (0.42 per *ad valorem*).

5. Advance Depreciation of Business Assets

The purpose of this program is to encouarge investment in less-developed areas or Norway by allowing companies located in selected districts of the country to claim a higher rate of depreciation in the year in which capital assets are acquired. Eligible companies, depending on their location, are allowed to take a first-year deduction of either 25 or 40 percent. After this initial deduction, the producer is then allowed to take the standard deduction on the remainder of the depreciable value of the asset.

Because only companies located in specific regions of Norway are eligible for this program, we determine the program to be countervailable. To calculate the benefit from this program, we divided the tax savings provided under the program to salmon producers and exporters by the total volume of fresh and chilled Atlantic salmon sold during the review period to obtain an

estimated net subsidy of less than NOK 0.01 per kilogram (0.01 percent *ad valorem*).

6. Government Bank of Agriculture

The Government Bank of Agriculture administers the Norwegian Fund of Development in Agriculture which was established to create supplemental income and employment for farmers. The Bank provides both long-term loans and grants to agricultural producers.

We verified that the Bank provides interest-bearing and interest-free loans to all agricultural producers throughout Norway. We also verified that the Bank provides grants to all agricultural producers throughout Norway. However, the Bank has maximum levels of assistance which differ by region. Grants may be provided for up to 30 percent of the approved project cost, with a maximum of NOK 150,000 in southern Norway and NOK 180,000 in northern Norway. Applicants located in northern Norway are eligible for a maximum of NOK 480,000 in loans, while applicants in southern Norway are eligible for a maximum amount of NOK 450,000 in loans.

We determine that this program provides a countervailable benefit to the extent that fish farmers in northern Norway receive a greater level of benefits than they would have received had they been located in southern Norway.

To determine whether any countervailable benefits were provided under this program, we measured the amount of loans and grants provided to salmon producers in northern Norway against the limits imposed in southern Norway. (We used these limits because any recipient in Norway could receive assistance up to those limits.) Using this methodology, we found that none of the loans provided to salmon producers in northern Norway were above the maximum set for southern Norway. Therefore, we determine that none of the loans under this program provided a countervailable benefit. With respect to grants under this program, we did find that one grant to a fish farmer in northern Norway exceeded the maximum grant amount permitted in southern Norway. Therefore, we determine the difference to constitute a countervailable benefit. Because the difference between the grant amount received and the maximum amount permitted in southern Norway was less than 0.5 percent of total sales, we expensed the grant in the year of receipt. Therefore, we divided the difference by the total volume of fresh and chilled Atlantic salmon sold during the review period to obtain an estimated net subsidy of less than NOK 0.01 per kilogram (less than 0.01 percent *ad valorem*).

II. Programs Determined To Be Not Countervailable

1. Regional Development Fund Loan Guarantees

In addition to the RDF loans and grants discussed above, the RDF also provides loan guarantees. Guarantees are provided on loans from commercial banks. RDF will guarantee up to a maximum of 50 percent of a loan, thus sharing the risk of the loan with the commercial bank. The RDF charges a guarantee fee of two percent per annum. We verified that the granting of loan guarantees is a standard commercial practice in Norway. The fees charged by commercial banks for loan guarantees vary but are generally in the range of 1.5 to 2 percent for the fish farming industry.

Because the fees charged on RDF loan guarantees correspond to the fees charged by commercial banks in Norway, we determine that loan guarantees provided by the RDF are not made on terms inconsistent with commercial considerations, and thus are not countervailable.

2. Write-Off of Loans and Deferred Loan Payments Under the Regional Development Fund and the National Fishery Bank

In our preliminary determination, we calculated a benefit under both of these programs for loans to salmon producers which were written-off during the review period and for non-payment of interest on outstanding loans. During verification, we found that when payment is late the RDF and NFB send the company a warning letter. If payment is not received after a month, another letter is issued warning of legal action. If at this point no payment is received, the agencies initiate legal proceedings to declare the company bankrupt and to seize the company's assets. These assets are then sold at a public auction. The losses which cannot be recovered are then written off. We verified that this practice is identical to that of commercial banks and consistent with the procedures as set out in the Debt Negotiation and Bankruptcy Act.

We also found during verification, that both RDF and NFB officials only defer interest and principal payments when clients are experiencing financial setbacks but foresee recovery in the near future. RDF officials explained that during this time, interest continues to accrue. NFB officials explained that they add one percent interest to delinquent loans. We verified that commercial banks in Norway will also defer interest and principal payments when their clients face similar financial situations. We also verified that RDF and NFB officials only write-off loans when a firm has declared bankruptcy and there is no chance for the bank to recover its losses.

In order for the loan write-offs and payment deferrals to be countervailable, the actions of the RDF and the NFB must be inconsistent with commercial considerations. We verified that in writing-off loans and in deferring loan payments, the RDF and the NFB follow the same procedures and practices as commercial banks in Norway. Therefore, we determine that RDF and NFB write-offs and the treatment of non-payment of interest and principal by the RDF and NFB are consistent with commercial considerations and thus, not countervailable.

3. Norwegian Bank for Industry Loans

The Norwegian Bank for Industry (NBI) was established in 1939. Presently, 51 percent of the shares are owned by the government. The remainder of the shares are owned by commercial and savings banks and insurance companies. In 1978, the NBI merged with the Institute for Structural Financing. The NBI provides medium- and long-term financing for the development, modernization and restructuring of Norwegian industry in accordance with the government's industrial policy. The NBI provides loans to new enterprises and for the expansion and improvement of existing enterprises. The Bank's interest rates are based on its borrowing costs.

We verified that the NBI provides loans throughout Norway to companies in such industries as mining, food processing, textiles, chemicals, metals, shipbuilding, and paper and wood. Because loans under this program are not limited to a specific enterprise or industry, or group of enterprises or industries, we determine this program to be not countervailable.

4. Government-Funded Aquaculture Research and Development

Government-funded aquaculture research primarily consists of basic research and development aimed at long-term economic development of aquaculture in Norway. Most of the companies which receive government funding manufacture goods and equipment for fish farms both in Norway and abroad. Only a small minority of the fund recipients are salmon producers.

There is no central government agency which handles all aquaculture research and development in Norway. Government funded research is planned, financed and performed through various organizations. For aquaculture, the Norwegian Fisheries Research Council (NFFR) is the main distributor of research funds. The NFFR is a research council which funds university and high school research projects, government research councils, and institutions of commissioned research. The RDF also provides research funding.

When the results of government-funded research and development are made publically available, we find that the assistance is not countervailable (see, for example, Final Affirmative Countervailing Duty Determination: Fresh, Chilled and Frozen Pork Products from Canada (Pork), 54 FR 30774, July 24, 1989). At verification, we found that results of government aquaculture research are normally made publically available. There are, however, certain exceptions. Firms seeking patent rights to their research are allowed to "buy off" NFFR by refunding the NFFR's portion of the project funding. However, to date, no firm has exercised that option.

During the review period, a grant was disbursed for the funding of a project involving a salmon producer in which the results of the research are not scheduled to be published until 1991. We verified that the results of this project will be published in 1991. Because the results of this research project will be made publically available, we determine the funding of the project to be not countervailable.

III. Programs Determined To Be Not Used

We determine that the following programs were not used by producers or exporters in Norway of fresh and chilled Atlantic salmon during the review period. For a full description of these programs, see our preliminary determination.

1. Norwegian Industrial Fund.
2. Norwegian Central Bank Loans to Salmon Farmers
3. Sales Promotion Assistance
4. Special Tax-Free Reserves for Export Development
5. Regional Transport Subsidies

During verification, we found that this program was created by the Ministry of Municipal and Local Affairs and was administered by the RDF until 1988. Prior to 1988, the RDF provided grants for the domestic transport of finished and semi-finished products of a certain processing value in accordance with a specified list of commodities. After 1988, the program was administered by the counties. We verified that fish farming is not eligible for these grants.

IV. Programs Determined To Not Exist

We determine that the following programs do not exist or were terminated prior to the review period. For a full description of these programs, see our preliminary determination.

1. District Development Bank Loans, Loan Guarantees and Investment Grants
2. Norwegian Export Council Export Financing
3. Institute for the Financing of Structural Readaptation
4. Fund for Industrial Enterprises
5. State Industry Bank
6. Transportation Subsidy for Salmon Exporters
7. Exchange Rate Guarantees
8. Discounting for Export Bills
9. Ministry of Industry Retraining Funds

Comments

All written comments submitted by the interested parties in this investigation which have not been previously addressed in this notice are addressed below.

Comment 1

Petitioner claims that the present investigation is the first in which the Department has neither sent questionnaires to nor reviewed the records of a single private recipient of government subsidies. Petitioner argues that the Department should solicit information from individual fish farmers. Petitioner further claims that where the number of recipients have been too numerous, the Department has investigated those companies which account for at least 60 percent of the exports to the United States (see, Final Negative Countervailing Duty Determination: Certain Granite Products from Italy (Granite), 53 FR 27197, July 18, 1988). In cases where 60 percent of the producers is not a manageable number, the Department has verified a select number of firms for important issues (see, Preliminary Affirmative Countervailing Duty Determination: Certain Softwood Lumber Products from Canada, 51 FR 37453, October 22, 1986).

DOC Position

Petitioner's statements are incorrect. This is not the first investigation in which the Department did not investigate individual firms. The Department has conducted numerous aggregate cases (see, for example, Groundfish, Pork, Final Affirmative Countervailing Duty Determination; Live Swine and Fresh, Chilled, and Frozen Pork Products from Canada (Live Swine), 50 FR 25097 (June 18, 1985), and Final Affirmative Countervailing Duty Determination and Countervailing Duty Order; Lamb Meat from New Zealand (Lamb Meat), 50 FR 37708, September 17, 1985). In each of these cases, the Department investigated the receipt of benefits almost exclusively at the government level. With the exception of company-specific equity infusion allegations (see, Groundfish), in none of these investigations did we solicit program utilization data from private companies for use in determining the amount of benefits conferred upon the investigated industry. While it is true that in some previous aggregate investigations the Department has requested information directly from some companies, the purpose of such requests related to issues, such as exclusion requests, which are not present in the current investigation. Furthermore, in most of these investigations, we did not verify receipt of benefits at the company level. In investigations where we did verify receipt of benefits at the company level, it was merely to corroborate information already received from the government. We have conducted this investigation in the same general manner as we have conducted our prior aggregate investigations.

Petitioner's cite to Granite is inopposite. Granite was not an aggregate case. In Granite, we were able to cover at least 60 percent of the imports by investigating less than 15 companies. In order to reach a similar level of coverage of U.S. imports of the subject merchandise in this investigation, the Department would have had to investigate hundreds of individual firms. Obviously, this was not possible. While it is true that in some previous aggregate investigations the Department has requested information from some companies, we did so to address specific issues incapable of analysis on an aggregate basis (such as exclusion requests). No such issues are present in this investigation.

As mentioned above, we solicited information from the Norwegian Government on an aggregate basis due to the large number of producers and exporters of salmon in Norway. We were able to structure the investigation in this manner due to the nature of the subsidy programs investigated and the records maintained by the Norwegian Government. Based on the questionnaire response, verification, and the excellent cooperation demonstrated by the Norwegian Government, we are

confident that the analysis of the total estimated net subsidy found in this case accurately reflects the degree of subsidization of the Norwegian salmon industry.

As a further note, petitioner has known since April 3, 1990, when our questionnaire went out, that the Department was conducting an aggregate case and not requesting information from individual respondents in this investigation. Yet, petitioner waited until after our investigatory functions (including verification) were completed to raise this fundamental issue in its December 10, 1990 case brief.

Comment 2

Petitioner contends that the Department erred in using the national average long-term corporate interest rate for 1989 published by the Norges Bank. Instead, the Department should use a higher rate which reflects the high degree of risk associated with lending to members of the salmon industry located in remote areas of Norway.

Respondents contend that the Department erred in using 14.9 percent as the long-term interest rate benchmark. Instead, they suggest the Department should use the rate provided by Den Norske Bank, 14.3 percent.

