**EMBA Global Economy (A14)**
**Prof. Stanley E. Zin**
**Assignment #2**

**Instructions:**

• You must work in you pre-assigned groups. Submit only one solution for the group (recording all group members names).

• Submit the assignment through Blackboard by

**1:30pm, Friday, February 22nd**

**Dumping Chinese Solar Panels in the US**

The term “dumping” has long been used in the area of industrial organization to refer to a strategy whereby a large, well-capitalized firm deliberately loses money by choosing to sell its product at a price below its average cost. The goal of such a strategy is to bankrupt less-well-capitalized competitors, become the sole producer in the industry and thereby more than make up for any short-term losses by charging monopoly prices forever. Given what we know about the inefficiencies associated with monopolies, should this strategy actually succeed, it wouldn’t just be bad for the bankrupted firms, it would be bad for social welfare more generally.

Surprisingly, there is very little evidence of anyone successfully implementing such a strategy. Note that it doesn’t just involve bankrupting the current competition. It also requires successfully preventing anyone else from entering the industry in the future and competing away the monopoly profits. Obviously, even well-capitalized firms can’t price below their average costs forever, hence, this tends not to be an attractive competitive strategy. Nonetheless, “predatory pricing” is illegal in most countries. More importantly, since everyone loves a conspiracy theory, it is easy to stir up public fears by claiming that a competitor’s low price isn’t simply a reflection of efficiency but is rather de facto evidence of dumping (eg, WalMart has been a popular target for predatory pricing claims by small local retailers, yet there is no evidence of monopoly-like pricing by WalMart). The US Federal Trade Commission has never successfully prosecuted anyone for predatory pricing. But when the competitor is from a foreign country, xenophobia makes it even easier to play the “us versus them” card and claim dumping. As a result, dumping and predatory pricing have become a standard fare in the world of international trade.

President Barack Obama made this a central point of his 2012 State of the Union Address:

> *We've brought trade cases against China at nearly twice the rate as the last administration--and it's made a difference. But we need to do more. Tonight, I'm announcing the creation of a Trade Enforcement Unit that will be charged with investigating unfair trading practices in countries like China.*

Not to be outdone, Mitt Romney's presidential campaign rhetoric on trade with China is equally inflammatory:

> *I understand what happens when China cheats, or when others cheat and dump products into this country. That's one of the reasons I'm running is to make sure we crack down on cheaters. (Republican primary debate, 1-16-2012)*

Since dumping and predatory pricing were traditionally part of domestic industrial regulations, international trade agreements like the World Trade Organization (WTO) or its predecessor the General Agreement on Tariffs and Trade (GATT), have never treated the issue of anti-dumping actions as a serious barrier to international trade on par with high tariffs, duties or quotas. This has left a very large loophole for "legal" trade barriers through anti-dumping penalties.

When a domestic firm (or more often, a coalition of firms) files an antidumping petition, two conditions have to be met to trigger an antidumping tariff: It must be found (1) that the imports are being sold at below "fair value," and (2) that these dumped imports have caused, or threaten to cause, material damage to a domestic industry. In the US, two agencies are responsible for antidumping investigations. The Department of Commerce (DOC) is given the task of determining if the goods in question are being sold at below "fair value", and the International Trade Commission (ITC) determines if the imported goods have caused material injury to the domestic industry.

Determining the "fair value" price of an import is not a simple uncontroversial calculation. If the DOC can observe the identical good being sold in the exporting firm's home market, the home market price is considered the fair value price, irrespective of any differences in demand between the two countries. If chicken feet sell for a higher price in China where the demand is high than in the US where the demand is very small, under the DOC's definition of "fair value," US chicken producers could be accused of dumping chicken feet on the Chinese market. It is rarely the case, however, that an identical good is ever marketed in the exporter's home country. Lacking an identical good for comparison, the DOC will compare the average U.S. price to the average home market price of the “next most similar product.” Defining a comparable product in the exporter’s home country is arbitrary and creates scope for manipulation in the dumping criteria. In addition, the DOC makes several additional arbitrary price adjustments before arrive at the final “fair value” price. (Notice how far we’ve drifted for the original notion of predatory pricing in these arbitrary price calculations.)

Trade with China opens up additional pricing issues. The most frequent target of U.S. antidumping investigations is China. Worldwide, 20% of all anti-dumping cases since 1995 have been brought against China. One reason for this is that the DOC has declared China to be a “nonmarket economy.” In practice what this means is that they can simply ignore prices charged in China (or any other economy deemed “nonmarket”). The DOC applies a special methodology in this case: prices of goods in other countries with “market economies” are used to construct the fair value price of goods in the nonmarket economy. This methodology opens up even more scope for arbitrary “fair value” calculations.

When the DOC decides that dumping has occurred, they apply anti-dumping duties against the offending foreign firms. Note that unlike standard tariffs which apply to all firms in all countries, these anti-dumping duties target specific producers in specific countries, which is anathema to the WTO’s nondiscrimination provisions and most favored nation rule. Antidumping duties are not intended to be punitive; the antidumping duty is supposed to exactly offset the difference between the price charged by the firm and the fair value price. The determination of fair value, and the arbitrariness associated with it, therefore, establishes both the claim of dumping behavior and it’s punishment, ie, the size of the penalty. These countervailing duties are typically much higher than the maximum 25% tariff allowed under WTO. Moreover, antidumping duties do not have a fixed duration. The WTO does reviews anti-dumping duties after 5 years. Not too surprisingly, 5 years is the median length of time they are kept in place -- although sometimes they are kept for a long time as in the case of a 60% duty protecting a US manufacturer of “soluble silicate” from competition from a French manufacturer of the same chemical which stayed in place for 24 years.

