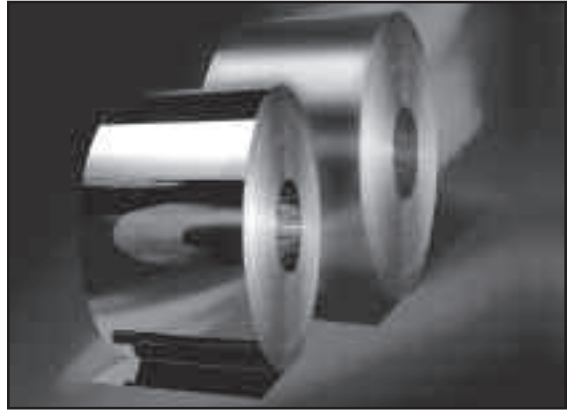


HOT-ROLLED FLAT-ROLLED CARBON-QUALITY STEEL PRODUCTS FROM BRAZIL, JAPAN, AND RUSSIA

The domestic steel industry has frequently resorted to antidumping and countervailing duty laws to address injury from unfair trade practices afflicting various product categories. Steel production is inherently vulnerable to unfair trade. Like cement, steel production is capital intensive and producers in the United States and elsewhere face high fixed costs. Moreover, steel production in



overseas markets has traditionally been subject to a wide range of market distorting activities, from nationally sanctioned import substitution policies and export promotion policies to massive loans government grants, investments and loans from state-owned banks to the toleration acceptance of cartel behavior. Because the objective of governments following these policies was not profit maximization, the capacity created typically has not matched national demand. The combination of excess foreign production capacity and high fixed costs has frequently resulted in spasms of unfair trade in the U.S. market as foreign firms sought to increase their capacity utilization by increasing their sales to the United States at prices lower than in their own home markets.

The Asian financial crisis and the subsequent slowdown in the global economy provided impetus to the most recent explosion of unfair trade. The crisis and its ripple effects led to declining and stagnant demand for steel across a host of countries, exacerbating the problem of structural excess capacity in many of these same countries. The result was a wave of steel imports into the United States, fairly and unfairly traded, that injured the domestic industry producing a wide variety of products. The U.S. industry filed numerous petitions alleging unfair trade, and the U.S. government ultimately self-initiated a safeguard investigation for the steel industry as a whole in 2001. Although the period of safeguard relief was cut short by President George W. Bush, the safeguard relief was widely credited with providing a stable environment that facilitated the U.S. industry's recovery.

This section focuses on the experience of the segment of the steel industry producing hot-rolled flat-rolled carbon steel (HRS). Production of hot-rolled steel requires the melting or refining of raw steel, casting the raw steel into semi-finished forms, rolling the “hot” semi-finished forms into HRS sheet and strip, and finishing operations such as tempering and pickling if desired.²⁰³ HRS is either consumed internally by steel producers to make other steel products such as cold-rolled steel or sold to end users or service centers. HRS is extensively used in automotive applications, pipes and tubes, transportation equipment, non-residential construction, appliances, heavy machinery, and machine parts.²⁰⁴

During the late 1990s, there were 28 firms in the United States producing hot-rolled steel.²⁰⁵ These firms were either integrated producers producing raw steel with blast and basic oxygen furnaces, mini-mills producing raw steel with electric arc furnaces, or one re-roller producing hot-rolled steel from purchased semi-finished steel known as slab. Indiana, Ohio, and Alabama were the states with the most mills producing HRS, but mills were also located in Pennsylvania, Kentucky, Illinois, West Virginia, Michigan, California, Iowa, Maryland, Texas, Arkansas, South Carolina, Oregon, and Utah. The value of U.S.-produced HRS shipments, including internal consumption of HRS to produce downstream products, was approximately \$20 billion annually during the late 1990s.²⁰⁶ In 1996, the industry employed approximately 34,000 workers and paid \$1.7 billion in wages.²⁰⁷

The Asian financial crisis, which began during the summer of 1997, had a profound impact on the HRS consumption around the world. In the case of Japan, its home market shipments, including internal consumption, fell precipitously in 1998, threatening disastrous capacity utilization rates. Brazilian steel makers faced a similar, though less dramatic, environment in 1998, while Russian producers’ losses were concentrated in third-country markets.²⁰⁸ This drop in demand resulted in a huge increase in HRS exports from these three countries to the U.S. market at a time when other sources of imports were also stepping up their activity in light of falling home country demand.

Original investigations and determinations

On September 30, 1998, twelve domestic producers of HRS, the United Steelworkers of America, and the Independent Steelworkers Union filed petitions alleging that the domestic HRS industry was being materially injured by

203 *Certain Hot-Rolled Flat Rolled Carbon Quality Steel Products from Brazil, Japan, and Russia*, USITC Pub. 3767, Invs. Nos. 701-TA-384 and 731-TA-806-808 (Review) (April 2005) at I-18 to I-21.

204 *Id.* at I-18.

205 *Id.* at I-26.

206 *Certain Hot-Rolled Flat Rolled Carbon Quality Steel Products from Brazil, Japan, and Russia*, USITC Pub. 3202, Inv. No. 731-TA-807 (Final) (June 1999) at III-6.

