

Strong Trade Laws as the  
Foundation of A Sound  
American Trade Policy

# ENFORCING THE RULES

Greg Mastel, Andrew Szamosszegi,  
John Magnus and Lawrence Chimerine

ALLIANCE FOR AMERICAN MANUFACTURING

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The Alliance for American Manufacturing (AAM) is an innovative labor-management partnership formed to develop strategies that will strengthen American manufacturing. AAM promotes public policy solutions on international trade, health care, retirement security, currency valuation and other issues of mutual concern to American manufacturers and employees.

**The Alliance for American Manufacturing**

727 Fifteenth Street, NW

Suite 700

Washington, DC 20005

(202) 393-3430

[www.americanmanufacturing.org](http://www.americanmanufacturing.org)

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# Executive Summary

U.S. anti-dumping (AD) and countervailing duty (CVD) laws are the backbone of U.S. international trade policy. These laws are in place to counter imports that are dumped – sold at less than the cost of production or below the price in their home market – or subsidized; they impose duties on imports to offset the impact of the dumping and/or subsidies.

U.S. law and international agreements have long recognized that dumping and subsidies are practices that can and should be countered or remedied. In recent decades, the laws have been used by a wide array of U.S. manufacturers, workers, and farmers to create a level playing field with unfairly traded imports. In many cases, AD/CVD laws are the only reason that individual companies and farms and even whole industries – such as steel and semiconductor manufacturing – have been able to continue to produce in the United States.

But AD/CVD laws have been the subject of a number of criticisms. In essence, most critics brand the laws as a modern form of protectionism. These critics, however, ignore the serious damage that dumping and subsidies do to both the U.S. economy, free markets, and to the world trading system. Subsidies are almost universally condemned as costly market distortions that damage both efficient producers and taxpayers and often result in additional subsidies that other governments feel compelled to offer to counter the initial subsidy. Of course, this causes further damage and further rounds of escalating subsidies.

Dumping is subject to more debate as some have argued that dumped goods should simply be considered as “bargains.” This perspective fails to recognize that dumped sales over any significant period are a clear sign of a deep distortion in the market. Inevitably, repeated dumping can be traced back to companies operating in a sanctuary market – a home market closed to imports in which high prices can be charged, a state-run economy, or one of a variety of related trade barriers. These distortions harm efficient producers, undermine political support for new trade agreements, and – ultimately – damage the entire economy.

The specific costs of dumping and subsidies are also usually underestimated. Critics often cite a simple static analysis of AD/CVD duties which treat them as a simple tariff. In essence, these analyses simply restate the notion from any introductory economics class that tariffs are bad. In order to make a more detailed estimate of the real impact of dumping and subsidies this paper has made a detailed analysis of the specific impact of dumping and subsidies in ten

recent cases in which AD/CVD duties have been imposed. In order to create a more complete picture, the direct impact of dumping and subsidies, the indirect impact on various supplier and related industries, the impact of the additional international borrowing necessary to purchase imports during a period of continuing current account deficit, and the benefits to consumers were all considered.

As would be expected, the impacts in specific sectors varied considerably because the underlying economics of, for example, the U.S. raspberry industry are simply different from those of the U.S. steel industry. In each case examined, however, the various costs of dumping and subsidies exceeded the pure increase in consumer benefits. The results in the sectors examined are summarized in the following table:

Product	Period	Lost revenue	Lost indirect activity	Interest expense	Pure consumption gains
		<i>Millions of current dollars</i>			
Shrimp	2000-2003	209.7	174.9	44.1	66.3
Crawfish	1994-1996	5.9	9.3	0.8	13.7
Garlic	1991-1994	12.3	9.2	0.6	0.8
Lumber	1999-2001	2,244.2	1,635.4	71.0	32.5
Honey	1998-2000	126.7	259.0	4.1	3.9
Raspberries	1999-2001	2.5	5.6	0.1	0.0
Cement and cement clinker	1986-1989	955.5	803.0	28.9	5.0
Bedroom furniture	2001-2003	332.9	409.8	11.8	4.0
Carbon steel	1996-1998	2,654.8	3,171.2	84.1	1.3
Ball bearings	1985-1987	877.1	793.8	28.6	8.0

# Introduction

U.S. antidumping and countervailing duty (AD-CVD) laws have been in place for more than a century, providing U.S. companies, farmers, and workers a remedy against subsidized and unfairly priced imports. These laws act by imposing a duty on an unfairly traded imported product to counter the size of the subsidy or the amount of dumping supporting the product. For at least the last 50 years, they have been the primary tool for countering foreign unfair trade practices in the U.S. market.



These laws have been widely used in the United States and around the world. AD-CVD laws have been operating in full accord with the world trading system since the inception of the system. There is a detailed section of the agreement that created the World Trade Organization (WTO) that describes the appropriate operation of AD-CVD laws.

CVD laws are aimed at countering the impacts of governmental subsidies, which are seen as market distorting. For their part, anti-dumping laws are a rough parallel to some aspects of domestic anti-trust/competition laws, which are widely used by leading market economies around the world. Further, in most industries where AD laws are employed, the pricing behavior that the laws aim to offset is a direct result of subsidies, closed markets, or the operation of non-market economies.

With all of the above in mind, one might suspect that AD-CVD laws would be seen in a positive light by advocates of free markets and free trade. In the United States at least, this is not the case.

Critics on several fronts in the United States dismiss the laws as arbitrarily applied,<sup>1</sup> costly to consumers,<sup>2</sup> and harmful to developing countries' trade interests.<sup>3</sup> In essence, they condemn the laws as tools of protectionism and rigged against foreign companies.

Each of these criticisms can be addressed in great detail and, as is almost always the case in any public policy debate, the issues are complex. The critics, however, invariably give short shrift to the history of these laws and little attention to the positive case that has kept the laws in place for the last century – as trade has become increasingly important to the U.S. economy – and made them a central part of the global trading system. This is not simply because, as critics seem to suggest, of bureaucratic inertia or the power of special interests.

In fact, AD-CVD laws have remained a critical part of both U.S. trade laws and the world trading system because they play a vital role in promoting free trade, providing the ground rules for international commerce, and ensuring continued political support for trade liberalization. The positive case for AD-CVD laws thus warrants careful consideration.

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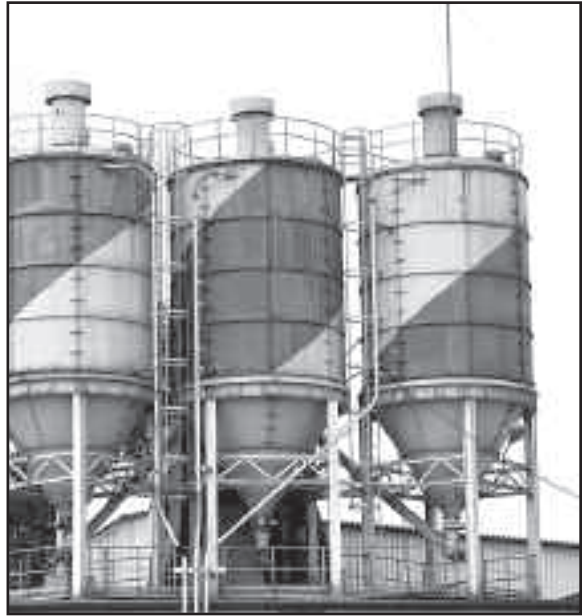
1 Michael O. Moore, *Antidumping Reform in the Doha Round: A Pessimistic Appraisal*, (prepared for The Economics of the Doha Round and the WTO, University of Hong Kong, December 15-17, 2005); and J. Michael Finger, ed., *Antidumping: How it Works and Who Gets Hurt* (Ann Arbor: University of Michigan Press, 1993).

2 Dan Ikenson, *Antidumping Laws Hurt American Consumers*, Cato Institute Center for Trade Policy Studies, Aug. 21, 2001; and Gary Clyde Hufbauer & Kimberly Ann Elliott, *Measuring the Costs of Protection in the United States* (Washington, DC: Institute for International Economics, 1994).

3 Shoba Ahuja, *Anti-dumping Duties and WTO: Agenda for Reform*, The Hindu Business Line, June 15, 2002; and Arvind Panagariya, *The Millennium Round and Developing Countries: Negotiating Strategies and Areas of Benefits*, (prepared for the Intergovernmental Group of Twenty-Four on International Monetary Affairs, March 2000).

# Countering Market Distortions

In the more-than-a-century long debate on AD-CVD laws a number of arguments have been raised to support them in various national and international forums. It would be impossible to analyze all of them in any short paper or even series of tomes, but there are three critical rationales for AD-CVD laws that deserve special attention: (1) to counter market distortions, (2) to provide an interface mechanism between economies – particularly with regard to non-market economies, and (3) – safeguarding political support for trade liberalization.



## Subsidies

U.S. countervailing duty laws – sometimes known as anti-subsidy laws – were created to insulate the U.S. market from the injurious impact of foreign subsidies. They were embraced by the global trading system through the General Agreement on Tariffs and Trade (GATT) and later the WTO – as a method to partially counteract the impact of subsidies in the world marketplace and discourage subsidization.

Although subsidies remain fairly common in agriculture and a number of industrial sectors – notably steel production – there is no debate that they have many negative economic effects.<sup>4</sup> Obviously, they adversely impact other competitive non-subsidized producers and workers in third markets. But they also

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<sup>4</sup> Some categories of agricultural subsidies, including those decoupled from production levels are believed to be less distorting of trade than subsidies that are linked to production.

cause a cascade of other problems, including burdening the taxpayers in the country paying the subsidy and distorting resource allocation within the subsidizing country as resources are channeled to subsidized sectors and away from non-subsidized sectors. They also encourage other countries – as has certainly been the case in agriculture – to adopt similar subsidies leading at times to escalating subsidy wars and hopelessly distorting true comparative advantage. Except for some possible narrow exceptions, the economic condemnation of trade-distorting subsidies is universal.

The importance of disciplining subsidies increases as border measures, such as tariffs, and other trade restrictions are reduced as trade is liberalized. More open markets allows the impact of subsidies to more easily impact global markets as goods move more freely over national borders, which makes subsidy disciplines and remedies all the more important.

The “best” response to subsidies from an economic perspective is eliminating them, but this is often not a practical option. The WTO does have rules on subsidies, but many subsidies are beyond the effective reach of these rules because of the limits of WTO subsidy provisions and limitations in the dispute settlement process. As a practical matter, the primary tool available to counter the injurious effects of subsidies is the application of countervailing duties. In those cases in which subsidies are identified and the imports of subsidized products are injuring producers in the domestic market, a country can impose a duty (usually referred to as a countervailing duty) equivalent to the size of the subsidy.

Countervailing duties do not eliminate all of the negative impacts of subsidies; indeed, a countervailing duty is limited to the calculated amount of a subsidy even if that subsidy’s effects are much greater. For example, even if a subsidy helps an industry drive a competitor from the market or develops a revolutionary new technology, only the face value of the original subsidy—not the long term harm—is offset by the countervailing duty.

Still the duty at least partly offsets the negative impact on producers in the country applying the duty. The imposition of duties can also discourage continuation of the identified subsidy program and deter other programs from being initiated. However, the negative effects in the country granting the subsidy – taxpayer costs, distortion of resource allocations, etc. – continue.

### **Sanctuary Markets And Industrial Subsidies**

The case for employing countervailing duties to promote free trade is simple, but the parallel arguments for antidumping laws are more complex. Antidumping laws aim to counter sales of imports at below the sale price in the home market or below the cost of production. Antidumping duties are applied on a company basis whereas countervailing duties are normally applied to all companies within the country extending subsidies.

In the United States, there are parallel concepts, sometimes called “predatory pricing”, enshrined in U.S. antitrust laws. Some argue that if a foreign company is willing to sell its products at low prices — even at below the cost of production —

that is actually a good thing and the United States should import as much as they are willing to sell; sort of an international equivalent of “buying on sale.”

Though superficially appealing, this view overlooks both the motivations of foreign companies in dumping in the U.S. market and the competitive impacts that dumping has on the domestic market. While it is possible that currency changes, accounting issues, and the like could result in an imported product being sold below the home market price or below the cost of production it is unlikely, that these “accounting errors” or other unusual circumstances would persist long enough to cause injury to the domestic industry as defined by U.S. law and the WTO. Certainly, in those cases in which a company or group of companies is dumping into the U.S. marketplace for years, it is clear evidence of market distorting practices by the dumping companies. Sales at a loss are not a sound long-term business strategy.

In most cases, continued injurious dumping are a result of one of several practices, including the maintenance of a sanctuary home market, the application of subsidies, or the consequences of a non-market economy government. The sanctuary market has been perhaps the most common explanation for ongoing dumping in the manufacturing sector; it is certainly one of the factors in play in the widely discussed cases of dumping in the semiconductor<sup>5</sup> and steel<sup>6</sup> industries. In essence, a sanctuary market is a home market that is largely closed to imports due to a combination of tariff and non-tariff barriers.

As a result, the companies within this closed market are able to maintain high profits, which can then be used to finance long term dumped sales in open markets with the aim of building market share. Competitors based in open markets are thus faced with the double prospect of being denied access to export markets, as well as having to deal with intense price competition at home.

To say the least, this presents a difficult and unfair competitive environment as sanctuary market competitors take sales from open market competitors regardless of true comparative advantage. Although consumers in the importing market may realize short-term gains, the long-term costs are real, and consumers within the home market of the dumper face similar losses due to higher prices from monopoly rents. The sanctuary market creates several related impacts including losses from distorted trade flows, the loss of competitive production, and the resulting distortions in investment patterns.

While opening the sanctuary market to competition would help remedy this problem, it is not a realistic course of action. As a practical matter, antidumping duties are one of the few timely remedies available to companies in relatively open markets facing sanctuary market competitors engaged in dumping. The

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5 Laura D’Andrea Tyson, *Who’s Bashing Whom? Trade Conflict in High-Technology Industries* (Washington, DC: Institute for International Economics, November 1992); and Fred Warshofsky, *The Chip War* (New York: Charles Scribner, 1989).

6 Thomas R. Howell, William A. Noellert, Jesse G. Kreier, and Alan Wm. Wolff, *Steel and the State: Government Intervention and Steel’s Structural Crisis* (Boulder, CO: Westview Press. 1988).

application of antidumping duties also lowers the incentives for countries to maintain sanctuary markets in order to build domestic industries. Over the years, many major U.S. industries including – steel<sup>7</sup>, semiconductors<sup>8</sup>, and tires<sup>9</sup> – have turned to antidumping laws as a partial answer to dumping from sanctuary markets.

Subsidies are also one of the root causes of dumping. In a typical case, government subsidies are used to build industrial facilities in order to create manufacturing employment. These subsidies result in more facilities being built around the world than the market demand can support. In down economic times, the artificially large production capacity allows individual companies to continue to produce and sell even if the sales do not fully recover the cost of production. In this way they can maintain market share, maintain employment and narrow losses by covering at least part of the cost of production.

Patterns similar to that described above have been found in industries involved in dumping disputes, including agriculture<sup>10</sup>, steel<sup>11</sup>, and, more recently, lumber.<sup>12</sup> In cases like these dumping is one aspect of the market distortion created by the initial government subsidy. In some cases, these subsidies could also be addressed through countervailing duties, but it is often easier to prove unfair pricing than it is to trace the history of subsidies, which may have been in place for decades and therefore hard to document.

### **Non-Market Economies**

In recent years, antidumping cases have focused heavily upon products imported from China. In fact, almost a quarter of the U.S. antidumping cases initiated over the last five years have involved Chinese products.<sup>13</sup> In part, these cases are likely the result of the size of the Chinese economy and its relatively recent and rapid entry into the world economy.

Equally important, the Chinese cases, like cases involving Russia and other former Eastern European communist countries, are the result of non-market economics. Over the last twenty years, most of the former communist bloc countries have adopted increasingly market based economies.

But the transition is far from complete. Some countries, like China and Vietnam, while adopting market reforms, maintain an avowedly communist government. Even in those countries that have shed their communist past – at

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7 See note 5.

8 See note 4.

9 Gary Hamel and C.K. Prahalad, “Do You Really Have a Global Strategy,” *Harvard Business Review* (July-August 1985: 139.)

10 *Hard Red Spring Wheat From Canada*, 68 Fed. Reg. 57,666 (USITC October 6, 2003) (amended final determination).

11 *Certain Stainless Steel Plate From Belgium, Canada, Italy, Korea, South Africa, and Taiwan*, 70 Fed. Reg. 38,710 (USITC July 5, 2005) (review).

12 *Softwood Lumber from Canada*, USITC Pub. 3509, Inv. Nos. 701-TA-414 and 731-TA-928 (May 2002).

13 International Trade Administration, Dept. of Commerce, Washington, DC, available at <http://ia.ita.doc.gov/stats/inv-initiations-2000-2005.html>.

least avowedly – there remain many state-owned enterprises and many state-built resources which still contribute to other sectors in those countries. For example, government-built dams still generate electrical power in Russia, which has a competitive impact upon industries in which electricity is an important input. China has an enormous educated labor pool over which the government has significant control. Among other things, that control can keep wages below a market determined level providing a cost benefit for the many manufacturing industries that have established operations in China.

The products manufactured in non-market economies (NMEs) have long posed problems for western market economies. The surge in antidumping cases involving China is just the latest and largest example of this trend, but it goes back decades and involves products as seemingly obscure as golf carts from Poland.

Western countries – chiefly the United States and Europe – have struggled to find a set of rules to deal with NME imports. It seemed of little value to identify specific subsidies in an economy in which all inputs from energy to labor were at least in concept subsidized. Similarly, it was difficult to identify a meaningful cost of production in a market in which costs were largely set by the government and some inputs were essentially “free.”