On October 3, 2012, the ITC heard one of the largest anti-dumping cases ever brought against China. The product in questions was solar panels. The case was brought before the ITC by SolarWorld, a German company (yes, this is indeed ironic) producing in the US. SolarWorld CEO Gordon Brinser testified that “Chinese imports have accelerated losses of high-paying jobs and plant closures at a time when the United States is struggling to jump-start a struggling economy.” (Somehow we went from predatory pricing to a German company trying to protect US jobs? I don’t know about you, but I’m a bit confused.) The ITC found in favor of the dumping allegation, and has levied substantial tariffs on a variety of Chinese manufacturers who export photo-voltaic cells to the US.

The EU seems to be following suit.  Earlier this week, EU Pro Sun Glass, a conglomerate of European solar glass makers, filed a compliant with the European Commission accusing Chinese solar exporters of “unfair competition.”

**Assignment**

Read the overview of the US-China situation in the attached articles from Forbes, The Economist, the NY Times, and the Wall Street Journal.  (If you are really a glutton for punishment, you can even look at the ITC report, but prepare yourself for lots of legalese without much economic content.)  You are also more than welcome to read about the current situation in any other source material you find. Along with the description of dumping above, you may also find the article by Mankiw and Swagel useful.

Write a brief summary (3-5 standard typed pages) of the situation including a discussion of the following questions:

- What is the evidence of dumping?  Is there any other reason that Chinese firms are able to sell at lower prices than manufacturers operating in the US?
- Do Chinese manufacturers receive government subsidies?  Do US manufacturers receive government subsidies?  How does this affect the argument?
- Who benefits and who loses from an anti-dumping finding against Chinese photo-voltaic producers?
- What are the likely consequences of this anti-dumping action in the US for the organization of the solar power industry, future trade relations with China, and the efficiency of the US economy more generally?

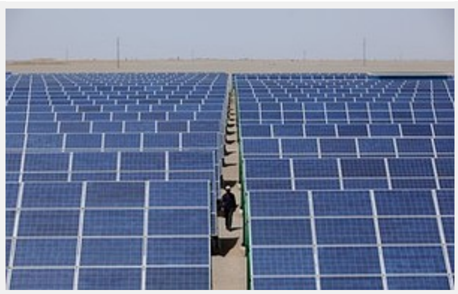
Forbes

**Todd Woody**, Forbes Staff
I cover environmental and green technology issues from San Francisco.

GREEN TECH | 10/10/2012 @ 8:49PM | 2,383 views

# U.S. Hits Chinese Solar Manufacturers With Higher Tariffs

The U.S. Department of Commerce on Wednesday slapped Chinese biggest solar manufacturers with tariffs as high as 36%, concluding in a final ruling that they illegally dumped cheap photovoltaic cells on the American market.



(Image credit: Getty Images AsiaPac via @daylife)

The anti-dumping tariffs roughly mirrored those the Commerce Department issued in a preliminary ruling in May. But the department jacked up the anti-subsidy tariff. For Suntech, China's biggest and most embattled solar manufacturer, the total tariff issued Wednesday jumped to nearly 47% from 34% in May. But the Commerce reduced the final tariffs by 10.54% to account for an export subsidy all manufacturers received.

The tariffs will become final if the U.S. International Trade Commission finds that the Chinese companies illegally dumped solar cells, a decision that is due Nov. 7.

But the solar war trade war is far from over.

The U.S. subsidiary of German manufacturer SolarWorld, which filed the trade case last year, has vowed to pursue other actions to stop Chinese manufacturers from selling solar cells they obtain outside China. The Commerce Department ruling only applies to photovoltaic cells made in China and companies like Suntech, Trina Solar and Yingli have moved to secure supplies from third countries that they can sell in the U.S. tariff-free.

"Assuming the International Trade Commission rules in our favor next month, we plan to ask the Commerce Department and Customs and Border

Protection to address the circumvention issue through strict enforcement actions," Gordon Brinser, president of SolarWorld Industries America, said in a statement.

The fight has divided the U.S. solar industry as solar installers and other companies have benefited from a 75% plunge in photovoltaic module prices over the past three years that resulted from Chinese manufacturers vastly expanding production, sometimes with the aid of government assistance and cheap bank loans

"We remain concerned about the growing global trade war, which will only hurt American solar industry jobs, growth and consumers," Jigar Shah, president of the Coalition for Affordable Solar Energy, a group opposed to the trade case, said in a statement. "We believe that global competition is good for American solar consumers and companies."

The tariffs decision is more bad news for China's solar industry, which faces crushing debt loads and excess manufacturing capacity. Suntech, for instance, is scrambling to find a way to meet a half-billion dollar payment due in 2013 on convertible notes. In September, the company said it would temporarily idle some of production lines. Shares of Suntech, which faces delisting from the New York Stock Exchange because its stock has been trading below $1, were trading at 89 cents after hours Wednesday.

"Unilateral trade barriers will not make any one company more competitive, but will make solar less competitive against other forms of electricity generation," E.L. "Mick" McDaniel, managing director of Suntech America, said in a statement. "As a multinational company with global supply chains and manufacturing facilities in three countries, including Goodyear, Ariz., we will continue to provide our customers in the U.S. with hundreds of megawatts of high-quality and affordable solar products that will not be subject to tariffs."

The tariffs are also not good news for solar installers like SolarCity, which filed last week for a $201 million initial public offering. In its filing with the U.S. Securities and Exchange Commission, the Silicon Valley company said two of its biggest solar panel suppliers are China's Trina Solar and Yingli.

But both those manufacturers benefited from a reduction in tariffs levied in the May preliminary decision. In its final ruling, the Commerce Department Wednesday imposed a 24% tariff against Trina – compared to a preliminary rate of 36% – and a 31% tariff against Yingli, a reduction from the 35% tariff in the original ruling.