DOC Position

During verification, we met with officials from two commercial banks in Norway. Representatives from one of the commercial banks stated that they are no longer making loans to new clients in the fish farming industry. Officials from the other bank stated that they charge an additional 0.75 percent on all fish farm loans. Based on the information provided by these commercial bank officials, we have added an additional 0.75 percent onto the national average long-term corporate interest rate of 14.9 percent. We believe that this most closely reflects the average borrowing rate of the fish farm industry in Norway.

The rate of 14.9 percent was the effective national average long-term corporate interest rate in Norway in 1989. This interest rate was verified at Norges Bank, the central bank of Norway. We believe it to be more accurate to use the interest rate provided to us by the Norges Bank since this rate reflects the national average interest rate in the country. The rate provided to us by Den Norske Bank only reflects the experience of one bank.

Comment 3

Petitioner argues that the Norwegian salmon industry as a whole is uncreditworthy. Petitioner cites the following facts as evidence of the uncreditworthiness of the Norwegian industry: (a) The 1987 crop was destroyed by Hitra disease, (b) in 1988 production doubled without an increase in demand, (c) the 1989 increase in production caused a collapse in prices and an increase in bankruptcies, and (d) a June 1989 press report stated that one-half of all salmon farms in northern Norway were in "economic difficulties." Petitioner also claims that there is no information on the record that any of the 786 recipients of RDF loans ever received private financing without government backing. Petitioner maintains that this information justified a creditworthiness investigation. Petitioner further states that since the Department focused exclusively on the government, and not on individual firms, there is not sufficient information on the record to make a creditworthy determination. However, absent company-specific information, petitioner believes the record proves that the industry is uncreditworthy.

Respondents argue that petitioner's allegation of uncreditworthiness should be disregarded. Petitioner never made a firm-specific allegation as required by the Department. Nor did petitioner provide any evidence, as required by the Department, of any specific firm's finances in the three years prior to the year the firm and government agreed upon the terms of a government loan. Respondents further argue that the Department should not initiate an uncreditworthy investigation because petitioner had eight months in which it could have objected to the lack of an uncreditworthy investigation, but failed to do so until its December 10, 1990 case brief.

DOC Postion

We have consistently applied a higher threshold showing to support uncreditworthy and unequityworthy allegations than for other subsidy allegations. In particular, the established policy of the Department is that an uncreditworthy allegation must be made on a company-specific basis. The allegation of uncreditworthiness must also be supported by documentation demonstrative of the allegation (see, *e.g.*, Final Affirmative Countervailing Duty Determination; Fuel Ethanol from Brazil, 51 FR 3361, January 27, 1986; see, also Groundfish, an aggregate case where we conducted an equityworthiness investigation on two specific companies only after petitioner provided documentation to support their allegations that those two companies were unequityworthy). In the current investigation, petitioner has neither made company-specific allegations nor provided documentary evidence that any specific salmon producer is uncreditworthy.

Furthermore, we generally consider a company to be creditworthy if it receives comparable long-term loans from a commerical bank. We verified that one of the criteria for receiving RDF loans is that at least one-half of the recipient's total financing of the capital investment be made by commerical banks. This requirement provides nearly conclusive evidence, under established Department policy, that at the time of the receipt of RDF loans, the recipient fish farmers were creditworthy.

The Department recognizes that providing company-specific uncreditworthy allegations and company-specific documentary evidence with respect to a large number of firms may be difficult. However, as noted above, the petitioner did not provide any company-specific documentary evidence concerning its uncreditworthy allegation. Moreover, the Department found that the evidence the petitioner did provide was totally inadequate for purposes of supporting its allegation that the entire Norwegian salmon industry, consisting of hundreds of companies, was uncreditworthy. Pointing to an increase in production of salmon without an increase in demand, for example, is hardly sufficient evidence for the Department to initiate a creditworthiness investigation with respect to the Norwegian salmon industry as a whole. Nor is a press report stating that one-half of all salmon farms in northern Norway are in "economic difficulties."

Although the Department recognizes that some salmon farms faced financial problems in 1989, the evidence on the record has never provided a basis upon which the Department could reasonably initiate a creditworthiness investigation against the entire Norwegian salmon industry. The evidence on the record shows that in 1989, by far the worst year for the salmon industry in the last five years, only 40 producers out of a total of 1108 (less than four percent) went bankrupt. In previous years, the number was markedly lower. Moreover, the evidence on the record shows that the average rate of return on equity for the aquaculture industry was 12.9 percent in 1986, 28.9 percent in 1987, and 38.8 percent in 1988. Furthermore, the rate of return on total capital was 11.0 percent in 1986, 15.7 percent in 1987, and 15.7 percent in 1988. (Information for 1989 was not available at the time the questionnaire response was filed by the

Govenment of Norway.) Thus, information on the record indicates that the Norwegian salmon industry is not uncreditworthy. Therefore, the Department has concluded that neither the information submitted by the petitioner nor other information on the record ever justified a creditworthiness investigation.

Comment 4

Petitioner argues that when calculating the benefit of preferential loans from the RDF and NFB, the Department should calculate total interest payments on the basis of the outstanding loan balance at the end of the year, and not on the preferential interest payments received.

Respondents contest petitioner's suggestion that the Department focus on interest accruing during the period of investigation, rather than the interest paid during the review period.

DOC Position

It is the Department's established practice, when measuring the benefit conferred on long-term loans with a variable interest rate, that the benefit is provided at the time interest payments are made (see *e.g.*, Final Affirmative Countervailing Duty Determination; Certain Stainless Steel Cooking Ware from the Republic of Korea, 51 FR 42867, November 26, 1986). This is based on the Department's policy of measuring a subsidy benefit in terms of a difference in cash flows. In this case, the difference between cash flows on the loans under examination and cash flows for comparable commercial loans (see Subsidies Appendix). Therefore, to calculate the benefit of loans provided by the RDF and NFB, we took the difference in the actual amount of interest paid during the review period and the amount that should have been paid using the commercial benchmark interest rate.

Comment 5

Petitioner argues that the Department should not assume that private banks in Norway charge all salmon farmers the same guarantee fees regardless of their location or financial situation. Petitioner also claims that there is no evidence on the record concerning the loan guarantee rates RDF recipients would have received from private banks in the absence of RDF support. Petitioner further asserts that the Department should use its export credit insurance methodology to calculate any benefit conveyed by RDF guarantees. Petitioner argues that essentially there is no difference between loan guarantee and export insurance programs.

Respondents contend that the RDF loan guarantees are consistent with commercial considerations. Since the premiums paid for RDF and commercial bank guarantees are equivalent, there is no benefit. Furthermore, the Department should not use its export credit insurance methodology to calculate the benefit from loan guarantees. Applying this methodology would cause additional work for the Department and is unneccessary. The RDF guarantee program was profitable for two of the three years prior to 1989. Therefore, even if the Department used its export credit methodology, no benefit would be found.

DOC Position

Section 771(5)(A)(ii)(I) of the Act, in defining one type of domestic subsidy, lists "the provision of * * * loan guarantees on terms inconsistent with commercial considerations." Therefore, in determining whether a government loan guarantee program confers a subsidy, the Department must compare the terms of the government loan guarantee to the terms offered by commercial financial institutions (see, *e.g.*, Live Swine at 25105). For this determination, we compared the premiums charged by RDF on its loan guarantees to the premiums charged by commercial banks in Norway. On this basis, we determined that the loan guarantees provided by the RDF were not countervailable.

Contrary to petitioner's assertion, the Department did not assume that private banks in Norway charge all salmon farmers the same guarantee fees regardless of their location or financial situation. Commercial bank officials told us that since 1986, premiums have been set on a customer-by-customer basis to reflect the risk of the applicant. They stated that the prime guarantee fee would be about 0.3 percent. They also reported that the premiums charged to the fish farming industry range from 1.5 to two percent. The RDF charges premiums of two percent on all their loan guarantees. Because the premiums charged by the RDF were equal to, or greater than, the premiums charged by commercial banks, we determined that the loan guarantees were not countervailable.

Comment 6

Respondents contend that because 93 percent of Norway is covered by the RDF, it is not a region-specific program.

Petitioner argues that the Department should find the RDF countervailable. The Department has long held that government subsidy programs whose receipt are contingent on the geographic location of the applicant meet the specificity requirements of the countervailing duty law, regardless of the size of the targeted region. Petitioner adds that while 93 percent of Norway is covered by the RDF, only 36 percent of the population lives in these eligible areas.

DOC Position

In determining whether a program is region-specific, the Department considers if benefits are limited to enterprises or industries located in a specific region or regions of a country. At verification, RDF officials stated that the RDF covers 93 percent of the country, but only 36 percent of the population. The program excludes the largest metropolitan areas of Norway, thereby denying benefits from this program to the bulk of the country's population. The Department has consistently held that benefits provided on a regional basis are, by their very nature, provided to a specific enterprise or industry or group of enterprises or industries (see, *e.g.*, Groundfish at 10045, 10066.)

Comment 7

Respondents argue that the RDF serves to compensate salmon producers for a portion of the additional costs they incur because of the various salmon regulatory programs of the Government of Norway. These programs include the prohibition of farm establishment in southern regions of Norway and the allocation of fish farm licenses to northern regions. Respondents claim these restrictions lower salmon production and increase production costs.

Petitioner states the Department may not offset the total RDF subsidy amount by the increased cost of producing in remote areas, since such offsets were prohibited by the 1979 amendments to the countervailing duty law. By compensating producers for locating in remote regions, the RDF creates production in places it would not otherwise have been and grants a competitive advantage over other countries.

DOC Position

We verified that the purpose of the RDF is to maintain the pattern of settlement within the country by equalizing the income, employment and living conditions between the northern and southern regions of Norway. The Government of Norway's restrictions on fish farm establishment in southern regions coincide with the RDF's policy

of promoting certain regions in the country.

We find no merit in respondents' argument that the RDF serves to compensate salmon producers for a portion of the additional costs they incur as a result of the various salmon regulatory programs of the Government of Norway since the RDF was created before the establishment of the fish farming regulations. Even if one were to accept respondents' argument, the RDF would still be countervailable. The Department has previously determined that the fact that a program is designed to offset the economic effects of another government program or policy does not exempt it from being considered a countervailable subsidy (see, Pork at 30785). In order to be considered an offset which may be subtracted from the gross subsidy, the provisions of section 771(6) of the Act must be met. Clearly, these provisions were not met here.

Comment 8

Respondents argue that the Department should not countervail the National Fishery Bank loans because the fishing industry, like agriculture, is not a specific enterprise or industry, or group of enterprises or industries. Respondents cite Final Negative Countervailing Duty Determination: Fresh Asparagus from Mexico, 48 FR 21618, May 13, 1983 and Certain Fresh Cut Flowers from Mexico, 49 FR 15007, April 16, 1984 in which the Department regarded the agricultural sector of the Mexican economy to "constitute more than a single group of industries."

Petitioner rebuts respondent's claim that the fishing industry does not constitute a specific enterprise or industry or group of enterprises or industries. Petitioner cites Groundfish, in which the Department stated that the fisheries "sector" encompasses a single industry under the countervailing duty law.

DOC Position

In Groundfish at 10041, 10067, the Department determined that the fishing industry does constitute a specific enterprise or industry or group of enterprises or industries. The Department held that the fishing industry does not include the same varied and diverse range of productive activities as does the agricultural sector. Respondents have not provided us with a sufficient basis to cause us to reexamine this determination with respect to the Norwegian fishing industry.

Comment 9

Respondents argue that the Department has consistently determined that loans to enterprises which consequently go bankrupt or have entered bankruptcy proceedings cannot constitute a countervailable benefit. (See Final Affirmative Countervailing Duty Determinations; Certain Textile Mill Products and Apparel from Columbia, 52 FR 13273, April 27, 1987 and Final Affirmative Countervailing Duty Determinations; Certain Stainless Steel Products from Spain, 47 FR 51453, November 15, 1982.) In the present investigation, several recipients of RDF benefits are in the middle of bankruptcy proceedings or have gone bankrupt. Consistent with its past practice, the Department should subtract RDF benefits to bankrupt farms from its subsidy calculations.

DOC Position

In the cases cited by respondents, the Department determined that the suspension of loan payments for firms in receivership was a normal commercial banking practice in the respective country. Similiarily, we found that the deferral of loan payments for companies facing financial difficulties and the write off of loans to bankrupt companies by the RDF and NFB to be a normal commercial banking practice in Norway. Therefore, we found the deferral of loan payments and the write off of loans by the RDF and NFB not to be countervailable.

