

FACT SHEET UPDATE: JULY 2, 2002

LIKELY IMPACT OF U.S. TARIFF MODIFICATION FOR TUNA IMPORTED FROM ATPA BENEFICIARIES

Commission staff has prepared an updated version of the May 2002 tuna fact sheet to correct certain factual errors in the initial fact sheet released on the Commission's web site. While the general thrust of the paper has not changed, the authors are making changes that reflect additional data provided by interested parties and obtained from independent sources.

Significant changes are as follows.

1. Page 2. A revision is made to reflect new ownership of StarKist Seafood.
2. Page 2-3. Incorporating data obtained from the Inter-American Tropical Tuna Commission and from U.S. and foreign industry sources, new information is added concerning (1) the abundance of skipjack tuna in the eastern tropical Pacific and its implications for increased Andean production and trade, and (2) the cost of shipping tuna from the western to the eastern Pacific.
3. Page 3. A correction was provided, using reports and data obtained from U.S. and foreign harvesting industry sources, concerning the source of vessels in Pacific Rim industries.
4. Pages 4-5. Incorporating new data provided by the Government of Ecuador concerning labor productivity and employment in tuna canning, new estimates of the growth potential for Andean employment are provided.
5. Page 6. The estimate from the staff economic model of a U.S. production decline of up to 13 percent is not changed. However, it is noted that actual changes may occur in large increments rather than on a continuum. In other words, while the staff model estimates a decline in production of up to 13 percent, if a U.S. producer decided to exit the market entirely, rather than reduce production incrementally, the decline would be larger than 13 percent.

**FACT SHEET: UPDATE ON THE LIKELY IMPACT OF
U.S. TARIFF MODIFICATION FOR TUNA IMPORTED FROM ATPA BENEFICIARIES**
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U.S. International Trade Commission, July 2002

Summary

Both Houses of Congress have passed legislation to renew and expand the Andean Trade Preferences Act (ATPA), including the provision of some level of duty-free treatment for canned tuna, which currently is ineligible for ATPA benefits. In response to an oral request from the staff of the House Ways and Means and Senate Finance Committees, Commission staff analyzed the likely impacts of providing some level of duty-free treatment to U.S. imports of canned tuna from Andean countries.

Broadly, our analysis found the following likely impacts (growing in magnitude with the level of duty-free access):

- At least moderate decline in U.S. canned tuna prices and production, and reduced U.S. tuna harvests;
- Significant increase in U.S. canned tuna imports. Much of the increased imports from ATPA sources would displace imports from other sources;
- Decreased Federal revenues from import duties;
- Slight increase in Andean production, employment, and overall exports; and
- Moderate decline in third-country (mainly ASEAN) production, employment, and exports.

Summary of staff model's estimated economic impacts of duty-free Andean canned tuna						
Likely effect on U.S.	Proportion of 2001 apparent U.S. consumption given duty-free treatment for ATPA countries					
	5	7*	10	20	50	100**
<i>Percent change</i>						
The quantity of:						
Canned tuna production	-1	-2	-4	-10	-13	-13
Canned tuna consumption	-	-	-	-	1	1
Canned tuna imports:						
All sources	2	5	7	20	28	28
From ATPA beneficiaries	39	95	176	456	602	602
From non-ATPA beneficiaries	-3	-8	-14	-34	-43	-43
Wholesale price of domestic canned tuna	-	-	-1	-2	-3	-3
<i>Million dollars</i>						
Federal revenues	n/a	-\$9.2	n/a	n/a	n/a	-\$22.8
* Approximately 20 percent of domestic pack as defined in the Senate version.						
** House version of legislation.						
- Less than 0.5 percent.						
Source: Commission staff estimates. Qualitative aspects of the quantitative results of the model are discussed below.						

The analysis also examined the likely impacts of a country-of-origin restriction providing duty-free treatment only for tuna harvested by U.S.- or Andean-flag vessels. The results suggest that, relative to duty-free access without the restriction, there would be (1) higher raw material costs for ATPA tuna canners, and therefore a smaller increase in U.S. imports of ATPA tuna; (2) a smaller drop in U.S. prices

¹ Agriculture Division, Office of Industries. The views expressed here are solely those of the authors, and are not the views of the Commission as a whole or any individual Commissioner. James Fetzer of the Office of Economics kindly provided modeling assistance. This fact sheet is based on a broader, ongoing staff research study.

for canned tuna, and as a result, a smaller decline in U.S. production and a smaller increase in U.S. consumption of canned tuna; and (3) a smaller drop in Federal revenues.

Introduction

The product examined here is tuna in airtight containers (cans or pouches), hereinafter, “canned tuna.”² Three firms account for nearly all U.S. production of this product. The largest, with 44 percent of the U.S. market in 1999, is StarKist Seafood, a Pittsburgh-based subsidiary of Del Monte (which recently acquired StarKist from H.J. Heinz Company). Bumble Bee Seafoods, a San Diego-based unit of ConAgra (of Omaha), accounted for 23 percent of U.S. consumption in 1999. Chicken of the Sea International, headquartered in San Diego and owned by Bangkok-based Thai Union Frozen Foods, supplied 17 percent of U.S. consumption in 1999. (Thai Union also is Thailand’s largest tuna canner and exporter). The remaining 16 percent of consumption is imported by other firms. StarKist and Chicken of the Sea each operate a tuna cannery in American Samoa; Bumble Bee operates two tuna canneries, one in California and one in Puerto Rico. All three are affiliated with tuna canneries abroad, including StarKist and Bumble Bee in an ATPA country (Ecuador).³

Ecuador is the largest Andean tuna producer and exporter, with more than half of the region’s supply (followed by Colombia, the only other significant producer). Ecuador is also the second largest supplier of U.S. imports (behind Thailand, see below), due in large part to investment by U.S. canners in both full-scale canneries and plants that produce loins (which is the most labor-intensive part of canned tuna manufacture and is increasingly done in low-wage locations). Its growth in the last decade is due largely to the European Union version of ATPA, which includes canned tuna processed from fish landed by EU- or Andean-flag vessels (Spain is the primary EU harvesting nation operating in the region). Exports of canned tuna to the EU market grew more than ten-fold during the 1990s, displacing much of the EU-bound exports from ASEAN countries.⁴ However, future growth in Ecuadorian (and all Andean) production will be constrained by limits on tuna abundance in regional waters (as well as periodic disruptions by El Niño).⁵ Any significant growth in output, once regional harvests reach their sustainable

² Classified in the Harmonized Tariff Schedule of the United States under subheadings 1604.14.10 to 1604.14.30. Tuna has traditionally been marketed in metal cans. However, a newly introduced product, tuna in flexible pouches, is currently imported and domestically produced in small amounts; it too is considered in airtight containers and unless otherwise noted, is included in any mention herein of “canned tuna.” An intermediate-stage product is “loins,” or large chunks of meat taken from the sides of a whole tuna. As will be described, loins (HTS 1604.14.40 and 1604.14.50) have become a significant item in international trade.

³ See appendix for more information on the U.S. industry.

⁴ The Association of Southeast Asian Nations, including Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

⁵ The principal tuna species in the eastern tropical Pacific (ETP) are yellowfin and skipjack. The ETP harvest of yellowfin is subject to country-specific quotas set by the Inter-American Tropical Tuna Commission; the harvest of skipjack is not. According to the IATTC, the harvest of ETP skipjack in 2001 (141,300 metric tons) was about 20 percent below the average during the previous five years (174,100 metric tons). The assumption in this paper is that the five-year average represents the maximum sustainable harvest rate for skipjack.