These problems led both Europe and the United States to develop special rules to govern trade with non-market economies. These NME anti-dumping rules rely heavily upon finding outside market economy prices to serve as surrogate prices for the prices of goods and services in the NME economy. In this respect, they are different from other uses of antidumping laws; rather than trying to offset market problems created by subsidies, sanctuary market, or other distortions, NME antidumping rules attempt to set a fair market price for NME imports from which “normal” commerce can proceed. Given the large volume of global imports from China – totaling \$660.1 billion in 2005<sup>14</sup> and the fourth largest source of U.S. imports<sup>15</sup> – a mechanism for determining the appropriate price for imports causing injury to producers in the U.S. market is necessary to address economic and political problems that would otherwise arise. NME laws have also played a role in addressing Russian exports, Vietnamese exports, as well as other NME country exports

U.S. and European trade laws both include a process for treating NMEs as normal market economies once certain benchmarks of market economics have been achieved. In China’s case, its WTO accession agreement sets an outside period of 15 years from accession on the application of special NME antidumping rules to Chinese imports.<sup>16</sup> Until that time, NME procedures are one set of

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14 People’s Republic of China, General Administration of Customs, (available at <http://www.uschina.org/statistics/tradetable.html>.)

15 Foreign Trade Division, U.S. Census Bureau, Washington, DC, available at <http://www.census.gov/foreign-trade/statistics/highlights/top/top0512.html>.

16 World Trade Organization, Accession of the People’s Republic of China, WT/L/432 ¶(15)(d) (Nov. 23, 2001).

tools, among others, to govern trade between seemingly incompatible economic systems. Absent these procedures, calls for broad restraints on Chinese products would no doubt grow.

### **Political Safeguards**

As noted in the introduction, rules against dumping and subsidization of exports have a history much older than the world trading system. While that framework emerged just after WW II, the first anti-dumping law was passed in Canada in 1904 and AD laws were adopted by most western countries early in the 20th Century.<sup>17</sup> Rather than being a barrier to trade, or to the global system, AD-CVD laws are part of the foundation which allowed global trade to grow.

The economic and business rationales for AD-CVD laws have already been discussed, but there is a closely related political role that also warrants consideration. AD-CVD laws provide “rules of the road” for trade that allow it to expand and grow while addressing unfairness that would otherwise provide a rationale for constraining trade more broadly. Thus, rather than being the tools of modern protectionism, as some critics have asserted, they provide one safeguard to prevent blunt protectionism from arising as well as smoothing the way for greater acceptance of trade arrangements like the WTO.

There have been numerous instances in the last half century where serious concerns about products ranging from lumber to agriculture to steel have been addressed through the use of AD-CVD laws. AD-CVD laws have been cited positively in congressional debates on many recent trade agreements<sup>18</sup> and AD-CVD laws have repeatedly demonstrated broad, bipartisan support in Congress.<sup>19</sup> If AD-CVD laws did not exist, these arguments would not have been possible. This could have slowed or halted the approval of major trade agreements and undermined U.S. public and congressional support for trade liberalization.

Further, though these details are sometimes missed by critics, AD-CVD laws include several built-in limits to constrain their scope and duration. To assess either AD or CVD duties, a petitioning domestic industry must demonstrate the existence or imminent threat of “material injury” from imports. This test has historically resulted in more than one-third of the cases brought in the United States being rejected. In accordance with WTO rules, AD-CVD cases are regularly reviewed and face a “sunset” review after five years. The implementation of these laws is reviewable by U.S. courts, WTO dispute settlement panels and in some cases, panels convened under free trade agreements. In short, there are numerous institutional reviews built into the system to ensure that the application of AD-CVD laws is precisely defined, time limited, and transparent.

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17 Jacob Viner, *Dumping: A Problem in International Trade* (Chicago: University of Chicago Press, 1923).

18 149 Cong. Rec. 10,530-33 (July 31, 2003) (Statement of Sen. Baucus); also see the Senate debate of the U.S.-Chile and U.S.-Morocco Free Trade Agreements.

19 H.R. 3283, 109th Cong. (2005), and related debate thereof; S. Con. Res. 55, 109th Cong. (2005); and S. 2020, 109th Cong. § 407 (2006).

If the United States did not have AD-CVD laws as a route for addressing concerns over unfairly traded imports, it is unlikely that those concerns would simply disappear. They would likely have considerable political potency, and could result in various ad hoc measures to limit imports, which might well not have the institutional reviews and safeguards built into AD-CVD laws.

Some would rightly suggest that safeguard provisions built into the WTO – often referred to as Section 201 in U.S. trade law— fill much the same function. The safeguard or “escape clause” provision allows a country to impose limitations on imports for a time – generally four years – if imports cause or threaten to cause “serious” economic injury to domestic industries. This is a higher injury test than applied in AD-CVD actions. The framers of the WTO recognized that economic dislocations and resulting political problems stemming from imports were a serious threat to the world trading system and created the safeguard provision as a safety valve.

Although useful in some cases, the safeguard provision has a number of shortcomings when compared to AD-CVD laws. First, safeguard actions deal with all imports – fairly traded or not. They provide no ongoing remedy in cases where there are systemic market distortions and as such, are not effective in addressing the causes of unfairly traded imports. Second, the serious injury test blocks relief in all but the most egregious cases and thus provides limited relief. This problem is made more serious owing to the fact that WTO dispute panels have been highly skeptical of most safeguard actions brought before them,<sup>20</sup> including those imposed by the Bush administration in response to a record surge in steel imports<sup>21</sup>.

Third, the safeguard remedy is subject to political considerations and therefore is viewed by potential users as unreliable. The AD-CVD remedy, in the United States, is just the opposite – a legal/administrative remedy. If an industry meets the requirements for relief (dumping or subsidies, plus injury test causation), it is entitled to relief, reviewable by a court. In the safeguard process, establishing the elements for relief under the law (serious injury and substantial causation) entitles an effected domestic industry to nothing; it merely triggers a political decision-making process in which the discretion of the Executive Branch is nearly complete. These distinctions mean in practice that safeguard relief, as currently structured, is rarely a viable option for U.S. industries seeking relief from imports.

The interesting political reality then is not just that AD-CVD laws have coexisted with the world trading system since its inception, but that the existence of AD-CVD laws has also built political support for that system. They are the

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20 Appellate Body Report, United States - Safeguard Measures on Imports of Fresh, Chilled or Frozen Lamb Meat from New Zealand and Australia, WT/DS178/AB/R (May 1, 2001); and Appellate Body Report, Chile - Price Band System, WT/DS207/AB/R (Sept. 23, 2002).

21 Appellate Body Report, United States - Definitive Safeguard Measures on Imports of Certain Steel Products, WT/DS259/AB/R (Nov. 10, 2003); and John K. Veroneau and Katharine J. Mueller, A High Bar for U.S. Safeguards, *China Business Review*, March-April 2006.

most practical avenue for addressing concerns over unfairly traded imports. By channeling those inevitable concerns into a limited and transparent mechanism they have supported efforts in the United States – and likely other countries – to move forward with trade liberalization.

# IMPACT OF AD-CVD LAWS ON THE U.S. ECONOMY

Many critics have analyzed AD-CVD laws and argued that they impose an undue cost on consumers and/or industrial users. These critics often ignore the competitive economic realities and market distortions that give rise to many AD-CVD actions and invariably ignore the political implications of these laws for trade liberalization. They also ignore the competitive characteristics of the particular industry that is the focus of the AD-CVD action.



In a standard economic analysis of AD-CVD-laws examining the impact of applying a tariff – it is not too surprising that the conclusion would often suggest higher consumer costs than producer benefits. Using a partial equilibrium model – the standard tool for such an analysis – the approach basically takes a snap-shot view of the economic impact of a duty at a moment in time. In a way, this method merely restates the premise of most introductory economics classes that protectionism is poor policy especially when considered from the consumer perspective.

These analyses, however, have serious shortcomings. First, it is rare that any parallel effort is made to consider the negative impacts of the subsidies, sanctuary markets, or other market distortions that gave rise to the original AD-CVD

complaint. Without considering the often-significant impact of these other market distortions on domestic producers, global consumers/taxpayers, and the global allocation of resources (including labor), this analysis is, at best, incomplete. Further, any analysis of AD-CVD laws and their impact on the U.S. economy that proceeds without considering the political impact these laws have on efforts to generally liberalize trade overlooks an essential concern.

All AD-CVD actions must be considered in terms of their competitive context. For example, one of the cases mentioned above, involves past and continuing instances of the dumping and subsidization of semiconductor imports. In this case, there is clear evidence that the dumping and subsidization was part of an explicit policy by Japanese semiconductor companies and the Japanese government, and later their counterparts in South Korea to gain a dominant position in semiconductor production. Economic analyses often assume that resources can shift without cost from one sector to another; in this view, a semiconductor plant that is closed due to dumping one year can easily re-open the next year when the dumping is halted. In the real world, this is obviously not the case. The losses in human and financial capital are often irreplaceable, or at least would take years to rebuild. Additionally, the benefits of continuing semiconductor production to serve as an incubator of the next generation of technology are considerable. Without a manufacturing facility in place, it can be very difficult to spring into the new generation of semiconductor technology and the input technologies will be less likely to be based in the United States if the primary consumers are overseas.

These competitive impacts are particularly acute in the high technology industry, but there are parallels in traditional manufacturing, agriculture, fisheries. In the following case studies of the application of AD-CVD laws, a more complete picture of the economic, political, and competitive impacts of AD-CVD actions is provided.

# A MODEL TO EVALUATE THE ECONOMIC COSTS AND BENEFITS OF DUMPING AND SUBSIDIES

To examine the economic impact of AD/CVD laws, this paper employs a comparative-static framework of analysis that is frequently used in the analysis of international trade policies. The basic model is represented graphically in Figure 1. Unlike other studies, this analysis considers the gains and losses due to unfair trade. That is, but for the market distortion of a subsidy or dumping, a free-trade market equilibrium would prevail, with higher prices for domestic producers and all sources of imports. This study also



reconsiders a major assumption of the comparative-static framework of analysis, namely that all inputs released from the domestic industry as a result of the unfairly traded imports are seamlessly absorbed into the U.S. economy with no economic loss. Finally, this study attempts to value the interest costs that arise from unfair trade.

The comparative-static framework of analysis identifies four sources of consumer gains from dumped imports. These sources are shown in the figure below, where an asterisk represents the equilibrium without dumping, the subscript D represents the equilibrium with dumping, P represents price and Q represents quantity.<sup>22</sup> Areas A and B are gains to consumers that come at the expense of domestic producers, who sell fewer products and receive lower prices for those products. Area A is commonly referred to as lost “producer surplus”. It represents lost economic profits to the domestic industry. These economic profits include extra returns on labor and capital. Area B is commonly referred to as an “efficiency gain” because it represents the added efficiency of moving resources from the industry afflicted by dumping to other areas in the economy where those resources can be used more profitably.<sup>23</sup> However, a critical assumption underlies this interpretation of B: the resources released by the domestic industry, including the rectangular area under area B, are absorbed seamlessly into other sectors of the economy. This simplifying assumption is, to put it mildly, quite optimistic about the effects of economic dislocation.

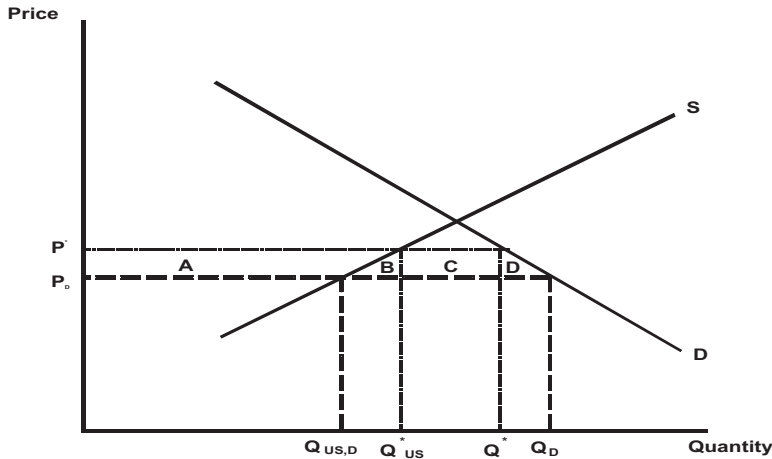
Take the steel industry as an example. The domestic coal used to produce steel does not get absorbed by other industries immediately, and may have to be sold at significantly lower prices in the future. Supplier industries in turn reduce spending in response to lower steel demand. Moreover, steel producers faced with lower sales and prices do not immediately lay-off workers. The firms earn lower revenues and income before they adjust to competing with dumped products. And laid off workers do not immediately find jobs in which they can add value, nor do the new jobs pay as much as the old ones lost due to the market distorting behavior.<sup>24</sup> In other words, the simplifying assumptions related to area B more often than not do not match reality. While such economic losses are an uncomfortable reality of capitalism, they are generally accepted when caused by new technology or better management at competing firms. In the case of dumping or subsidization, these losses often flow directly or indirectly from market distortions created or encouraged by foreign governments. The gains to consumers represented by area B are not mere “efficiency gains”, but are instead pure losses to the U.S. firms, workers, and input suppliers to the industry afflicted by dumping. Thus, contrary to the conventional interpretation, we view area B as a direct loss to producers in the industry and to their workers and suppliers.

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22 This graphical presentation assumes that dumped imports, fair imports, and the domestic product are perfect substitutes. The conclusions hold if the three groups of products are imperfect substitutes as well.

23 Prior to the dumping, these resources are considered to be efficiently used. Thus, it is the distortion of dumping that causes these resources to be considered “inefficient”.

24 Economists have no trouble recognizing the losses resulting from economic dislocation when they occur outside the context of international trade. See, for example, Joseph E. Stiglitz, Jonathan M. Orszag, and Peter R. Orszag, *The Impact of Asbestos Liabilities on Workers in Bankrupt Firms* (Sebago Associates, December 2002) at 28-29.

**Figure 1. Impact of Dumping in the Comparative-Static Analytical Framework**

Area C in the figure above represents losses to fairly traded imports. Like domestic producers, firms that supply fairly traded imports are adversely affected by dumping as their prices and sales quantities decline due to the presence of dumped imports. This lost revenue is another source of the gain to domestic consumers of the product affected by dumping.

The only area that is a pure gain to consumers is area D, which represents the gains to consumers from being able to increase consumption of the dumped product. This area is the only benefit to consumers that does not come at the expense of the other actors represented in the comparative-static framework of analysis.

To assess the producer costs and consumer benefits of dumping, we apply the following methodology. First, we apply data from antidumping and sunset investigations to a partial equilibrium model.<sup>25</sup> This model specifies an equilibrium for each year in which there is dumping. The dumping margin is set to zero to calculate a new equilibrium in which there is no dumping (or subsidy).<sup>26</sup> The two equilibriums are used to calculate the following:

- **THE DIRECT PRODUCER COSTS OF DUMPING IN THE FORM OF LOST PRODUCER REVENUE.** In other words, we calculate the lost revenue to the domestic industry caused by the unfair trade using the dumping (and/or subsidy) margins calculated by the Department of Commerce.
- **THE INDIRECT EFFECTS OF DUMPING ON INDUSTRIES THAT SUPPLY THE INDUSTRY AFFECTED BY DUMPING.** For this, we use industry-by-industry total requirement tables to derive indirect industry mul-

25 For an explanation of the model used, See Kenneth H. Kelly and Morris E. Morkre, *One Lump or Two: Unitary Versus Bifurcated Measures of Injury at the USITC*, Working paper No. 282, Bureau of Economics, Federal Trade Commission (March 2006) at 8 to 12.

26 No adjustment is made for internal transportation costs or duties on fairly traded imports.

tipliers. These multipliers are then applied to lost industry revenue to estimate the impact of lost domestic sales on suppliers and secondary suppliers.

- **THE ONE-YEAR FINANCIAL COST OF DUMPING.** This cost results from the fact that the United States runs a large current account deficit and must borrow from abroad to finance any increase in imports.<sup>27</sup> An increase in imports due to dumping causes additional borrowing and interest payments that would not occur in the “but-for” world of no dumping. To calculate the one-year financial cost of dumping, we multiply the one-year Treasury bill constant maturity rate by the increase in the value of imports due to dumping for that year.
- **THE PORTION OF THE CONSUMER SURPLUS THAT DOES NOT COME AT THE EXPENSE OF ANOTHER ACTOR IN THE SYSTEM.** This value, represented by area D, is calculated, as suggested by the geometry above, by multiplying by 0.5, the increase in the quantity consumed, and the decrease in the market price resulting from dumping.

The estimates provided in this report should be kept in perspective. First, the dumping margins sometimes reflect the fact that foreign producers did not cooperate with the Department of Commerce during the unfair trade investigation. In such cases, the Department has no choice but to use information from the petition. Petition margins tend to be higher than those ultimately found by the Department when the firms under investigation cooperate fully. In cases when the Department utilized “facts available” to estimate the dumping margins, the lost-revenue, indirect effects, financial costs, and consumer gains due to dumping will be inflated.

Second, other variables important to the results, such as the elasticities of aggregate demand and substitution used in the model, also have a margin of error. The USITC typically provides a range of elasticity estimates. Our convention is to choose the mid-point of the various elasticity ranges provided by the Commission. In some cases, we strayed from this convention when common sense or modeling results suggested a value at the low or high end of the Commission range was more appropriate than the mid-point. Third, there are other gains associated with imports aside from consumer gains that we do not attempt to measure, such as the dynamic gains from trade.<sup>28</sup> However, the existence of dynamic gains that may result from trade based on comparative advantage is not all that certain when the increase in imports is caused by market distorting practices such as subsidies and dumping. If

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27 Increasingly, the borrowed funds come from foreign governments who purchase U.S. government and agency securities.