Respondents also provided the Department with the amount of grants provided to bankrupt salmon producers. However, there is no sales information on the record for the same bankrupt companies. Since the bankrupt companies' sales are included in the denominator, and cannot be adjusted for, we cannot deduct the grants those companies received from the calculations without distorting the calculated subsidy rate. We excluded the benefit of the loan deferrals and written-off loans from our calculations even though we do not have the sales value of the bankrupt companies since we have determined that these actions are consistent with commercial considerations. Grants, if specific, are always countervailable. Normally, we would not countervail grants which had been provided to bankrupt companies. Here, however, we have maintained in our calculations the grants provided to bankrupt companies because, as explained above, we cannot adjust for the sales value of these companies.

Comment 10

Respondents argue that written-off loans should not be treated as grants in the final determination. They state that when the RDF and NFB write off loans to bankrupt firms, they follow the same practice as commercial banks.

Petitioner argues that the "commercial" nature of the write-offs is actually irrelevant because the Department should be looking at the benefit bestowed on the buyer of the bankrupt company's assets. By selling these assets, the Government of Norway is providing a grant to the asset buyer in the amount of the written-off loan. Petitioner cites section 771(5)(A)(ii)(3) of the Act which describes "the grant of funds or forgiveness of debt to cover operating losses sustained by a specific industry" as a countervailable subsidy. Petitioner maintains that by allowing farmers to purchase the assets of bankrupt farms at "distress prices", the Government of Norway is providing subsidies as defined by the Act. The RDF's provision of cheap loans to salmon farmers has resulted in the creation of production capacity that would not otherwise exist. Moreover, farmers are able to further increase their capacity, according to petitioner, by purchasing the assets of bankrupt farmers.

DOC Position

To determine whether the actions of a government bank or government agency with lending authority provides countervailable benefits, we are directed by the statute to determine whether that government entity acts in a manner inconsistent with commercial considerations. During our period of investigation, the RDF and the NFB had outstanding loans to companies which subsequently went bankrupt. We verified that the RDF and the NFB attempted to recover their losses by selling the assets of bankrupt companies. Those losses which could not be recovered in this procedure were written off. We found that the RDF and the NFB followed the same procedures as commercial banks in writting off loans to bankrupt companies which are specified in the Debt Negotiation and Bankruptcy Act. Since the RDF and NFB acted in a manner consistent with commercial considerations in this matter, we found that their write off of loans did not confer a countervailable benefit.

Comment 11

Respondents argue that the Department erred in using the tax rate of 50.8 percent in its calculations of

benefits from the Regional Capital Tax Incentive and Advance Depreciation of Business Assets Programs. The Department should have used the national income tax rate for joint stock companies, 27.8 percent. The 50.8 percent rate includes municipal and county income taxes. Exemptions from these taxes are not region-specific, and therefore, not countervailable.

Petitioner contends that the Department was correct in using the corporate income tax rate of 50.8 percent in calculating the Regional Capital Tax Incentive and the Advance Depreciation of Business Assets Programs.

DOC Position

The Department believes that it is proper to include the municipal and county income tax rates in the tax rate used to calculate the tax benefit under the two programs at issue. These taxes are levied and collected by the Government of Norway. The effect of both the Regional Capital Tax Incentive and Advance Depreciation of Business Assets Programs is to lower the taxable income used for purposes of calculating municipal and county income taxes. Therefore, these programs lower the amount of municipal and county income taxes actually paid, and thus provide a countervailable benefit. Additionally, nowhere on the record does it state that only national income taxes are reduced under the Regional Capital Tax Incentive and Advance Depreciation of Business Asset Programs.

Comment 12

Respondents claim that because payroll taxes are deductible, the reduction of payroll taxes leads to an increase in future taxable income and profit taxes. Therefore, the Department should take account of this tax effect in its subsidy calculations.

DOC Position

We are not adjusting for any tax liability caused by the reduction of payroll taxes because of the speculative nature of any such adjustment. We have taken the same approach in other cases involving secondary tax effects (see, *e.g., Groundfish* at 10066).

Comment 13

Respondents contend the Department should use the value of salmon produced in 1989, NOK 3, 598,077,000, rather than the amount of NOK 3,440,793,000 reported in the annual report of the Fishfarmers' Sales Organization (FOS).

Petitioner argues that the Department should use the value of salmon produced in 1989 it verified at FOS.

DOC Position

At verification, FOS explained that NOK 3,440,793,000, the amount listed in the FOS 1989 Annual Report, is the "first hand" value of salmon sales in 1989 (the first hand value is the sales value between the producer and the exporter). They stated that this amount does not include the value of the fish when the farmer is also the buyer/exporter. In checking the FOS database of sales in 1989, we found the value of sales of NOK 3,598,077,000. Officials explained that the difference between these figures is due to the manner in which data is organized. It is the Department's practice to tie information in the response to published financial statements. Since we were unable to tie the amount of NOK 3,598,000,000 from the data base to any source documents, we are using NOK 3,440,793,000 as the first hand value of salmon sales in 1989.

Since we calculated the subsidy rate and the duty deposit rate on a per kilogram basis, the only relevancy of the sales value is in determining whether we must allocate RDF grants provided to the salmon industry in 1989 or expense them in the year of receipt. Since the sum of RDF grants provided during the review period is greater than 0.5 percent using either sales values, using one number as opposed to the other has no effect on our calculations.

Comment 14

Respondents contend that since the smolt and salmon farmers are "upstream" from salmon processors and exporters, the subsidies provided to smolt and salmon farmers should be treated as upstream subsidies within the meaning of section 771A of the Act. They argue that most of the assistance provided to the salmon industry is provided to the smolt producing sector which has little incentive to pass any benefits forward. Likewise, assistance provided to salmon farmers would not be passed forward to exporters. Therefore, under an upstream subsidy analysis, there would be two stages of "pass-through" required before any competitive benefit could be conferred on exports.

Petitioner disagrees with respondents' upstream subsidy claim. Petitioner argues that throughout the investigation respondents have argued that smolt and salmon farmers and exporters all constitute the salmon industry. Furthermore, a smolt is defined as a young salmon, and cannot be construed an "input" in terms of section 771A of the Act.

DOC Position

Section 771A of the Act does not apply to this investigation. The upstream subsidy provision only refers to input products. A smolt which is a young salmon is not an input into an adult salmon. It is the same salmon only at an earlier stage of development. With respect to the sale of salmon by Norwegian salmon farmers to Norwegian salmon exporters, we consider the sale of salmon to a third party for export to the United States analogous to the sale of merchandise through a trading company. In such instances, we have determined that the subsidies conferred upon the production of the product remain with that product when sold through a trading company (see, e.g., Final Affirmative Countervailing Duty Determination; Oil Country Tubular Goods from Korea, 49 FR 46776, November 28, 1984). Furthermore, our treatment of subsidies conferred upon the salmon industry is consistent with our treatment of the subsidies conferred upon the Canadian groundfish industry (see, Groundfish).

Comment 15

The Government of Norway states that the administration of the RDF is in conformity with international obligations under the General Agreement on Tariffs and Trade (GATT), including the Subsidies Code. It states that action to countervail such programs should therefore not have been initiated. The Government of Norway also states that the imposition of both a countervailing duty and a antidumping duty concerning the same product is highly questionable under the GATT.

DOC Position

Our determination that the RDF is countervailable because it provides benefits only to companies located in specific regions of Norway is entirely consistent with U.S. obligations under the GATT and the GATT Subsidies Code. GATT Article VI:3 clearly states that "[t]he term "countervailing duty" shall be understood to mean a special duty levied for the purpose of offsetting *any bounty or subsidy bestowed, directly or indirectly, upon the manufacture, production or export of any merchandise.*" Article 2:1 of the Subsidies Code indicates that "[a]n investigation to determine the existence, degree and effect of *any alleged subsidy* shall normally be initiated upon a written request by or on behalf of the industry affected," and that the request shall include "sufficient evidence of the existence of * * * a subsidy * * *".

Article 4:2 of the Code further stipulates that "[n]o countervailing duty shall be levied on any imported product in excess of the amount of *the subsidy found to exist*, * * *" (emphases added). As these citations illustrate, neither article VI nor the Subsidies Code qualifies that only certain kinds of subsidies may be countervailed. If anything, the comprehensive wording of article VI:3 affirms the notion that any subsidy is potentially countervailable, and there is nothing in the Code to suggest that another interpretation is appropriate.

We also disagree with the Government of Norway's contention that the imposition of both a countervailing duty and an antidumping duty on the same product is questionable under the GATT. Antidumping duties and countervailing duties offset different kinds of unfair trade practices. The reference in GATT article VI:5 that "no product * * * shall be subject to both antidumping and countervailing duties to compensate for the same situation of dumping or export subsidization" is merely recognition that one form of unfair trade practice (government subsidization of exports) can in and of itself permit another unfair trade practice (injurious price discrimination) to occur.

U.S. practice takes full account of this phenomenon, in accordance with our obligations under the General Agreement. When the Department conducts concurrent antidumping and countervailing duty investigations of the same product, any antidumping cash deposit is adjusted to reflect the amount of export subsidies found in the companion countervailing duty investigation.

Verification

In accordance with section 776(b) of the Act, we verified the information used in making our final determination. We followed standard verification procedures, including meeting with government officials, examination of relevant accounting records, and examination of original source documents. Our verification results are outlined in detail in the public version of the verification report, which is on file in the Central Records Unit (room B-099) of the Main Commerce Building.

Suspension of Liquidation

In accordance with our preliminary affirmative countervailing duty determination published on June 20, 1990, we directed the U.S. Customs Service to suspend liquidation on the products under investigation and to require a cash deposit or bond be posted equal to the duty deposit rate. This final countervailing duty determination was extended to coincide with the final antidumping duty determination on the same product from Norway, pursuant to section 606 of the Trade and Tariff Act of 1984 (section 705(a)(1) of the Act).

Under article 5, paragraph 3 of the Subsidies Code, provisional measures cannot be imposed for more than 120 days without final affirmative determinations of subsidization and injury. Therefore, we instructed the U.S. Customs Service to discountinue the suspension of liquidation on the subject merchandize entered on or after October 28, 1990, but to continue the suspension of liquidation of all entries, or withdrawals from warehouse, for consumption of the subject merchandise entered between June 29, 1990, and October 27, 1990. We will reinstate suspension of liquidation under section 703(d) of the Act, if the International Trade Commission (ITC) issues a final affirmative injury determination, and will require a cash deposit on all entries of the subject merchandise equal to NOK 0.71 per kilogram.

ITC Notification

In accordance with section 705(d) of the Act, we will notify the ITC of our determination. In addition, we are making available to the ITC all non-privileged and non-proprietary information relating to this investigation. We will allow the ITC access to all privileged and business proprietary information in our files, provided the ITC confirms that it will not disclose such information, either publicly or under an administrative protective order, without the written consent of the Deputy Assistant Secretary for Investigations, Import Administration.

If the ITC determines that material injury, or the threat of material injury, does not exist, this proceeding will be terminated and all estimated duties deposited or securities posted as a result of the suspension of liquidation will be refunded or cancelled. If, however, the ITC determines that such injury does exist, we will issue a countervailing duty order, directing Customs officers to assess countervailing duties on all entries of fresh and chilled Atlantic salmon from Norway entered, or withdrawn from warehouse, for consumption, as described in the "Suspension of Liquidation" section of this notice.

This determination is published pursuant to section 705(d) of the Act (19 U.S.C. 1671d(d)).

Dated: February 15, 1991.

Eric I. Garfinkel,

Assistant Secretary for Import Administration.

[FR Doc. 91-4393 Filed 2-22-91; 8:45 am]
BILLING CODE 3510-DS-M

APPENDIX C

CALENDAR OF THE PUBLIC HEARING

Calendar of the Public Hearing

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: FRESH AND CHILLED ATLANTIC SALMON FROM NORWAY

Invs. Nos.: 701-TA-302 (Final) and 731-TA-454 (Final)

Date and Time: February 26, 1991 - 9:30 a.m.

