Case Studies

WARMWATER SHRIMP

The U.S. warmwater shrimp industry is a regional industry largely concentrated in the states along the coastline of the Gulf of Mexico and the Southeastern Atlantic.[30] Shrimp are both "wild-caught" and farmed, though wild-caught shrimp account for the vast amount of U.S. production. The largest producing states for wild-caught shrimp are Louisiana, Texas, Florida, and Mississippi, while shrimp farming is concentrated in Texas and Florida. Other southeastern production takes place in Alabama, North Carolina, South Carolina, and Georgia.[31] The industry, as defined by the USITC, consists of fisherman and shrimp processors. Shrimp processors purchase live shrimp at the dock, where they prepare the shrimp before freezing or canning it.[32] The prepared product is then either placed in inventory for later sale or sold to distributors or retailers.

The size of the industry is not known precisely. One-hundred forty firms responded to the questionnaire sent by the Commission to U.S. fishermen, and thirty-nine processors responded to the Commission's processor questionnaire.[33] While the share of processors accounted for by responding firms is confidential, the Commission noted that the responding firms accounted for approximately 6.5 percent of wild-caught landings in 2003.[34] Based on employment data provided by the responding firms, there are approximately 11,000

30 *Certain Frozen or Canned Warmwater Shrimp and Prawns from Brazil, China Ecuador, India, Thailand, and Vietnam,* USITC Pub. 3748, Inv. Nos. 731-TA-1063-1068 (Final) (January 2005) at III.1 to III-2.

31 The other states with shrimp farming activity are South Carolina, Hawaii, Arizona, Arkansas, and Alabama.

32 USITC Pub. 3748 at II-1.

33 Id. at III-1 to III-2.

34 Id. at III-1.

shrimp fishermen in the United States.[35] The value of the 2003 catch was approximately $680 million.[36]

Original investigation and determination

Although the domestic shrimp industry is large, imports are required to satisfy U.S. demand for shrimp. Imports have been a part of the market for years. However, the industry experienced a sharp increase in imports and falling prices during the early years of the millennium that it believed was caused by dumped imports.

The Ad Hoc Shrimp Trade Action Committee filed petitions on December 31, 2003 alleging that certain frozen and canned warmwater shrimp and prawns imported from six countries were being sold in the United States at less than fair value and causing injury to the domestic industry.[37] In January 2005, the Commission issued a split decision. On the one hand, the Commission determined that the domestic industry producing non-canned warmwater shrimp and prawns was being materially injured by dumped imports from all six subject countries. On the other hand, the Commission found that the industry producing canned shrimp was not being injured.

In its determination, the Commission found material injury due to the following factors.

- Subject imports increased during the period of investigation and that the increase came at the expense of the domestic producers.[38]

- The subject imports undersold the domestic product and depressed prices in the United States. For five of the seven products examined by the Commission, the price reduction exceeded 30 percent.[39]

- Indicators of employment well-being, such as wages and hours worked, worsened.[40]

- Operating performance experienced an extreme deterioration.[41]

35 Id. at III-1 and Table F-4. The responding fishermen reported 718 production workers in 2003. Dividing 718 by 6.5% implies 11,046 production workers.
36 Id. at IV-6.
37 See 69 Fed. Reg. 1301, 1302 (January 8, 2004). The six countries are Brazil, China, Ecuador, India, Thailand, and Vietnam.
38 Id. at 26.
39 Id. at 29-30.
40 Id. at 31.
41 Id. at 31.

Table 1. Certain Shrimp and Prawns:
Selected Indicators of Injury Collected by the USITC

Item	2000[(1)]	2001	2002	2003	January to June	
					2003	2004
U.S. shipment ($1,000)	1,149,369	906,706	662,715	679,251	226,396	203,742
U.S. market share (percent, by value)	23.5	20.0	16.3	15.4	13.3	12.0
Subject imports ($1,000)[(2)]	2,370,984	2,403,994	2,403,023	2,723,132	1,077,187	1,024,830
Subject import unit value ($/lb)[(2)]	5.13	4.19	3.76	3.50	3.61	3.15
Wages paid ($1,000)[(3)]	63,408	48,519	44,142	43,449	17,142	15,256

Notes:
(1) Data from 2000 are from the preliminary investigation. Data on wages paid for that year are not comparable to data for subsequent periods.
(2) One firm from China was found not to be dumping. Subject import data have been adjusted under the assumption that this firm accounted for 10 percent of imports from China.
(3) Wages paid are the sum of processor wages and fishermen wages.
Sources: USITC Pub. 3672 at III-10 and D-8; USITC Pub. 3748 at IV-4, IV-6, C-6, and F-8.

Estimated revenue impact of unfair trade

The data above indicate that the value of U.S. shipments declined by approximately 40 percent between 2000 and 2003 while import prices were declining and import value was rising. The Commission found that wages also declined significantly, in large measure because the wages that crew members receive typically are a fixed percentage of the revenue received for each catch. The wage losses were substantially larger than shown in the table because these data are based on firms accounting for only 6.5 percent of the catch in 2003.