An increase in ETP skipjack harvest to its assumed maximum, if processed into Andean tuna for export to the United States, would equal 24,700 metric tons of canned product, which is about 170 percent of 2001 U.S. imports from Andean sources and about 5 percent of apparent U.S. consumption.

maximum, would have to come either at the expense of other Latin American industries or by importing raw tuna from distant locations, the added cost of which could offset most or all duty preferences.⁶

ASEAN countries – mainly Thailand, the Philippines, and Indonesia – have long been the largest foreign suppliers to the U.S. market (indeed, to the world).⁷ Their dominant position is due mainly to low labor costs, stable business relations with developed economies, a long history of canning food products, and an abundance of tuna resources in the western tropical Pacific. ASEAN accounted for 80 percent by value and quantity of U.S. imports in 2001, down from more than 90 percent two years earlier. Their share has been eroded by competition from Andean as well as other Pacific nations (e.g., Fiji and Papua New Guinea, which enjoy similar wage and tuna-abundance advantages as ASEAN nations), also fueled largely by U.S. industry investment.

In many of these industries as well as other Pacific Rim industries, the harvesting sector supplying the canneries has grown mainly by the purchase of new vessels built in Taiwan or other locations and partly by the purchase of former U.S.-flag harvesting vessels. (U.S. fleet operations are addressed later in this paper.)

The EU canned tuna market, as a whole, is the world's largest, and is supplied mainly by developing-country industries benefitting from ATPA and Lomé Convention preferential arrangements. Besides the Andean countries, important sources of EU tuna are various countries in Africa and the Indian Ocean (e.g., Seychelles). In most of these locations, U.S. canners also have investments in canning and/or loining. Of the three major U.S. canners, only StarKist has a significant EU presence: it is a dominant supplier in the French and Portuguese markets. However, no significant supplies to these markets come from U.S.-based operations.

Canned tuna is currently excluded from the U.S. Andean Trade Preferences Act (ATPA). However, both Houses of the U.S. Congress have recently passed legislation that would provide duty-free benefits for some portion of Andean supply: the House version would waive duties for 100 percent of Andean exports, and the Senate version would provide for an amount equal to 20 percent of “domestic pack” (excluding Samoa) (about 7 percent of apparent U.S. consumption). The U.S. duties for canned tuna depend on the medium in which the tuna is packed: 35 percent for tuna packed in oil, and a 6 - to - 12.5 percent tariff rate quota equal to 20 percent of the previous year's domestic pack (excluding Samoa) for tuna packed “not in oil” (e.g., in brine or spring water). Until recently, virtually all U.S. imports were tuna in water; however, oil-packed imports from Ecuador and Thailand are rising. Together, imports of these products supplied about one-third of the U.S. market in 2001.

Impacts on total U.S. imports

The staff analysis suggests that, with *complete* duty-free access, total U.S. canned tuna imports would rise by as much as 28 percent in quantity (about 37,000 metric tons, based on 2001 trade) (see table 1). This estimate applies for duty-free quotas on ATPA tuna of any amount greater than 25 percent of

⁶ The cost of shipping raw tuna from the western tropical Pacific, according to U.S. and Ecuadorian industry sources, ranges from \$110 to \$165 per ton. This adds 17 to 25 percent to the cost of a \$600/ton shipment of raw tuna, which translates to 10 to 15 percent of the cost of canned product.

⁷ ASEAN exporters are much less competitive in the EU market than Andean exporters, however, because they have no duty-free preferences that help them avoid the EU Most Favored Nation (MFN) duty of 24 percent on canned tuna.

apparent U.S. consumption.⁸ This estimate is for total imports and represents the maximum likely net effect of increased imports from Andean sources (up by as much as 88,000 metric tons), and displaced imports from non-Andean sources (down by 51,000 metric tons). Smaller duty-free quotas probably would cause smaller impacts on U.S. imports, both from ATPA and non-ATPA sources.

Imports from ATPA sources

The immediate effect of ATPA duty-free access logically would be an increase in imports of Andean canned tuna. All other impacts – on prices, U.S. production and consumption, on imports from non-ATPA sources – arise from this initial response. The size of the increase depends on many factors, including the availability of additional raw tuna to Andean canneries, their ability to divert existing exports from markets other than the United States, and the price response in the U.S. market (which depends on other exporters to the U.S. market, on the product form exported – cans or pouches, and on consumer behavior and domestic supply response).

Based on information obtained on these factors, duty-free access could lead to an eventual increase in U.S. imports of Andean canned tuna of as much as 600 percent, or by about 88,000 metric tons, based on 2001 trade. This outcome is possible for any duty-free quota in excess of 25 percent of U.S. consumption. This estimate would place ATPA exports at about 25 percent of U.S. consumption, which is near the practical economic limit to increased Andean capacity to export to the U.S. market.

Under the Senate version (a 7-percent duty free quota), U.S. imports of Andean tuna could rise by 95 percent, or about 13,800 metric tons based on 2001 trade.

The total value of U.S. imports of Andean tuna would not rise as much as quantity because the price of Andean tuna in the U.S. market is likely to fall as part of the duty savings is passed on to importers. (The rest of the duty savings would go to Andean exporters.) The distribution of the duty savings suggests that, in the event of complete duty-free access, gains to U.S. importers would account for as much as 6.7 percentage points of the 12.5 percent duty savings. (That is, wholesale prices in the U.S. market could fall by up to 6.7 percent). The remaining 5.8 percentage points of savings would go to ATPA beneficiary nations in the form of higher prices received by their exporters. Under a 7-percent quota, there would be smaller savings but similar distribution of benefits.

The likely impact on Andean cannery employment under the House version of the legislation would be 1,230 to 2,340 new jobs.⁹

⁸ That is, for smaller quotas, the quota would in fact be binding and imports would be correspondingly smaller. Quotas of more than 30 percent would not be binding, because Andean exporters cannot at present easily and economically provide a quantity greater than 30 percent of 2001 consumption. This is the reason why the estimated impacts described in this paper stop rising after the duty-free quota exceeds approximately 30 percent of apparent U.S. consumption.

⁹ The range is due to different sources of data on Ecuadorian labor productivity. The low end of the range is derived from data supplied by the Government of Ecuador (Ministerio de Comercio Exterior, Industrialización, Pesca y Competitividad). The high end of the range is derived from data supplied by the National Fisheries Chamber of Ecuador. Currently, according to the Government of Ecuador, 11,250 people are employed in tuna canning, and an additional 42,000 are employed in ancillary industries such as box manufacture.

The main source of new jobs (75 to 85 percent) would be an increase in full-scale canning. This would primarily be of skipjack tuna whose abundance is indicated by information from the IATTC to enable an increased harvest of 25 percent over 2001 levels. If this entire hypothetical increase in harvest were to be used by Andean canneries for export to the U.S. market, the employment gains reported here would result. This increased harvest would require additional investment in new harvesting vessels of, according to industry sources, \$100 million to \$150 million.

A secondary -- but more ready -- source of new jobs (15 to 25 percent) would be in the conversion of

Job creation with the Senate version's duty-free quota could range from 225 jobs to as many as 600 jobs.

Imports from non-ATPA sources

Most of the increase in U.S. imports from ATPA sources would displace current U.S. imports from non-Andean (primarily ASEAN) sources, which accounted for 80 percent of U.S. imports (quantity and value) in 2001. This is because of similarities in the products and the market channels through which both groups' products are distributed. The analysis suggests that, in the event of complete duty-free access for Andean tuna, U.S. imports from non-Andean sources could fall by as much as 43 percent, or 51,000 metric tons, based on 2001 trade. Under the Senate version (7 percent duty free quota), U.S. imports from non-Andean sources could fall by 7.5 percent, or 8,870 metric tons.