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**This article is available online at:**
**http://www.forbes.com/sites/toddwoody/2012/10/10/u-s-hits-chinese-solar-manufacturers-with-higher-tariffs/**

The Economist

## Solar tariffs

# Sunspots

### American tariffs on Chinese solar panels are dangerous and pointless

May 26th 2012 | from the print edition

SOLAR energy is at a delicate, maybe historic, moment. The cost of the glassy photovoltaic panels that generate most solar electricity—by freeing electrons from a semiconducting material such as silicon—is plummeting. In the past four years their average cost has fallen by more than 75%. At less than $1 per watt of generating capacity, solar is now the cheapest power source in some sunny places, especially those, like India, that lack fossil-fuelled alternatives. This is starting to look like a revolution. Everyone who wants a reliable and nonpolluting energy supply, you would think, would welcome that.

But on May 17th America's Commerce Department slapped a provisional tariff of 31% on 61 Chinese makers of solar panels, including some of the cheapest in the business. Another group of unnamed Chinese solar companies, which failed to respond satisfactorily to the department's inquiries, were hit with a 250% tariff. These duties, which are expected to be confirmed in October, were in response to an anti-dumping complaint from seven solar firms including SolarWorld, a German company with operations in America.

China's panelmaking industry has seen explosive growth, fuelled by strong demand, mainly from Europe, but also by soft loans from state-owned lenders. Chinese panelmakers are reckoned by Bloomberg New Energy Finance (BNEF), a research firm, to be able to make panels for around 10% less than the industry's average cost. They have undercut European and American producers: between 2009 and 2011 the value of American imports of cheap Chinese panels soared from $640m to $3.1 billion.

This has brought misery to higher-cost producers, which a recent slowdown in demand for solar panels, caused mostly by reductions in European and American subsidies, has greatly exacerbated. Many solar firms, Chinese and otherwise, are now furiously selling inventory—the bane of an industry where prices are falling—at a loss. Some have gone bust, including recently a clutch of once-pioneering German firms such as Solarhybrid, Solon, Solar Millennium and Q-Cells.

The American tariffs, if confirmed, will annoy Chinese panelmakers—and perhaps a wide array of American exporters, too, if China's “strongly dissatisfied” government launches retaliatory measures. But they are unlikely to save many Western solar firms. The tariffs were long mooted (though they are even higher than expected), which has allowed Chinese exporters to build large inventories in the United States.

Some developers of American solar projects have also signed precautionary deals, committing their Chinese suppliers to covering the cost of the mooted tariffs. The most integrated Chinese solar firms, such as SunTech, the world's biggest panel-maker, could probably stomach this, because panels represent less than a quarter of the cost of installed solar generating capacity. Financing, installation and other infrastructure costs account for the rest. They will also look to make or buy panels in other Asian manufacturing hubs, such as Taiwan and South Korea. These panels will not be subject to the tariffs, even if they are assembled into solar modules in China.

Whatever the legal merits of SolarWorld's complaint, America will help neither the planet nor its own domestic consumers by shutting out Chinese solar panels. And, predicts BNEF's Nat Bullard, the tariffs will not even do much to protect American solar firms.

from the print edition | Business

The New York Times



October 11, 2012

# For Solar Panel Industry, a Volley of Trade Cases

By KEITH BRADSHER

HONG KONG — The solar panel manufacturing industry in the United States and Europe has begun a volley of trade cases against imports, following the same track as the steel industry before it — and for many of the same reasons.

“Back in the ’60s and ’70s, all over the world, governments were investing in steel mills,” said Nicholas Tolerico, a retired American trade official and steel executive. “These days, they invest in solar panels, and you end up with the same overcapacity and cutthroat pricing.”

The Commerce Department issued a final ruling Wednesday that would impose tariffs of 24 to 36 percent on solar panels imported from China. The department concluded, despite China’s denials, that manufacturers had received government subsidies and had “dumped” solar panels on the United States market for less than it cost to manufacture and ship them.

Solar panel manufacturers in the United States are now lobbying the Obama administration to broaden the tariffs to include solar panels made partly in China and partly in other places, notably Taiwan. And the American industry is not ruling out more trade cases against other Asian solar panel exporters.

In Brussels, the European Union has started a trade investigation into solar panel imports from China, a case covering imports worth $26.5 billion last year. And the European industry is seeking a second case against Chinese solar panel exports, accusing them of benefiting from government subsidies.

Shen Danyang, a spokesman for China’s commerce ministry, said in a statement on Thursday that the United States had disregarded “the reasonable defense of the Chinese government and Chinese enterprises,” and he expressed “strong dissatisfaction” with the Commerce Department’s decision.

He also said that the American decision to put import tariffs on a category of renewable energy imports was harmful to global efforts to address climate change. And he warned that the American action was likely to result in reduced Chinese imports of raw materials and factory equipment for the solar panel industry.

He Weiwen, a co-director of the China-U.S.-E.U. Study Center at the China Association of International Trade, which is part of the Commerce Ministry, said his opinion was that China was likely to call for consultations with the United States to reach a settlement on the tariffs.

Such settlements have been reached in trade disputes in the past, leading to outcomes like price floors for tomatoes imported from Mexico and the so-called voluntary restraints that Japan imposed on its car exports in the 1980s, which were anything but voluntary.

But Mr. He said it was unlikely that negotiations could start quickly, given the coming presidential election in the United States, and he worried that settling a trade dispute with China might not be at the top of the agenda of whoever is sworn in as president.

“The new administration will be faced with more pressing domestic issues,” he said.

The tariffs imposed Wednesday cover about $3 billion a year in imported solar panels and were imposed after a quasi-judicial process at the Commerce Department. United States law does not allow the White House to intervene in the process of calculating duties. But the duties can be replaced with a negotiated settlement that also satisfies the domestic industry.