28 There are also indirect gains from higher imports, such as increased in port activities. We have not measured these offsetting indirect effects, and believe they are substantially smaller than the indirect effects experienced due to lost domestic production.

employees dislocated due to dumping were consistently employed in higher productivity industries, one would expect them to have consistently higher wages upon reentering the workforce. Empirical research indicates that displaced workers in general face poorer employment prospects, an increased probability of working part-time, lower earnings due to shorter hours and lower wage rates, and substantial earnings losses on average, even if employed full time.<sup>29</sup> Under these circumstances, it is not at all clear that there are substantial dynamic gains from imports inflated by unfair trade.

Finally, the overriding result of the modeling exercise is to demonstrate that the pure gains from unfair trade, the gains that do not come at the expense of fairly traded imports and domestic production, are relatively small compared to the revenues lost by the domestic industry, and are often not significantly higher than the financial costs associated with higher imports. Given the potentially large direct and indirect economic losses due to dumping and subsidies that the conventional analysis assumes away, the relatively small pure consumer gains from dumping are hardly attractive. Under these circumstances, the economic case for weakening U.S. trade laws, whether unilaterally or in response to new international trade agreements, is not persuasive.

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<sup>29</sup> Henry S. Farber, *Job Loss in the United States, 1981-1999*, Working Paper # 453, Princeton University Industrial Relations Section (June 2001) at 12-31.

# 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.<sup>30</sup> Shrimp are both “wild-caught” and farmed, though wild-caught shrimp account for the vast amount of U.S. produc-



tion. 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.<sup>31</sup> 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.<sup>32</sup> 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.<sup>33</sup> 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.<sup>34</sup> 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.<sup>35</sup> The value of the 2003 catch was approximately \$680 million.<sup>36</sup>

*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.<sup>37</sup> 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.<sup>38</sup>
- 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.<sup>39</sup>
- Indicators of employment well-being, such as wages and hours worked, worsened.<sup>40</sup>
- Operating performance experienced an extreme deterioration.<sup>41</sup>

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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 <sup>(1)</sup>	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) <sup>(2)</sup>	2,370,984	2,403,994	2,403,023	2,723,132	1,077,187	1,024,830
Subject import unit value (\$/lb) <sup>(2)</sup>	5.13	4.19	3.76	3.50	3.61	3.15
Wages paid (\$1,000) <sup>(3)</sup>	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.<sup>42</sup> 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 these 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.<sup>43</sup> 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](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.<sup>44</sup> 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.<sup>45</sup> 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.

## CRAWFISH TAIL MEAT FROM CHINA

The U.S. industry producing crawfish tail meat is centered in one state: Louisiana. Only one member of the Crawfish Processor's Alliance, the group filing the petition for trade relief, had a production facility outside of Louisiana as of 2002.<sup>46</sup> A significant amount of crawfish production is



consumed in Louisiana and neighboring states,<sup>47</sup> where there are obvious locational advantages for local producers. The industry is largely comprised of small, family-owned businesses that operate seven-to-eight months per year and rely on crawfish sales for the majority of their business.<sup>48</sup> Sales revenues of these firms average from \$300,000 to \$800,000 per year.<sup>49</sup>

Crawfish processors obtain crawfish from unaffiliated harvesters who either catch wild crawfish or farm them.<sup>50</sup> After purchasing crawfish, processors either peel it or sell it on the live market.<sup>51</sup> End users who purchase live crawfish peel, prepare, and consume them. Whole boiled crawfish is typically frozen and then exported, though Chinese competition is reducing this market as well.<sup>52</sup> Approximately one-eighth of the crawfish harvest is further processed into tail meat, which is shipped either fresh or frozen.<sup>53</sup>

According to official statistics from Louisiana, the state's annual crawfish harvest from 1997 through 2002 ranged from 18.5 million pounds to 77.1 million pounds, the majority of production accounted for by farming. Commission data indicates that the tail meat industry accounted for \$11.5 million in sales in

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46 Crawfish Tail Meat from China, USITC Pub. 3614, Inv. No. 731-TA-752 (Review) (July 2003) at I-15 to I-16.

47 *Id.* at II-1.

48 *Id.* at I-13.

49 *Id.* at I-13.

50 *Id.* at I-9, II-2, and II-3.

51 *Id.* at I-9.

52 *Id.* at I-8 to I-9.

53 *Id.* at I-9.

1994.<sup>54</sup> The catch in Louisiana was dramatically reduced in 2000 and 2001 due to drought.<sup>55</sup>

### *Original investigation and determination*

Despite the advantages of local production, crawfish processors saw the volume of frozen tail meat imported from China triple from 1994 to 1995.<sup>56</sup> On September 20, 1996, the Crawfish Processors Alliance of Breaux Bridge, Louisiana filed an antidumping petition alleging that the U.S. industry was materially injured by dumped crawfish tail meat from China.<sup>57</sup> In August 1997, the Department of Commerce announced its affirmative determinations indicating dumping margins in excess of 91 percent for all firms examined.<sup>58</sup> By a vote of 4-0, the Commission found that the domestic industry producing crawfish tail meat was materially injured by the dumped imports of Chinese tail meat.<sup>59</sup>

The Commission determination rested on the following factors.

- The increase in imports from China was extremely large. The value of imports increased from \$9.0 million in 1994 to \$35.8 million in 1995.<sup>60</sup>
- The sales and market share of domestic producers declined even though the U.S. market for crawfish was growing.<sup>61</sup> Moreover, the majority of dumped imports were sold to customers in Louisiana and contiguous states – the back yard of the domestic industry.
- Chinese tail meat undersold domestic tail meat by margins by 20 percent. With input prices rising, domestic producers were caught in a cost-price squeeze because the presence of low-priced imports prevented them from covering higher costs with higher prices.<sup>62</sup> In fact, the Commission found that domestic processors reduced prices of frozen domestic tail meat to Louisiana retailers.
- Due to the cost-price squeeze and the reduced shipments, the domestic industry suffered financial declines. Domestic producers also experienced declining production, sales volumes, capacity utilization, and employment.<sup>63</sup>

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54 Id. at I-4.

55 Id. at I-8

56 Crawfish Tail Meat from China, USITC Pub. 3507, Inv. No. 731-TA-752 (Final) (August 1997) at 17.

57 Id. at I-1.

58 62 Fed. Reg. 41358 (August 1, 1997).

59 Id. at 3.

60 Id. at 17. Though import declined to \$19 million in 1996, the Commission attributed this decline in part to the filing of the petition.

61 Id. at 17.

62 Id. at 21-24.

63 Id. at 26.

Certain indicators of injury in the Commission's report are shown in the table below. The table includes information from the original investigation, which covered 1994 to 1996, and for 1997 and 1998, the first two years after the order.

**Table 5, Crawfish Tail Meat from China:**  
*Selected Data Collected by the USITC*

Item	1994	1995	1996	1997	1998
U.S. shipment (\$1,000)	11,461	10,352	7,118	8,262	10,801
U.S. market share (percent, by value)	53.8	30.1	23.9	65.7	50.7
Subject imports (\$1,000) <sup>(1)</sup>	9,032	35,845	19,308	4,309	9,769
Subject import unit value (\$/lb) <sup>(1)</sup>	2.66	3.26	2.49	1.84	1.64
Wages paid (\$1,000)	2,596	2,242	1,634	2,200	2,692
Notes:					
(1) Import data for 1994 to 1996 was based on responses to the Commission's questionnaire, while data in 1997 and 1998 are based on official trade statistics. The two sets of import data are thus not comparable.					
Sources: USITC Pub. 3614 at I-3 to I-4.					

### *Estimated revenue impact of unfair trade*

The lost revenue from dumping cannot be estimated by the model used for this study without making certain modifications to the elasticity estimates calculated by the Commission.<sup>64</sup> Specifically, a substitution elasticity of 1.75 was used, along with an aggregate elasticity of demand of 1.25.<sup>65</sup> Assuming that dumping of this magnitude occurred during the 1994-1996 period, the model indicates that crawfish dumping cost the industry a cumulative \$5.9 million in revenue during the three-year period, with a range of \$1.6 to \$2.6 million per year. These losses are small in comparison with those experienced by the shrimp industry, but are somewhat larger relative to shipment value.

64 The USITC's COMPAS model, which the Commission used with frequency to estimate injury during the 1990s, was also not able to generate meaningful injury estimates. See USITC Pub. 3057 at II-16 to II-17, and fn. 60.

65 The Commission estimated a range 1 to 3 for the substitution elasticity in the original investigation, with the low end of the range applicable to sales in and near to Louisiana, and the high end applicable to sales outside the local area. Our methodology calls for a substitution elasticity at the midpoint range of the Commission's estimate, but the estimate of 1.75 is used to reflect the fact that the majority of the domestic market for tail meat is beyond Louisiana. An aggregate demand elasticity of 1.25 was used instead of the 2.25 amount implied by the Commission's estimates because the 2.25 value implies that the imported and domestic tail meat are complements, not substitutes. The losses by the domestic industry, even in their own local market, suggest that the imported and domestic products are substitutable.

**Table 6. Crawfish Tail Meat from China:**  
*Estimated Lost Revenue due to Dumping*

Item	1994	1995	1996	Total
Estimated dumping margin (percent)	91.00	91.00	91.00	N/A
Lost revenue due to dumping (\$1,000)	1,609	2,611	1,686	5,907
Sources: USITC Pub. 3614 at I-3 and author's calculations.				

Losses suffered by producers of crawfish tail meat have implications for other industry sectors. Based on the Department of Commerce's detailed benchmark estimates of industry-by-industry total output multipliers for the U.S. economy, the indirect effect of a one dollar change in output from the domestic crawfish tail meat industry has an indirect effect, on the economy of \$1.57.<sup>66</sup> The borrowing required to purchase just one years worth of the unfairly traded imports is equal to the interest rate multiplied by the increase in imports resulting from the dumping. This interest can be viewed as a financial cost of the market distorting behavior. For crawfish tail meat, the annual financial costs range from approximately \$0.1 million to \$0.4 million during the 1994-to-1996 period. The indirect and interest estimates are shown in the table below.

**Table 7. Crawfish Tail Meat from China:**  
*Indirect Costs and Interest Costs due to Dumping*

Item	1994	1995	1996	Total
Indirect industry output multiplier	1.57	1.57	1.57	N/A
1-year T-bill rate (percent)	5.31	5.95	5.51	N/A
Lost indirect activity (\$1,000)	2,523	4,095	2,644	9,263
Interest on borrowed funds (\$1,000)	137	438	230	805
Sources: Bureau of Economic Analysis at <a href="http://www.bea.gov/bea/dn2/i-o.htm#benchmark">http://www.bea.gov/bea/dn2/i-o.htm#benchmark</a> (data for multiplier); Federal Reserve Bank of St. Louis at <a href="http://www.research.stlouisfed.org/fred2/series/GS1/downloaddata">http://www.research.stlouisfed.org/fred2/series/GS1/downloaddata</a> (interest rates); and authors' calculations.				

The gains to consumers from increased consumption of dumped crawfish tail meat are relatively substantial because the magnitude of the dumping margin, 91 percent, is so large and because substitutability outside Louisiana and the surrounding area where most domestic crawfish is consumed is relatively low. The gains to consumers from the consumption of tail meat that otherwise would not have been consumed are shown in the table below, along with the estimated revenue, indirect, and financial losses from the dumping.

66 This estimate is based on detailed estimates from the U.S. 1997 Benchmark Input-Output industry-by-industry total requirements table. The total requirements multiplier for the seafood product and preparation and packaging industry is 2.61. The detailed data are available from <http://www.bea.gov/bea/dn2/i-o.htm#benchmark>.

**Table 8. Crawfish Tail Meat from China:**  
*Summary of Costs and Benefits of Dumping*

Item	1994	1995	1996	Total
Lost revenue due to dumping (\$1,000)	-1,609	-2,611	-1,686	-5,907
Lost indirect activity (\$1,000)	-2,523	-4,095	-2,644	-9,263
Interest on borrowed funds (\$1,000)	-137	-438	-230	-805
Consumption gains (\$1,000)	1,456	7,486	4,746	13,687
Sources: Author's calculations.				

Unlike with shrimp, the gains from increased consumption of dumped tail meat are only somewhat lower than the sum of the various domestic effects shown above. This result is explained by the magnitude of the dumping margin and by the fact that the increase in domestic sales is much smaller than the decline in dumped imports in the fair trade scenario.

#### *Long-term impact of the order*

The order appeared to have been successful in its initial years. As shown in Table 5 above, U.S. shipments by the domestic industry rose significantly during 1997 and 1998, the first two years after the order. Commission data from the sunset review demonstrate that the improvement in revenue was driven by both increased volume of sales and higher prices.<sup>67</sup> Prices rose in each of the first four years after the order was issued.

However, the industry's profitability did not improve. Though sales recovered, the costs experienced by the industry rose even faster, preventing the domestic industry from reaching profitability not only in 1997 and 1998, but also in the following three years. Costs increases were exacerbated in 2000 and 2001 by a drought in Louisiana that drastically reduced the output and sales of the domestic industry. The employment picture was somewhat better in the aftermath of the order as production workers and wages improved in 1997 and 1998. But the drought that harmed profitability also damaged employment levels and wages. Furthermore, the Commission found that imports continued to expand more quickly than U.S. demand despite the order and the high margins.<sup>68</sup> It also appears that U.S. Customs had difficulty collecting the duties owed from Chinese producers.<sup>69</sup> The ability of exporters to avoid paying duties indicates that the deterrent effect of the order and the expected recovery of the industry were diluted by Chinese non-compliance.

In 2002, the first year after the drought, the level of subject imports experienced a major decline and the domestic industry returned to profitability. Wages and the number of workers in the industry rose, and prices received by

<sup>67</sup> USITC Pub. 3614 at I-4.

<sup>68</sup> Id. at 12.

<sup>69</sup> Id. at 17.

the domestic industry remained well above those that prevailed before the order went into place.<sup>70</sup>

In its sunset review of the order in 2003, the Commission determined that the domestic industry remained vulnerable to an increase in imports from China if the order were revoked.<sup>71</sup> As a result, the order on tail meat from China was extended for an additional five years. Information from the LSU Agriculture Center gives a mixed picture of the industry. The crawfish harvest in 2005 was good – comparable to the harvest in 1997.<sup>72</sup> Unfortunately, there are indications that processing business is still under duress.<sup>73</sup>

While the impact of the order was at least partially diluted by non-compliance, U.S. tail meat producers appear to have benefited from the Countervailing Duty and Subsidy Offset Act. Customs initially had difficulty collecting duties, but official data indicate that by 2005, nearly \$28 million in collected duties had been distributed to the domestic industry.<sup>74</sup> The combination of these funds and the orders have at the very least enabled the domestic industry to survive in the face of difficult economic conditions caused by dumping, drought, and natural disasters.

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70 Id. at I-3 to I-4.

71 Id. at 1.

72 Louisiana State University Agricultural Center, *Aquaculture Factsheet: Louisiana Aquaculture as of 2005* (available on line at <http://www.lsuagcenter.com/NR/rdonlyres/EFEF3DD2-416A-4573-9829-6377DAC3C353/24737/AquacultureFactsheet07.pdf>)

73 Louisiana State University Agricultural Center, *Aquaculture Factsheet: Louisiana Aquaculture as of 2005* (available on line at <http://www.lsuagcenter.com/NR/rdonlyres/0293E20C-509F-4013-941C-FF1A854203C7/17922/AquacultureFactsheet04.pdf>)

74 See [http://www.cbp.gov/xp/cgov/import/add\\_cvd/cont\\_dump/](http://www.cbp.gov/xp/cgov/import/add_cvd/cont_dump/).

## GARLIC FROM CHINA

The U.S. industry producing fresh garlic is centered in sunny and relatively dry areas, mostly in California.<sup>75</sup> Garlic is a seasonal crop that is planted in the fall and harvested in June and July of the following year.<sup>76</sup> Approximately 22 percent of U.S. garlic is grown for fresh use, while the remainder is earmarked for dehydration



(61 percent) and as seed for the future crops.<sup>77</sup> When the petition was filed in 1994, there were 26 firms that produced garlic in the United States.<sup>78</sup>

In the investigation, garlic producers consisted of firms that plant, harvest, pack and sell garlic.<sup>79</sup> These firms contract with so-called “crop tenders” who grow garlic on their farms.<sup>80</sup> Fresh garlic is picked by hand and sold largely to distributors, who then sell the product to retailers and other distributors. While producers of dehydrated garlic also purchase garlic from the fresh market, they typically grow, mechanically harvest, and internally consume garlic. During the period examined by the Commission, total U.S. production of fresh and dehydrated garlic ranged from 341 million pounds to 442 million pounds.<sup>81</sup>

Garlic is also produced in large quantities in Argentina, Chile, and Mexico in the western hemisphere. Because the timing of the garlic season depends on the latitude of the growing area, there is little overlap in competition between U.S.-produced garlic and garlic produced in other western hemispheric sources. For example, in Mexico, garlic is planted in the summer and then harvested in the following spring. In Argentina and Chile, garlic is planted in the spring and harvested in the following winter.<sup>82</sup> In contrast, the crop year in China coincides

75 *Fresh Garlic from The People's Republic of China*, USITC Pub. 2825.Inv. No. 731-TA-683 (Final) (November 1994) at II-4.