Sessions were held in connection with the investigations in the Main Hearing Room 101 of the United States International Trade Commission, 500 E Street, S.W., in Washington, D.C.

In support of the imposition of antidumping duties:

Vinson & Elkins
Washington, D.C.
on behalf of--

The Coalition for Fair Atlantic Salmon Trade

Theodore W. Kassinger)
Michael J. Coursey)--OF COUNSEL
Rosemary E. Gwynn)

Witnesses:

Kenneth D. Hirtle--President, Connors Aquaculture, Inc.

James D'Angelo--Personnel and Office Manager, Connors Aquaculture, Inc.; and former Town Manager and current Town Council Member, Eastport, ME

Colin McLernon--President and CEO, Maine Pride Salmon, Inc.

Frank Simon, II--President, Maine Coast Trading Company, Inc.

James L. Anderson--Associate Professor, Department of Resource Economics, University of Rhode Island

Frank Ayers--President, Maine Salmon, Inc.

Burton Blanche--President, Nellie B. Fisheries, Inc.; and President, Maine Aquaculture Association

Charles L. Anderson--Economic Consultant, ICF Consulting Associates

Daniel J. Klett--Economic Consultant, ICF Consulting Associates

In opposition to the imposition of antidumping duties:

Mudge Rose Guthrie Alexander & Ferdon
Washington, D.C.
and
Vislie, Odegaard & Kolrud
Oslo, Norway
on behalf of

Fiskeoppdretternes Salgslag A/L (FOS)
Norske Fiskeoppdretteres Forening (NFF)
Norges Ferskfishomsetnings Landsforening (NFOL)
Norwegian Salmon Marketing Council, Inc.
Austevoll Marine Farming, A/S
Bremanger Fiskeindustri, A/S
Bremnes Fryseri, A/S
Hofa, A/S
Midnor Seafood A/S
Norsvalaks, A/S
Safish, A/S
Chr. Bjelland Seafoods A/S (now Norwegian Salmon A/S)
R. Domstein & Co.
Fremstad Group A/S
Hallvard Leroy A/S
Saga A/S
Salmonor A/S
Sea Star International A/S
Skaarfish Mowi A/S (now Skaarfish A/S)

N. David Palmeter)
Jeffrey S. Neeley)--OF COUNSEL
Thomas J. Trendl)
and
Trond S. Paulsen)--OF COUNSEL

Hugh Sawyer-Cann)--Economic Consultant

Witnesses:

Odd Steinsbo--Managing Director, FOS

Wollert Krohn-Hansen--Assistant Managing Director, FOS

Paul Birger Torgnes--Secretary General, NFF

Per Day Iversen--Secretary General, NFOL

Arne Bjornstad--President, Norwegian Salmon Marketing Council, Inc.

Tracy Murray--Distinguished Professor, International Economics and Business, University of Arkansas

APPENDIX D

DATA ON RELATED SPECIES

Data on Related Species

In addition to the data on Atlantic salmon presented in the body of this report, the Commission gathered production, shipment, employment, financial, and pricing data on Pacific salmon and steelhead trout. Some of these data were available from public sources. Also, questionnaires were sent to fish farmers, processors, and fishermen. Ten firms responded to the questionnaire for farmed chinook, coho, and steelhead trout. Of these, six also reported production of Atlantic salmon.[1] The data reported are believed to account for most U.S. farmed production of these species. Twelve Pacific salmon processing companies and 13 salmon fishermen provided data on wild-caught high-value Pacific salmon. None of these firms or individuals produce either Atlantic or farmed Pacific salmon. The responding firms do not account for a majority of production of these species.

The world market

The United States, Canada, Japan, and the Soviet Union are the dominant world producers of Pacific salmon. Japan, by far the largest consumer of Pacific salmon, is a net importer, whereas the United States and Canada both export the bulk of their production. Japan and the EC are major export markets for U.S.-produced Pacific salmon. For the most part, increased world supplies of fresh Atlantic salmon have created new markets for fresh fish, primarily at the expense of red meat. However, Pacific salmon suppliers report that the subject product has also displaced frozen Pacific salmon.[2] Japan remains predominantly a frozen fish market for foreign suppliers; however, in the United States and Europe, both canned and frozen fish have declined in popularity relative to fresh fish. Atlantic salmon also competes with Pacific salmon in the European smoked salmon market.[3]

U.S. production

Wild catch.--During 1987-90, chinook accounted for an average of 5 percent (by volume) of the U.S. Pacific salmon catch, coho for 6 percent, sockeye 38 percent, chum 14 percent, and pink salmon 36 percent. 1987-90 U.S. commercial landings of wild-caught Pacific salmon are shown in the following tabulation (in thousands of pounds):[4]

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[1] Three firms are steelhead-farming members of the petitioning coalition in these investigations. These three firms responded in the negative to the Commission's Atlantic salmon producers' questionnaire, but they reportedly are growing out Atlantic smolt. (Transcript, p. 77.)

[2] See respondents' prehearing brief, p. 4.

[3] Ibid., p. 6.

[4] 1987 data are from Fisheries of the United States 1988, NMFS, May 1989, p. 1; 1988-89 data are from Fisheries of the United States 1989, NMFS, May 1990, p. 1; and 1990 data are from petitioners' prehearing brief, exh. 1 (citing an Alaska Department of Fish and Game official). 1990 data are not available from NMFS.

Species	1987	1988	1989	1990
Chinook	39,938	45,672	31,466	25,572
Coho	39,041	47,486	43,768	41,480
Sockeye	227,411	190,036	274,051	321,136
Chum	86,320	146,467	68,685	66,337
Pink salmon	169,308	176,487	367,898	265,269
Total	562,018	606,148	785,868	719,794

More than 95 percent of the Pacific harvest is net-caught and less than 5 percent is troll-caught; however, these percentages vary considerably among the five species. 1989 net and troll catches, by species, are shown in the following tabulation:[5]

Species	1989 harvest (1,000 pounds)	Net catch (1,000 pounds)	Net catch (Share of harvest)	Troll catch (1,000 pounds)	Troll catch (Share of harvest)
Chinook	31,466	17,193	54.6	14,273	45.4
Coho	43,768	31,435	71.8	12,333	28.2
Sockeye	274,051	273,996	100.0[1]	55	(1)
Chum	68,685	68,484	99.7	201	0.3
Pink salmon	367,898	365,582	99.4	2,316	0.6
All salmon	785,868	756,690	96.3	29,178	3.7

[1] More than 99.95 percent of sockeye is net-caught and less than 0.05 percent is troll-caught.

The vast majority of the wild Pacific catch is frozen or canned; however, this also varies widely depending on the species. Estimated disposition of the 1989 U.S. Pacific salmon harvest, by species, is presented in the following tabulation:[6]

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[5] Harvest data are from NMFS. The percent of troll catches are from petitioners' prehearing brief, exh. 1. (citing public sources). The volume of troll and net catches and the percent of net catches are derived from the unrounded percent of troll catches.

[6] Pounds are expressed in terms of round weight. Harvest data are from NMFS; canned production quantity data are from the National Food Processors Association; fresh production share of harvest data are estimated by James Anderson, consultant to the petitioner, based primarily on data from the Alaska Commercial Fisheries Entry Commission. (See exh. 1 to petitioners' prehearing brief.) The derived share-of-harvest data are estimates. Some canned salmon production is produced from frozen salmon inventories (transcript at p. 95), which may be held from one season to the next. Fresh salmon data may be overstated to the extent that some of this product may subsequently be frozen, canned, or smoked. Frozen fish data are also derived; they will include some product that is subsequently canned or smoked.

Species	Harvest	Frozen production		Canned production		Fresh production	
	(1,000 pounds)	(1,000 pounds)	(Share of harvest)	(1,000 pounds)	(Share of harvest)	(1,000 pounds)	(Share of harvest)
Chinook.....	31,466	19,437	61.8	292	0.9	11,737	37.3
Coho.....	43,768	36,505	83.4	2,624	6.0	4,639	10.6
Sockeye.....	274,051	225,971	82.5	46,162	16.8	1,918	0.7
Chum.....	68,685	47,009	68.4	12,747	18.6	8,929	13.0
Pink salmon.....	367,898	98,692	26.8	245,925	66.8	23,281	6.6
All salmon..	785,868	427,614	54.4	307,750	39.2	50,504	6.4

It is not coincidental that the percentages of troll catches and fresh sales are somewhat similar in magnitude. Questionnaire respondents noted that a large portion of the troll catch is directed toward the fresh market. Net-caught fish are correspondingly concentrated in the frozen and canned markets.

Farmed production.--In addition to the wild Pacific salmon harvest, some chinook, coho, and steelhead trout are farm-raised. Four Washington producers reported production of farmed chinook totalling *** fish in 1988, increasing to *** fish in 1989, and jumping to *** in 1990. These totals represent the equivalent of less than 3.0 percent of the wild chinook harvest. No data on farmed adult coho were reported. Firms on both coasts reported production of an estimated *** steelhead trout in 1988, *** in 1989, and *** in 1990. Farmed production, although small, accounts for a significant proportion of commercial steelhead trout supplied to the market.

Total U.S. shipments

Wild catch.--The volume of total shipments of U.S.-caught Pacific salmon equals landings as reported above. Unit values for all species increased strongly from 1987 to 1988 and then fell sharply in 1989. The values and unit values of such shipments are presented in the following tabulation:[7]

Species	1987		1988		1989	
	Value ($1,000)	Unit value (per pound)	Value ($1,000)	Unit value (per pound)	Value ($1,000)	Unit value (per pound)
Chinook.....	80,068	$2.00	117,551	$2.57	48,531	$1.54
Coho.....	56,281	1.44	93,506	1.97	33,399	0.76
Sockeye.....	359,767	1.58	437,630	2.30	346,442	1.26
Chum.....	43,801	0.51	134,689	0.92	30,078	0.44
Pink salmon.....	56,459	0.33	127,297	0.72	132,784	0.36
All salmon..	596,376	1.06	910,673	1.50	591,234	0.75

[7] Value data are from Fisheries of the United States 1988, NMFS, May 1989, p. 1 and Fisheries of the United States 1989, NMFS, May 1990, p. 1. 1990 data are not available. Unit values are derived.

Farmed shipments.--The volume of U.S. shipments of farmed chinook and steelhead trout equaled production, as reported above. The reported value of shipments of chinook increased from *** in 1989 to *** during January-September 1990. The reported value of shipments of steelhead trout increased from *** in 1987 to *** in 1988 and declined to *** in 1989. Reported shipment values totaled *** during January-September 1990. Producers have reportedly been shifting operations away from steelhead trout and toward Atlantic salmon.

Export shipments

The majority of the U.S. Pacific salmon catch is sold in export markets. 1989-90 U.S. exports, by species and type of processing, are presented in table D-1.

Table D-1
Pacific salmon: U.S. exports, by species and by product types, to all countries, 1989-90

Species and product	Quantity (1,000 kg) 1989	Quantity (1,000 kg) 1990	Value ($1,000) 1989	Value ($1,000) 1990
Chinook:				
Fresh	873	527	5,905	3,817
Frozen	4,029	2,318	23,063	17,181
Coho:				
Fresh	1,699	912	7,220	3,563
Frozen	15,052	12,820	66,953	57,231
Sockeye:				
Fresh	4,790	4,126	23,019	18,876
Frozen	82,493	88,258	496,299	475,853
Canned in water	6,810	10,481	40,314	56,580
Chum:				
Fresh	1,762	985	5,313	3,018
Frozen	16,252	10,755	50,185	34,391
Canned in water	1,553	632	6,262	2,250
Pink salmon:				
Fresh	7,612	3,598	16,885	11,213
Frozen	14,604	13,438	36,237	35,190
Canned in water	8,091	9,674	35,871	38,120
Salmonidae[1] not elsewhere specified or included:				
Frozen	2,455	1,797	10,202	6,713
Canned in water	945	1,082	4,066	5,384
Canned in oil	104	197	405	801
Smoked	176	206	1,296	2,121
Roe	2,538	2,702	27,753	32,982
Other	830	342	2,802	1,142
Total	172,688	164,850	860,050	806,426

[1] May include small amounts of Atlantic salmon and trout.

Source: Compiled from official U.S. export statistics.