To the dismay of Chinese regulators, hundreds of solar panel manufacturers in their country have followed a pattern of using lavish loans from state-owned banks to buy and install as much foreign-made factory equipment as possible while setting aside little for research and development.

“They made quite a lot of money but did not invest,” Li Junfeng, a director general for energy and climate policy at the National Development and Reform Commission, said in an interview last month in Beijing. The commission is China’s top economic planning agency.

Mr. Li, who is also the president of the Chinese Renewable Energy Industries Association, also said that the solar industry’s problems were the direct result of overcapacity in China and not the fault of overseas trade restrictions.

Yet he insisted that if the Chinese government could revisit past renewable energy decisions, it would not do anything differently because the business community in China is prone to overinvestment in many industries.

Asked what he was telling Chinese banks to do about their continued loans to solar panel manufacturers, he replied, “I say, ‘Just stop.’ ”

But Frank Haugwitz, a solar industry consultant in Beijing, said this week that there were signs that Chinese banks would sharply increase lending, at least to the country’s largest solar panel manufacturers, a step that could allow them to delay taking losses on previous loans to those companies.

Aaron Chew, a renewable energy analyst at the Maxim Group, a New York investment bank and asset management company, estimated that the 10 largest Chinese solar manufacturers had already borrowed $18 billion almost entirely from state-controlled banks.

Dirk Thomas, an executive in the computer hard drive industry who is now a solar industry consultant in Hong Kong, predicted that China could emerge triumphant from the current troubles in the solar panel industry.

Those Chinese solar panel companies chosen by the government to receive more bank loans could end up buying enough of their domestic and foreign competitors to gain market dominance, reduce overcapacity and set prices high enough to be profitable, he said.

That would follow a pattern already seen in the computer hard drive industry since the 1980s — although in that industry, the consolidation has been led by a Japanese company, Toshiba, and two American companies, Seagate and Western Digital.

When China began the rapid expansion of its solar industry several years ago, many in the global industry expected that technological breakthroughs would result in more cost reductions. But Chinese companies have driven costs down sharply, mainly through greater economies of scale from the construction of larger factories to produce conventional solar panels, and few industry executives foresee further cost reductions by building even larger factories.

At the same time, few new technologies have been developed. Some experts attribute that to China’s rapid expansion of capacity for conventional polycrystalline solar panels, which has driven prices down so quickly that investment in newer thin-film solar technologies has faltered, particularly in Europe.

“The artificially low prices resulting from Chinese overproduction have nearly destroyed a second generation of photovoltaic technologies based on thin film,” said Ken Zweibel, the director of the George Washington University Solar Institute in Washington. “This has been a huge setback for the

U.S. competitive position."

But Sebastian Meyer, a partner at Azure International, a renewable energy consulting firm in Beijing, said he thought the United States decision on tariffs was a mistake.

The United States is still strong in making factory equipment for manufacturing solar panels, Mr. Meyer said, and should let China actually make the panels as long as Chinese banks and local and provincial governments refuse to admit defeat and continue covering most of the costs.

"If you buy a solar panel from China, China is paying for part of it," he said. "If I were the U.S., I would let Americans milk it."

THE WALL STREET JOURNAL.
WSJ.com

BUSINESS | Updated October 10, 2012, 11:43 p.m. ET

# U.S. Boosts Tariffs on Some Chinese Solar Firms

By RYAN TRACY And CASSANDRA SWEET

WASHINGTON—The Commerce Department pushed a trade investigation of Chinese solar-panel makers closer to a final resolution Wednesday, affirming its ruling that the companies dumped their products on the U.S. market and received unfair subsidies from the Chinese government.

The department adjusted some of the tariffs it wants to impose on the Chinese makers, with some companies seeing a slightly lower burden and others a slight increase. The tariffs generally range from about 24% to nearly 36% for leading Chinese makers.

The battle over solar panels is one of several disputes raising tensions between China and the U.S. during an election year in which both presidential candidates have outlined policies to crack down on what they describe as unfair Chinese trade practices.

The department said Chinese solar-panel makers including Suntech Power Holdings Co. and Trina Solar Ltd. have been selling panels at unfairly low prices. Since a preliminary ruling in March, the U.S. has been collecting the tariffs on a provisional basis.

The duties at issue on Wednesday won't be final unless the U.S. International Trade Commission finds, in a parallel investigation, that U.S. companies were injured by the dumping. That probe is set to conclude next month.

In a partial victory for Chinese exporters, the department didn't close what some U.S. firms say is a loophole in the tariffs. Chinese solar manufacturers have said they could skirt the tariffs by purchasing one part of the panel—the electricity-generating solar cell—from other countries while continuing to make finished panels in China for sale in the U.S. Currently, only Chinese solar cells are subject to tariffs.

In May, the department slapped antidumping duties of 31% on several leading Chinese solar-cell makers. That followed duties of between 3% and 5% announced in March to counteract what the department described as unfair Chinese government subsidies to the country's solar-panel makers.

On Wednesday, the Commerce Department reduced the antidumping duties for many suppliers somewhat and increased antisubsidy duties.

"On average the tariffs applied are slightly lower than the preliminary decision," said Kevin Lapidus, senior vice president at solar developer SunEdison, a unit of MEMC Electronic Materials Inc.

The U.S. unit of Germany's SolarWorld AG filed the petition that prompted the U.S. investigation. The case is one of the largest U.S. trade complaints against China as measured by the value of imports involved, according to a SolarWorld representative.

Timothy Brightbill, a lawyer at Wiley Rein LLP who represents SolarWorld, said the company was "pleased with the margins calculated by Commerce" but "concerned" about its decision to focus the tariffs on Chinese solar cells, rather than on fully assembled panels.

"In our view, all Chinese cells and all Chinese modules are dumped and subsidized and therefore all should be covered," Mr. Brightbill said.