76 *Id.* at I-19.

77 *Id.* at II-7 to II-8.

78 *Id.* at I-6.

79 *Id.* at I-6.

80 *Id.* at II-16. The Commission found no garlic farmers who sold garlic independently of the larger garlic producers

81 *Id.* at G-3, based on data from the California County Agricultural Commissioner.

82 *Id.* at II-4.

with the crop year in California. In fact, the Chinese harvest is somewhat earlier, enabling it to enter the U.S. market just prior to the U.S. harvest and compete directly with U.S. garlic.<sup>83</sup>

*Original investigation and determination*

In the early 1990s, use of garlic was growing strongly in the United States due to the increasing popularity of ethnic food using garlic.<sup>84</sup> U.S. production of raw garlic was rising as well.<sup>85</sup> However, during the summer of 1993, imports of fresh garlic from China experienced an extremely sharp rise.<sup>86</sup> On January 31, 1994, the Fresh Garlic Producers Association filed a petition alleging that domestic producers of fresh garlic were being injured by reason of dumped imports of fresh garlic from China.<sup>87</sup> Because none of the named producers of garlic in China responded to the Department of Commerce's questionnaire, the Department found an antidumping rate of 376.67 percent, equal to the dumping margin alleged in the petition.<sup>88</sup> The Commission determined that the industry producing fresh garlic was materially injured by dumped imports of fresh garlic from China, but that producers of seed garlic and dehydrated garlic were not injured.<sup>89</sup>

The Commission found the following indicators of injury.

- The increase in imports from China was massive. The volume of imports tripled in 1993 and then increased by nearly a factor of seven in 1994.<sup>90</sup>
- The market share of the Chinese garlic by volume rose by 27.2 percentage points in 1994, while the U.S. market share declined by 18.0 percentage points that year.<sup>91</sup> U.S. market share by value also declined substantially in 1994.
- Chinese fresh garlic undersold domestic fresh garlic by margins by that reached 70 percent during crop-year 1994 and depressed U.S. prices.<sup>92</sup> U.S. producers who initially held off selling their product at low prices were eventually forced to sell at distressed prices when prices for fresh garlic failed to recover as expected.<sup>93</sup>

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83 Id. at I-20 and II-4 to II-5.

84 Id. at II-10.

85 Id. at II-16.

86 Id. at II-55.

87 Fresh Garlic from China, USITC Pub. 3393, Inv. No. 731-TA-683 (Review) (February 2001) at 3.

88 59 Fed. Reg. 49060 (September 26, 1994).

89 USITC Pub. 2825 at I-5.

90 Id. at I-25.

91 Id. at I-25.

92 Id. at I-26.

93 Id. at I-26.

- Despite the rapid growth in the U.S. market for fresh garlic, the U.S. industry experienced falling profitability from 1991 to 1994, including negative operating income in 1994, a year in which garlic consumption rose by 53.5 percent.<sup>94</sup>

Certain indicators of injury in the Commission's report are shown in the table below. The table includes information from the original investigation, which covered 1991 to 1994, and for 1998 to 2000, the three years covered in the Commission's sunset investigation carried out during 2000-2001.

**Table 9. Fresh Garlic from China:**  
*Selected Data Collected by the USITC*

Item	1991	1992	1993	1994	1998	1999	2000
U.S. shipment (\$1,000)	32,538	39,766	53,191	52,966	95,423	89,196	89,616
U.S. market share (percent, by value)	58.3	64.7	71.1	58.4	76.5	59.5	75.5
Subject imports (\$1,000) <sup>(1)</sup>	2,474	1,446	3,719	20,014	92	261	182
Subject import unit value (\$/lb) <sup>(1)</sup>	0.41	0.41	0.40	0.32	0.19	0.30	0.18
Wages paid (\$1,000)	6,380	8,519	10,008	10,463	10,262	10,192	12,195
Sources: USITC Pub. 3393 at to I-4.							

#### *Estimated revenue impact of unfair trade*

The dumping margin resulting from the Chinese respondent's lack of cooperation with the Department of Commerce's investigation is too large to be used in the model. To derive a meaningful estimate of the impact of dumping, a lower margin was required. The margin used was 30 percent, which was high enough to reduce Chinese penetration of the U.S. market by a significant amount.<sup>95</sup> The other elasticities used were the midpoint of the Commission estimates from the sunset review. Based on the 30 percent margin, the model indicates that dumping of fresh garlic cost the domestic industry a cumulative \$12.3 million in lost revenue during the three-year period, with losses varying between \$0.7 and \$8.6 million per year. Losses are concentrated in 1994, the last year of the period of investigation. This result is consistent with the fact that imports from China increased significantly during crop year 1994.

<sup>94</sup> Id. at I-27.

<sup>95</sup> In 1992, a 30 percent margin was enough to eliminate Chinese fresh garlic from the market entirely, so a margin of 29 percent was input into the model instead.

**Table 10. Fresh Garlic from China:**  
*Estimated Lost Revenue due to Dumping*

Item	1991	1992	1993	1994	Total
Estimated dumping margin (percent)	30.00	30.00	30.00	30.00	N/A
Lost revenue due to dumping (\$1,000)	1,053	693	1,990	8,586	12,321

Sources: USITC Pub. 3393 at I-2 to I-3 and author's calculations.

The combined losses to other sectors resulting from this lost revenue, as well as the financing costs of the increase in imports, appear in the table below. According to the Department of Commerce's detailed benchmark estimates of industry-by-industry total output multipliers for the U.S. economy, the indirect effect of a one dollar change in output from the U.S. fresh garlic industry is \$0.75.<sup>96</sup> The cumulative indirect effect of the dumping is an estimated \$9.2 million. The financial cost of consuming more imports is estimated to equal the one-year Treasury bill rate multiplied by the increase in import value resulting from the dumping. The annual financial costs during the 1991 to 1994 period were \$30,000 to \$0.4 million. The low financing costs in part reflect the way in which the model treats fairly traded imports. Those imports rise in response to the decline in Chinese imports in the same way that U.S. sales rise in the absence of dumping. The model likely overstates the increase in fairly traded imports without dumping (because they enter the market during the U.S. off-season) and therefore understates the required financing costs associated with the dumped imports.

**Table 11. Fresh Garlic from China:**  
*Indirect Costs and Interest Costs due to Dumping*

Item	1991	1992	1993	1994	Total
Indirect industry output multiplier	0.75	0.75	0.75	0.75	N/A
1-year T-bill rate (percent)	5.86	3.89	3.43	5.31	N/A
Lost indirect activity (\$1,000)	790	520	1,493	6,440	9,242
Interest on borrowed funds (\$1,000)	76	30	66	448	619

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 gains to consumers from increased consumption of fresh garlic are shown in the table below, along with the estimated revenue, indirect, and financial losses from the dumping. The pure gains to consumers are relatively small in this case, peaking at \$0.7 million in 1994. The small pure consumer gains likely reflect the small market share held by the subject imports until the massive

<sup>96</sup> This estimate is based on detailed estimates from the U.S. 1997 Benchmark Input-Output industry-by-industry total requirements table. The total requirements multiplier for vegetable and melon farming is 1.78. The detailed data are available from <http://www.bea.gov/bea/dn2/i-o.htm#benchmark>.

increase in dumped imports in 1994. It is also evident that the revenue losses to U.S. producers from the Chinese dumping far outdistanced the pure consumer gains from increased consumption.

**Table 12. Fresh Garlic from China:**  
*Summary of Costs and Benefits of Dumping*

Item	1991	1992	1993	1994	Total
Lost revenue due to dumping (\$1,000)	-1,053	-693	-1,990	-8,586	-12,321
Lost indirect activity (\$1,000)	-790	-520	-1,493	-6,440	-9,242
Interest on borrowed funds (\$1,000)	-76	-30	-66	-448	-619
Consumption gains (\$1,000)	12	3	23	734	772
Sources: Author's calculations.					

### *Long-term impact of the order*

As indicated by Table 9 above, the affirmative dumping order had a noticeable impact on the flow of dumped garlic from China. By 1998, for instance, the value of subject imports totaled only \$92,000, compared to \$20 million in 1994. According to the Commission, “The order resulted in an immediate and massive reduction in the volume of imports from China, from 63.5 million pounds in 1994 to 3.7 million pounds in 1995.”<sup>97</sup>

The Commission determined that in the absence of the order, China’s export oriented industry would have had a strong incentive to export to the U.S. market, and that imports from China would likely increase if the order were lifted.<sup>98</sup> The Commission noted that trade actions had been used to block the disruptive effects of Chinese imports in other markets.<sup>99</sup> The Commission also noted that China’s export price of \$0.16 per pound was much lower than the prevailing U.S. price of \$0.51 to \$0.58 per pound.<sup>100</sup> The Commission thus concluded that there would be a significant increase in imports of the subject merchandise if the order were revoked.<sup>101</sup>

In the aftermath of the order, the profitability of the U.S. fresh garlic industry experienced a dramatic improvement. Operating income, which had declined to almost minus \$1.0 million in 1994, recovered to \$15.7 million in 1998.<sup>102</sup> Hourly wages, which had been declining during the original investigation, increased during the 1998 to 2000 period and supported an overall increase in wages paid by the industry.<sup>103</sup> The domestic industry also invested in cold storage and controlled

97 USITC Pub. 3393 at 11.

98 *Id.* at 11-12

99 *Id.* at 11.

100 *Id.* at 11.

101 *Id.* at 11.

102 *Id.* at I-3.

103 *Id.* at I-3.

atmosphere storage equipment in order to prolong the shelf life of fresh garlic.<sup>104</sup>

Domestic producers were thus able to increase their share of the home market. By 1998, domestic producers held approximately three-quarters of the U.S. market for fresh garlic. U.S. market share and financial performance tailed off somewhat in 1999 and 2000.<sup>105</sup> In 1999, the size of the domestic crop declined due to fungal damage, leading to higher prices but lower domestic volumes.<sup>106</sup> Fairly traded imports increased to replace the lost domestic output. In 2000, domestic producers over planted, leading to increased supply and a fall in prices consistent with the price levels that had prevailed during the original investigation of dumped fresh garlic.<sup>107</sup> Despite the bad luck, the domestic industry was still able to achieve better financial results in 1999 and 2000 than it had when the dumped Chinese fresh garlic was in the market.

Accordingly, the Commission determined that material injury would revisit the domestic producers of fresh garlic if the order on fresh garlic from China were revoked. The second sunset review of the order is scheduled to be completed by September 14, 2006. From 2001 to 2005, members of the U.S. industry received approximately \$1.1 million in revenue from the Countervailing Duty and Subsidy Offset Act.

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104 *Id.* at 10.

105 *Id.* at I-4.

106 *Id.* at V-1.

107 *Id.* at V-1.

## HONEY FROM ARGENTINA AND CHINA

In 2000, the United States was the world's second largest producer of honey.<sup>108</sup> Although most U.S. honey is produced by commercial beekeepers, a significant amount of honey is also produced by hobbyists (25 or fewer hives), who consume most of the honey they produce, and part-time beekeepers (25 to 299 hives), who generally derive most of their income from other sources.<sup>109</sup> The majority of bee colonies and honey production occurs in five states: California,



North Dakota, South Dakota, Florida, and Minnesota; but honey is produced in virtually every state.<sup>110</sup> There are no public data on beekeeper employment. However, an estimate is possible based on data collected from U.S. producers during its investigation of Honey from Argentina and China. Beekeepers responding to the Commission's questionnaire reported 766 employees in 2000.<sup>111</sup> Responding producers covered approximately one-fourth of U.S. honey production, suggesting there are more than three thousand workers in the beekeeper industry.<sup>112</sup> The value of U.S. honey production in 2000 was approximately \$132 million.<sup>113</sup> Some beekeepers maintain "packing" operations that process the honey for sale, while other independent packers process honey that is purchased from domestic and imported sources.<sup>114</sup>

In 2000, China and Argentina were the first and third largest producers of honey in the world.<sup>115</sup> Though China is also a major consumer of honey,

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108 *Honey from Argentina and China*, USITC Pub. 3470, Inv. Nos. 701-TA-402 and 731-TA-893 (Final) (November 2001) at VII-3.

109 *Id.* at III-1. This classification is based on USDA definitions.

110 *Id.* at 13 and III-3

111 *Id.* at III-8.

112 *Id.* at III-8.

113 *Id.* at C-3.

114 *Id.* at II-2

115 *Id.* at VII-8.

Argentina exports well over 90 percent of its output.<sup>116</sup> The Chinese government views honey production as a way to improve rural incomes, and government policy encourages honey production.<sup>117</sup> The Argentine government also encourages honey production for export. Despite already being a huge net exporter of honey, the number of producing colonies is still growing and the government in 2000 launched an initiative to increase the competitiveness of Argentine honey. Data collected by the Commission indicates that roughly half of Argentine honey exports went to the U.S. market.<sup>118</sup>

Domestic honey producers have long felt endangered by imports. Twice, honey producers have sought forms of safeguard relief.<sup>119</sup> In 1976, the USITC determined that honey was being imported into the United States in such increased quantities as to be a substantial cause of the threat of serious injury to the domestic industry. However, President Ford denied the industry relief. In 1993, the United States Trade Representative requested that the USITC conduct a safeguard investigation under a statute reserved for non-market economies. That investigation found that imports from China were increasing rapidly “so as to be a significant cause of market disruption to a domestic industry in the United States,” but relief again was denied, this time by President Clinton.<sup>120</sup> In response, the domestic industry in 1994 filed an antidumping petition against China. A suspension agreement with a reference price mechanism was implemented before either the Department of Commerce or the USITC reached their final determinations. When it was time to review the determination against China in 2000, the domestic industry, which believed that the reference price mechanism was unsuccessful, did not participate in the review, and the investigation was terminated. Instead, the domestic industry, in the form of the American Honey Producers Association and the Sioux Honey Association, filed antidumping petitions on September 29, 2000, against honey from Argentina and China, and a countervailing duty petition against Argentina.

### *Original investigation and determination*

Available data from packers suggest that honey consumption increased in the United States from 1994 to 2000, primarily as a result of an expansion of honey used in the industrial sector as an ingredient.<sup>121</sup> Sales to the retail and food service sectors, which account for the majority of honey demand in the United States, also grew during the period.<sup>122</sup> In the face of growing demand, prices did not increase, as one would have expected, but instead declined.

During the investigation, there was a split among the U.S. industry, with most independent packers opposing the petition and the country’s largest packer sup-

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116 Id. at VII-8.

117 Id. at VII-4.

118 Id. at VII-3.

119 Id. at I-2 to I-3.

120 Id. at I-2.

121 Id. at I-10.

122 Id. at I-10

porting the petition.<sup>123</sup> The antidumping investigations by the Department of Commerce found dumping margins ranging from 25.88 percent to 183.80 percent for Chinese firms, and 32.56 percent to 60.67 percent for Argentine firms.<sup>124</sup> The Department also found that Argentine government subsidies were countervailable at a rate of 4.53 percent.<sup>125</sup> The Commission determined that the U.S. honey industry was materially injured by unfairly traded honey from China and Argentina.<sup>126</sup> With respect to imports from China, the duties were applied retroactively because the Commission determined that the surge in imports after the filing of the petition was likely to seriously undermine the remedial effect of the antidumping duty order.<sup>127</sup>

The Commission found the following indicators of injury.

- The quantity of subject imports rose by 42.6 million pounds (42.6 percent) in 2000 and then an additional 15.3 million pounds (10.7 percent) in 2001.<sup>128</sup>
- The market share of the subject imports expanded from 28.4 percent in 1999 to 37.7 percent in 2001.<sup>129</sup>
- Argentine and Chinese honey undersold domestic honey in nearly three-fourths of the instances in which the two products were priced “head-to-head, with the dumped and subsidized imports up to 20 percent cheaper than domestic honey.”<sup>130</sup>
- The overall condition of the industry declined from 1999 to 2001. The U.S. honey producers lost market share and the value of their sales declined due to lower prices. Beekeepers experienced rising inventories even though domestic consumption was increasing. Packers as a whole saw many of their performance indicators fall as well.<sup>131</sup>

Some of the indicators of injury cited by the Commission’s report are shown in the table below. The data demonstrate that import prices were falling at a time of rising U.S. demand.

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123 *Id.* at 7.

124 66 Fed. Reg. 50610 (October 4, 2001); and 66 Fed. Reg. 50613 (October 4, 2001).

125 66 Fed. Reg. 50614 (October 4, 2001). The cash deposit rate on Argentine honey imports was raised to 5.85 percent due to changes in Argentine government subsidies that enhanced their value to exporters.

126 USITC Pub. 3470 at 24. All six Commissioners found that the domestic industry had been materially injured by the subject imports.

127 *Id.* at 23. Three of the six Commissioners determined that critical circumstances existed with respect to imports from China.

128 *Id.* at 17. In analyzing the subject imports, the Commission added the imports from each country together.

129 *Id.* at 17-18.

130 *Id.* at 18.

131 *Id.* at 19-22.

**Table 13. Honey from Argentina and China:**  
*Selected Data Collected by the USITC*

Item	1998	1999	2000
U.S. production (\$1,000)	147,254	125,422	132,205
U.S. market share (percent, by quantity)	62.5	52.9	52.7
Subject imports (\$1,000)	59,228	67,511	72,256
Subject import unit value (\$/lb)	0.59	0.47	0.46
Net pretax income (beekeepers, \$1,000)	6,413	3,254	3,635
Sources: USITC Pub. 3470 at to C-3 to C-4.			