207 *Id.* at III-8.

208 *Id.* at VII-4 to VII-6.

subsidized imports from Brazil, and by dumped imports from Brazil, Japan, and Russia. The Department of Commerce found company dumping margins ranging from 17.86 percent to 67.14 percent for Japan; 41.27 percent to 43.4 percent for Brazil; and 73.59 percent for the Russian firm JSC Severstal. The company-specific countervailing duty rates for Brazil were 6.35 percent and 9.67 percent, respectively, for its two exporters.²⁰⁹ Ultimately, suspension agreements were concluded with Brazil and Russia. As part of the agreement with Brazil, the Government of Brazil agreed not to provide any new or additional export or import substitution subsidies on HRS; and to restrict the volume of direct or indirect exports to the United States of HRS from all Brazilian producers/exporters. Quota levels were also established.²¹⁰ As part of the agreement with Russia, the Department implemented an export quota and reference price system for HRS from Russia.

The Commission did render an affirmative finding on imports from Japan and cumulated the imports from all three countries in performing its analysis.²¹¹ The Commission determination cited the following facts as warranting an affirmative determination.

- U.S. demand for HRS was strong during the 1996-to-1998 period with apparent consumption of steel apparently at record highs in 1998.²¹²
- The market share of the subject imports doubled from 1996 to 1997 and then doubled again from 1997 to 1998. This higher market share prevented domestic producers from participating fully in the growing market,²¹³ which, all other things being equal, should have resulted in higher prices and sales quantities for domestic producers. Instead, while tons consumed in the U.S. merchant market grew 13.2 percent in 1998, U.S. shipments to that market fell by 4.4 percent.
- The frequency of underselling in late 1997 and 1998 grew markedly when the unfairly traded imports were increasing as subject imports began accumulating market share at the expense of the domestic industry.²¹⁴ The Commission noted that the price declines in the U.S. market were most severe during the last two quarters of 1998, when the volume of the subject imports was peaking.

209 USITC Pub. 3767 at I-2 to I-4.

210 *Id.* at I-3 to I-4.

211 The Commission's injury investigation "cumulated" the imports from all three countries. That is the imports from the countries were combined and injury was assessed on that basis.

212 USITC Pub. 3202 at 10.

213 *Id.* at 12.

214 *Id.* at 13-15.

The U.S. industry had increased production capacity roughly in line with consumption increases, yet experienced reduced capacity utilization due to the market share gains by the subject imports.²¹⁵ Shipment, production, and financial data deteriorated in the second half of 1998 even as HRS consumption was rising due to the substantially increased volume of imports and their declining prices.

Some of the relevant data collected during the Commission's original and sunset investigations appear in the table below.

Table 29. Hot-rolled Flat-rolled Carbon Steel Products from Japan, Brazil, and Russia:

Selected Data Collected by the USITC

Item	1996	1997	1998	1999	2000	2001	2002	2003	2004
U.S. shipments (\$mil.)	19,557	19,908	18,976	19,244	20,125	15,771	19,509	19,247	35,913
U.S. market share (percent, by volume)	92.3	90.9	84.8	91.5	90.2	95.3	92.6	95.9	92.9
Subject imports (1,000 short tons.)	1,343	3,002	6,980	126	359	15	167	43	923
Subject imports (\$mil.)	410	914	1,858	37	116	9	60	24	496
Subject import unit value (\$/ton)	305	304	266	297	324	574	357	562	537

(1) Subject imports include HRS imports from Japan, Brazil, and Russia.
Sources: USITC Pub. 3767 at I-5 to I-6.

Estimated revenue impact of unfair trade

In order to calculate the revenue effects of the dumping, the countervailing duty and dumping margins were applied to trade data in order to calculate weighted-average margins for each year of the period of investigation. The margins exceed 50 percent in all three years. The estimated margins were applied to each year of data using the partial equilibrium model described in the Overview. The losses to the domestic industry became progressively greater during the period of investigation.²¹⁶ In 1998, the model results suggest that the domestic industry's revenue losses exceeded \$1.4 billion. The model also predicts domestic output in 1998 of 67.7 million short tons, which translates into a capacity utilization rate of 92.1 percent, approximately the same as in 1996, the year before the Asian crisis. The results of the model also imply a domestic market share of 89 percent, only slightly lower than was the case in 1996.

215 Id. at 17.

216 These calculations assume that the same level of dumping and subsidization existed throughout the period of investigation. The circumstances of this investigation suggest that the unfair trade intensified after the middle of 1997. Thus, the model results for 1998 are probably the most relevant for assessing the losses experienced by the domestic industry.

Table 30. Hot-rolled Flat-rolled Carbon Steel Products from Japan, Brazil, and Russia:

Estimated Lost Revenue due to Dumping

Item	1996	1997	1998	Total
Estimated dumping margin (percent)	57.56	59.85	52.79	N/A
Lost revenue due to dumping (\$mil.)	369	837	1,449	2,655
Sources: USITC Pub. 3743 at I-5; and author's calculations.				