A coalition of Chinese solar-panel makers and some of their U.S. customers said they were pleased that tariffs won't significantly increase from earlier levels but expressed concern about a possible trade war. "We believe that global competition is good for American solar consumers and companies," said a spokesman for the group, the Coalition for Affordable Solar Energy.

Wednesday's decision comes as Chinese and other solar-panel makers struggle with falling prices and shrinking profits amid persistent global oversupply. The market troubles have forced smaller firms into bankruptcy and put pressure on large companies to cut costs and find new markets.

Chinese solar manufacturers are also defending themselves against a similar probe by the European Union that could lead to duties on solar panels shipped to Europe, the world's largest solar market.

China has responded to the U.S. case by opening up its own trade investigations. In August, it found renewable-energy projects in the U.S. received subsidies that violated trade rules, restricting access to the market for Chinese companies. It stopped short of issuing penalties.

China is also investigating allegedly unfair subsidies to U.S. companies that export polysilicon, a key raw material for making solar panels.

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*A version of this article appeared October 11, 2012, on page B2 in the U.S. edition of The Wall Street Journal, with the headline: U.S. Boosts Some Chinese Solar Tariffs.*

# Antidumping: The Third Rail of Trade Policy

# Antidumping: The Third Rail of Trade Policy

*N. Gregory Mankiw and Phillip L. Swagel*

## NOT FAIR

It did not take long for the newest class of U.S. senators to pledge its allegiance to one of the few trade policies that politicians of both parties overwhelmingly support. In February, seven of nine newly elected senators publicly endorsed the Byrd Amendment, a provision that encourages American companies to file antidumping lawsuits by awarding the revenues collected from the resulting tariffs to the litigating companies. The ostensible purpose of antidumping law is to help ensure competition by punishing foreign firms that sell their products at "unfair" prices in U.S. markets. In practice, however, antidumping has strayed far from this purpose, becoming little more than an excuse for special interests to shield themselves from competition at the expense of both American consumers and other American companies.

Antidumping is the "third rail" of U.S. trade politics, with few politicians of either party willing to point out its broadly negative impact. Antidumping statutes are extremely complex, and few voters understand how they work and what effect they have. Advocates of antidumping measures claim that they guarantee that international trade is competitive and fair. And who, they ask, could be against

N. Gregory Mankiw is Professor of Economics at Harvard University and was Chair of the President's Council of Economic Advisers from May 2003 to February 2005. Phillip L. Swagel is Resident Scholar at the American Enterprise Institute and was Chief of Staff of the Council of Economic Advisers from July 2002 to February 2005.

fairness? But such rhetoric bears little relation to economic reality. Rather than promote fairness and competition, the American producers who petition for antidumping tariffs—a powerful and often unrecognized lobby—use them to thwart foreign competition. In essence, "antidumping" means little more than "antibargain." If a foreign firm sells its product in the U.S. market at too attractive a price, domestic firms can threaten it with an antidumping suit that will lead to hefty tariffs and higher prices.

What is especially perverse is that the impact of antidumping tariffs falls most harshly on two groups whose interests members of Congress should be working to protect: the least well-off of their constituents and the vast majority of American producers. All Americans pay higher prices for food and housing as a result of antidumping tariffs, but the burden is likely greatest on the poor, because these necessities make up a larger share of their spending. U.S. producers are affected because most items hit with antidumping tariffs are not finished goods but components that are used to make other items. Since 1989, for example, imported ball bearings have been subject to tariffs ranging above 50 percent. U.S. manufacturers of ball bearings surely benefit, but there are many more buyers of ball bearings in the United States than there are producers—and all of them end up paying significantly more than they should and than their foreign competitors do. Antidumping practice has also become a growing obstacle for U.S. exporters.

Firms that benefit from antidumping and their allies in Congress hotly contest any change that weakens antidumping law. Yet for all their claims that antidumping policy ensures that trade is fair, it is little more than an opaque way of protecting favored industries that have powerful lobbies—doing, in the process, significant damage to everyone else.

## GOING ASTRAY

FREE TRADE benefits the world economy by pushing countries to specialize in the goods and services they produce most efficiently. Just as a shopper benefits from a sale, each nation benefits from paying less for products it buys on the world market. Antidumping law was created

AP/WIDE WORLD PHOTOS

*Free trade in action? Chinese textile workers, Jiaxing, March 8, 2004*

to address an exception to this principle: when a foreign company uses temporary low prices to drive its competitors out of a market and then raises prices, a practice known as "predatory pricing." Antidumping statutes purport to defend against this by preventing the sale of foreign goods "at less than fair value."

But defending against "predatory pricing" and enforcing "fair value" as it has come to be understood are two very different things—a distinction that is crucial for understanding how U.S. trade law has gone so far astray. As soon as one tries to define what a "fair" price is, it quickly becomes apparent that the idea is elusive. In a competitive system of world trade, where resources are allocated by the invisible hand of the market and prices are untainted by either government intervention or the exercise of monopoly power, prices are determined by supply and demand, and the voluntary nature of commerce ensures that trade benefits both parties. The debate over fair prices begins with deviations from this ideal: What if a government subsidizes a particular industry? What if a country has a single large producer that charges lower prices in more competitive markets and higher prices in less competitive ones?

Such deviations make prices seem less natural. But do they make commerce undesirable for either party? Not necessarily. If a country is a net exporter of a product, high prices are generally good; if a country is a net importer of a product, low prices are generally good, even if those prices are the result of practices that might be viewed as unfair. The notable exception to this rule is a situation in which, thanks to predatory pricing, lower prices today will reduce competition in the future. If, to use one of David Ricardo's examples, a wine supplier uses lower prices to drive competitors out of business and new firms are slow to enter the market, consumers lose out—the harm of the ensuing higher prices outweighs the initial benefits of low prices. On the other hand, if the price war lasts long enough or if the would-be predator is unable to raise prices in the end because of the entrance of new competitors, consumers are net winners. The possibility of new firms entering a market is thus a crucial constraint on anticompetitive behavior.