*Estimated revenue impact of unfair trade*

A single dumping and subsidies margin was required to estimate the impact of the unfair trade on the U.S. industry. The margin was estimated as the weighted average of the following: the simple average of all but the largest Chinese duties; the “all others” rate for Argentina; and the subsidy margin for Argentina. As shown in the table below, the margin applied in the model was approximately 43 percent for all three years. According to the results, the prices received by the domestic producers were depressed by approximately \$0.07 per lb. each year due to the unfair trade. The revenue losses estimated by the model are likely too high, especially in 1998, because production in each year was fixed by the number of colonies and the yield for each particular year. However, higher prices available would have enabled domestic beekeepers to expand production, leading to greater capacity to supply the U.S. market in 1999 and 2000. The record shows that dozens of domestic producers were forced to cancel or reject expansion plans during the period of investigation due to the unfairly traded honey from Argentina and China.<sup>132</sup>

**Table 14. Honey from Argentina and China:**  
*Estimated Lost Revenue due to Subsidies and Dumping*

Item	1998	1999	2000	Total
Estimated subsidy margin (percent)	43.21	43.34	43.33	N/A
Lost revenue due to dumping (\$1,000)	41,857	40,956	43,922	126,735
Sources: USITC Pub. 3393 at I-2 to I-3 and author's calculations.				

The estimated losses to other sectors resulting from this lost revenue and the financing costs of the increase in imports appear in the table below. The indirect industry multiplier of 2.04 is based on the industry-by-industry total output mul-

132 Id. at VI-16.

multiplier for “animal production, except cattle, poultry and eggs.”<sup>133</sup> As noted above, the revenue losses estimated by the model are likely exaggerated, which suggests that the actual indirect impact of the dumping is also exaggerated. The financial cost of consuming more imports is estimated to equal the one-year Treasury bill rate multiplied by the increase in import value resulting from the dumping. The increase in the subject imports resulting from unfair trade was approximately \$25 million per year, resulting in annual financial costs ranging from \$1.2 million to \$1.6 million.

**Table 15. Honey from Argentina and China:**

*Indirect Costs and Interest Costs due to Subsidies and Dumping*

Item	1998	1999	2000	Total
Indirect industry output multiplier	2.04	2.04	2.04	N/A
1-year T-bill rate (percent)	5.05	5.08	6.11	N/A
Lost indirect activity (\$1,000)	85,534	83,693	89,755	258,982
Interest on borrowed funds (\$1,000)	1,226	1,261	1,596	4,083

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 consumer gains from increased consumption of honey due to unfair trade are shown in the table below, along with the estimated revenue, indirect, and financial losses from the dumping, which are expressed as negative values. The dollar value of consumer gains is approximately \$3.9 million during the three years covered by the Commission's investigation. This amount is approximately equal to the financing costs associated with the increase in unfairly traded imports. Another loser from unfair honey trade is fairly traded honey. Model estimates indicate that the unfairly traded honey depressed the price of fairly traded honey imports by approximately \$0.04 to \$0.05 per lb. each year, and the value of those imports by 30 percent each year. Other important sources of imported honey include Canada, Vietnam, Mexico, Uruguay, Thailand, and Chile.

133 This estimate is based on detailed estimates from the U.S. 1997 Benchmark Input-Output industry-by-industry total requirements table. The total requirements multiplier for animal production, except cattle, poultry and eggs is 3.11. The detailed data are available from <http://www.bea.gov/bea/dn2/i-o.htm#benchmark>.

**Table 16. Honey from Argentina and China:**  
*Summary of Costs and Benefits of Subsidies and Dumping*

Item	1998	1999	2000	Total
Lost revenue due to dumping (\$1,000)	-41,857	-40,956	-43,922	-126,735
Lost indirect activity (\$1,000)	-85,534	-83,693	-89,755	-258,982
Interest on borrowed funds (\$1,000)	-1,226	-1,261	-1,596	-4,083
Consumption gains (\$1,000)	594	1,519	1,761	3,874

Sources: Author's calculations.

### *Long-term impact of the order*

The long-term impact of the order on honey has not yet been assessed by the Commission. However, some observations based on publicly available USDA data are possible.<sup>134</sup> The Commission's affirmative determination was issued in November 2001. That year saw a further decline in domestic colonies to 2.5 million. In the aftermath of the order, prices increased sharply, and they remained significantly higher through 2005. The number of colonies also increased in 2002 and 2003, though yields during those years were disappointing. The value of domestic production increased \$97 million in 2002 and another \$24 million in 2003. Though the value of domestic honey production declined in 2004 and 2005 along with prices, it has remained above the levels that prevailed during the Commission's investigation. Nonsubject imports increased significantly after the order, especially from Canada, but also from Vietnam, Mexico, Brazil, and Uruguay. After initially declining, imports from China increased substantially in 2003 as U.S. prices made those imports competitive even with the duties in place. Combined, imports from Argentina and China have not exceeded levels attained during the initial period of investigation.<sup>135</sup> The continued import of the subject merchandise has meant an additional \$5.9 million in CDSOA distributions to domestic producers during the 2002-2005 period.<sup>136</sup>

134 See Sugar and Sweeteners Yearbook Tables, at <http://www.ers.usda.gov/briefing/sugar/data.htm>.

135 For data on honey imports by country, see USITC Trade Dataweb at <http://dataweb.usitc.gov> for HTS 0409.00.00.

136 See [http://www.cbp.gov/xp/cgov/import/add\\_cvd/cont\\_dump/](http://www.cbp.gov/xp/cgov/import/add_cvd/cont_dump/).

## INDIVIDUALLY QUICK FROZEN RED RASPBERRIES FROM CHILE

Red raspberries in the United States are grown primarily in California, Oregon, and Washington. Red raspberries from California are sold mostly in the fresh market, while nearly all the product grown in Washington and Oregon is sold for processing.<sup>137</sup> Individually quick frozen (IQF) red raspberries accounted for approximately one-fifth of the processed red raspberries in 2001. Raspberries can also be block



frozen when the end use of the product does not require the berry to be whole. Data from the U.S. Department of Agriculture indicates that the value of processed red raspberries, including IQF raspberries, has ranged from \$16 million to \$51 million annually during the past 15 years.

The domestic product is of the Meeker variety and is harvested from mid-June to late August.<sup>138</sup> The vast majority of the berries are mechanically harvested. Most of the producers of IQF red raspberries grow their own red raspberries, as well as other berries.<sup>139</sup> The freezing process is energy and capital intensive; requires specialized IQF tunnels to prevent damage to the fresh, grade A fruit; and involves either bathing the fruit with liquid nitrogen or running the berries over cold air.

Because Chile is located in the southern hemisphere and its harvest occurs during the U.S. winter season, the country's exports of fruits and vegetables are usually considered complementary to U.S. production. In Chile, red raspberries of the Heritage variety are harvested twice, with the harvest periods covering November to May. Thus the Chilean harvest ends just as the U.S. harvest is about to begin.<sup>140</sup> But the complementary timing of the harvest is less an issue with IQF red raspberries because the fruit, once frozen, can be held in cold storage.<sup>141</sup>

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<sup>137</sup> Individually Quick Frprozen Red Raspberries from Chile, USITC Pub. 3524, Inv. No. 701-TA-948 (Final) (June 2002) at I-5.

<sup>138</sup> Id. at I-6 to I-9.

<sup>139</sup> Id. at III-1

<sup>140</sup> Id. at IV-1.

<sup>141</sup> Id. at I-9.

Thus, the IQF imports from Chile are highly substitutable with the domestic product.

On May 31, 2001, a committee consisting of 44 growers, eight grower/processors, one coop processor, and one processor of IQF red raspberries filed petitions alleging that dumped and subsidized IQF red raspberries from Chile were the cause of material injury to the domestic industry.<sup>142</sup>

### *Original investigation and determination*

The Department of Commerce did find that red raspberries from Chile were subsidized, but the level of the subsidies found was de minimis, too low to justify an affirmative determination.<sup>143</sup> On the dumping side, the Department found that two of the companies investigated had de minimis dumping margins, 0.50 percent and 0 percent, respectively. In the event of an affirmative injury determination by the Commission, these two fair traders would be able to trade as if no case had been filed. The third firm's margin was estimated to be 5.98 percent, and that firm's rate was to be applied to all other Chilean sources of imports unless they sought, and received, separate duty rates.<sup>144</sup>

At the Commission, the red raspberry investigation was a price case, a case in which the effects of the subject merchandise are largely felt on the price of the domestic product, rather than the volume. Indeed, as shown in the table below, the domestic industry's value of shipments actually increased over the period of investigation. However, despite the increase in sales the Commission in a four-one vote found that the domestic industry was injured by reason of dumped imports, even after removing the imports sold by the two fairly trading Chilean firms.

The Commission found the following indicators of injury.

- U.S. shipments of the subject imports (excluding the imports produced by the two firms found not to be dumping) expanded by 10.3 percent from 1999 to 2001.<sup>145</sup>
- The market share of the subject imports expanded during the last year of the period of investigation. Because some of the imports from Chile were not dumped, the exact increase in imports of the subject merchandise is confidential.<sup>146</sup>

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142 66 Fed. Reg. 30482 (June 6, 2001).

143 67 Fed. Reg. 35962 (May 22, 2006). The subsidies for the three firms investigated were 0.1 percent; 0.16 percent; and 0.65 percent, respectively.

144 67 Fed. Reg. 40271 (June 12, 2006).

145 USITC Pub. 3524 at 13.

146 Id. at 13. Total imports from Chile are published in the Commission's investigation report, but the breakdown between subject and nonsubject imports from Chile is not public information.

- The subject imports from Chile undersold U.S. – produced IQF red raspberries in 31 out of 45 quarters in which “head-to-head” comparisons were possible. The margins of underselling were 22.6 percent on average, and prices of the subject imports generally declined over the period examined.<sup>147</sup>
- Net sales of the U.S. industry declined by 20 percent as U.S. producers dropped prices to hold onto market share in the face low-priced imports.<sup>148</sup> With price in the market below the profitability threshold, the U.S. industry experienced negative profits during the investigation.

Some of the indicators of injury cited by the Commission’s report appear below.

**Table 17. Individually Quick Frozen Red Raspberries from Chile:**  
*Selected Data Collected by the USITC*

Item	1999	2000	2001
U.S. production (\$1,000)	18,926	19,199	17,915
U.S. capacity utilization (percent)	87.2	87.0	79.8
Import unit value (\$1,000) <sup>(1)</sup>	0.86	0.95	0.80
U.S. shipment unit value (\$/lb)	1.31	1.17	1.05
Operating income (\$1,000)	438	-770	-408
(1) Includes nonsubject imports from Chile. Sources: USITC Pub. 3524 at to C-3 to C-4; and D-4.			

#### *Estimated revenue impact of unfair trade*

Calculating the estimated revenue and other effects of Chilean dumping is complicated by the fact that the exact value of the subject merchandise is unknown. In order to generate an estimate, it was necessary to estimate how much of IQF imports were actually dumped. Data from PIERS indicates that one of the Chilean firms accounted for approximately 9 percent of Chilean IQF Raspberry imports during a recent twelve month period. We thus assume that the two firms found not to be dumping accounted for 20 percent of Chile’s total imports. The remaining imports from Chile are assumed to be dumped, and the dumping margin estimated by Commerce, 5.98 percent, is applied to those imports only. The annual revenue losses by the domestic industry range from \$0.7 million to \$0.9 million per year and total \$2.5 million for the three-year period investigated by the Commission.

<sup>147</sup> Id. at 14.

<sup>148</sup> Id. at 15.

**Table 18. Individually Quick Frozen Raspberries from Chile:**  
*Estimated Lost Revenue due to Dumping*

Item	1999	2000	2001	Total
Estimated subsidy margin (percent)	5.98	5.98	5.98	N/A
Lost revenue due to dumping (\$1,000) <sup>(1)</sup>	836	883	737	2,456
(1) Assumes that the nonsubject Chilean firms accounted for 20 percent of imports from Chile. Sources: USITC Pub. 3524 at to C-3 to C-4; D-4; and author's calculations.				

The lost revenue by the domestic raspberry industry has adverse effects on other domestic industries, as well as financial costs to the overall economy. These estimated values are shown in the table below. The indirect industry output multiplier for frozen food manufacturing industry is 2.28. This is a relatively large multiplier, which indicates that the total dollar change in output of other industries that results from a one dollar change in IQF output is \$2.28. The indirect effect of reduced output from dumping on other industries was approximately \$5.6 million. The financial cost of consuming more imports is estimated to equal the one-year Treasury bill rate multiplied by the increase in import value resulting from the dumping. The increase in imports resulting from unfair trade was approximately \$0.5 million per year, resulting in annual financial costs of \$0.1 million during the three-year period.

**Table 19. Individually Quick Frozen Raspberries from Chile:**  
*Indirect Costs and Interest Costs due to Dumping*

Item	1999	2000	2001	Total
Indirect industry output multiplier	2.28	2.28	2.28	N/A
1-year T-bill rate (percent)	5.08	6.11	3.48	N/A
Lost indirect activity (\$1,000)	1,902	2,009	1,678	5,589
Interest on borrowed funds (\$1,000)	34	43	20	96
Sources: Bureau of Economic Analysis at <a href="http://www.bea.gov/bea/dn2/i-o.htm#benchmark">http://www.bea.gov/bea/dn2/i-o.htm#benchmark</a> (data for multiplier); Federal Reserve Bank of St. Louis at <a href="http://www.research.stlouisfed.org/fred2/series/GS1/downloaddata">http://www.research.stlouisfed.org/fred2/series/GS1/downloaddata</a> (interest rates); and authors'				

The value of the consumer gains from increased consumption of red raspberries is shown below. This amount represents the portion of the gain in consumer surplus that does not come at the expense of domestic producers or fairly trade imports. It is the pure consumer gain that results from the market distortion of dumping. In this instance, the gain is only an estimated \$23,000. This amount is far smaller than even the financing costs associated with the increase in imports resulting from the market distortion of dumping. The disparity between the revenue losses to the domestic industry and the pure gains to consumers is considerable. The size of this disparity is largely determined by the various elasticities, the dumping margin, and other characteristics associated with the market. The conventional interpretation, as noted in the overview, is to ignore most of the

revenue lost by domestic producers because the inputs used are assumed to be absorbed in other productive activities, and to focus on the net gain in consumer surplus. In the case of red raspberries, this assumption seems especially unwarranted. While some of the machines used to quick freeze fruit can be used to freeze other fruits or vegetables, some of the machines are specialized. In addition, if prices are depressed due to dumped imports, some of the fruit may not even be harvested, which would reduce the value added by harvest machinery, or the fruit may be harvested and not sold, thereby wasting productive resources that would not have been wasted had the dumped product not been in the market.

**Table 20. Individually Quick Frozen Raspberries from Chile:**  
*Summary of Costs and Benefits of Dumping*

Item	1999	2000	2001	Total
Lost revenue due to dumping (\$1,000)	-836	-883	-737	-2,456
Lost indirect activity (\$1,000)	-1,902	-2,009	-1,678	-5,589
Interest on borrowed funds (\$1,000)	-34	-43	-20	-96
Consumption gains (\$1,000)	11	6	6	23
Sources: Author's calculations.				

#### *Long-term impact of the order*

The sunset review of the raspberry antidumping order is scheduled to be initiated in June 2007. Publicly available data indicate that IQF imports from Chile have continued, which is not surprising given the relatively small size of the dumping margin and the fact that some Chilean firms were found not to be dumping and have not been subject to a duty.<sup>149</sup> However, there has been a marked change in the average price of imports from Chile since the order went into effect. In 2001 and 2002, the average unit value of imports from Chile was \$0.80 per lb. In 2003, the unit value rose by \$0.05 per lb., and rose by another \$0.10 per lb in 2004. In 2005, through April of 2006, unit values remained above the levels that prevailed during the IQF investigation. Data from USDA indicate that higher import unit values have enabled domestic growers in Oregon and Washington to get more money for their crops sold to processors. In 2000, the unit value of sales to processors declined by more than 50 percent and remained depressed in 2001.<sup>150</sup> Prices increased somewhat in 2002 and then rose substantially in 2003 and 2004. The value of domestic red raspberries sold to processors doubled between 2000 and 2004. Though not all of this increase can be attributed to the elimination of dumped imports not all of processed raspberries are individually quick frozen the absence of dumped imports were

149 According to official trade data, imports of HTS 0811.20.2020 from Chile declined in 2002, but have risen each year thereafter. See <http://dataweb.usitc.gov>.

150 See <http://usda.mannlib.cornell.edu/data-sets/specialty/89022/tab-d05.xls>.

certainly a positive development for U.S. growers. The domestic industry received approximately \$500,000 in distributions attributable to the CDSOA in 2005, but did not receive any distributions during prior years.

## GRAY PORTLAND CEMENT AND CEMENT CLINKER FROM JAPAN AND MEXICO

Gray portland cement is the dominant type of hydraulic cement produced and used in the United States, accounting for nearly all domestic production.<sup>151</sup> Cement clinker are small grayish-black pellets that are ground to produce gray portland cement. Clinker is produced from a raw material mixture containing the following chemical components: calcium carbonate, silica, alumina, and iron oxide.<sup>152</sup>



The raw materials are blended either with or without water and then heated in rotary kilns at a temperature of 2,700 degrees Fahrenheit, and the resulting clinker is ground to produce cement. Cement is used to produce concrete, a major material in road and building construction.<sup>153</sup>

National data on gray portland cement are collected and published by the United States Geological Service (USGS). According to USGS, there were 40 companies producing gray portland cement in 37 states and in Puerto Rico as of 1999.<sup>154</sup> On a national basis, net sales in 1999 totaled \$5.8 billion.<sup>155</sup>

Markets for cement in the United States are generally regional. Cement is a heavy substance, which increases the cost of transporting the product, and has a low value-to-weight ratio. As a result, nearly 80 percent of domestic production is shipped to customers within 200 miles of the production site, and import sales occur near the location of the import terminal.<sup>156</sup>

Cement is a commodity product, and the domestic and imported products are readily interchangeable.<sup>157</sup> Due to the commodity nature of the product,

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151 Gray Portland Cement and Cement Clinker from Japan, Mexico, and Venezuela, USITC Pub. 3361, Invs. Nos. 303-TA-21 (Review) and 731-TA-451, 461, and 519 (Review) (October 2000) at I-23. Hydraulic cement is cement that sets or hardens under water.