Like other manufacturing industries, the steel industry has important impacts on other U.S. industries. According to the Commerce Department's input-output tables for the U.S. economy, the total dollar change in the output of all industries that is required for an additional \$1 billion of output from the iron and steel mill industry is \$2.32 billion. The portion of this output that is due to industries other than the steel mill is \$1.19 billion. Thus to calculate the indirect effect of dumping and subsidized steel imports on other industries, we use a multiplier of 1.19. The indirect effect of the market-distorting unfair trade is shown in the table below. The table below also estimates the financial cost of unfair trade, which is the interest that must be paid on funds borrowed from international investors or governments to finance the increase in the trade deficit that results from the purchase of unfairly traded imports. Because the U.S. current account is perennially in deficit, an incremental increase in imports, such as one that is caused by dumping, creates an additional U.S. liability to foreigners. The financial cost associated with the increase in imports in 1998 was \$44 million.

Table 31. Hot-rolled Flat-rolled Carbon Steel Products from Japan, Brazil, and Russia:

Indirect Costs and Interest Costs due to Dumping

Item	1996	1997	1998	Total
Indirect industry output multiplier	1.19	1.19	1.19	N/A
1-year T-bill rate (percent)	5.51	5.63	5.05	N/A
Lost indirect activity (\$mil.)	441	1,000	1,731	3,171
Interest on borrowed funds (\$mil.)	12	28	44	84
Sources: Bureau of Economic Analysis at http://www.bea.gov/bea/dn2/i-o.htm#benchmark (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 losses due to dumping are shown in the table below in comparison with the pure consumer gains that accrue from the dumping. As explained in the Overview, these gains only include the gains that do not come at the expense of domestic producers and fairly traded imports. In most of the industries covered in this report, those gains have been relatively small. In this case, the gains are extremely small, even negative, when calculated on a market-wide basis. The reason for this anomaly is simply that the losses in domestic sales and fairly traded imports in the injury model are larger than the increased quantity of unfairly trade imports.²¹⁷ Such an outcome is not possible when imports and the domestic product are perfect substitutes, but it is possible when the products are imperfect substitutes. Different elasticity choices would yield somewhat different results, but not dramatically different results in this case. The bottom line is that pure consumer gains from unfairly traded HRS during the late 1990s the gains that did not come at the expense of domestic and fairly traded steel are not very large when compared to the types of dislocation caused by unfair trade when the inputs to production are not seamlessly absorbed by the domestic economy. The results here confirm an observation made by Paul Krugman, who, while opining on the Mexican peso crisis, described the gains from trade as “embarrassingly small”.

Table 32. Hot-rolled Flat-rolled Carbon Steel Products from Japan, Brazil, and Russia:
Summary of Costs and Benefits of Dumping

Item	1996	1997	1998	Total
Lost revenue due to dumping (\$ mil.)	-369	-837	-1,449	-2,655
Lost indirect activity (\$ mil.)	-441	-1,000	-1,731	-3,171
Interest on borrowed funds (\$ mil.)	-12	-28	-44	-84
Consumption gains (\$ mil.)	0	0	2	1
Sources: Author's calculations.				

Long-term impact of the order

Brazilian HRS producers violated the suspension agreement, and an antidumping duty order on Brazilian HRS was issued in March 2001. In September 2004, the suspension agreement for the subsidy investigation was terminated at the request of the government of Brazil.²¹⁸

217 This could be due to the fact that the elasticities estimated by the USITC staff during the last year of the investigation are not appropriate for the conditions that prevailed during the first two years of the investigation period. This result may also reflect the fact that the unfair trade did not begin in earnest until the second half of 1997.

218 USITC Pub. 3767 at 3, fn. 2.

The Commission's sunset investigation of the orders on Japanese and Brazilian HRS and the Russian suspension agreement were concluded in April 2005. The Commission found that revocation of the orders and termination of the suspension agreement would be likely to lead to continuation or recurrence of material injury.²¹⁹ The trade remedies on HRS from the three countries thus remain in place.

The Commission's review of the domestic HRS industry found that it experienced troubles despite the initial success of the remedies. Subject imports declined substantially and domestic prices rose during 1999 and into 2000. But the industry was subsequently staggered by a second wave of unfairly traded imports from other countries and by a recession that reduced demand for HRS.²²⁰ In late 2001, antidumping and/or countervailing duty orders were issued with respect to imports from eleven other countries and, with the industry in a state of crisis, a safeguard was put into place that covered HRS and other steel products. The years following the imposition of safeguard relief saw the U.S. industry consolidate and restructure under the auspices of new labor agreements. Nevertheless, the industry initially struggled with several years of negative operating income until 2004, when higher prices and revived demand for HRS were sufficient to cover higher raw materials costs and generate industry-wide profits. The domestic industry was also generally profitable in 2005, despite the continued volatility of input prices.

Although the domestic HRS industry has benefited from strong steel demand in Asia, China in particular, steel industry workers and executives generally credit both remedies on unfair trade and the safeguard action with providing the necessary breathing room to consolidate effectively and reinvigorate an industry that was on the brink of collapse. The industry has also received approximately \$2.3 million in distributions from the CDSOA.

219 *Id.* at 3.

220 *Id.* at 3-4.