U.S. imports

1989-90 U.S. imports of Pacific salmon are presented in table D-2. Canada is by far the largest supplier of Pacific salmon to the United States, and Chile is a major source of coho. The United States is a net exporter of most Pacific salmon species and products, but, during 1989-90, it was a net importer of fresh chinook, coho, sockeye, and chum. Overall, imported Pacific salmon accounts for a very small percentage of the U.S. market. However, in 1989, imports of chinook (primarily from Canada) and coho (mostly from Chile), accounted for an important share of the fresh market. These products are largely farm raised.

Table D-2
Pacific salmon: U.S. imports, by species and by product types, from all countries, 1989-90

Species and product	Quantity (1,000 kg) 1989	Quantity (1,000 kg) 1990	Value ($1,000) 1989	Value ($1,000) 1990
Chinook:				
Fresh	8,106	8,283	48,976	46,534
Frozen	1,330	1,347	8,398	7,248
Coho:				
Fresh	2,255	3,914	10,445	26,014
Frozen	457	679	1,856	3,893
Sockeye:				
Fresh	2,450	2,940	12,096	12,962
Frozen	675	299	5,259	1,595
Chum:				
Fresh	2,278	3,805	5,737	10,323
Frozen	1,874	1,862	5,013	4,879
Pink salmon:				
Fresh	1,772	698	3,047	1,245
Frozen	729	486	1,767	1,206
Salmon[1] not elsewhere specified or included:				
Smoked	902	1,036	16,883	19,286
Salted	110	92	1,297	996
Total	22,938	25,440	120,776	136,181

[1] Includes substantial amounts of Atlantic salmon from Norway.

Source: Compiled from official U.S. import statistics.

U.S. consumption[8]

Estimated 1989 U.S. consumption of fresh and frozen wild-caught Pacific salmon is presented in the following tabulation (in 1,000 kg):

[8] Consumption data were estimated by James Anderson, consultant to the petitioner, and presented in exh. 1 of the petitioner's prehearing brief.

Species	Frozen	Fresh
Chinook	16,753	9,937
Coho	2,121	469
Sockeye	258	9
Chum	10,381	2,149
Pink salmon	13,611	1,466
Total	43,124	14,029

In addition, 1989 U.S. consumption of frozen and fresh farmed Pacific salmon was estimated at 904,000 kg and 877,000 kg, respectively.

Financial experience of U.S. producers

Operations on wild caught chinook, coho, and sockeye.--Five firms with chinook, coho, or sockeye processing operations provided the financial data requested in the Commission's questionnaire. Of these five firms, none was able to provide the separate financial data requested for each species. Overall company financial data were not usable as the sales of fresh chinook, coho, and/or sockeye were very low compared to the total sales of the companies.

Three fishermen's financial data were usable. These data are summarized below:

Item	1987	1988	1989	1990
*	*	*	*	*	*	*

Operations on farmed chinook and steelhead trout.--Five firms provided financial data requested in the Commission's questionnaire on these products. One of the firms ***. It does not keep separate records on operations of each species but provided estimated data that are ***. *** reported data down to the gross profit level on its combined operations of ***. Its data are shown in the following tabulation:

*	*	*	*	*	*	*

*** reported *** on their chinook operations. Their data are summarized in the following tabulation:

*	*	*	*	*	*	*

*** reported *** its steelhead trout operations as shown in the following tabulation:

* * * * * * *

Impact of imports on capital and investment.--The Commission requested U.S. producers to describe any actual and/or potential negative effects of imports of fresh Atlantic salmon from Norway on their growth, investment, and ability to raise capital and/or existing development and production efforts.

***, all producers of Pacific salmon, stated "No" to the actual and negative impact of imports of Atlantic salmon from Norway on their operations of farmed chinook, coho, and steelhead trout. However, four producers of farmed steelhead trout said "Yes" to such impact of imports on their operations, as described below:

* * * * * * *

Pricing and markets

Published price trends for fresh Pacific salmon and steelhead trout.--Published prices for farmed and wild Pacific salmon sold in the United States generally followed the same trend as that for Atlantic salmon, with prices dropping in 1989 from 1988 levels and subsequently rising for most species in early 1990 (figures D-1 through D-6).[9] Prices increased in late 1989 and early 1990 for chinook, two types of coho (U.S. gillnet-caught and Canadian-farmed), and steelhead trout.[10] Seasonal patterns exist for all the Pacific salmon species presented, but these patterns were less pronounced for the farmed Pacific species.

Prices for Canadian-farmed chinook in the 2-4 pound, 4-6 pound, and 6-9 pound categories declined by 50 percent between April 1988 and July 1989 (figure D-1). During 1990, prices fluctuated at a higher level. Prices for U.S. gillnet- and troll-caught chinook in the 11-18 pound category declined by over 40 percent and 25 percent, respectively, between 1988 and 1989 (figure D-2). Although prices were higher during 1990 than in 1989, prices declined through the 1990 chinook season.

Prices for U.S. gillnet- and troll-caught coho, and Canadian-farmed coho declined by over 40 percent between 1988 and 1989 (figure D-3). Canadian-farmed coho prices increased by over 30 percent during the first quarter of 1990 and then fluctuated during the remainder of the year. Chilean-farmed coho prices declined between 1988 and 1990, falling by approximately 10 percent in each year or partial-year period.

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[9] See figs. D-7 through D-11 for average Alaskan ex-vessel prices reported for wild Pacific salmon during 1986-90. Prices for wild Pacific salmon were at their highest point during 1988.

[10] Steelhead trout prices subsequently declined in late 1990.

Figure D-1.--Fresh Canadian-farmed chinook published prices, 2 to 4 pounds, 4 to 6 pounds, and 6 to 9 pounds, sold in the U.S. market, weekly, January 1988-December 1990

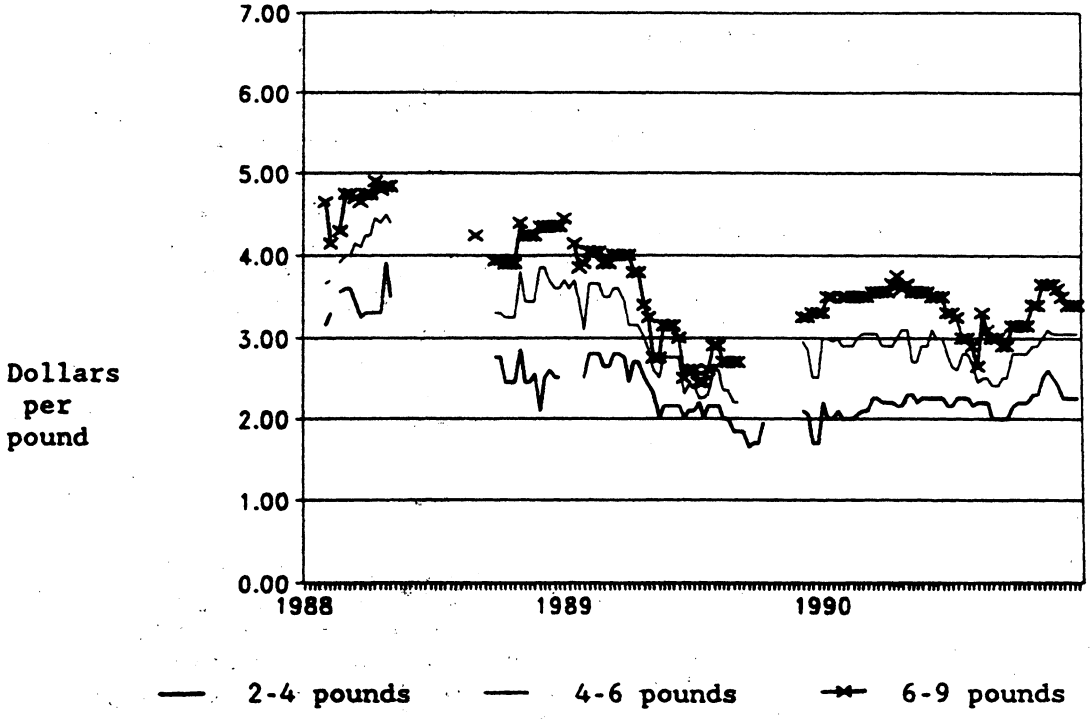
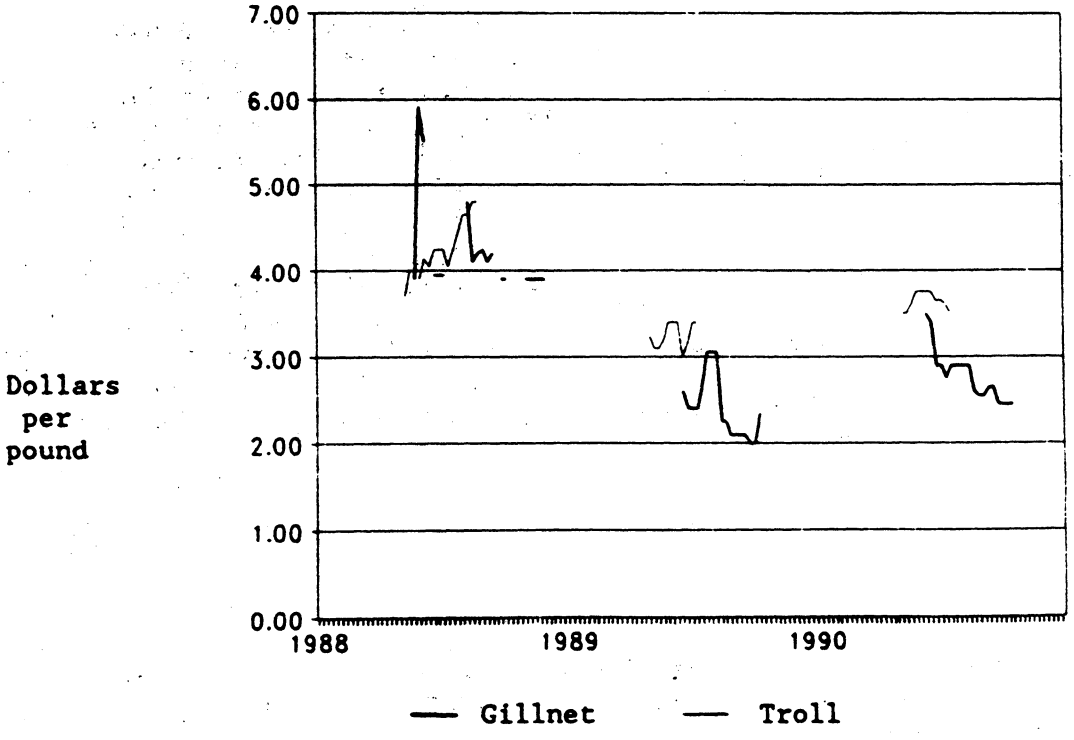


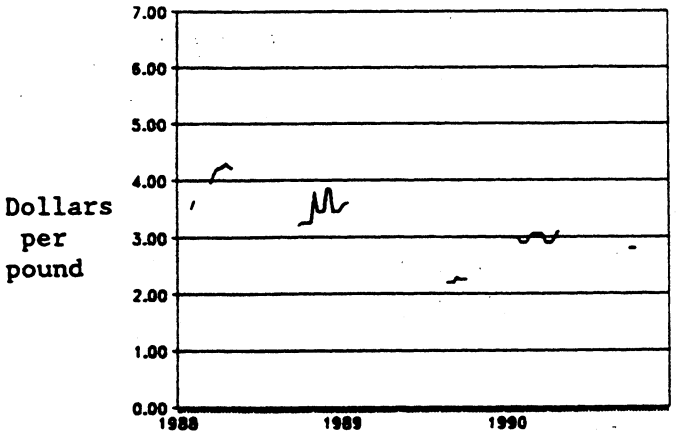
Figure D-2.--Fresh U.S. gillnet- and troll-caught chinook published prices, 11 to 18 pounds, sold in the U.S. market, weekly, January 1988-December 1990



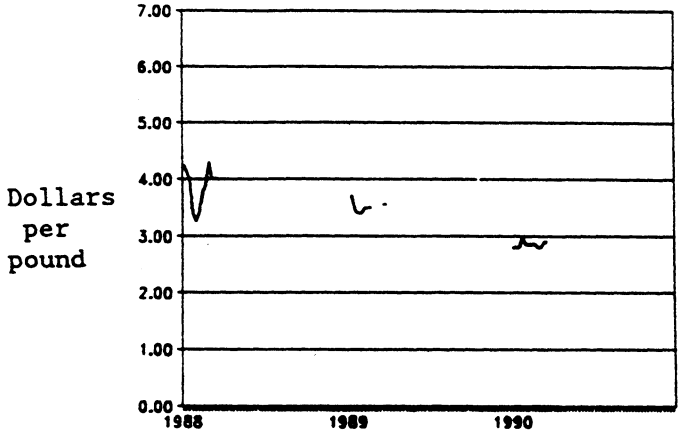
Source: Urner Barry Publications, Inc.