152 Id. at I-25.

153 Id. at I-24.

154 Id. at I-28.

155 Id. at III-37.

156 Id. at 12.

157 Id. at 32.

price is an important factor in purchasing decisions. Demand for cement is relatively inelastic because demand is derived from demand for concrete and concrete costs are a relatively small share of total building costs.<sup>158</sup> As a result, lower prices do little to spur demand and instead result in declining revenues. Production of cement is capital intensive, which means that high capacity utilization rates are required to maximize returns on investment.<sup>159</sup> As a result of these factors, dumped imports that reduce prices and production volumes can seriously injure domestic producers. In 1989, the Bureau of Mines observed:

The primary issue facing the cement industry is a lack of capital investment for new plant construction or capacity modernization and expansion. Foreign import penetration into coastal markets and regional competition among domestic producers have combined to reduce the profitability of the U.S. industry. The lack of domestic investment capital has opened the door for foreign investors who now own more than two-thirds of U.S. cement production capacity.<sup>160</sup>

#### *Original investigations and determinations*

The original petitions covering cement and cement clinker from Mexico, Japan, and Venezuela were filed in 1989, 1990, and 1991, respectively. Antidumping petitions were filed against all three countries, while a counter-vailing duty petition was filed only against Venezuela.

The Mexican petition was filed by domestic producers in Arizona, New Mexico, Texas and Florida. The Department of Commerce found dumping margins ranging from 3.69 percent to 58.38 percent.<sup>161</sup> The USITC performed a “regional analysis” of imports into the “Southern-tier region”, which the Commission defined to include Florida, Alabama, Mississippi, Louisiana, Texas, New Mexico, Arizona, and California.<sup>162</sup>

The petition against imports from Japan was filed by U.S. producers in Southern California and by unions representing the plants in Southern California.<sup>163</sup> The Department of Commerce calculated dumping margins ranging from 47.79 percent to 84.70 percent. The Commission again performed a regional analysis. The southern California region was defined to include twelve counties in accordance with the USGS definition for the southern part of the state.

The petition alleging dumped and subsidized imports from Venezuela was filed by three domestic producers in Florida.<sup>164</sup> The Department found that one firm

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158 Id. at 33.

159 Id. at 35.

160 United States Bureau of Mines, *Cement Minerals Yearbook*, Cement 1989, as quoted in Pub. 3361 at I-28.

161 USITC Pub. 3361 at I-2.

162 Id. at I-2.

163 Id. at I-2.

164 Id. at I-3.

did not receive a subsidy and that another firm received a subsidy of 3.63 percent. The dumping margins were found to be approximately 50 percent.

The Commission made affirmative final determinations in the investigations of imports from Mexico and Japan. The investigation of imports from Venezuela was suspended after the two primary Venezuelan suppliers to the U.S. market agreed to eliminate completely the price difference between their U.S. sales and sales to other foreign markets.<sup>165</sup> The impacts of the Venezuelan unfair trade are thus not considered here.

The Commission found the following indicators of injury in the investigation of cement from Mexico,

- The value of subject imports from Mexico into the Southern Tier increased by 13 percent from 1986 to 1989, while the volume of subject imports increased by 20 percent.<sup>166</sup>
- Underselling by the subject imports was predominant in 9 out of 10 markets in which comparisons were possible and depressed prices for the domestic product.
- The combination of increasing dumped imports had a material adverse impact on employment, investment, capacity utilization, and financial indicators such as profits and cash flow.<sup>167</sup>

The Commission found the following indicators of injury in the investigation of cement from Japan:

- The volume of subject imports from Japan into the California region rose from 349,000 tons in 1986 to 1.7 million tons in 1989, an increase of 386 percent.<sup>168</sup>
- The subject imports almost always undersold the domestic product in head-to-head comparisons. The Commission found underselling in 60 out of 60 months in the Los Angeles market, 57 out of 60 months in the Orange County market, 59 out of 59 months in the Riverside County market, and 12 out of 12 months in the San Diego market.<sup>169</sup>

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165 Id. at I-3, fn. 8.

166 Id. at 36.

167 *Gray Portland Cement and Cement Clinker from Mexico*, USITC Pub. 2305, Inv. No. 731-TA-451 (Final) (August 1990) at 47-49, and 65.

168 USITC Pub. 3361 at 43.

169 Id. at 44, and fn. 272.

- The subject imports adversely affected the financial operations of the Southern California industry, resulting in a decline in total operating income due to falling prices. Producers lost market share in the early part of the period of investigation and suffered further in 1990 due to declining sales caused by falling consumption.<sup>170</sup>

The following table includes some of the relevant data collected by the Commission during the original investigations and the sunset investigation of 2000.

**Table 21a. Gray Portland Cement and Cement Clinker from Mexico:**  
*Selected Data Collected by the USITC*

Item	1986	1987	1988	1989	1997	1998	1999
Southern-tier shipment (\$mil.)	1,100.2	983.9	983.4	1,047.1	1,746.4	1,849.5	1,981.8
U.S. regional share (percent, by volume) <sup>(1)</sup>	69.1	68.3	69.3	69.7	75.6	69.7	65.1
Subject imports (\$mil.) <sup>(1)</sup>	113.4	138.2	164.7	168.9	75.1	86.1	93.2
Subject import unit value (\$/ton) <sup>(1)</sup>	34.29	34.37	30.76	32.00	40.73	40.25	41.75
Production workers (Number)	4,437	4,051	3,739	3,593	3,282	3,304	3,447

(1) Subject imports include Japanese data because Southern California is included in both regions examined by the Commission.  
Sources: USITC Pub. 3361 at I-5 to I-6.

**Table 21b. Gray Portland Cement and Cement Clinker from Japan:**  
*Selected Data Collected by the USITC*

Item	1986	1987	1988	1989	1990	1997	1998	1999
So. California shipments (\$mil.)	348.3	317.9	317.6	334.7	325.7	299.2	305.2	346.7
U.S. regional share (percent, by volume) <sup>(1)</sup>	78.5	72.9	69.3	67.1	69.2	77.3	67.4	61.7
Subject imports (\$mil.) <sup>(1)</sup>	33.0	38.8	60.0	69.4	70.3	0.8	1.7	3.1
Subject import unit value (\$/ton) <sup>(1)</sup>	35.30	34.98	32.86	31.54	34.40	40.45	38.32	38.67
Production workers (Number)	1,146	1,072	986	965	960	771	809	805

(1) Subject imports include Mexican data because Southern California is included in both regions examined by the Commission.  
Sources: USITC Pub. 3361 at I-7 to I-8.

### *Estimated revenue impact of unfair trade*

The revenue effects of the dumping by Mexico and Japan were estimated only for the Southern-tier region because all of Japan's imports came into Southern California, which is included in the Southern-tier region. In addition, the Commission did not publish its elasticity estimates in the determinations of the original investigations. We have been guided by the elasticity estimates published in the sunset review determination.<sup>171</sup> However, these elasticity estimates were based on the market structure and market shares at the time of the reviews and are not necessarily appropriate for the circumstances that existed at the time of the original investigations. Consequently, we have diverged from the practice of using

170 *Gray Portland Cement and Cement Clinker from Japan*, USITC Pub. 2376, Inv. No. 731-TA-461 (Final) (April 1991) at 43-44.

171 USITC Pub. 3361 at II-20 to II-25.

the mid-point of the Commission's elasticity estimates in the model.<sup>172</sup> Finally, the margins were calculated as the simple averages of the individual company rates calculated by the Department of Commerce in its original investigations. The results of the model estimates for 1986 to 1989 appear in the table below. The estimates indicate annual losses in the range of \$188.3 million to \$290.9 million, for a total 4-year loss of nearly one billion dollars to the regional industry. According to the model, U.S. shipment quantity and prices would have been approximately 8 percent higher than was the case with dumped imports in the market.

**Table 22. Gray Portland Cement and Cement Clinker from Mexico and Japan:**  
*Estimated Lost Revenue due to Dumping in the Southern-tier Region*

Item	1986	1987	1988	1989	Total
Estimated dumping margin (percent)	41.38	41.94	45.26	47.42	N/A
Lost revenue due to dumping (\$mil)	188.3	212.9	263.4	290.8	955.5

Sources: USITC Pub. 3361 at I-5 to I-6 and author's calculations.

The lost revenue due to dumping not only has direct effects on producers of cement, but also indirect effects on cement industry suppliers and their suppliers as well. These indirect effects are shown in the table below. Based on the Department of Commerce's benchmark survey for 1997, the indirect industry multiplier for cement manufacturing is 0.84. This means that a one dollar reduction in industry output by cement manufacturers due to dumping would result in a \$0.84 reduction in other industries' output. The financial cost of the dumping is estimated by multiplying the constant maturity interest rate for a 1-year T-bill by the increase in imports that results from the dumping. The interest rates during the 1980s were higher than during the 1990s, leading to borrowing costs of nearly \$29 million due to the market distortion of dumping during the 1986-to-1989 period.

<sup>172</sup> Specifically, the domestic supply elasticity used was in the model is 1 instead of 2.5 and the elasticity of demand used is -0.50 instead of -0.35.

**Table 23. Gray Portland Cement and Cement Clinker from Mexico and Japan:**  
*Indirect Costs and Interest Costs due to Dumping in the Southern-tier Region*

Item	1986	1987	1988	1989	Total
Indirect industry output multiplier	0.84	0.84	0.84	0.84	N/A
1-year T-bill rate (percent)	6.46	6.76	7.65	8.54	N/A
Lost indirect activity (\$mil.)	158.3	178.9	221.4	244.4	803.0
Interest on borrowed funds (\$mil.)	5.1	6.1	8.1	9.5	28.9

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.

As noted in the overview to this report, pure consumer gains are the increase in the consumer surplus that does not come at the expense of another actor in the economy. When dumping or subsidies lead to increased imports, those imports come at the expense of domestic production and fairly traded imports. The only consumer surplus gains that do not come at the expense of another actor are the increase in consumption quantities that occurs due to the dumping. This surplus value can be calculated using the inputs and outputs of the model employed to generate the lost revenue estimates. Calculated on a market-wide basis, the pure gain to consumers from 1986 to 1989 was approximately \$5 million, as shown in the table below along with the estimated losses due to dumping.

**Table 24. Gray Portland Cement and Cement Clinker from Mexico and Japan:**  
*Summary of Costs and Benefits of Dumping in the Southern-tier Region*

Item	1986	1987	1988	1989	Total
Lost revenue due to dumping (\$mil.)	-188.3	-212.9	-263.4	-290.8	-955.5
Lost indirect activity (\$mil.)	-158.3	-178.9	-221.4	-244.4	-803.0
Interest on borrowed funds (\$mil.)	-5.1	-6.1	-8.1	-9.5	-28.9
Consumption gains (\$mil.)	0.5	0.4	2.0	2.1	5.0

Sources: Author's calculations.

#### *Long-term impact of the order*

As shown in the first two cement tables, the orders had a positive impact on the regional industries. The period covered by the first sunset review indicate that subject import prices during the review period were higher and that subject import quantities were significantly lower absent the unfair trade. U.S. market share and employment levels were relatively stable compared to the sharp downward trends that had been apparent during the original investigations. U.S. shipments in the southern-tier region as a whole experienced a marked expan-

sion compared to levels that prevailed during the late 1990s.<sup>173</sup> Other notable trends uncovered by the sunset review include higher prices for the domestic industry, higher capacity utilization, and a dramatic increase in operating income. In contrast to the low profits bemoaned by the Bureau of Mines above, operating profits during the review period were healthy and capital expenditures robust.<sup>174</sup> From 2001 to 2005, firms in the industry received \$27.2 million in distributions from the Countervailing Duty Subsidy Offset Act.

As a result of the sunset review in 2000, the Commission terminated the suspension agreement with Venezuela, but maintained the orders on Mexico and Japan. The Commission noted that the Mexican and Japanese industries maintained significant excess capacity and faced high fixed costs, which would provide incentives to increase shipments to the United States in the absence of the orders.<sup>175</sup>

The Mexican and Japanese orders came up for a second sunset review cycle in 2006. The United States and Mexican governments signed an agreement in January 2006 allowing for an increase in imports from Mexico and a phase out of tariffs in 2009.<sup>176</sup> As part of that agreement, the Mexican government agreed to open the Mexican market to imported cement, potentially eliminating that sanctuary market. The Japanese industry did not file an adequate response to the Commission's notice of initiation for the second review. Consequently, the Commission decided to conduct an expedited review of the Japanese order. Such reviews are based on facts on the record, which in this case consist mainly of information gathered during the first sunset review of 2000 and the original investigation.<sup>177</sup> Based on these facts, the Commission determined that a revocation of the antidumping duty order on gray portland cement and cement clinker from Japan is likely to lead to continuation or recurrence of material injury to the California regional industry within a reasonably foreseeable time.<sup>178</sup>

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173 There is some difference in coverage between the two investigations, but the responding producers in both investigations accounted for at least 96 percent of active capacity. See I-6, table note 3.

174 USITC Pub. 3361 at I-6; and III-41. The Commission noted that the high profits were in part due to the business cycle. 41.

175 *Id.* at 41 and 46.

176 "U.S., Mexico Reach Agreement to End High Cement Duties," *Concrete Monthly* (February 2006) (on line at <http://www.concretemonthly.com/monthly/art.php?1962>).

177 *Gray Portland Cement and Cement Clinker from Japan*, USITC Pub. 3856, Inv. No. 731-TA-461 (Second Review) (May 2006) at 4-5.

178 *Id.* at 3.

## WOODEN BEDROOM FURNITURE FROM CHINA

Wooden bedroom furniture includes beds, night stands, chests, armoires, dressers with mirrors, and other wooden furniture designed for the bedroom.<sup>179</sup> These furniture products are often sold together in coordinated groups, known as suites.<sup>180</sup>



Fifty-four U.S. producers from 23 states responded to the USITC's producers' questionnaire during the investigation of dumped wooden bedroom furniture from China.<sup>181</sup> Of these producers, ten were headquartered in North Carolina, eight in Virginia, four in California, and three each in Arizona, Missouri, New York, and Vermont. In 2001, the U.S. industry recorded shipments \$2.3 billion dollars and employed approximately 33,000 workers.<sup>182</sup> Unlike the cement industry, which is a high fixed cost industry, the wooden bedroom furniture industry is a high variable cost industry. High variable cost industries are expected to adjust capacity and employment more quickly than high fixed costs industries in response to changes in demand.<sup>183</sup> One thus would expect that the dumping of wooden bedroom furniture would have strongly negative effects on the domestic industry. Producers of such furniture also tend to produce other wooden furniture on the equipment they use to produce bedroom furniture.<sup>184</sup> The production process entails sawing or cutting into shape lumber, veneer, and engineered wood products. These shapes are assembled into furniture pieces, which are then either stained or painted on a finishing line. Numerically controlled production techniques are increasingly employed in the industry.<sup>185</sup>

Wooden bedroom furniture manufactured in the United States is sold primarily through unrelated retailers, though approximately 15 percent is sold

179 *Wooden Bedroom Furniture from China*, USITC Pub. 3743, Inv. No. 731-TA-1058 (Final) (December 2004) at 4.

180 *Id.* at I-11.

181 *Id.* at III-2.

182 *Id.* at C-3.

183 *Id.* at II-4.

184 *Id.* at I-13.

185 *Id.* at I-13.

through related retailers.<sup>186</sup> These unrelated retailers in many cases increasingly purchase furniture from China, other producing countries in Asia, Mexico, and Brazil.<sup>187</sup> Some domestic producers, including some of the largest firms, have also begun purchasing furniture from China in increasing quantities.<sup>188</sup>

The furniture industry in China has been booming, with a large share of production targeted toward the U.S. market. For example, the firms responding to the Commission's foreign producers' questionnaire indicated that between 2001 and 2003, China's capacity to produce wooden bedroom furniture had doubled, that shipments to the U.S. market increased by 147 percent, and that exports to the United States accounted for approximately three quarters of these firms' total shipments.<sup>189</sup> This growth has occurred despite information indicating a high incidence of quality problems with Chinese furniture.<sup>190</sup>

### *Original investigations and determinations*

On October 31, 2003, a petition was filed alleging that imports of wooden bedroom furniture from China sold at less than fair value were causing material injury to the U.S. industry.<sup>191</sup> The petition was filed by an ad hoc association of U.S. producers and six unions: Local 721 of the Cabinet Makers, Millmen, and Industrial Carpenters; Local 2305 of the UBC Southern Council of Industrial Workers; Local 193U of the United Steelworkers of America; Local 2093 of the Carpenters Industrial Union Local; Local 991 of the Teamsters, Chauffeurs, Warehousemen and Helpers Union; and Local 82472 of the IUE, Industrial Division of the Communications Workers of America.