This estimate is for ASEAN exports to the U.S. market, not total ASEAN exports. Overall, ASEAN exports would fall by a smaller amount because ASEAN exporters have an established presence in non-U.S. markets such as Japan and the EU, to which they could divert exports from the U.S. market (at a likely loss in revenues because ASEAN countries have no duty preferential treatment). In addition, should U.S. canneries respond to Andean competition by shifting to loin processing, U.S. demand for ASEAN loins could actually increase. This is important because if an increase in ASEAN loin exports made up for a decrease in canned exports, it could recover up to 80 percent of the ASEAN tuna cannery employment that would be sacrificed as canned exports decline. In addition, harvesting employment would be retained, to catch the fish used to make the loins. Although an increase in loin exports probably would not replace all lost canned exports, any increase would help offset ASEAN employment impacts. In locations such as the Philippines, the tuna industry is an important regional employer, and the possibility of economic loss due to increased Andean competition has drawn the attention of U.S. and foreign Government officials and the media.¹⁰

Impacts on U.S. prices, production, and employment

Prices in the U.S. market

Based on the analysis and consideration of appropriate price-elasticities of demand and supply, the probable decline in price of Andean tuna that would result from passing along duty savings would cause reductions of no more than 2.7 percent of the wholesale price of domestically produced tuna and 1.7 percent of the composite (weighted average) wholesale price of domestic plus imported tuna.

On this question, much depends on the product form that ATPA exporters ship to the U.S. market. Traditionally, tuna has been marketed in metal cans. However, recently a new product, tuna in flexible pouches, has been introduced. It is this product that accounts for almost all of the rapid increase

existing loins to canned product. The estimates reported here assume all loins exported to the U.S. market and 25 percent of loins exported to non-U.S. markets would instead be processed into canned product and exported to the U.S. market. Diversion of existing canned tuna exports from non-U.S. markets to the U.S. market is assumed likely to occur but not to create any new jobs.

¹⁰ See, e.g., "Drugs, Terror and Tuna: How Goals Clash," *The New York Times*, May 16, 2001, p. 1; and "Cruz: RP seeking protection of canned tuna exports to US," *The Mindanao [Philippines] Times*, May 3, 2002, retrieved from the Internet on May 26, 2002, at <http://www.mindanaotimes.com.ph/news/>; "U.S. Senators Back Philippine Government on Tuna Exports," Dow Jones newswire, May 29, 2002.

in U.S. imports from Andean countries since 2000.¹¹ Pouches reportedly accounted for 6 percent of the value of U.S. tuna sales in 2001 (and a somewhat lower share of quantity).¹²

Pouches are not presently a close substitute for canned tuna. They contain almost no added liquid (oil or water) and, according to marketing officials of the three domestic canners, consumers consider pouches a higher quality product than the stew-like substance that canned tuna has evolved into. Moreover, because a pouch contains almost 100 percent tuna meat, while a can contains one-third to one-half liquid medium, the retail price per pound listed on grocery store shelves is higher for pouches. U.S. industry sources interviewed by Commission staff have described the higher listed unit price as a deterrent to consumers contemplating a purchase of pouches.¹³ Thus, if future growth in ATPA exports take the form of pouches, there will be a smaller direct price impact on domestic canners than if canned tuna is exported.

Domestic production

The analysis suggests a maximum decline in U.S. production of canned tuna of about 13 percent in quantity and 15 percent in revenues, below levels that are likely to occur if no ATPA tariff modifications are made. Under a 7- percent quota, U.S. production could fall by 2 percent in both quantity and value. The principal consideration that could significantly alter these estimates is if pouches dominate future imports, which could lessen any production impacts since pouches are not as close a substitute as canned imports.

These burdens, however, probably would not be equally distributed across the industry. The economic model assumes a continuous relation between price and supply, whereas in fact there is considerable “lumpiness” in U.S. canned tuna supply. That is, canners generally do not alter production levels in small increments in response to price changes. Rather, entire shifts or production lines are added or curtailed; in the extreme, a decline in price can cause a cannery to be shut down altogether, without first curtailing production.

Labor costs are the largest influence on international competitiveness in tuna canning. Other costs do not vary as much by location: canneries the world over generally use the same technology (and so incur similar capital costs); the price of fish, a fungible commodity, is generally set on international markets and the delivered cost is subject mainly to differences in transportation costs (see below). The

¹¹ Additional supplies are imported from Thailand and Korea. To date, U.S. canneries have produced pouches mainly for institutional use (such as the military, which also requires that the tuna in the pouch be harvested by a U.S.-flag vessel). Because pouches must be hand-packed and are very labor intensive relative to metal cans, most retail-size pouches are imported from countries with low labor costs. Eventually, if demand grows sufficiently, U.S. and Andean industry officials expect that automation may become feasible, which may encourage domestic canners to produce more retail pouches.

¹² Testimony of K. Ward Rodgers, Heinz North America and StarKist Seafood, before the Senate Committee on Finance, Subcommittee on International Trade, Aug. 3, 2001.

¹³ This may change if an industry-sponsored request submitted in 1994 to the Food And Drug Administration (FDA) to change unit pricing to drained-weight equivalent is successful. However, this analysis assumes the current FDA rules.

most significant difference in relative canning costs across locations is the cost of labor, which accounts for as much as 20 percent of the cost of producing a can of tuna.¹⁴

There are significant labor cost disparities across different tuna-processing locations (see box). High U.S. wages put U.S. canneries at a significant competitive disadvantage against foreign exporters. In this respect, the California and Puerto Rico canneries are the most disadvantaged of all.

Tuna cannery labor costs (\$/hour)	
<u>Location</u>	<u>Hourly labor cost (incl. benefits)</u>
California	\$11.00
Puerto Rico	\$6.50
Am. Samoa	\$3.75
Ecuador	\$0.77
Philippines	\$0.67
Thailand	\$0.66
Indonesia	\$0.16

Source: Industry estimates.

Transportation costs are incurred by canneries that are too distant from the fishing grounds for harvesters to land directly at the cannery. For canneries in California and Puerto Rico, according to U.S. and foreign industry sources, this cost ranges from \$110 to \$165 per metric ton (adding from 17 to 25 percent to the cost of a \$650/ton shipment of tuna and 4 to 6 percent to the cost of a can of tuna). In contrast, there are generally no transportation costs incurred by Andean or Samoan canneries; rather, harvesters land their catch directly at the dock.¹⁵

An additional regional-impact consideration arises from the fact that California and Puerto Rico canneries rely significantly (although decreasingly)¹⁶ on Andean loin exports for their raw material, and ATPA treatment is likely to accelerate the current shift by the Andean industry from exporting loins to exporting value-added canned product.

American Samoa is not immune from the possibility of economic loss, although it is less vulnerable than the other U.S. regions. Both Samoan canneries are vulnerable to Andean competition, although in different degrees and for different reasons: not for any obvious cost differentials (the two canneries are similar in technology and in most cost respects) but because of their corporate structures. In many respects the canneries are similar: they incur high labor costs and are ineligible for EU duty-free treatment, and, according to their representatives interviewed by Commission staff, they both owe their continued success in Samoa mainly to Federal and Samoan tax and tariff advantages and a lower minimum wage than on the mainland United States and Puerto Rico.¹⁷

¹⁴ Other cost items -- each smaller than labor in the overall cost structure -- that are somewhat lower in developing economies include administrative salaries, construction and capital costs, regulatory compliance costs, and the costs of packing supplies. Statement of COS [Chicken of the Sea] Samoa Packing Company, before the U.S. Department of Labor, Special Committee No. 24 for American Samoa, hearing, June 5, 2001, p. 17.

¹⁵ At the canneries, however, the boats incur an added cost in the form of waiting in unloading queues for anywhere from a few days to several weeks, depending on supply/demand conditions and the boat-owner's relationship with the cannery. Such delays mean fewer fishing trips per year.

¹⁶ According to the U.S. Department of Commerce, the share of U.S. loin imports from Andean sources fell from 65 percent during 1997-2000 to 52 percent in 2001 and 52 percent during January-March 2002. (Data exclude imports into American Samoa.) Much but not all of this shift is due to the 2001 closure of a cannery in Puerto Rico that had relied on Andean loins, and the transfer of its equipment to an Ecuadorian location. Information from industry interviews and Statement of Barry Mills, vice president for North and Latin American Tuna Operations, StarKist Seafood, before the U.S. Department of Labor, Special Committee No. 24 for American Samoa, hearing, June 5, 2001.