The economic model described earlier can be used to estimate the impact of dumping in each year covered by the investigation. As noted, these estimates of lost revenue depend critically on the elasticity assumptions and the size of the dumping margin.[42] For shrimp, the issue is complicated by the fact that there are several subject countries. Weighted average dumping margins were estimated using the so-called "all others" rate for each country. Based on this methodology, margins were 8.59 percent in 2000, 9.46 percent in 2001, 11.60 in 2002, and 13.25 percent in 2003. The rising margin is a reflection of the fact that China, which had the highest margins, garnered an increasing share of subject imports during the period of investigation. The combined total of the annual losses attributed to theses margins is approximately $210 million. These losses were divided among boat owners, fishermen, and processors and were concentrated in the Gulf Coast and South Atlantic states.

42 The elasticity estimates used in the model are the midpoint of the ranges provided in the Commission's staff report.

Table 2. Certain Shrimp and Prawns:
Estimated Lost Revenue due to Dumping

Item	2000	2001	2002	2003	Total
Estimated dumping margin (percent)	8.59	9.47	11.60	13.25	N/A
Lost revenue due to dumping ($1,000)	52,384	49,426	48,699	59,163	209,672
Sources: USITC Pub. 3748 at Appendix A; and author's calculations.					

As noted in the overview, there are other important economic costs resulting from dumping that are not considered by the typical comparative-static welfare analytical framework. These costs include indirect effects on other industries that supply inputs to the industry affected by dumping and the interest paid on funds that must be borrowed because the United States must continuously borrow to consume more than it produces. Estimates of these costs are shown in the table below. For every one dollar change in shrimp industry output caused by dumping, there is a change in the output of other domestic industries totaling approximately $0.83.[43] For every increase in imports brought about by market distorting unfair trade, an estimated one-year interest cost can be estimated by multiplying the one-year Treasury bill rate by the increase in imports caused by the dumping. This is the amount that the United States must borrow in order to finance its imports of products that would not have been imported but for the market distortion. For shrimp, the annual cost during 2000 to 2003 was in the range of $5.8 million to $19.1 million. All told, these costs were $218.9 million during the four-year period examined.

Table 3. Certain Shrimp and Prawns:
Indirect Costs and Interest Costs due to Dumping

Item	2000	2001	2002	2003	Total
Indirect industry output multiplier	0.83	0.83	0.83	0.83	N/A
1-year T-bill rate (percent)	6.11	3.48	2.00	1.24	N/A
Lost indirect activity ($1,000)	43,686	41,219	40,613	49,339	174,856
Interest on borrowed funds ($1,000)	19,075	11,579	7,568	5,850	44,072
Sources: Bureau of Economic Analysis at http://www.bea.gov/bea/industry/iotables/prod/table_list.cfm?anon=97 (data for multiplier); Federal Reserve Bank of St. Louis at http://www.research.stlouisfed.org/fred2/series/GS1/downloaddata (interest rates); and authors' calculations.					

The dumping of a product does produce certain consumer benefits. In the comparative static analytical framework, these net gains are referred to as an increase in consumer surplus. This surplus comes from four sources: the producers' surplus, which declines due to unfair trade; the shifting of factors of production to other uses where they can be more profitably used, in theory, than in their

43 This estimated range is based on the benchmark "industry-by-industry total requirement table" for 1997. The indirect effect is calculated by subtracting the own-industry contribution from the total multiplier.

competition with unfair trade; lost revenue to all fairly traded imports, which lose volume and value due to unfair imports; and an increase in consumption that results from having access to unfair imports. As stated in the overview, the only consumer gain that unambiguously does not come at the expense of some other economic actor is the increase in consumption of the imported product, in this case, shrimp.[44] The annual consumer surplus gains from higher consumption of shrimp due to dumping have been estimated by the same model that was used to estimate the lost producer revenue caused by dumping. These values range from $9.0 million to $26.9 million. The estimated gains and losses (expressed as negative values) from unfair trade are summarized in the table below.

Table 4. Certain Shrimp and Prawns:
Summary of Costs and Benefits of Dumping

Item	2000	2001	2002	2003	Total
Lost revenue due to dumping ($1,000)	-52,384	-49,426	-48,699	-59,163	-209,672
Lost indirect activity ($1,000)	-43,686	-41,219	-40,613	-49,339	-174,856
Interest on borrowed funds ($1,000)	-19,075	-11,579	-7,568	-5,850	-44,072
Consumption gains ($1,000)	8,964	13,069	17,400	26,906	66,339
Sources: Author's calculations.					

Long-term impact of the order

It will not be possible to assess the full effect of the order until the sunset investigation takes place during 2010. Early indications are that the domestic industry has benefited from the investigation. Data from the National Marine Fisheries Service suggests that ex vessel prices for warmwater shrimp rose in 2004 from the low levels of 2003.[45] If the order is successful in eliminating dumping, the results above suggest an additional $48 million to $59 million in revenues would be available to the shrimp industry in normal years. However, Hurricane Katrina had a devastating impact on the economy of Louisiana, the major shrimp-producing state. Under these circumstances, the order is providing the U.S. industry with some breathing room to get back on its feet after a horrific natural disaster.

44 In the presence of a budgetary constraint, even this consumption would have a cost as it would come at the expense of some other substitute product.
45 National Marine Fisheries Service, Fisheries of the United States – 2004 (Nov. 2005) at 86.