The Department of Commerce investigation found dumping margins ranging from 0.79 percent to a "facts-available" rate of 198.08 percent.<sup>192</sup> The majority of firms received separate rates based on the rates of the firms for which the Department of Commerce performed a detailed investigation. The separate rate was calculated to be 8.64 percent.<sup>193</sup>

The injury investigation at the USITC was hotly contested by the Chinese furniture producers and importers; U.S. retailers such as Crate & Barrel, Marlo Furniture, and Pier 1 Imports; and an ad hoc committee of retailers and manufacturers that imports furniture from China. Even Furniture Brands International, the largest domestic producer of wooden bedroom furniture, opposed the petition. The Commission ultimately decided by a vote of 6 - 0 that the U.S. industry was materially injured by dumped imports from China. The Commission determination cited the following indicators of injury.

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186 Id. at III-13.

187 Id. at III-15.

188 Id. at IV-15.

189 Id. at VII-2. One hundred fifty-three Chinese firms responded to the Commission's foreign producers' questionnaire.

190 Id. at VII-7.

191 Id. at 3.

192 69 Fed. Reg. 67316 - 67317. The Department found that one firm, which goes by the names of Tech Lane Wood Mfg or Kee Jia Wood Mfg, did not cooperate to the best of its ability.

193 69 Fed. Reg. 67317.

- The quantity and the market share of the subject imports increased “rapidly and consistently” during the period of investigation. The Commission found that the expansion of the Chinese market share came directly out of the market share of the domestic industry.<sup>194</sup>
- There was “consistent and substantial price underselling by the subject imports”. The margins of underselling ranged from 15.9 percent to 61.1 percent for comparable item and style combinations.<sup>195</sup> The Commission found that the lower priced dumped merchandise forced U.S. prices to decline or forced those prices to decline more quickly than production costs.<sup>196</sup>
- Despite an expanding U.S. market for wooden bedroom furniture, the domestic industry saw its financial and trade data deteriorate due to the subject imports. According to the Commission, the U.S. industry experienced “significant declines in its capacity, production, capacity utilization, domestic shipments, net sales values and quantities, employment, operating income, operating income margins, and capital investment.”<sup>197</sup>

Some of the key data collected by the Commission during its investigation appear in the table below.

**Table 25. Wooden Bedroom Furniture from China:**  
*Selected Data Collected by the USITC*

Item	2000	2001	2002	2003	January to June	
					2003	2004
U.S. shipment (\$mil.)	2,500.1	2,294.3	2,150.1	1,878.7	960.8	899.2
U.S. market share (percent, by value)	59.8	55.6	48.2	40.3	42.7	35.7
Subject imports (\$mil.)	432.7	565.6	957.9	1,401.9	624.6	871.8
Wages paid (\$mil.)	856.6	740.3	713.6	624.7	325.2	312.8
Operating income (\$mil.)	271.3	109.8	100.7	47.5	30.7	29.2

Note: Import data include sales of Tianjin Manufacturing Company, Ltd, which was found to have a de minimis margin.  
Sources: USITC Pub. 3743 at C-3; and USITC Pub. 3667 at C-3.

### *Estimated revenue impact of unfair trade*

The so-called separate dumping margin, 8.64 percent, was used to estimate the impact of dumping on the revenues of the domestic industry. Questionnaire data on imports were used instead of trade data, and appear to understate the subject imports’ value and volume. The data used also yield a higher unit value than domestic shipments of U.S.-produced goods, an unlikely circumstance

194 USITC Pub. 3743 at 18-19.

195 Id. at 21.

196 Id. at 21-22.

197 Id. at 24.

given that the Commission's head-to-head pricing data confirm that the prices of Chinese goods are significantly lower than the prices of comparable U.S.-produced goods. Despite these shortcomings, the model results indicate that annual losses during the period of investigation ranged from \$77 million to \$133 million, for a total three-year loss of \$333 million. The annual revenue losses imply that domestic revenues would have been 3.3 percent higher in 2000, 5.7 percent higher in 2002, and 7.1 percent higher in 2002 if there had been no dumping of wooden bedroom furniture from China.

**Table 26. Wooden Bedroom Furniture from China:**  
*Estimated Lost Revenue due to Dumping*

Item	2000	2001	2002	Total
Estimated dumping margin (percent)	8.64	8.64	8.64	N/A
Lost revenue due to dumping (\$mil.)	76.8	123.0	133.1	332.9
Sources: USITC Pub. 3743 at IV-6; IV-10; IV-14; and C-3; and author's calculations.				

It is worth noting that the revenue losses likely understate the losses to the domestic industry due to survivor bias. Because of the high variable costs associated with this industry, producers are likely to shut down once the market clearing price for a product falls below average variable cost.<sup>198</sup> The new equilibrium in the following year thus has a lower domestic production base (i.e., less equipment and fewer employees) and a lower domestic market share than would have been the case if dumping had not injured the industry during the prior year.<sup>199</sup>

The table below shows two other measures of cost that are normally not considered in the comparative static analytical framework. The impact of lost furniture shipments on other industries, for instance, is assumed to be zero in the conventional interpretation because the factors of production released as a result of the dumping are absorbed in other economic pursuits. The indirect industry multiplier for wooden bedroom furniture is estimated by subtracting the direct industry output multiplier for the nonupholstered wood household furniture manufacturing industry from the total industry output multiplier for that industry. Based on the Department of Commerce's detailed benchmark input-output tables for 1997, the indirect output multiplier for wooden household furniture is 1.23. The indirect effects of the dumping totaled an estimated \$410 million during the 2001-to-2003 period. The financial cost of dumping is equivalent to the increase in dumped imports multiplied by the interest rate. This calculation suggests that the financial cost of dumping was approximately \$12 million during the three full years of the period of investigation.

<sup>198</sup> Id. at II-4.

<sup>199</sup> For an example of this dynamic, see Greg Mastel, *Antidumping Laws and the U.S. Economy* (New York: M.E. Sharpe, 1998) at 81-98.

**Table 27. Wooden Bedroom Furniture from China:**  
*Indirect Costs and Interest Costs due to Dumping*

Item	2001	2002	2003	Total
Indirect industry output multiplier	1.23	1.23	1.23	N/A
1-year T-bill rate (percent)	3.48	2.00	1.24	N/A
Lost indirect activity (\$mil.)	94.5	151.4	163.8	409.8
Interest on borrowed funds (\$mil.)	4.4	4.2	3.2	11.8

Sources: Bureau of Economic Analysis at [http://www.bea.gov/bea/industry/iotables/prod/table\\_list.cfm?anon=97](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 only unambiguous gain to the economy from the distorted market that results from dumping is equal to the change in the consumer surplus that does not come at the expense of domestic producers and fairly traded imports. Conceptually, it is equal to area D in the overview graph. The value embodied in this area tends to be small relative to the lost domestic revenue that is assumed away in the conventional approach. In the case of wooden bedroom furniture, the market-wide pure consumer gain over the three year period is \$4 million. How can this value be so small? In practice, the market-wide increase in the consumer surplus due to dumping is equal to the sum of changes in the consumer surpluses of three sources of furniture: domestic production, fair imports, and unfair imports. Mathematically, the pure gains to consumers from having much greater access to Chinese imports are offset in part by declines in the consumer surpluses of U.S.-made furniture and third-country imports. Thus, the net impact on the market as a whole, when measured as the pure gain to consumers, is relatively small – in this case, even less than the interest costs resulting from the increase in imports.

**Table 28. Wooden Bedroom Furniture from China:**  
*Summary of Costs and Benefits of Dumping*

Item	2001	2002	2003	Total
Lost revenue due to dumping (mil.)	-76.8	-123.0	-133.1	-332.9
Lost indirect activity (mil.)	-94.5	-151.4	-163.8	-409.8
Interest on borrowed funds (mil.)	-4.4	-4.2	-3.2	-11.8
Consumption gains (mil.)	0.9	1.5	1.6	4.0

Sources: Author's calculations.

*Long-term impact of the order*

The long-term impact of the order is difficult to discern at this point in time. The dumping margin on most major producers is less than the underselling margins. This means that Chinese furniture imports will continue to present a competitive challenge to U.S. producers, at least until there is meaningful appreciation of China's currency, the Yuan. Although contemporaneous data are not publicly available, 2004 data from the Annual Survey of Manufacturing suggest that value added and the value of shipments of the nonupholstered wooden household furniture manufacturing industry rebounded strongly in 2004.<sup>200</sup> An executive from one of the petitioning firms claimed in February 2006 that his firm's core line of bedroom furniture has seen double digit growth since the order.<sup>201</sup> The industry also received approximately \$144,000 in distributions as a result of the CDSOA in 2005. On the other hand, official data demonstrate that the number of employees in furniture and related industries, which include wooden bedroom furniture employment, deteriorated in 2005 and 2006 after recovering in 2004.<sup>202</sup>

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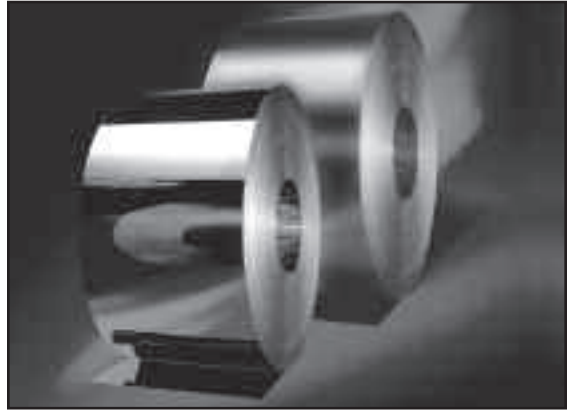
200 See U.S. Census Bureau, Annual Survey of Manufacturer—Statistics for Industry Groups and Industries: 2004 (December 2005) at 31. Wooden bedroom furniture production appears to account for approximately 20 percent of this category.

201 Sue Schultz, "Furniture Makers Ask for Investigation" news-record.com (February 16, 2006) online at <http://www.news-record.com/apps/pbcs.dll/article?AID=/20060216/NEWSREC0103/302160003/-1/NEWSRECRSS>.

202 Data can be accessed at <http://www.bls.gov/webapps/legacy/cesbtab1.htm>.

## 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.<sup>203</sup> 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.<sup>204</sup>

During the late 1990s, there were 28 firms in the United States producing hot-rolled steel.<sup>205</sup> 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.<sup>206</sup> In 1996, the industry employed approximately 34,000 workers and paid \$1.7 billion in wages.<sup>207</sup>

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.<sup>208</sup> 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

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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.<sup>209</sup> 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.<sup>210</sup> 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.<sup>211</sup> 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.<sup>212</sup>
- 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,<sup>213</sup> 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.<sup>214</sup> 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.

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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.<sup>215</sup> 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.<sup>216</sup> 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 <a href="http://www.bea.gov/bea/dn2/i-o.htm#benchmark">http://www.bea.gov/bea/dn2/i-o.htm#benchmark</a> (data for multiplier); Federal Reserve Bank of St. Louis at <a href="http://www.research.stlouisfed.org/fred2/series/GS1/downloaddata">http://www.research.stlouisfed.org/fred2/series/GS1/downloaddata</a> (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.<sup>217</sup> 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.<sup>218</sup>

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.<sup>219</sup> 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.<sup>220</sup> 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.

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219 *Id.* at 3.

220 *Id.* at 3-4.

## **BALL BEARINGS FROM FRANCE, GERMANY, JAPAN, ITALY, ROMANIA, SINGAPORE, SWEDEN, AND THE UNITED KINGDOM**

Ball bearings are the largest category antifriction bearing products. These products are machine components that “permit free motion between moving and fixed parts by holding, separating, or guiding the moving parts to minimize friction and wear.”<sup>221</sup> Other antifriction products include tapered roller bearings, cylindrical roller bearings, and spherical roller bearings. Bearings are frequently distinguished by their rolling element. Ball bearings consist of an inner and outer race and balls that are fitted into a cage. For roller bearings, the rolling element is not a ball, but a roller.



Modern bearing production is capital intensive. High quality alloy steel is used and machined into balls and races, and cold-rolled steel is used to produce the cage. The balls are made from alloy wire while the races are made from alloy steel tubes or bars. After machining, the balls and races are heat treated and finished by a series of grinding and honing operations. The balls, cage, and races are then assembled into the final product.<sup>222</sup> Balls and cages are often produced by firms that specialize in component production and then sold to the major bearing producers.

At the time of the 1999 sunset investigation of the original orders, ball bearing production facilities were located in 19 states, with production concentrated in the Northeast (primarily in Connecticut, New York, and Pennsylvania); Southeast (primarily in Georgia, South Carolina, and Tennessee); and in the Midwest (primarily in Illinois, Indiana, and Ohio).<sup>223</sup> Industry employment among the firms reporting to the Commission

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221 Certain Bearings from China, France, Germany, Hungary, Italy, Japan, Romania, Singapore, Sweden, and the United Kingdom, USITC Pub. 3309, Invs. Nos. AA1921-143, 731-TA-341, 731-TA-343-345, 731-TA-391-397, and 731-TA-399 (Review) (June 2000) at Overview-7.

222 Id. at Overview 7-9 and I-25 to I-26.

223 Id. at BB-I-30 to BB-I-35

totaled approximately 12,000 production workers and total sales exceeded \$2.2 billion.<sup>224</sup>

Bearing production, including the production of ball bearings, was dominated by large producers in major industrial countries (e.g., Japan, Germany, France, and the United States). Many of these producers have facilities in more than one country. In recent years, China has become a major producer of ball bearings as well.

### *Original investigations and determinations*

There have been many investigations of unfair trade of bearings. The first TRB order went into effect in 1976 on imports from Japan. A second TRB petition was filed in 1986. In March 1988, a petition was filed alleging subsidized imports from Thailand and Singapore, as well as dumped ball bearings from France, Germany, Japan, Italy, Romania, Singapore, Sweden, and the United Kingdom.<sup>225</sup> The Department of Commerce found that ball bearings were being sold at less than fair value. The ranges of dumping margins found by the Department for the eight countries ranged from 2.55 percent to 106.61 percent.<sup>226</sup> The Commission's period of investigation covered 1985 to 1987. The Commission found the following indicators of material injury due to the subject imports.

- The volume of imports was significant. Because ball bearings come in so many different sizes and price points, the Commission assessed import volume on the basis of values, not quantities. On this basis, the subject market share grew from 20.2 percent in 1985 to 23.8 percent in 1987, with nearly all of the increase in market share coming at the expense of the U.S. industry.<sup>227</sup>
- The subject imports undersold the domestically produced ball bearings and prevented domestic producers from increasing prices to deal with higher costs.<sup>228</sup>
- The significant volume and price effects of the subject imports led to a consistent decline in the profitability of the domestic industry.<sup>229</sup> Data indicate that employment levels and domestic capacity also shrunk during the 1985-1987 timeframe.<sup>230</sup>

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224 Id. at BB-III-2 and BB-III-4.

225 Id. at Overview-4. This petition also alleged dumping of several other antifriction bearing products.

226 Id. at BB-I-5 to BB-I-8.

227 Id. at 43 and BB-I-2.

228 Id. at 44.

229 Id. at 45.

230 Id. at BB-I-3.

Some of the data relevant to the Commission's affirmative injury determination are shown in the table below.

**Table 33. Ball Bearings from France, Germany, Japan, Italy, Romania, Singapore, Sweden, and the United Kingdom:**  
*Selected Data Collected by the USITC*

Item	1985	1986	1987	1998	1999
U.S. shipment (\$mil.)	1,302	1,187	1,169	2,260	2,273
U.S. market share (percent, by value)	77.3	74.5	73.5	70.5	69.9
Subject imports (\$mil.)	332	351	361	508	506
Production workers (number)	12,937	12,029	11,681	12,278	12,284
Operating income (\$mil)	126	95	89	170	148
Note: subject import value excludes imports from Thailand.					
Sources: USITC Pub. 3309 (Vol. II) at BB-I-2 to BBI-3.					

*Estimated revenue impact of unfair trade*

The table below shows estimated revenue losses due to dumping based on data from the original investigation.<sup>231</sup> The dumping margins are weighted-average margins calculated by multiplying the simple averages of the individual company rates for each country and the respective ratio of each country's imports to total unfairly traded imports. The annual weighted-average margin exceeded 50 percent each year. We have adjusted the elasticities suggested in the sunset review because the market structure, export share of shipments, and other factors suggest lower domestic supply elasticities than estimated by Commission Staff during the review. Based on these elasticities, the annual revenue losses due to dumping were approximately \$280 million per year. In other words, dumping appears to have reduced domestic revenues by approximately 19 percent each year from levels that would have been achieved if no dumping had occurred.

**Table 34. Ball Bearings from France, Germany, Japan, Italy, Romania, Singapore, Sweden, and the United Kingdom:**  
*Estimated Lost Revenue due to Dumping*

Item	1985	1986	1987	Total
Estimated dumping margin (percent)	53.18	54.67	54.70	N/A
Lost revenue due to dumping (\$mil.)	275	284	288	847
Sources: USITC Pub. 3309 (Vol. II) at BB-I-2 to BBI-3 and author's calculations.				

231 Due to the lack of quantity data, the price for each year was assumed to be 1 and the quantity was assumed to equal the value of U.S. shipments, unfair imports, and fair imports, respectively. These assumptions do not alter the model's revenue calculations from the case in which actual quantity data were used.