¹⁷ Another advantage is proximity to rich fishing grounds; however, according to industry sources, it is the tax, tariff, and wage constraints that have led to cannery investment in Samoa rather than neighboring island nations.

The cannery operated by Chicken of the Sea International (COSI) is owned by Thai Union, a major tuna canner in Thailand, which is the single largest supplier of U.S. imported canned tuna and thus faces the possibility of economic loss from increased Andean competition. Based on information provided by U.S. and Thai industry sources, a sizeable displacement of Thai exports by increased Andean exports could threaten the COSI cannery by weakening the parent firm. Thailand's likely reaction to U.S. ATPA benefits for tuna will be to divert exports of canned product from the U.S. market to the European market, and in that market Thai Union would have little use for its Samoan cannery. The cannery is on the other side of the globe, it has labor costs at least five times its rivals', and it is ineligible for the European Union's version of ATPA, which already covers certain canned tuna.

The StarKist Samoa (SKS) cannery may also face economic loss but to a lesser extent than the COSI cannery. The parent firm has in recent years entered into co-packing or other arrangements with at least three Andean establishments and is now, according to industry sources, the largest U.S. importer of Andean canned tuna. It has stated many times that labor costs drive cannery competitiveness¹⁸ and that, as U.S. pouch sales increase, StarKist would "prefer" to expand capacity in Ecuador because of its low labor costs.¹⁹ It has repeatedly argued against "any increase" in the Samoan minimum wage, which increase it says would squeeze its already narrow margins – much as would a price decrease caused by additional imports in the U.S. market – and force the parent firm to rethink its investment in the location.²⁰ In 2001 it closed its Puerto Rican cannery, which at one time employed more people than its Samoan cannery, and moved the assets to Ecuador explicitly because of labor cost differentials.²¹ Finally, the cannery's parent firm also operates foreign canneries besides the Ecuador operations, including a major presence in Europe and its EU-ATPA beneficiaries, where it is well positioned to fill any vacuum left if Andean canned exports to Europe are diverted to the U.S. market. However, the Samoan cannery is unlikely to gain any benefit from the parent's added European sales because of its labor costs and distance from the market and the fact it cannot export to Europe duty-free, unlike some of StarKist's other locations.²²

However, the parent company of SKS (StarKist Seafood) has emphasized its commitment to its Samoan location not only to Commission staff²³ but also in other venues.²⁴ Therefore, it appears that the SKS cannery is less likely than its COSI rival to close in the face of substantially increased Andean competition; in fact, in Commission staff interviews, StarKist officials stated their interest in buying the COSI cannery (which is next door to the SKS cannery) should Thai Union decide to sell it if tuna receives

¹⁸ See, e.g., the firm's Statements before U.S. Department of Labor, Special Industry Committees for American Samoa (Committee Nos. 21, 22, 23, and 24), minimum wage hearings for 1995, 1997, 1999, and 2001; also, testimony submitted to the Commission on *Competitive Conditions Affecting the U.S. Tuna Industry*, USITC Investigation No. 332-224, USITC Publication 1912 (Oct. 1986), and *Tuna: Current Issues Affecting the U.S. Industry*, USITC investigation No. 332-313, USITC Publication 2547 (Aug. 1992) (hearing, Feb. 4-5, 1992).

¹⁹ Testimony of K. Ward Rodgers, Heinz North America and StarKist Seafood, before the Senate Committee on Finance, Subcommittee on International Trade, Aug. 3, 2001.

²⁰ See statements to the U.S. Department of Labor, op. cit.

²¹ Statement of Malcolm E. Stockwell, consultant, StarKist Seafood, before the U.S. Department of Labor, Special Committee No. 24 for American Samoa, hearing, June 5, 2001.

²² Thai Union/COSI also operates both in Samoa and in developing-economy locations to supply the U.S. and European markets and both could potentially increase sales to Europe. A notable difference between that firm and StarKist is that the latter, unlike the former, has duty-free access to the European market, where it already enjoys strong brand identification.

²³ Commission staff telephone communications, May 2002.

²⁴ In its 2001 corporate Strategic Plan, for example, the company stresses the importance of maintaining simultaneous access to tuna resources in the western and eastern tropical Pacific: "Given our light meat fish requirements and the capacity limitations of the ETP, we must maintain access to both the ETP and the WTP. Samoa is ideally located near the most prolific fishing grounds (WTP)... Due to ever-changing fishing conditions, prompted by factors such as EL Nino, a presence is required in at least two fisheries to maintain supply and manage arbitrage opportunities." StarKist Strategic Plan, 10/19/01, p. SC-46.

U.S. ATPA benefits.

Before closing operations, however, the most likely way the Samoan canneries would react to increased Andean competition is to continue what they have already started: shifting to the processing of imported loins instead of raw fish delivered by foreign and U.S. harvesters. The ramifications for U.S. harvesters of this and other likely events is examined next.

U.S. tuna harvesters

There are currently about 40 U.S. tuna purse seiners (which harvest tropical tunas such as yellowfin and skipjack for “light meat” canned tuna), down from 90 in 1985.²⁵ Of these, eight operate in the eastern tropical Pacific (ETP) and the rest operate in the western/central tropical Pacific (WTP). The ETP seiners land their harvest mainly in ports in Latin America (including Andean countries); some also deliver their catch via the Panama Canal to the Puerto Rican cannery. The WTP seiners land most (at least 95 percent) of their harvest in American Samoa; the rest is delivered to the Philippines and other regional locations or shipped to more distant sites such as Thailand. Such foreign deliveries typically entail higher costs in terms of time, fuel, and other operating expenses incurred while steaming to such locations, or paying shipment fees to carriers.²⁶

This analysis suggests that a quota at the lower end of the range would not significantly impact the purse seine sector as a whole – although, some vessels probably would be forced out. A large quota, especially complete duty-free treatment, could possibly lead to elimination of U.S. canners’ demand for whole tuna (as they convert to loin processing). This would cause some vessels either to seek alternative markets or to exit the industry. Alternative markets include the growing Andean industry, whose demand for U.S.-harvested tuna would be materially increased by a country-of-origin restriction on the flag of the vessel harvesting the tuna canned for duty-free treatment. “Exiting” the industry typically entails sale of the boat to a foreign buyer, which also could be located in an Andean country but is as likely to be in one of several other Pacific Rim nations.²⁷ Older, smaller boats probably would be scrapped.

There is also a fleet of U.S. albacore vessels (which use a different technology than purse seiners), operating mainly in the North Pacific. These vessels harvest a variety of fish species, including albacore tuna which is used to make “white meat” canned tuna. Their numbers are less exact than the seiner fleet because of the multi-species nature of their production, enabling them to more easily enter or exit the albacore fishery as relative fish prices and other economics dictate. These vessels deliver their catch primarily to American Samoa; some is also delivered to foreign locations.

²⁵ U.S. International Trade Commission, *Competitive Conditions in the U.S. Tuna Industry*, Report to the President on Investigation No. 332-224, USITC Publication 1912, Oct. 1986. There was a decline in vessel numbers following the adoption in the early 1990s of “dolphin safe” policies by U.S. and foreign canneries; in more recent years, according to U.S. vessel owners and cannery officials, U.S. cannery closures have led to a further reduction in the fleet. Much of the increase in the Andean fleet is accounted for by former U.S.-flag vessels.

²⁶ Vessel owners informed Commission staff that they dislike foreign deliveries because of the danger of vessel damage by terrorism, and the human and economic risk of loss by piracy. For example, a major Philippine tuna port, General Santos City, was recently the scene of violence that Philippine officials have characterized as terrorism. See, e.g., “Drugs, Terror and Tuna: How Goals Clash,” *The New York Times*, May 16, 2001, p. 1.

²⁷ Andean demand for additional tuna vessels is unlikely to expand as rapidly as its cannery sector because there is little or no surplus tuna in the eastern tropical Pacific (ETP) fishery. New vessels would either replace aging ones, displace existing ones of other Latin American or European nations operating in the ETP, or, less likely because of transportation costs, operate in the central/western tropical Pacific, where there is a surplus of tuna, according to officials of the IATTC. Sources in the U.S. harvesting sector say that there is, and will likely continue to be, a market for surplus U.S. harvesting vessels in a number of western Pacific Rim nations.