Figure D-3.--Fresh Canadian-farmed, Chilean-farmed, and U.S. gillnet- and troll-caught coho published prices, 4 to 6 pounds, sold in the U.S. market, weekly, January 1988-December 1990

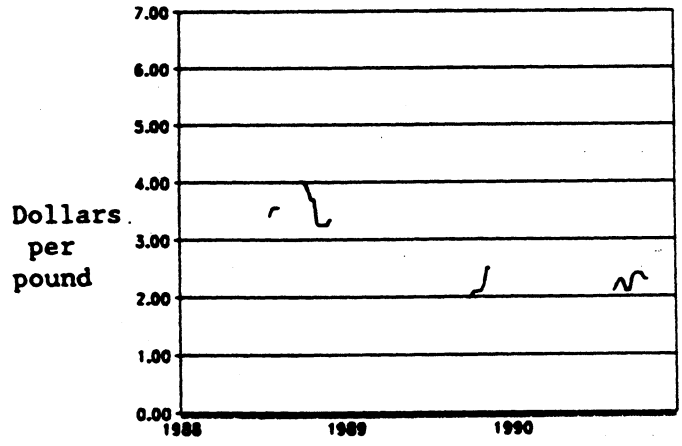
Canadian-farmed



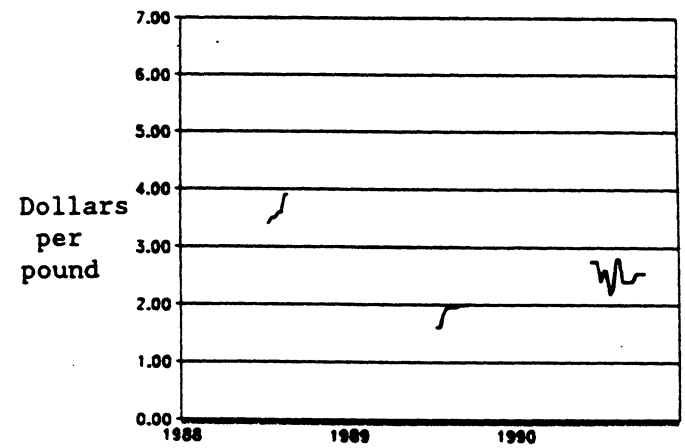
Chilean-farmed



U.S. gillnet-caught



U.S. troll-caught

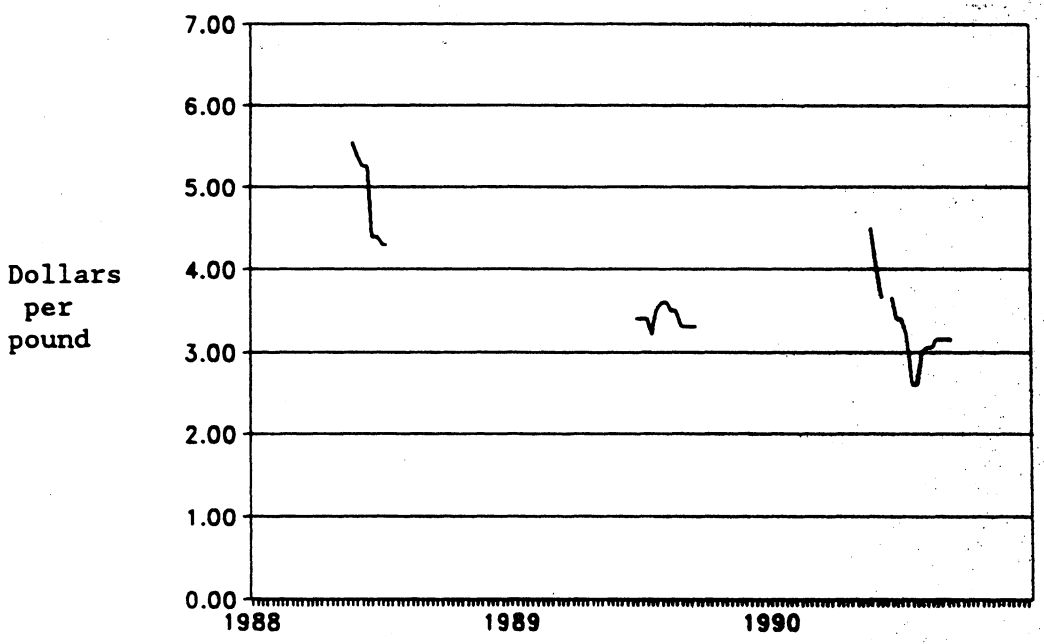


Source: Urner Barry Publications, Inc.

Prices for both U.S. sockeye and chum were lower in 1989 than in 1988 (figures D-4 and D-5). U.S. sockeye salmon prices were higher at the beginning of the 1990 season, but declined sharply through the year, whereas U.S. chum salmon prices stayed relatively level through 1989 and 1990. Prices for U.S.-produced steelhead trout declined by over 50 percent between January 1988 and September 1989, increased by over 25 percent during late 1989, but declined by over 20 percent during late 1990 (figure D-6).

Average ex-vessel Alaskan prices for wild Pacific salmon increased from 1986 to 1988 before declining during 1989-90 (figures D-7 through D-11). Troll-caught wild Pacific salmon are priced higher than gillnet- or purse seine-caught salmon. These fish are primarily caught during the summer months of each year.

Figure D-4.--Fresh U.S. gillnet-caught sockeye published prices, 4 to 6 pounds, sold in the U.S. market, weekly, January 1988-December 1990



Source: Urner Barry Publications, Inc.

Figure D-5.--Fresh U.S. gillnet-caught silver and dark chum published prices, 6 to 9 pounds, sold in the U.S. market, weekly, January 1988-December 1990

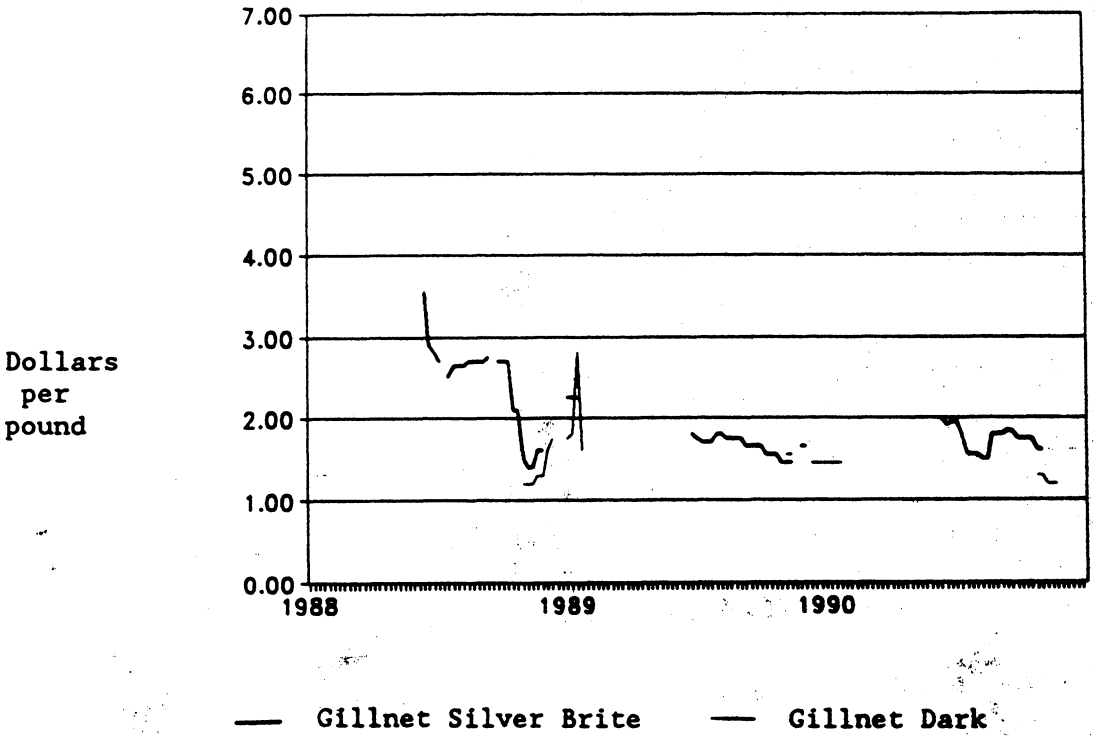
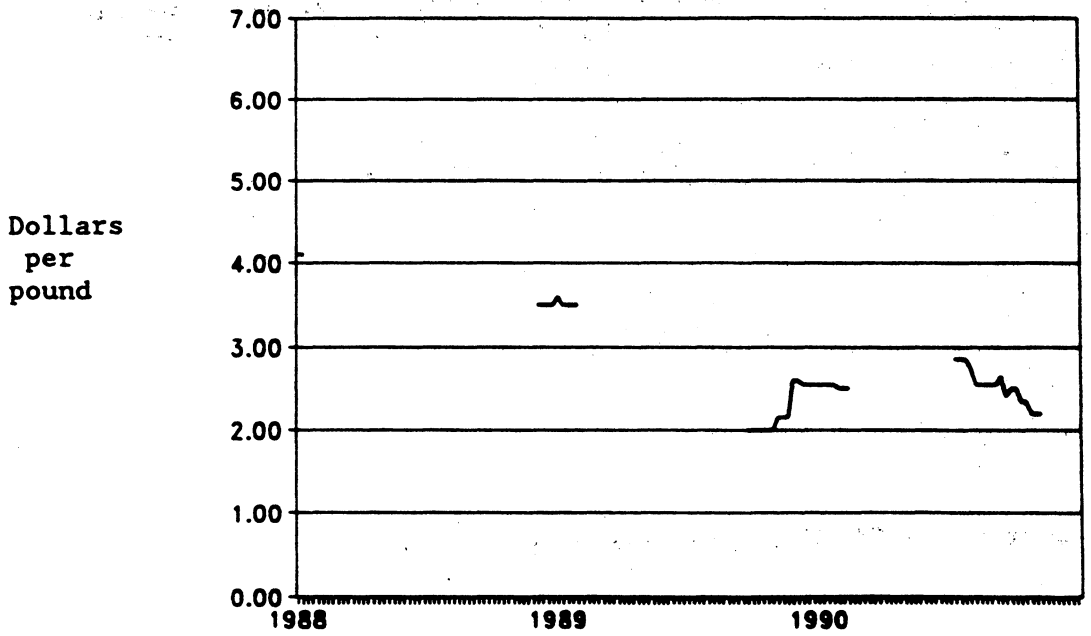
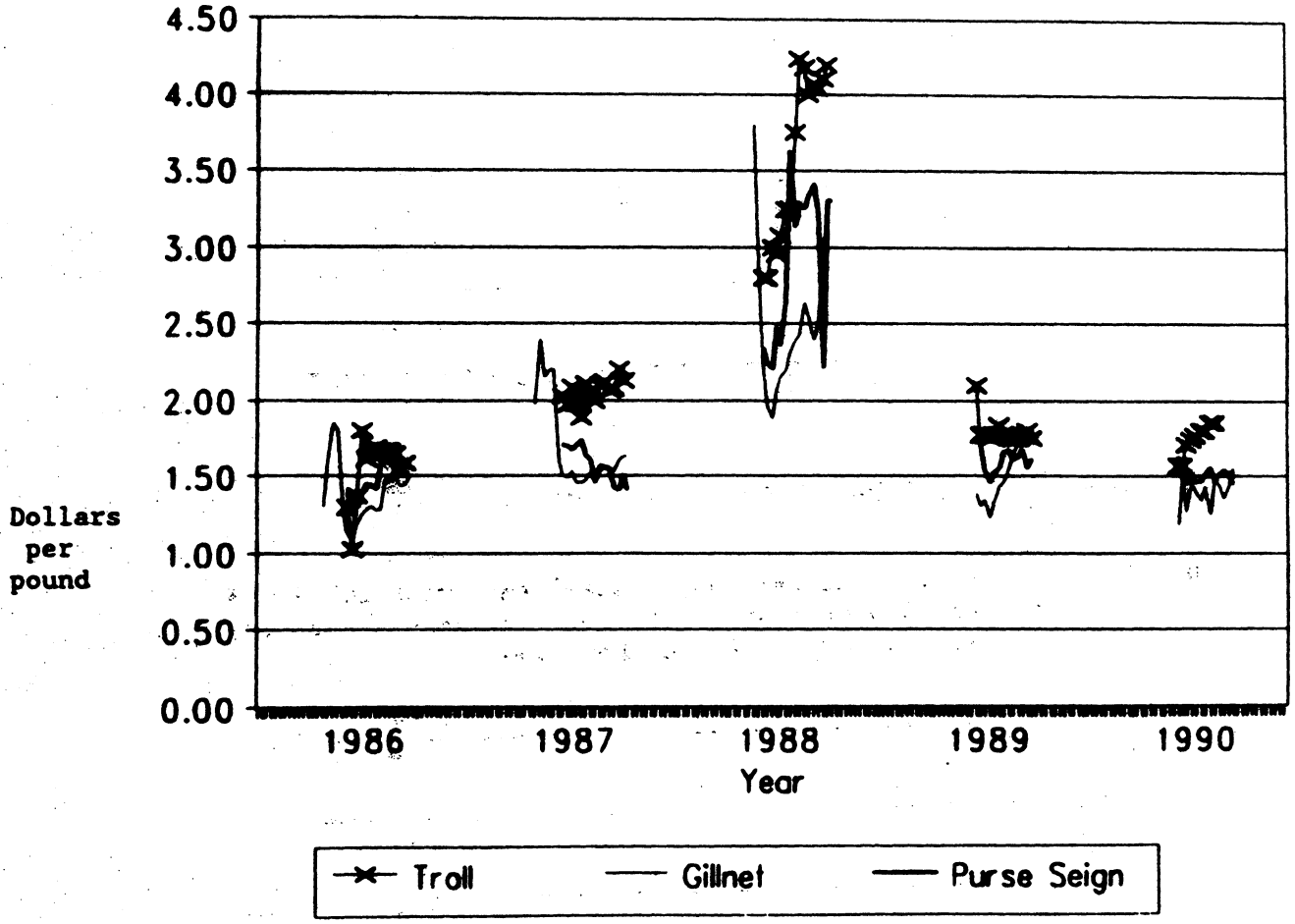