The indirect effects and financial costs of dumping are shown in the table below. The indirect effects are caused by the fact that dumping resulted in lost domestic economic activity that would have occurred but for the market distortion caused by dumping. The Department of Commerce estimates detailed industry total requirement tables for various U.S. industries. These tables are used to calculate multipliers that enable economists to estimate the impact on total U.S. industry output of higher or lower production of a single U.S. industry. The “indirect” multiplier for the ball and roller bearing industry in 1997 was 0.91. This multiplier was used to estimate the indirect effect of the dumping of ball bearings on other U.S. industries. The indirect effect is equal to the lost domestic revenue times the indirect multiplier of 0.91. The estimated indirect effect of ball bearing dumping during the mid-1980s was \$0.8 billion in lost activity for other industries. Because the United States is a net debtor country that runs a persistent trade deficit, any increase in imports not offset by an increase in exports requires the United States to accumulate additional liabilities to foreign investors (public or private) equal to the increase in imports. The United States must pay foreign investors for the privilege of consuming the additional imports that result from dumping. We estimate this value to be the product of the increase in dumped imports times the 1-year Treasury constant maturity interest rate. The additional interest costs associated with the increase in dumped imports was approximately \$30 million over the three-year period of investigation.

**Table 35, Ball Bearings from France, Germany, Japan, Italy, Romania, Singapore, Sweden, and the United Kingdom:**

*Indirect Costs and Interest Costs due to Dumping*

Item	1985	1986	1987	Total
Indirect industry output multiplier	0.91	0.91	0.91	N/A
1-year T-bill rate (percent)	8.43	6.46	6.76	N/A
Lost indirect activity (\$mil)	249	257	260	767
Interest on borrowed funds (\$mil.)	11	9	9	29
Sources: Bureau of Economic Analysis at <a href="http://www.bea.gov/bea/dn2/i-o.htm#benchmark">http://www.bea.gov/bea/dn2/i-o.htm#benchmark</a> (data for multiplier); Federal Reserve Bank of St. Louis at <a href="http://www.research.stlouisfed.org/fred2/series/GS1/downloaddata">http://www.research.stlouisfed.org/fred2/series/GS1/downloaddata</a> (interest rates); and authors' calculations.				

The estimates of pure consumer gains due to the dumping of ball bearings are presented in the table below. They indicate that the pure consumer gains, those that did not come at the expense of fair imports and domestic production, were on average less than \$2.5 million annually. As has been the case with most of the industries studied in this report, those gains are relatively small compared to the revenue losses experienced by the domestic industry and its suppliers. It seems that if the assumption of seamless absorption of released factors of production

by the rest of the economy is valid, then the pure consumer gains from dumping are usually relatively small. If that assumption is inaccurate, then the so-called gift to consumers that is supposed to arise from dumping probably does not exceed the economic dislocation that it causes.

**Table 36. Ball Bearings from France, Germany, Japan, Italy, Romania, Singapore, Sweden, and the United Kingdom:**  
*Summary of Costs and Benefits of Dumping*

Item	1985	1986	1987	Total
Lost revenue due to dumping (\$mil.)	-275	-284	-288	-847
Lost indirect activity (\$mil.)	-249	-257	-260	-767
Interest on borrowed funds (\$mil.)	-11	-9	-9	-29
Consumption gains (\$mil.)	2	3	3	7
Sources: Author's calculations.				

#### *Long-term impact of the order*

The orders on ball bearings that arose from the 1989 dumping investigation appear to have had a positive impact on the domestic industry. As shown in the first table of this section, by the time of the first sunset review in 1999, the value of U.S. shipments had nearly doubled, U.S. market share remained high despite the increase in nonsubject imports, and profitability and productivity significantly improved.

After reviewing the data on ball bearings, the Commission determined that ball bearing imports from Romania and Sweden were unlikely to cause injury to the domestic industry if the orders on those countries were revoked. On the other hand, the Commission determined that ball bearing imports from the remaining countries would likely injure the domestic industry if the existing orders were revoked. Consequently, the orders on ball bearing imports from France, Germany, Italy, Japan, Singapore, and the United Kingdom remained in place.

The second review of these orders has been completed, but a decision has not yet been rendered as of this writing. In between the two reviews, the U.S. ball bearing industry has faced competitive challenges from China and other non-subject countries, and falling demand. The decline in demand has been due to a shift in the production of bearing using products to Asia, especially China, and due to significant problems in the U.S. automotive industry, which consumes large amounts of wheel-hub units incorporating ball bearings.

Because foreign producers continue to import ball bearings to the United States despite the existence of duties, the ball bearing industry's receipts from the Continued Dumping and Subsidy Offset Act have been quite large. From 2001 to 2005, U.S. producers received more than \$300 million as a result of the CDSOA.

## SOFTWOOD LUMBER FROM CANADA

Softwood lumber includes a wide variety of products, such as boards, planks, timber, framing materials, flooring, and siding, which are produced from coniferous species of trees.<sup>232</sup> U.S. production of softwood lumber occurs largely in the West (primarily in Oregon, California, Washington, Idaho, and Montana)



and the South (primarily in the Carolinas, Georgia, Alabama, Mississippi, Texas, and Arkansas).<sup>233</sup> The major U.S. species of softwood lumber are the southern yellow pine, douglas fir, hem-fir, and ponderosa pine. In 2000, these species accounted for approximately 85 percent of U.S. production.<sup>234</sup>

Logs are removed from the forest and transferred to a sawmill, where they are debarked, bucked, and sawn to rough sizes. The roughly sawn logs are then transferred to a secondary breakdown area, where they are re-sawn to suitable dimensions and then sorted. The final steps are kiln-drying, planing, and packaging.<sup>235</sup> This is a capital-intensive process; annual capital expenditures during the 1999-2001 period ranged from \$253 million to \$474 million.<sup>236</sup> The U.S. industry producing softwood lumber reported approximately 30,000 production workers who received wages totaling more than \$1 billion per year.<sup>237</sup>

Canada-U.S. softwood lumber trade has been a source of friction for many years. At the core of the dispute is a difference in forestry systems – more specifically, the Canadian practice of administratively setting the price of harvesting timber (the main softwood lumber production input) rather than allowing prices to be set by market forces. By setting a very low administered price, Canadian authorities provide a “subsidy” on softwood lumber production for purposes of U.S. and international trade law. The subsidy has signif-

<sup>232</sup> *Softwood Lumber from Canada*, USITC Pub. 3509, Inv. No. 701-TA-414, 731-TA-928 (Final) (May 2002) at I-11.

<sup>233</sup> USITC Pub. 3509 at III-3 to III-4.

<sup>234</sup> *Id.* at III-14.

<sup>235</sup> *Id.* at I-12 to I-13.

<sup>236</sup> *Id.* at C-4.

<sup>237</sup> *Id.* at C-4.

ificant trade effects, and the past 25 years have accordingly seen a succession of trade remedy investigations alternating with negotiated settlements limiting Canadian lumber shipments into the U.S. market. To summarize briefly:

- The U.S. softwood lumber industry filed a CVD petition in 1982. The U.S. Commerce Department determined (under then-prevailing law) that the Canadian subsidy was not specific to the softwood lumber industry.
- Another CVD petition followed in 1986, but a Memorandum of Understanding resolved the dispute until 1991 when Canada announced its withdrawal from the MOU and the Commerce Department self-initiated a CVD investigation.<sup>238</sup> During a controversial appellate process over the affirmative subsidy and injury findings that followed, another negotiated settlement, the Softwood Lumber Agreement (“SLA”), was concluded in 1996.<sup>239</sup>

At the end of the SLA’s 5-year effective period, during which Canadian stumpage practices were not brought into line with market principles, the U.S. industry filed trade remedy cases again – this time claiming both dumping and subsidization, and threatened material injury by reason of the unfairly traded imports.

The dumping claims brought into focus, for the first time, the additional harm caused by Canadian firms’ sales into the U.S. market at prices below their production costs. The Commerce Department’s initial calculations found that prices of Canadian lumber sold in the United States during the period April 2000 - March 2001 averaged 12.58% less than the average production cost measured in several Canadian regions. (The final dumping margin in the original investigation was just under 10 %.) Underlying this phenomenon are regulations that mandate harvesting and production regardless of market conditions, at the risk of losing long-term timber licenses. While mills in a commercial setting sometimes operate below variable cost for a period of time, Canadian government regulations mandate continued high levels of production — in some cases requiring government approval if a mill wishes to reduce capacity.

#### *Original investigation and determination*

Imports from Canada are an essential part of the U.S. lumber market. However, the potential for unfairly traded Canadian lumber to surge into the U.S. market and harm domestic producers has been demonstrated repeatedly. The most recent trade remedy findings and measures – the ones currently in effect — were based on the imminent threat of material injury which was shown to exist at the time the SLA expired in 2001. The U.S. agency findings involved

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<sup>238</sup> Id. at I-7 to I-8, fn. 19.

<sup>239</sup> Id. at I-8.

actual, not merely threatened, subsidization and dumping; significant levels of dumping and subsidization were found to exist during the original period of investigation and in subsequent 1-year periods examined in administrative reviews. Only the injury determination was based on “threat.”

The USITC found imminently threatened material injury on the basis of the following factors:

- The market share of subject imports increased during the 1999-2001 period of investigation, at the expense of the market share of U.S. producers.<sup>240</sup>
- The U.S. industry was vulnerable to import-related injury in light of declines in its performance over the 1999-2001 period. Significant declines were observed in, for example, the U.S. industry’s (1) production, shipments and capacity utilization, (2) number of mills in operation, (3) production workers, hours worked, and wages paid, and (4) ratio of operating income and net income to net sales.<sup>241</sup>
- There was a high likelihood that imports would increase significantly. Canadian producers in the post-SLA environment had significant ability to increase shipments to the U.S. market (excess capacity), coupled with a demonstrated inclination to do so (export orientation). Moreover, mandatory cut requirements in many Canadian provinces “increase production even when demand is low and thus increase the incentive to export more softwood lumber to the U.S. market.”<sup>242</sup>
- Additional imports were likely to have a “significant price depressing effect” in the U.S. market.<sup>243</sup>

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240 USITC Pub. No. 3509 at 42, 45.

241 Id. at 41-43.

242 Id. at 43-46.

243 Id. at 48.

**Table 37. Softwood Lumber from Canada:**  
*Selected Data Collected by the USITC*

Item	1999	2000	2001
U.S. shipment (\$ mil.)	13,922	10,818	10,355
U.S. market share (percent, by value)	64.1	60.7	60.2
Subject imports (\$ mil.)	7,116	6,280	5,980
Subject import unit value (\$/mbf)	395.71	347.88	323.54
Wages paid (\$1,000)	6,380	8,519	10,008
Sources: USITC Pub. 3509 at to C-3 to C-4.			

*Estimated revenue impact of unfair trade*

The Department of Commerce's final determination found a subsidy margin of 18.57 percent. As a result of appeals and reviews, the subsidy margin had been reduced to 8.7 percent by September 2005.<sup>244</sup> This rate was applied to the model for data covering 1999 to 2001 even though the SLA was operative during those years.<sup>245</sup> According to the model, the three-year revenue cost to U.S. firms was \$2.2 billion, with losses ranging from \$666 million to \$871 million.<sup>246</sup> These losses are large, surpassed only by the lost revenue related to hot-rolled steel among the industries covered in this study. Losses grew progressively smaller during the period of investigation, in part because market prices were declining due to an increase in lumber supply relative to demand.<sup>247</sup>

**Table 38. Softwood Lumber from Canada:**  
*Estimated Lost Revenue due to Subsidies*

Item	1999	2000	2001	Total
Estimated subsidy margin (percent)	8.70	8.70	8.70	N/A
Lost revenue due to dumping (\$ mil.)	871	707	666	2,244
Sources: USITC Pub. 3393 at I-2 to I-3 and author's calculations.				

244 *Certain Softwood Lumber Products from Canada, Notice of Final Results of Countervailing Duty Administrative Review*, 70 Fed. Reg. 73,448 (Dep't Comm. Dec. 12, 2005).

245 This methodology seems appropriate in light of the fact that the subsidies remained in existence during the SLA. Canadian firms had to pay fees once the export baseline of 14.7 billion board feet was surpassed, and the baseline was surpassed in each year of the Commission's period of investigation.

246 Antidumping duties were also applied to Canadian lumber, but revenue losses due to dumping have not been estimated here.

247 USITC Pub. No. 3509 at 47.

The table below shows the indirect revenue losses resulting from the unfairly traded imports, as well as the financing costs of the increase in imports. The indirect effect of a one dollar change in U.S. lumber industry output on other domestic industries is \$0.73.<sup>248</sup> Given the large direct losses to the logging industry due to the subsidies and dumping, the indirect losses are also substantial, ranging from \$486 million to \$634 million. As would be expected, the largest beneficiaries of domestic lumber industry output are forest nurseries, forest products, and timber tracts; and agricultural and forestry support activities. The financial cost of consuming more imports is estimated to equal the one-year Treasury bill rate multiplied by the increase in import value resulting from the dumping. The annual financial costs during the 1999-to-2001 period ranged from \$15 million to \$28 million.

**Table 39. Softwood Lumber from Canada:**  
*Indirect Costs and Interest Costs due to Dumping*

Item	1999	2000	2001	Total
Indirect industry output multiplier	0.73	0.73	0.73	N/A
1-year T-bill rate (percent)	5.08	6.11	3.48	N/A
Lost indirect activity (\$ mil.)	634	515	486	1,635
Interest on borrowed funds (\$ mil.)	28	28	15	71
Sources: Bureau of Economic Analysis at <a href="http://www.bea.gov/bea/dn2/i-o.htm#benchmark">http://www.bea.gov/bea/dn2/i-o.htm#benchmark</a> (data for multiplier); Federal Reserve Bank of St. Louis at <a href="http://www.research.stlouisfed.org/fred2/series/GS1/downloaddata">http://www.research.stlouisfed.org/fred2/series/GS1/downloaddata</a> (interest rates); and authors'				

Consumer gains from increased consumption of imported lumber due to Canadian subsidies and dumping are shown in the table below. At \$33 million, they are not very large relative to the losses experienced by the domestic industry, and they are actually smaller than the interest payments resulting from the increased imports resulting from the subsidies. In this case, because imports from countries other than Canada are not large, one could argue that the “gift” to consumers is coming directly from Canada’s unwillingness to charge a higher, market price that reflects the true value of the lumber being harvested, and should be larger than the amount calculated by the model.<sup>249</sup> On the other hand, the distortion of undervalued timber caused by Canada’s practice leads to greater use of a natural resource than would occur absent the subsidy. In other words, the condition that the consumer gains associated with area C come at the expense of another entity in the system still holds.

248 This estimate is based on detailed estimates from the U.S. 1997 Benchmark Input-Output industry-by-industry total requirements table. The total requirements multiplier for vegetable and melon farming is 1.78. The detailed data are available from <http://www.bea.gov/bea/dn2/i-o.htm#benchmark>.

249 In terms of calculating the pure consumer gains, this would require that we add a portion of area C to area D. See Figure 1.

**Table 40. Softwood Lumber from Canada:**  
Summary of Costs and Benefits of Dumping

Item	1999	2000	2001	Total
Lost revenue due to dumping (\$ mil.)	-871	-707	-666	-2,244
Lost indirect activity (\$ mil.)	-634	-515	-486	-1,635
Interest on borrowed funds (\$ mil.)	-28	-28	-15	-71
Consumption gains (\$ mil.)	13	9	10	33
Sources: Author's calculations.				

*Long-term impact of the order*

It is difficult to estimate the impact of trade remedy “orders” in this sector based on prior experience, because the relief imposed through the administrative process has in each case been quickly replaced by negotiated import restraints. No orders have remained in place long enough to undergo a “sunset” review in which their impact would have been quantified. This pattern appears likely to continue, as a 3-7 year agreement settling the current litigation on the basis of (mainly) a price trigger has been negotiated by the two governments and is now awaiting formal approval in both countries.

Although a cause-and-effect relationship cannot yet be definitively established, there is strong circumstantial evidence that one exists, as the U.S. industry’s performance has improved markedly since the current round of litigation was launched in 2001. For example, from 2001 to 2005, U.S. manufacturers’ shipments of softwood lumber rose from 34.7 billion board feet to 40.5 billion board feet.<sup>250</sup> And the \$1 billion of collected duties earmarked to benefit the U.S. industry under the pending settlement – half to go directly to affected U.S. producers, and half to be used to promote the use of lumber in the U.S. market – should facilitate continued recovery.

250 AF&PA Statistical Roundup, Q1 2006, page 2.

## AUTHORS\*

**Lawrence Chimerine** is currently President of Radnor International Consulting. He has had a distinguished career in economic consulting, including posts as Senior Economic Adviser DRI-McGraw Hill, Chairman and CEO of the WEFA Group, and Chairman and CEO at Chase Econometrics. Dr. Chimerine serves on a number of corporate and advisory boards and is a widely recognized commentator on economic issues.

**John Magnus** is President of TRADEWINS LLC. He is an attorney and has represented and consulted with numerous industries involved in antidumping and countervailing duty matters. He also provides advice on World Trade Organization disputes, regional and bilateral trade initiatives, U.S. trade legislation, and related matters.

**Greg Mastel** is currently Chief International Trade Adviser at Miller & Chevalier, Chartered - a Washington law firm. He was Chief International Trade Adviser and Chief Economist at the U.S. Senate Finance Committee from 2001 to 2003. He is the author of a number of books and articles about the operation of U.S. trade laws, including Antidumping Laws and the U.S. Economy (Armonk, NY: ME Sharpe Inc., 1998)

**Andrew Szamosszegi** is Managing Consultant at Capital Trade, Incorporated. He has consulted for U.S. and international clients on a wide range of topics, ranging from the impact of trade liberalization and currency valuation issues to technical aspects of countervailing duty and antidumping margins. Previously, he held posts at LECG – an economic consulting firm – and at the Economic Strategy Institute.

*\* Each author did not necessarily participate in the drafting and preparation of each section of this paper. In some cases, professional obligations prevented authors from participating in analysis of matters in which they had previously been involved.*