U.S. albacore vessels could significantly benefit from a country-of-origin restriction for Andean duty-free treatment, because there are numerous competing suppliers of albacore to the Andean industry that would be shut out by such a restriction, raising the likely price offered by Andean canners for U.S.-harvested albacore. Thus, there would be impacts on prospective Andean canners of albacore, which would have to pay such higher whole-fish prices.

Employment

Complete duty-free access for ATPA canned tuna could result in an estimated loss of 15 to 74 percent of current U.S. cannery employment. At current employment of about 6,000, this is 900 to 4,440 jobs. A 7-percent quota could cause employment to fall by anywhere from an estimated 2 percent (120 jobs) to 71 percent (4,230 jobs). The actual figure in either case depends on the extent to which U.S. canneries turn to loin processing in response to increased imports.

Evaluating likely job loss is difficult because it depends largely on whether U.S. canneries turn to loin processing or shut down altogether. Either way reduces employment, but the former allows canneries to sustain high output levels. Converting a full-scale cannery to a canner of imported loins²⁸ eliminates the need for about 80 percent of the workforce – that portion which was engaged in the processing of whole tuna into loins.²⁹ Closing the cannery down altogether eliminates 100 percent of the jobs. (Reducing the cannery's capacity by a given percent eliminates at most the same percentage of the jobs; however, some jobs are necessary as long as the cannery is operating at any level.) Thus the estimates include a range that covers both scenarios, increased loin processing and shut-downs. Increased loin processing is more likely for small duty-free quota levels, and capacity reduction or even shut-downs are more likely with large quotas.

In table 2, there are two general scenarios and, within each one, four sub-scenarios. The two general scenarios are (1) Andean exports consist mainly of tuna in metal cans (which have a larger direct competitive impact on the U.S. industry than pouches), and (2) Andean exports consist mainly of tuna in pouches (which have a smaller direct competitive impact on the U.S. industry than metal cans).

Within each of these scenarios, there are four possible cannery reactions in terms of input mix: (1) all canneries retain their current input mix of loins and/or whole fish; (2) full-scale canneries increase their use of loins relative to whole fish by 25 percent; (3) full-scale canneries increase their use of loins relative to whole fish by 50 percent; and (4) all canneries revert to exclusively processing imported loins.

In all cases, employment declines because the principal input into the analysis is the likely change in overall industry production described earlier. But any given drop in production can have a variety of employment effects, depending on the cannery responses in our scenarios.

Impacts on apparent U.S. consumption

The analysis suggests a likely increase in U.S. canned tuna consumption of no more than two percent above the level that would prevail without ATPA tariff modification.

One of the most immediate impacts of lower prices is the benefit to consumers. Canned tuna is

²⁸ Such as is gradually happening to the Puerto Rican plant, which imports its loins from an affiliated loin processor in Trinidad and Tobago, among other sources.

²⁹ In estimating job impacts, the assumption was made, based on information from industry sources, that on average, one million cases of canned tuna supports 275 jobs, of which 220 are engaged in processing whole fish to loins and 55 process the loins into canned product.

the most popular seafood in America and is consumed by 96 percent of the nation's households.³⁰ However, although many people eat tuna, they do not eat much of it: per capita consumption has hovered between three and four pounds (about eight to ten 6-ounce cans) per year for many years. U.S. industry representatives characterize the U.S. tuna market as mature, noting that per capita consumption has been flat and traditional retail sales are actually declining (partially offset by gains in nontraditional outlets such as "club stores" and department stores).³¹ Likely declines in wholesale prices probably wouldn't be reflected in lower retail prices, according to tuna industry officials, because a general trend toward consolidation in grocery retailing is widening retail-wholesale price margins.

Impacts on Federal tariff revenues

There could be a loss in Federal tariff revenues of as much as \$22.8 million from duty-free access to Andean canned tuna under complete duty-free access (the House version of the legislation), and as much as \$9.2 million under a 7-percent duty-free quota (the Senate version). The House estimate is based on 2001 trade patterns, and is the sum of the lost revenue from previously dutiable Andean tuna (\$6.3 million, or 28 percent of the total) plus lost revenue from the likely reduction in imports of non-Andean tuna (\$16.5 million, or 72 percent of the total). The Senate estimate also is based on 2001 trade patterns, and is the sum of the lost revenue from previously dutiable Andean tuna (\$6.3 million, or 69 percent of the total) plus lost revenue from the likely reduction in imports of non-Andean tuna (\$2.9 million, or 31 percent of the total). The estimates of reduced non-Andean tuna take into account the added impact of lower prices for the remaining imports.

Impacts of a country-of-origin restriction

The analysis also examined the likely impacts of a country-of-origin restriction providing duty-free treatment only for tuna harvested by U.S.- or Andean-flag vessels. This restriction would be similar to one that has long been in place in the EU version of ATPA, which has provided benefits mainly to the Spanish tuna industry. Relative to duty-free access without the restriction, such a restriction probably would cause higher raw material costs for Andean tuna canners (because they could buy from a smaller number of harvesters), and therefore would lead to a smaller increase in U.S. imports of Andean tuna and a smaller displacement of U.S. imports of non-Andean tuna. As a result, there could be a smaller drop in U.S. prices for canned tuna. This in turn probably would cause a smaller decline in U.S. production and a smaller increase in U.S. consumption of canned tuna. In addition, because of the smaller import effects, there would be a smaller drop in Federal revenues. As noted earlier, there could be significant benefits to U.S. albacore harvesters, which would be the only likely suppliers of albacore to Andean canneries, because there are only limited albacore resources within the range of Andean harvesters.

Conclusion

Commission staff analyzed the likely impact of providing some level of duty-free treatment to U.S. imports of canned tuna from Andean countries. The results of the staff analysis indicated that competition with (and displacement by) any increase in U.S. imports from Andean sources would be felt more keenly by other foreign suppliers to the U.S. market than by domestic producers – although both groups face possible economic loss from increased Andean competition. The reasons why non-Andean

³⁰ Source: A.C. Nielsen; industry sources.

³¹ See, e.g., Statements submitted by officials of StarKist Samoa and COS Samoa Packing [Chicken of the Sea] to the U.S. Department of Labor, Special Industry Committee No. 24, hearing, June 5, 2001.

exporters face a greater possible loss are (1) the similarity between the products exported by Andean and non-Andean suppliers to the U.S. market and (2) the similarity between the U.S. buyers of the two groups' exports. Currently, U.S. imports from both Andean and non-Andean sources enter three broad market channels: the institutional trade (restaurants, schools, etc.), where brand is less important than price and quality; the private-label (as opposed to national brands) retail trade, where price is paramount; and co-packing arrangements with major U.S. tuna canners under their nationally marketed labels. In each of these markets there is a strong likelihood of a shift by buyers from non-Andean sources to Andean ones in response to duty-free access by Andean exporters.

The smaller but still likely economic loss to domestic producers would come mainly from two sources. One is a price reduction for private label tuna, which would upset the pricing structure of the national brands that, according to industry sources and econometric analysis by Commission staff, base their prices on private-label prices. The other is the likely reduction in availability of imported loins (which could be processed abroad into canned product before export to the U.S. market). The risk from imported private-label tuna faces all U.S. canneries; the risk from reduced loin supplies primarily faces the California and Puerto Rico canneries.

Any risk of economic loss to American Samoan canneries is a risk to U.S. tuna harvesters, who rely on the Samoan canneries to purchase more than 95 percent of their harvest. Such a risk would be somewhat mitigated by a country-of-origin provision giving Andean canners an incentive to buy U.S.-harvested tuna, and thereby provide a larger alternative market for U.S. tuna.³² Net returns from such sales, however, would not completely offset lost revenues from reduced sales to Samoa (otherwise such sales would already be made). The principal constraint is a set of harvest quotas in place in the eastern tropical Pacific (ETP), overseen by the IATC. Without access to ETP waters, any harvester turned away from Samoan canneries would have to pay transshipment costs of as much as 25 percent to deliver its western Pacific tuna to Andean canneries.