Figure D-6.--Fresh U.S. gillnet-caught steelhead trout published prices, 8 pounds and over, sold in the U.S. market, weekly, January 1988-December 1990



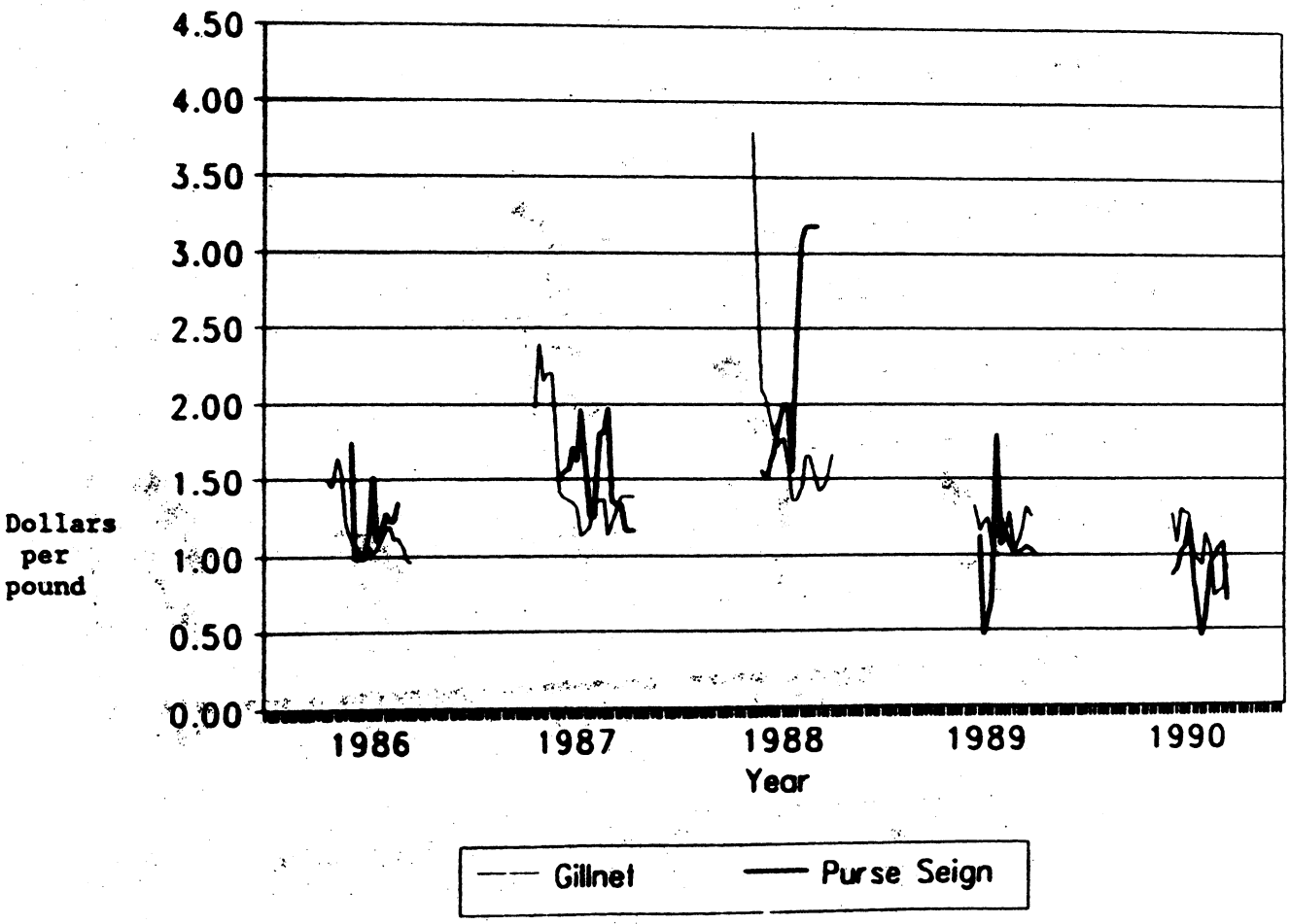
Source: Urner Barry Publications, Inc.

Figure D-7.--Wild Pacific sockeye salmon: Average weekly ex-vessel Alaskan prices, by method of catching fish, 1986-90



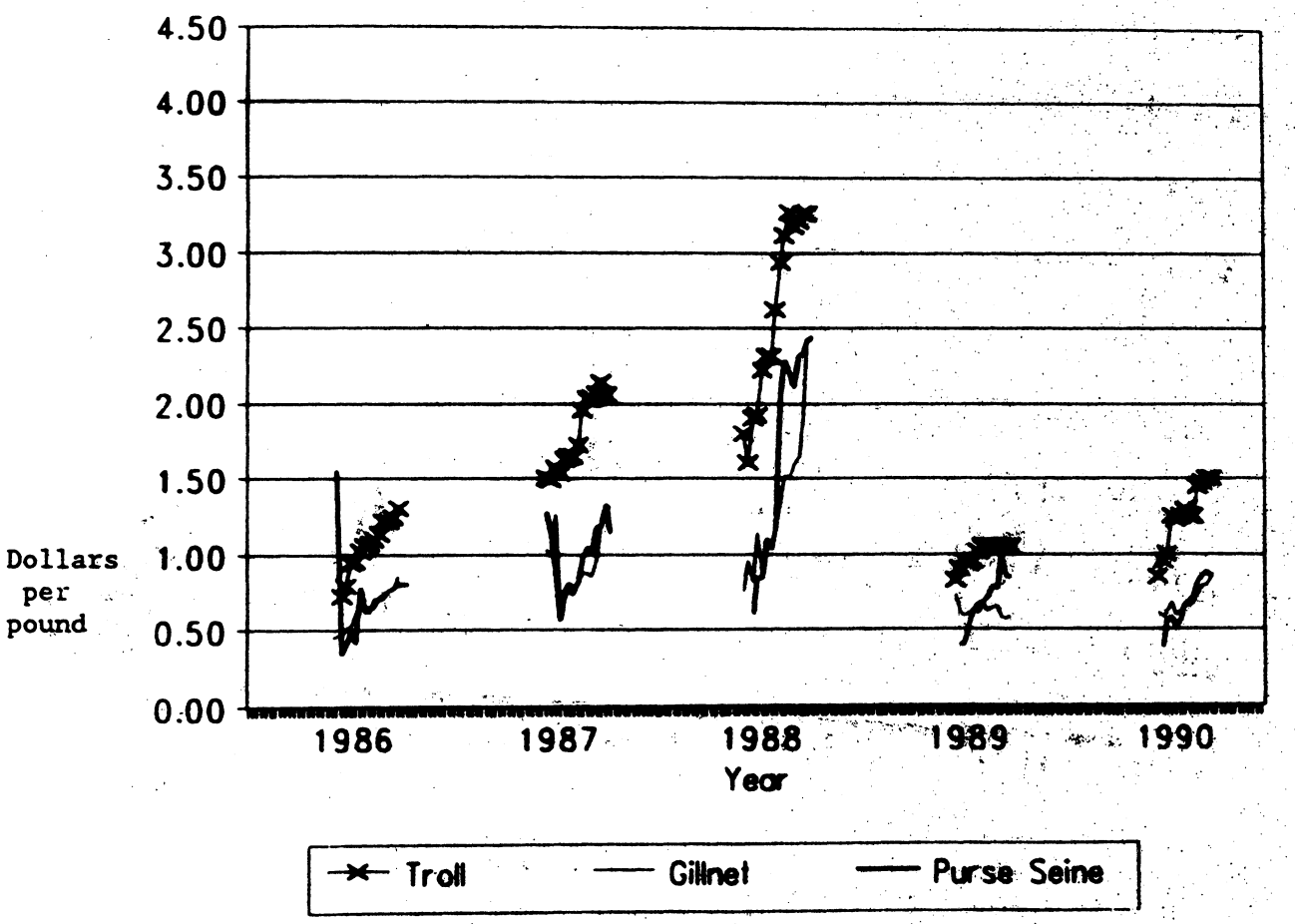
Source: NMFS, U.S. Department of Commerce

Figure D-8.--Wild Pacific chinook salmon: Average weekly ex-vessel Alaskan prices, by method of catching fish, 1986-90