The precursor to modern antidumping law was the seminal Sherman Antitrust Act of 1890. Antitrust laws are intended to protect consumers from predatory pricing and other forms of anticompetitive behavior by firms seeking to establish a monopoly. By the standards of antitrust, low prices are a problem not when they simply harm other competitors, but when they threaten to wipe out competition and thereby ultimately harm consumers. In practice, this situation is rare. Firms usually cut prices as part of the competitive process, not in an attempt to thwart it. Thus, to prove that a firm is seeking a monopoly, it is necessary to show it has taken actions that do not make business sense apart from their stifling effects on competition.

Current U.S. antidumping practice is based on the Antidumping Act of 1921, which followed the example of a 1904 Canadian law that allowed the government to block imports sold at "less than fair value." (The original target of the Canadian measure was U.S. Steel; as a result of it, the company was obliged to raise the prices of the materials it supplied to build Canadian railroads in order to avoid a tariff.) The Antidumping Act of 1921 adopted this notion of "fair value," straying from the idea that antidumping measures were meant strictly to protect consumers and markets from anticompetitive practices. The act grants protection from imports as long as a company can prove that a foreign firm's actions are designed to injure or threaten to injure an American industry. If these conditions are met, the government imposes a tariff worth the "dumping margin"—the difference between the price of the imported product and its "fair value," defined as a price above the cost of production and at least as high as the price charged in the foreign firm's home market.

From an economic standpoint, selling at prices below "fair value" can be considered normal business practice. If competition in the U.S. market is fiercer than competition in a foreign market, for example, a foreign firm might be able to maximize profits by selling its products in the United States at lower prices than in its home country. Rather than the result of predatory practices by foreign firms, lower prices are often the result of healthy competition; outlawing them denies American consumers the benefits of such competition. Consider as well that within the United States firms are allowed to charge different prices to different consumers. Movie theaters, for example, charge an adult more for a ticket than they charge a child, even though they each take one seat. Likewise, pharmaceutical firms can charge more for drugs in high-income countries than they do in low-income countries.

Predatory pricing is a very different matter, since it harms not only domestic competitors but, in the long run, American consumers as well. Unfortunately, U.S. antidumping law has come to ignore the distinction between the two different kinds of low prices. Since the Antidumping Act of 1921, there has been no requirement to show that dumping is predatory; one need only prove that prices are either below cost or below the price charged for a similar item in a firm's home market.

An unintended consequence of this evolution is that modern antidumping practice actually facilitates the kind of unfair and anti-competitive behavior it was intended to prevent. When a group of firms in a market tries to act in concert to keep prices high, one check on their collusive behavior is the possibility that a competitor will undercut them. Allowing domestic firms to threaten foreign competitors with antidumping action makes it easier for them to keep prices high. And not only do antidumping tariffs themselves restrict trade, but investigations into dumping also have a restrictive effect. Research by Bruce Blonigen and Thomas Prusa has shown that the mere threat of antidumping action is a valuable tool for a domestic firm trying to impede competition from abroad.

## KEEPING PRICES HIGH

An investigation of alleged dumping by a foreign firm typically proceeds along two concurrent paths. While the Commerce Department's Import Administration investigates whether the imported product has been sold in the United States at less than fair value, the U.S. International Trade Commission (ITC) investigates whether a domestic industry has been injured or threatened with injury by the allegedly dumped imports. If both dumping and injury are established, a tariff is levied equal to the dumping margin.

These tariffs have a substantial impact on trade, and that impact has grown considerably in recent years. Antidumping tariffs are often substantially larger than other kinds of protection. One study found that antidumping duties are on average 10 to 20 times higher than normal tariffs. And once imposed, antidumping tariffs are not easily removed. Although they can be lifted after a "sunset review" that occurs every five years, they carry no fixed time limit and therefore tend to last for considerable periods. The Department of Commerce lifted tariffs in only two of the 314 cases it reviewed between 1998 and 2000. Recently, the increased use of discretion by Department of Commerce staff in calculating dumping margins has led to an increase in antidumping tariffs—an increase that has nearly reversed reductions in dumping margins resulting from rule changes agreed to by Washington in 1995 during the Uruguay Round of international trade talks.

These antidumping measures do considerable harm to both American consumers and American business. Research by Michael Gallaway, Bruce Blonigen, and Joseph Flynn found that in 1993 antidumping and antisubsidy tariffs (the latter are meant to counteract the effects of foreign subsidies) had economic costs of $4 billion ($5 billion in today's prices), with most of the harm caused by antidumping tariffs, which outnumber antisubsidy measures by more than three to one. Since then, the economic cost of antidumping laws has likely increased. Although average antidumping tariffs have fallen somewhat since 1993, from 50.6 percent between 1991 and 1993 to 41.9 percent between 1997 and 1999, the value of imports affected has increased substantially. Some $14 billion worth of imports were covered by antidumping tariffs approved between 1994 and 2003, up from $8.34 billion between 1984 and 1993.

Most antidumping tariffs are levied on components used in the production of other goods rather than on items sold directly to consumers. As a result, "downstream" firms using the affected items as production inputs face higher costs. U.S. automakers, for example, must pay more for steel, making their cars less competitive against imports. This is the case even if they use no imported steel, since domestic steel firms can raise prices behind the antidumping barrier. In some cases, the impact is large enough to cause American firms to shift jobs out of the United States. Antidumping tariffs of 62.7 percent imposed in 1991 on flat-panel displays prompted U.S. companies to shift production of notebook computers from the United States to Asia, since imports of whole computers did not face the punitive tariff. Toshiba closed a California production facility to open one in Japan, and Apple Computer set up a facility in Ireland rather than stick to its original plan of assembling laptops in Colorado.