³² Currently only two U.S. harvesting vessels sell significant amounts of tuna to Andean canners.

Table 1
Likely impacts of ATPA benefits on U.S. canned tuna imports¹

ATPA duty-free access ²	Andean		Non-Andean		All sources	
	Low	High	Low	High	Low	High
————— Change in quantity (<i>thousand metric tons</i>) —————						
5 percent	5.7	5.7	-3.3	-3.7	2.4	2.0
6 percent	6.4	9.8	-3.6	-6.3	2.7	3.5
7 percent ³	6.4	13.8	-3.6	-8.9	2.7	5.0
8 percent	6.4	17.9	-3.6	-11.4	2.7	6.5
9 percent	6.4	21.9	-3.6	-13.9	2.7	8.0
10 percent	6.4	25.7	-3.6	-16.2	2.7	9.5
15 percent	6.4	46.3	-3.6	-28.4	2.7	17.9
20 percent	6.4	66.6	-3.6	-39.7	2.7	26.9
25 percent	6.4	87.0	-3.6	-50.4	2.7	36.6
30 percent	6.4	88.0	-3.6	-50.9	2.7	37.1
50 percent	6.4	88.0	-3.6	-50.9	2.7	37.1
100 percent ⁴	6.4	88.0	-3.6	-50.9	2.7	37.1
————— Change in quantity (<i>percent</i>) —————						
5 percent	39.0	39.0	-2.8	-3.1	1.8	1.5
6 percent	43.5	66.8	-3.1	-5.3	2.1	2.6
7 percent ³	43.5	94.6	-3.1	-7.5	2.1	3.7
8 percent	43.5	122.3	-3.1	-9.7	2.1	4.9
9 percent	43.5	150.1	-3.1	-11.8	2.1	6.1
10 percent	43.5	175.5	-3.1	-13.7	2.1	7.1
15 percent	43.5	316.9	-3.1	-24.1	2.1	13.5
20 percent	43.5	455.9	-3.1	-33.7	2.1	20.3
25 percent	43.5	594.9	-3.1	-42.7	2.1	27.6
30 percent	43.5	601.7	-3.1	-43.1	2.1	28.0
50 percent	43.5	601.7	-3.1	-43.1	2.1	28.0
100 percent ⁴	43.5	601.7	-3.1	-43.1	2.1	28.0
————— Change in value (<i>million dollars</i>) —————						
5 percent	12.8	16.7	-9.6	-10.7	3.3	6.6
6 percent	14.3	28.6	-10.6	-17.3	3.7	11.3
7 percent ³	14.3	40.3	-10.6	-24.4	3.7	16.0
8 percent	14.3	52.0	-10.6	-31.3	3.7	20.7
9 percent	14.3	63.7	-10.6	-37.2	3.7	25.4
10 percent	14.3	74.2	-10.6	-44.4	3.7	29.8
15 percent	14.3	132.3	-10.6	-77.8	3.7	54.5
20 percent	14.3	188.2	-10.6	-108.6	3.7	79.5
25 percent	14.3	242.7	-10.6	-137.4	3.7	105.3
30 percent	14.3	245.4	-10.6	-138.8	3.7	106.6
50 percent	14.3	245.4	-10.6	-138.8	3.7	106.6
100 percent ⁴	14.3	245.4	-10.6	-138.8	3.7	106.6

¹ The “low” estimates assumed low elasticities of supply, demand, and substitution; the “high” estimates assume high elasticities of supply and substitution and low elasticity of demand.

² As a percent of apparent U.S. consumption.

³ This is approximately equal to 20 percent of domestic pack as defined in the Senate version.

⁴ House version of the legislation.

Source: Commission staff estimates.

Table 2
U.S. cannery employment: Likely impacts under various scenarios

Scenario A: Andean exports are tuna in metal cans				
	Canneries maintain current input mix	Canneries decide to:		
		Raise loin use by:		Use loins 100%
ATPA duty-free access¹		25%	50%	
<i>Percent change in number of jobs</i>				
5 percent	-0.95	-18.13	-35.46	-70.17
6 percent	-1.55	-18.54	-35.79	-70.32
7 percent	-2.27	-19.04	-36.18	-70.50
8 percent	-2.86	-19.45	-36.50	-70.65
9 percent	-3.70	-20.03	-36.96	-70.86
10 percent	-4.18	-20.36	-37.22	-70.98
15 percent	-7.76	-22.84	-39.17	-71.88
20 percent	-11.33	-25.31	-41.12	-72.78
25 percent and above	-15.03	-27.87	-43.14	-73.72
Scenario B: Andean exports are tuna pouches				
	Canneries maintain current input mix	Canneries decide to:		
		Raise loin use by:		Use loins 100%
ATPA duty-free access¹		25%	50%	
<i>Percent change in number of jobs</i>				
5 percent	-0.95	-18.13	-35.46	-70.17
6 percent	-1.07	-18.21	-35.53	-70.20
7 percent	-1.07	-18.21	-35.53	-70.20
8 percent and above	-1.07	-18.21	-35.53	-70.20

¹ Percentage share of 2001 apparent U.S. consumption.

Source: Commission staff analysis.

APPENDIX
INDUSTRY PROFILES

The U.S. Industry

U.S. canned tuna production grew from 284,400 metric tons in 1997 to 304,500 metric tons in 2000 (the latest year for official statistics), an overall increase of 7.1 percent. Declining prices (especially for light meat tuna) during this period caused the total value of production to decline from \$918.7 million in 1997 to \$855.4 million, a drop of 6.9 percent. Table A1 presents data on these and other selected indicators for the U.S. tuna industry and market.

The industry has seen considerable consolidation during the last two decades. Five canneries, representing 30 to 40 percent of the 1979 industry workforce, shut down between 1979 and 1989, including four on the west coast and one in Hawaii. Since 1990, another six canneries have closed, mostly in Puerto Rico. Four canneries remain today: StarKist and Chicken of the Sea each operate a tuna cannery in American Samoa; and Bumble Bee operates two tuna canneries, one in California and one in Puerto Rico. Total direct employment in these canneries is about 6,000 persons, more than 5,000 of which work in American Samoa (but many are Western Samoan nationals). All three firms are affiliated with tuna canneries abroad, including StarKist and Bumble Bee in an ATPA country (Ecuador).

The international connections of these companies helps explain some of the trade patterns in table A1. ASEAN nations, particularly Thailand, supply the lion's share of U.S. canned tuna imports. Strong Thai ties to U.S. canners are not limited to Thai Union's ownership of Chicken of the Sea. Both StarKist and Bumble Bee have long had co-packing arrangements with Thai canners/exporters, to supplement their own domestic production as U.S. supply/demand conditions and other economic forces dictate.

More recently, ATPA countries have gained a larger share of the U.S. market, due in large part to investments in that region's tuna industry by U.S. canners. StarKist until recently ran its own canning operations in Ecuador, before selling the facilities and leasing them back from the owners. Part of these operations utilize machinery and equipment transferred from a Puerto Rican cannery StarKist closed in 2001. Bumble Bee also has investments in Ecuadorian tuna canning.

Despite the sharp drop in U.S. cannery numbers and employment, domestic industry output has remained high (and in fact increased in volume during 1997-2001, even as the number of canneries fell by a third). This is because the remaining canneries are processing less whole tuna and more loins (cooked meat) imported from abroad, where low wages make a labor-intensive process like loin processing economical. As a result, canneries can generate the same output with a fraction of the employment. Much of the loin supply imported by U.S. canneries comes from affiliated loin-making operations in the eastern and western Pacific regions and the Caribbean. There was a large rise in U.S. loin imports in 2001: that was due to the coming on-line of a loin-processing facility in Fiji, which has been shipping loins through the port of Los Angeles (probably to the Bumble Bee loin cannery in Santa Fe Springs).