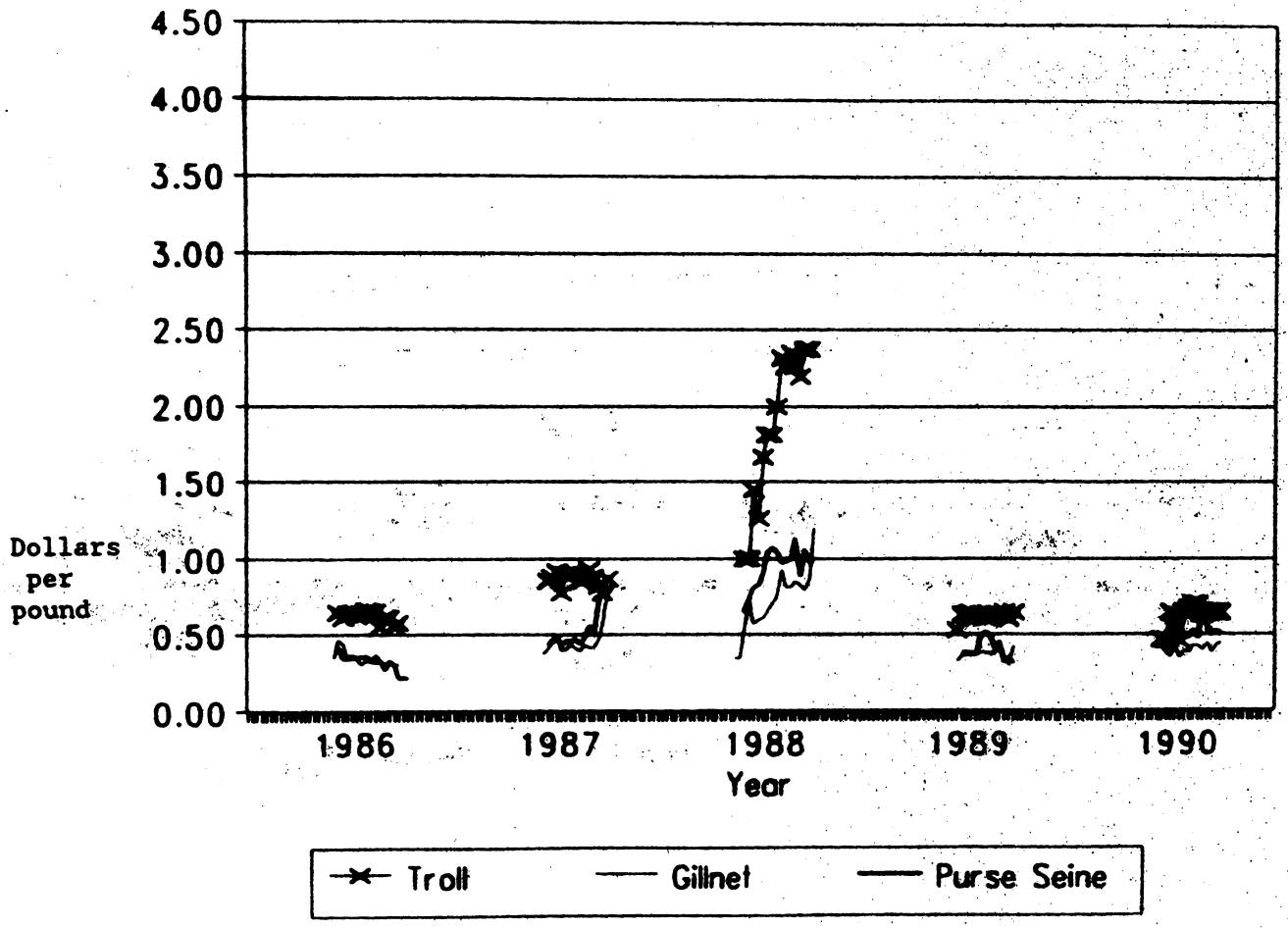
Source: NMFS, U.S. Department of Commerce

Figure D-9.--Wild Pacific coho salmon: Average weekly ex-vessel Alaskan prices, by method of catching fish, 1986-90



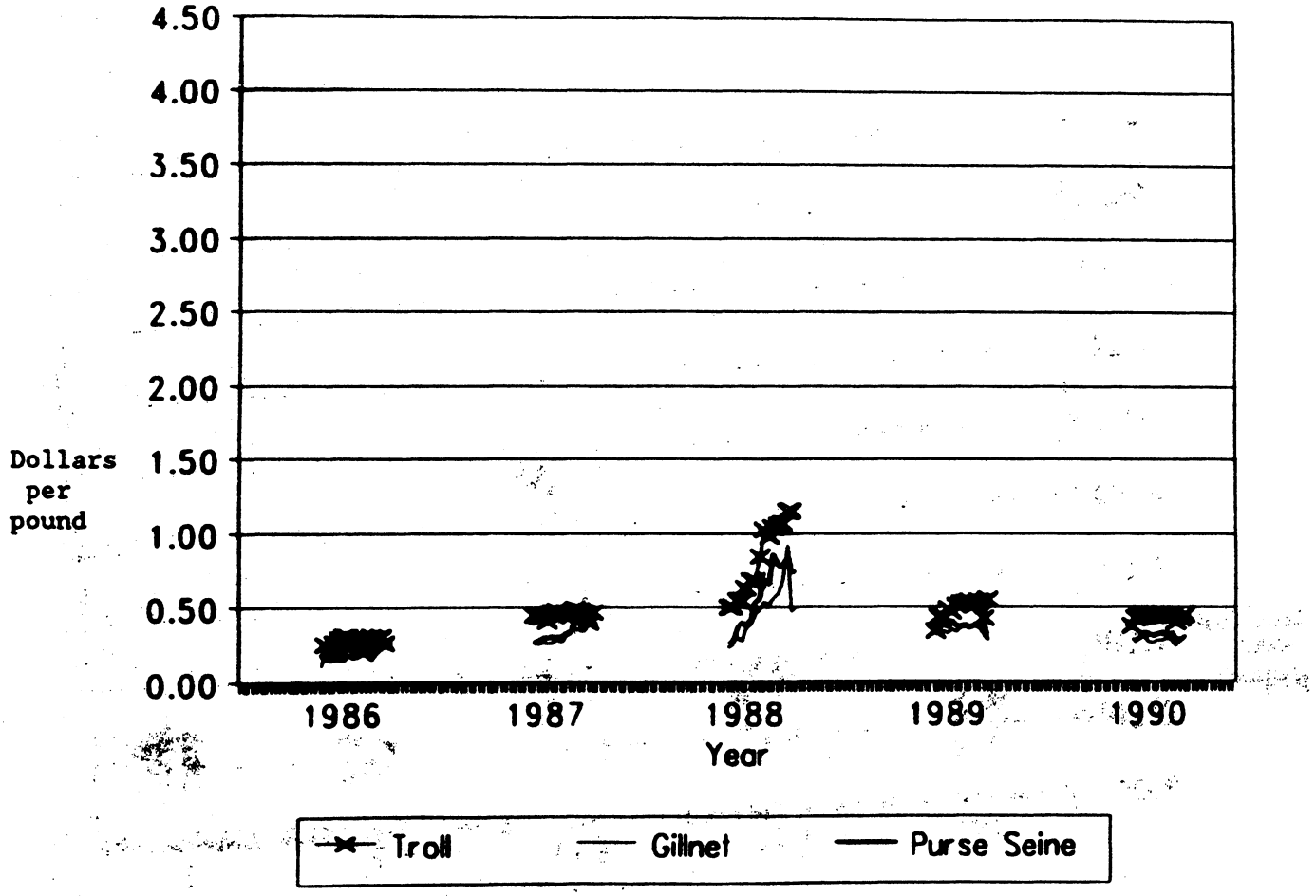
Source: NMFS, U.S. Department of Commerce

Figure D-10.--Wild Pacific chum salmon: Average weekly ex-vessel Alaskan prices, by method of catching fish, 1986-90



Source: NMFS, U.S. Department of Commerce

Figure D-11.--Wild Pacific pink salmon: Average weekly ex-vessel Alaskan prices, by method of catching fish, 1986-90



Source: NMFS, U.S. Department of Commerce

Questionnaire price trends for farmed chinook and steelhead trout.--The limited price data collected through questionnaires for U.S.-produced farmed chinook and steelhead trout are shown in table D-3.

Table D-3
Farmed chinook and steelhead trout: Weighted-average net U.S. f.o.b. prices reported by U.S. producers of 4 to 6 pound farmed chinook salmon and steelhead trout, by product and by months, September 1988-October 1990

	(Per pound)	
Period	Chinook salmon[1]	Steelhead trout[2]
* * * * * * *		

[1] Only *** reported prices.
[2] Only *** reported prices.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

APPENDIX E

IMPACT OF IMPORTS ON CAPITAL AND INVESTMENT

Impact of Imports on Capital and Investment

The Commission requested U.S. producers to describe any actual and/or potential negative effects of imports of fresh Atlantic salmon from Norway on their growth, investment, and ability to raise capital and/or existing development and production efforts.

*** stated "Yes" to both actual and potential negative impact of imports. *** said "Yes" to actual negative impact but "No" to potential negative effect of imports. *** mentioned "No" to actual negative effect, but "Yes" to potential impact of imports. *** said "No" to both actual and negative impact of imports on their operations.

Detailed responses by producers are presented below:

* * * * * * *

APPENDIX F

OPERATION-RELATED FACTORS IDENTIFIED BY U.S. PRODUCERS OF ATLANTIC SALMON

Operation-Related Factors Identified by U.S. Producers of Atlantic Salmon

The Commission requested U.S. producers of farmed Atlantic salmon to identify and rate factors in terms of their impact on their operations during 1987-90.[1] Eleven U.S. producers responded to this section of the questionnaire.[2] Overall, seven factors were rated as having an impact on U.S. producers' Atlantic salmon business. These factors include algae blooms; biological/health problems; Norwegian, Chilean, and Canadian salmon supply and pricing practices; regulatory/legal problems; and wild Pacific salmon supply and pricing practices. As shown in the tabulation below, the relative importance of these factors differed significantly depending on the regional location of the U.S. producer.

	East coast producers		
	High	Moderate	Low
Norwegian salmon	6	0	0
Chilean salmon	4	1	0
Regulatory/legal problems	3	0	1
Canadian salmon	1	1	1
Pacific salmon	0	2	2
Biological/health problems	0	1	2

	West coast producers		
	High	Moderate	Low
Algae blooms	4	1	0
Biological/health problems	4	0	0
Chilean salmon	3	0	1
Pacific salmon	2	1	1
Canadian salmon	1	2	1
Regulatory/legal problems	1	0	3
Norwegian salmon	0	0	4

All six east coast producers rated Norwegian supply and pricing practices as having a high impact on their business of raising Atlantic salmon, whereas four of five west coast producers rated Norwegian salmon as having only a low impact relative to other factors. West coast producers had a greater problem than east coast producers with algae blooms, salmon health problems, and Pacific salmon supply and pricing practices. Algae blooms in 1989 and 1990 accounted for significant losses for west coast producers. *** reported losing approximately *** percent of their fish to the Labor Day 1989 algae bloom. Both east and west coast producers reported that Chilean salmon supply and pricing practices had a major impact on their business of raising Atlantic salmon.

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[1] Including any hatching, farming, or selling operations.
[2] Including 6 east coast producers (***) and 5 west coast producers (***).

APPENDIX G

INDEXES OF EX-VESSEL PRICES FOR FISH AND SHELLFISH

Table G-1
Indexes of ex-vessel prices for fish and shellfish, by species, 1986-89

(1987=100)

Species	1986	1987	1988	1989
Edible finfish:				
Salmon:				
Sockeye	91	100	146	80
Chinook	82	100	128	77
Coho	55	100	137	53
Chum	79	100	182	87
Pink	62	100	217	108
Total salmon	80	100	154	79
Groundfish, et al:				
Cod	78	100	83	83
Haddock	78	100	86	93
Pollock:				
Atlantic	66	100	86	109
Alaska	77	100	110	122
Flounders	91	100	79	94
Total groundfish, et al	82	100	85	95
Halibut	92	100	77	98
Sea herring	92	100	113	52
Swordfish	86	100	93	92
Tuna:				
Albacore	70	100	112	114
Bluefin	17	100	122	127
Skipjack	85	100	129	108
Yellowfin	78	100	124	110
Total tuna	73	100	125	111
Total edible finfish	80	100	129	88
Shellfish:				
Clams:				
Hard	92	100	126	112
Ocean quahog	105	100	97	97
Soft	118	100	103	110
Surf	118	100	100	100
Total clams	103	100	114	108
Crabs:				
Blue	87	100	108	111
Dungeness	100	100	88	86
King	100	100	118	118
Snow	88	100	109	112
Total crabs	95	100	110	112
American Lobster	90	100	102	96
Oysters	83	100	106	120
Scallops:				
Bay	164	100	111	113
Calico	175	100	96	83
Sea	118	100	102	95
Total scallops	128	100	102	96
Shrimp:				
Gulf and South Atlantic	103	100	101	89
Other	73	100	66	59
Total shrimp	101	100	99	87
Total edible shellfish	99	100	104	99
Total edible fish and shellfish	90	100	116	94
Industrial fish, menhaden	102	100	127	107
All fish and shellfish	90	100	117	95

Source: Fisheries of the United States, 1989, National Marine Fisheries Service, U.S. Department of Commerce, May 1990.