> Each job saved by steel tariffs came at the cost of three jobs in steel-using industries.

The U.S. steel industry has long been the leading user of antidumping procedures: nearly half of antidumping tariffs imposed since 1970 have been on steel imports, and 158 of the 294 antidumping orders in force as of April 2005 were on steel products. Such tariffs continue despite strong performance by U.S. steel firms and a 45 percent jump in steel prices between December 2003 and March 2005. These higher steel prices help steel producers, but they hurt the much larger number of firms and workers that use steel. Whereas steel producers employed just under 160,000 workers in early 2005, more than 1.5 million employees worked at firms that manufacture metal products, more than 1.1 million at firms that manufacture machinery, and nearly 1.8 million at firms that produce transportation equipment such as cars and parts. One recent study found that each job saved by steel tariffs came at the cost of three jobs in steel-using industries and caused economic distortions equal to some $450,000.

Foreign firms also use U.S. antidumping laws to inhibit competition. In late 2003, imports of Chinese television sets 21 inches and larger were hit with antidumping tariffs of up to 78 percent (5 to 26 percent for most firms) as a result of a case filed by U.S. companies that assemble televisions on behalf of Japanese and Korean television manufacturers. These tariffs exclude newer digital models, affecting instead the lower-end televisions sold mainly in discount stores.

The total effect of antidumping laws probably surpasses these visible costs, because the mere existence of such laws causes firms to change their behavior in ways that are not easily measured. Just knowing that lower prices might trigger antidumping tariffs can lead foreign firms to charge higher prices than they might otherwise in order to reduce the risk of becoming entangled in trade lawsuits. In some cases, antidumping suits are resolved by "suspension agreements," under which foreign firms agree to minimum prices for goods they export to the United States. It is no small irony that the Department of Commerce sets prices in this fashion for steel plates imported into the United States from the former Soviet Union.

Antidumping tariffs change over time in ways that cause additional economic harm. After the dumping margin is calculated, foreign firms are allowed to ask for the duties to be adjusted through periodic administrative reviews that take into account any recent price increases. In theory, they can even request that the antidumping tariffs be removed after showing that import prices have risen by the same amount as the tariff. If they win, consumers face the same bottom-line price, but the U.S. Treasury no longer collects the tariff revenue. Instead, it goes to the foreign firm in the guise of a higher price. In reality, antidumping tariffs are computed so as to make it impossible for foreign firms to raise prices by an amount that precisely offsets the tariffs. Nonetheless, research has found that about half of the economic harm caused by antidumping laws stems from the impact of foreign firms raising prices after tariffs are imposed, thereby depriving American consumers of lower prices and the U.S. government of the associated tariff revenues. (The other half of the harm results from market distortions, as users of the goods affected by tariffs change their behavior in response to the higher prices.)

## ABSURDITIES

THE HARM to U.S. consumers and producers from antidumping law goes well beyond higher prices. U.S. exporters are increasingly hampered by the use of antidumping actions in the rest of the world. Moreover, antidumping policies have become a point of contention in international trade negotiations, threatening to undermine the mission of the World Trade Organization (WTO) and the overall expansion of free trade.

Although the United States and the European Union initiate the largest number of antidumping suits, developing countries are now the heaviest users of antidumping measures per dollar of imports. Argentina, Brazil, India, and South Africa use antidumping laws 5 to 20 times more often than the United States does. Over the last decade, only Chinese and South Korean firms have been accused of dumping more than U.S. firms.

Not coincidentally, American exporters face dumping charges in many of the markets where they have been most successful. Mexico has initiated six antidumping investigations against U.S. exports in the last year, often targeting agricultural products, including ham, beef, rice, and apples. U.S. exports to China have been growing at roughly 30 percent per year, and the number of antidumping cases filed against U.S. firms there has grown even faster. Some $286 million in U.S. exports were subject to Chinese antidumping actions in 2003, up 65 percent from 2002. The vast majority of these cases involve chemical products, with supposed dumping margins ranging from 7 to 112 percent. Research by Thomas Prusa and Susan Skeath has found that the increase in antidumping allegations is motivated, at least in part, by a desire for retaliation against U.S. antidumping actions, not by a change in the trading practices of U.S. exporters.

Recent antidumping tariffs applied to U.S. chicken exports to South Africa illustrate the frequent absurdity of the proceedings. Chicken eaters in the United States prefer white meat; chicken eaters in South Africa prefer dark meat. Since chickens come with both white and dark, this would seem to present an ideal opportunity for trade. In 1999, however, the South African Board of Tariffs and Trade (BTT) initiated an antidumping case against U.S. chicken exporters for selling below fair value. The BTT approached the question of fair value by comparing the sales price of exports to the computed costs of production (a method that has become increasingly common in recent years). But how to determine the cost of producing dark chicken meat versus the cost of producing white chicken meat? Since a "scientific" approach to this question is impossible, the U.S. exporters offered one calculation of the cost of producing dark meat while the BTT used another. In the end, the BTT judged that the two U.S. exporters involved were dumping dark meat by margins of 209 percent and 357 percent. As a result, U.S. exports of poultry to South Africa fell to a mere $307,000 in 2001, a decline of 80 percent from the previous year. These duties remain in force.