Table A1
Selected indicators for the U.S. tuna industry and market

Items	1997	1998	1999	2000	2001	Percent
						change, 1997-2001 ¹
<i>Million dollars</i>						
U.S. canned tuna production	918.7	983.0	945.8	855.4	n/a	-6.9
U.S. canned tuna imports	250.0	289.0	335.8	258.5	314.1	25.6
Imports from ATPA	1.1	2.5	7.3	6.3	44.2	3,918.2
Share of total (<i>percent</i>)	0.4	0.9	2.2	2.4	14.1	-
Imports from ASEAN	241.5	277.4	316.6	238.7	254.7	5.5
Share of total (<i>percent</i>)	96.6	96.0	94.3	92.3	81.1	-
Total U.S. supply	1,168.7	1,272.0	1,281.6	1,114.0	n/a	-4.7
U.S. industry share (<i>percent</i>)	78.6	77.3	73.8	76.8	n/a	-
Total import share (<i>percent</i>)	21.4	22.7	26.2	23.2	n/a	-
ATPA share (<i>percent</i>)	0.1	0.2	0.6	0.6	n/a	-
ASEAN share (<i>percent</i>)	20.7	21.8	24.7	21.4	n/a	-
U.S. loin imports	95.5	100.2	122.6	97.0	91.8	-3.9
Loin imports from ATPA	52.4	49.7	83.4	74.9	33.6	-35.9
ATPA share (<i>percent</i>)	54.9	49.6	68.0	77.2	36.6	-
Loin imports from ASEAN	38.1	39.8	34.8	14.3	9.0	-76.4
ASEAN share (<i>percent</i>)	40.0	39.7	28.4	14.7	9.8	-
Loin imports from other	5.0	10.7	4.4	7.8	49.2	884.0
Other share	5.2	10.7	3.6	8.0	53.6	-
<i>1,000 metric tons</i>						
U.S. canned tuna production	284.4	308.8	314.7	304.5	n/a	7.1
U.S. canned tuna imports	96.2	109.0	151.7	142.0	132.5	37.7
Imports from ATPA	0.5	0.7	1.9	2.4	14.6	2,820.0
Share of total (<i>percent</i>)	0.5	0.6	1.3	1.7	11.0	-
Imports from ASEAN	92.5	104.4	144.0	130.7	110.4	19.4
Share of total (<i>percent</i>)	96.1	95.8	94.9	92.1	83.3	-
Total U.S. supply	380.7	417.9	466.5	446.5	n/a	-
U.S. industry share (<i>percent</i>)	74.7	73.9	67.5	68.2	n/a	-
Total import share (<i>percent</i>)	25.3	26.1	32.5	31.8	n/a	-
ATPA share (<i>percent</i>)	0.1	0.2	0.4	0.5	n/a	-
ASEAN share (<i>percent</i>)	24.3	25.0	30.8	29.3	n/a	-
U.S. loin imports	33.7	39.2	50.6	45.5	32.4	-3.9
Loin imports from ATPA	21.4	21.3	32.1	34.5	16.7	-22.0
ATPA share (<i>percent</i>)	63.5	54.3	63.4	75.8	51.5	-
Loin imports from ASEAN	11.3	12.0	14.3	7.9	4.1	-63.7
ASEAN share (<i>percent</i>)	33.5	30.6	28.3	17.4	12.7	-
Loin imports from other	1.0	5.9	4.2	3.1	11.6	1,060
Other share	3.0	15.1	8.3	6.8	35.8	-

¹ Percent change for 1997-2000, where 2001 data are unavailable.

Note.—Supply equals production plus imports. U.S. exports of canned tuna and loins are negligible in most years and are included in production in this table.

Source: Official statistics of the U.S. Department of Commerce.

Table A2
U.S. imports of canned tuna and lions, by source, 1997-2001

Source	1997	1998	1999	2000	2001	Share in	Change,
	<i>Million dollars</i>					2002	1997-2001
						<i>Percent</i>	
Canned tuna:							
Thailand	129.2	150.4	202.0	155.4	167.5	53.3	29.7
Ecuador	1.0	2.5	7.3	6.3	44.2	14.1	4,180.8
Philippines	80.2	89.9	69.5	46.5	42.6	13.6	-46.9
Indonesia	27.2	33.2	40.3	30.4	38.0	11.8	36.1
Papua New Guinea	0.1	3.5	4.5	5.8	4.9	1.6	6,775.9
Malaysia	4.9	3.8	4.5	5.8	4.9	1.6	0.7
Korea	0.3	0.2	0.7	0.7	3.6	1.1	1,318.8
Vietnam	0.0	0.0	0.0	0.5	2.7	0.9	n/a
Other	7.1	5.5	7.0	7.1	6.7	2.1	-5.6
Total	250.0	289.0	335.8	258.5	314.1	100.0	25.7
Loins:							
Fiji	4.6	9.0	2.3	7.8	49.2	53.5	978.8
Ecuador	50.5	47.6	76.2	71.5	32.6	35.4	-35.5
Thailand	38.1	39.7	33.6	13.9	9.0	9.8	-76.3
Colombia	1.9	2.7	8.9	6.5	1.0	1.1	-48.5
Canada	0.0	0.0	0.1	0.2	0.1	0.1	n/a
Other	0.7	3.7	5.9	3.6	0.1	0.1	-92.5
Total	95.7	101.5	124.7	103.3	92.0	100.0	-3.8
<i>1,000 metric tons</i>							
Canned tuna:							
Thailand	45.1	51.8	86.3	79.9	64.0	48.4	41.9
Ecuador	0.5	0.7	1.9	2.4	14.6	11.0	2,845.2
Philippines	36.6	38.9	38.6	35.5	28.2	21.3	-23.0
Indonesia	9.5	12.6	17.4	13.4	15.2	11.5	60.4
Papua New Guinea	(¹)	1.6	3.4	7.6	5.2	3.9	10,750.0
Malaysia	1.3	1.1	1.3	1.8	1.4	1.1	8.9
Korea	0.1	0.1	0.2	0.4	1.3	1.0	1,751.5
Vietnam	0.0	0.0	0.0	0.4	1.6	1.2	n/a
Other	3.2	2.3	2.5	0.8	1.1	0.8	-65.5
Total	95.5	108.5	150.9	141.8	132.3	100.0	37.7
Loins:							
Fiji	0.8	4.6	3.0	3.1	11.5	35.5	1,284.9
Ecuador	20.9	20.7	29.0	31.9	16.2	50.0	-22.4
Thailand	11.3	11.9	13.8	7.7	4.1	12.7	-63.8
Colombia	0.6	0.9	4.1	3.9	0.6	1.9	-6.7
Canada	0.0	0.0	(¹)	(¹)	(¹)	(¹)	n/a
Other	0.1	0.9	1.7	0.7	(¹)	(¹)	-92.9
Total	33.7	38.9	50.4	47.3	32.4	100.0	-4.0

¹ Less than 500 metric tons or 0.1 percent.

Source: Official statistics of the U.S. Department of Commerce.