Antidumping has also become an increasingly frequent subject of WTO disputes, and the United States has fought vigorously to preserve its right to use antidumping policies. Although trade agreements offer general guidelines for acceptable antidumping practices, WTO members implement them very differently. One ongoing dispute concerns the U.S. practice of "zeroing," which allows officials to disregard instances in which foreign firms charge prices over fair value, thus offsetting supposed instances of undercharging. Consider, for example, a foreign firm that sells a product in its home and U.S. markets. Six months a year, the firm charges $10 in its home market and $8 in the United States; the other six months a year, it charges $8 at home and $10 in the United States. On average, the firm charges $9 both overseas and in the United States. But under zeroing, a U.S. official can define this as dumping, with each sale in the first half of the year assigned a dumping margin of $2 and each sale in the second assigned a dumping margin of zero (rather than -$2). Instead of letting the overpricing offset the underpricing, which would mean no tariff, the average dumping margin—and the resulting tariff—is $1. Europe's version of zeroing was recently found to be contrary to its WTO obligations. The U.S. government has asserted that its version differs from the Europeans' and is attempting to defend its practice before the WTO. The

WTO is unlikely to accept Washington's defense, hinting at yet another defeat for the United States in the WTO dispute process.

Another dispute before the WTO involves the Byrd Amendment. The provision, first proposed as the Continued Dumping and Subsidy Offset Act, became law when it was attached to appropriations legislation in 2000. Even while signing the measure, President Bill Clinton noted that it was contrary to U.S. obligations at the WTO and called for its quick repeal.

U.S. antidumping law requires that a filing must have the support of a significant portion of the domestic industry in question, and the Byrd Amendment gives all firms in the industry a financial incentive to support a case by determining that a firm only receives a share of the collected tariffs if it backs the initial filing. It also gives petitioning industries a double serving of federal assistance: they benefit first from the increase in prices when antidumping tariffs are applied and then from a subsidy when the revenues are distributed. Through 2004, payments under the Byrd Amendment totaled more than $1 billion, and the Congressional Budget Office estimates that such payments will exceed $5 billion between 2005 and 2015.

A WTO panel ruled against the Byrd Amendment in September 2002, allowing countries in the European Union and several other nations to apply retaliatory tariffs against U.S. exports. The decision was upheld on appeal in January 2003. The Bush administration has repeatedly called for the Byrd Amendment to be repealed, but Congress has so far failed to act. In the meantime, the retaliatory tariffs took effect in May.

## A BETTER WAY

ADDRESSING THE excesses of antidumping policy could well play a critical role in the Doha Development Agenda talks now being conducted under the auspices of the WTO. Outright repeal of U.S. antidumping laws would certainly be the best policy for the United States' well-being, but it is politically infeasible. The Trade Act of 2002, which granted trade promotion authority to the president, requires that he provide Congress with at least 180 days advance notice before signing a trade agreement that affects U.S. antidumping law or other trade remedies. A principal objective of the act was to "preserve the ability of the United States to enforce rigorously its trade laws," including antidumping and other laws regulating unfair trade.

A second-best compromise that recognizes these political constraints could still improve on current trade law. Antidumping has two objectives: to protect U.S. firms against predatory pricing and to give them time to adjust to new levels of competition. Today's policy is not well suited to either goal. Fortunately, there are better ways to meet both. To be sure, free trade remains the ideal, but the best should not become the enemy of the good in designing and implementing trade policy.

Concerns about predatory pricing could be met by revising antidumping law to address the antitrust concerns that inspired it. Government should be able to protect against those rare instances when a foreign firm does approach the U.S. market with the intent of establishing a monopoly. But it does not need current antidumping law to do so; this can be effectively achieved by giving the Department of Justice an enhanced role in antidumping proceedings and reducing the role of the Department of Commerce.

A better way to protect industries adjusting to increased competition would be through the increased use of "safeguard tariffs," a type of trade barrier that is explicitly temporary. Increased use of safeguards may fall short of the free-trade ideal, but they cost the U.S. economy far less than do antidumping tariffs. (When tariffs are in place for more than three years, the WTO allows countries whose exports are affected by the safeguards to levy retaliatory tariffs.) Like antidumping duties, safeguards can be put in place only if the ITC determines that specific imports are hurting a domestic industry. The legal hurdle for getting a safeguard, however, is higher: unlike antidumping tariffs, which can be levied when imports merely cause material injury, safeguards are permissible only when the ITC finds that no other factor is more important than imports in causing harm to a U.S. industry. In return for the higher standard of injury with safeguards, import-competing firms in the United States do not have to show that the foreign firms took any particular actions. No consideration is given in safeguard determinations as to whether trade is fair or unfair.

The law governing safeguard tariffs also gives the president an opportunity to balance the needs of the import-competing community against the interests of the rest of the country. Although the ITC issues a recommendation, the president, according to the legislation, has the discretion to impose trade barriers as he sees fit, balancing "the short- and long-term economic and social costs" of the safeguard tariffs with "other factors related to the national economic interest of the United States." And in return for trade barriers, the domestic industry must put forward a plan for adjustment and show progress in making the adjustment—or face the prospect of having the safeguard tariffs removed by presidential action.

Proponents of antidumping measures frequently point to the hostile reception safeguard actions have received at the WTO. A series of WTO rulings has indeed made it difficult for the ITC to find that imports hurt an American industry at least as much as any other cause. A useful negotiating goal in the Doha negotiations would be to clarify the rules governing safeguards in the WTO so as to facilitate their temporary use. Meanwhile, Washington should amend the administrative procedures to remove zeroing, rather than wait for a WTO panel to force the issue. Such a move would reduce dumping margins and avert another U.S. defeat at the WTO. Each such loss is a blow to public and congressional support for an institution that is a powerful force for improving global economic conditions and promoting international cooperation.

In international trade negotiations, a government will typically offer as "concessions" actions that are economically desirable but politically difficult at home. In a sense, each party in a trade negotiation uses the need to make concessions to the other side as an excuse to undertake actions that, absent politics, it should be willing to make on its own. The U.S. economy has benefited enormously from the liberalization it has "conceded to" in decades of trade negotiations. Any move to limit the use of antidumping policy would certainly be cast as a major concession as well. It is a concession Washington should be eager to make. Such a change would offer great benefits to both American consumers and American producers and pave the way for a return to antidumping's original purpose: ensuring rather than restricting competition.