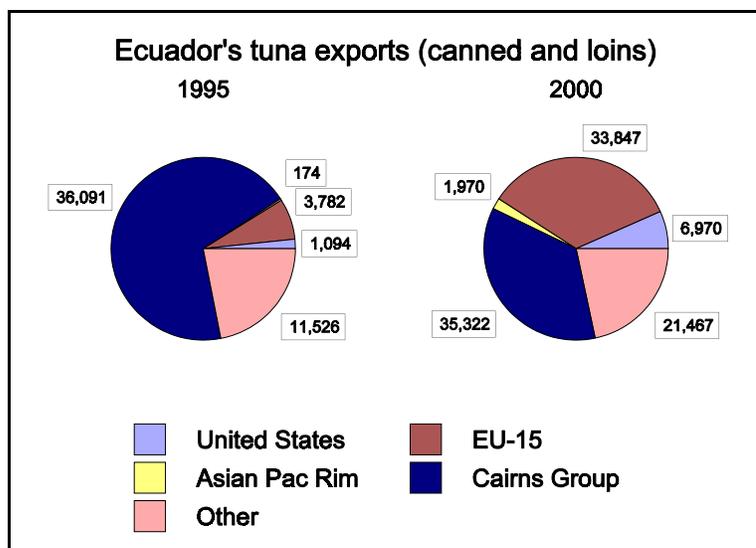
The Andean Industry

This discussion focuses on Ecuador because it is the central player in the Andean canned tuna industry. Ecuador has a variety of advantages over its Latin American rivals, including substantial U.S. investment (giving it technology, capital, and market access); in addition, it is the only Latin American producer certified by the U.S. Government as “dolphin-safe,” and thus its tuna exports are not encumbered by U.S. trade restrictions placed under the authority of the Marine Mammal Protection Act.³³ Further, it is adjacent to rich tuna fishing grounds in the eastern tropical Pacific (ETP); however, ETP tuna resources are subject to harvest quotas set by the Inter-American Tropical Tuna Commission, a multilateral organization to which the United States is a party, and currently the region’s harvest rates are at or near their maximum. As a result, there is little room for further growth of the region’s tuna industry, and any gains by one nation probably would come at the expense of neighboring rivals.

U.S. canned tuna imports from ATPA, as shown above, grew substantially during 1997-2001, rising nearly 40-fold to \$44 million, or 14 percent of total imports. Much of this increase was not a net change in exports but a shift from exporting loins to exporting value-added products (canned tuna as well as pouches). This too was the result largely of procurement decisions by U.S. tuna canners, who have invested in Ecuador to take advantage of its low wages and its proximity to ETP tuna.

As indicated in the main body of this report, this shift from loins to finished product has not added many new jobs to Ecuador’s tuna canning sector. Loin-making is labor intensive, but the final stage of canning loins is not, requiring about 20 percent of the overall labor requirements of a full-scale tuna cannery. For this reason, future increases in Ecuadorian exports to the U.S. market are not likely to generate proportionally similar increases in employment.

Tuna may also be diverted from current export markets in the EU, which is Ecuador’s other major market. Since the EU began giving canned tuna preferential treatment in its ATPA 12 years ago, Ecuadorean (and Colombian) exports to the EU have risen sharply. Such treatment applies only to tuna harvested by Andean or EU-flag vessels, and there is a large Spanish presence in the ETP tuna fishery. The accompanying box shows changes in Ecuador’s relative dependence on the EU, the United States, and other markets for its canned tuna and loins.

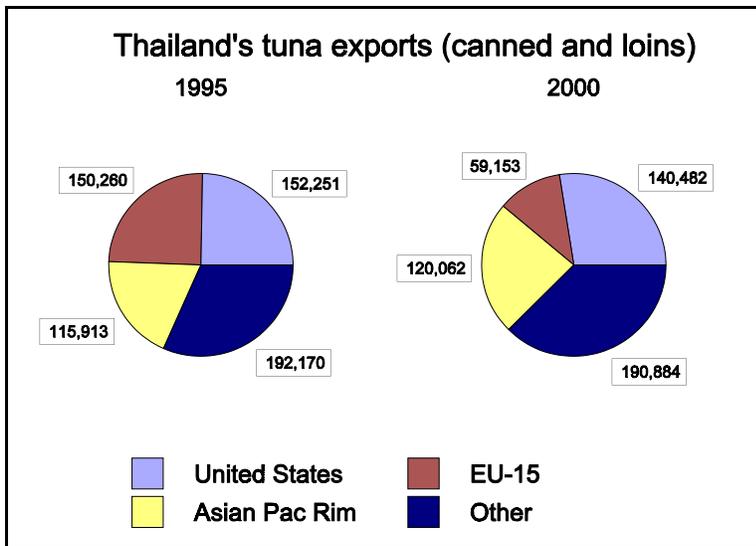


Source: United Nations.

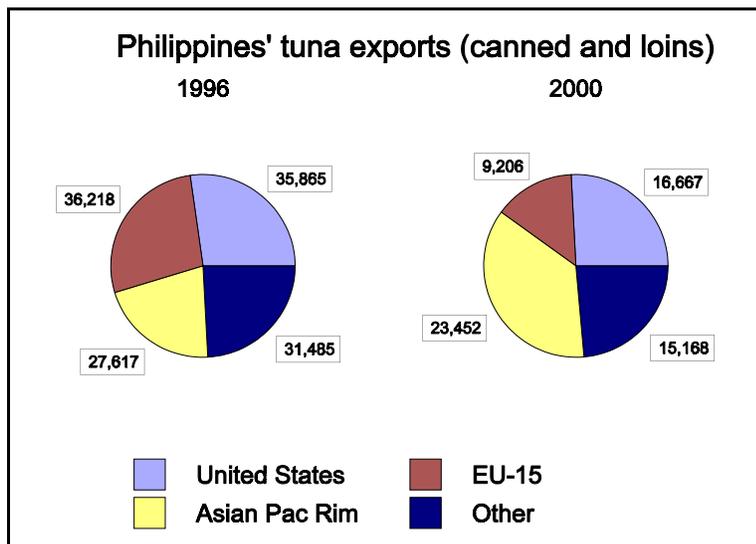
³³ For background of this issue, see U.S. International Trade Commission, *Tuna: Current Issues Affecting the U.S. Industry*, Report to the Committee on Finance, U.S. Senate, on Investigation 332-313, USITC Publication 2547 (Aug. 1992), esp. chapter 3.

The ASEAN Industry

The two largest ASEAN tuna canners and exporters are Thailand and the Philippines. Both have traditionally held sizeable shares of the U.S. import market (56 percent for Thailand during 1997-2000; 25 percent for the Philippines). However, in 2001 their shares began to slide – for the Philippines (14 percent in 2001) more so than for Thailand (53 percent in 2001). This is mainly because the Philippines’ strongest market channel is the private-label market (grocery stores’ house brands, etc.), which is highly price competitive and in which the Philippines has been facing increased competition from Andean sources as well as fellow ASEAN member Indonesia. Thailand, in contrast, is relatively strong in the nationally advertised brand market, in which it has co-packing arrangements with U.S. canners (in addition to Chicken of the Sea’s parent firm’s role as Thailand’s largest tuna exporter). There, too, prices have been falling (as they are tied to the private-label price structure, as noted in the text), but there are other competitive factors at work (such as advertising) by which firms can maintain market shares.



Source: United Nations.



Source: United Nations.

The accompanying boxes illustrate the changing dependence on various markets of both Thailand and the Philippines. For Thailand, although its exports to the U.S. market have fallen in value, the relative share of its total exports has grown, mainly because of a large drop in exports to the EU market. There has also been some gain in shares in the Asian Pacific Rim: mainly in Japan, whose own industry is shrinking, according to U.S. and Japanese industry sources, because of high labor costs and reduced access for its harvesters to foreign nations’ waters. Overall, Thailand’s exports to the world fell from \$610.6 million in 1995 to \$510.6 million in 2000.

The Philippines’ case is more dramatic with respect to the EU market versus the Asian Pacific Rim. An approximately 75-percent decline in EU-bound exports has forced an increased reliance on the U.S. market but more importantly, on the Asian Pacific Rim markets. However, these markets have not been able to replace the EU: total Philippine exports declined by over 50 percent during 1996-2000 (data for 1995 are not available), from \$131.2 million to \$64.4 million.

Competition in the EU market is an important determinant of the impact of ATPA on the Philippines and other ASEAN exporters. The EU market is largely supplied by two groups of exporters with preferential duty treatment, ATPA and Lomé Convention beneficiaries. To the extent that Andean exporters shift their exports from the EU to the U.S. market, the vacuum created in the EU is likely to be filled by Lomé exporters rather than ASEAN exporters (who face the 24-percent duty).