Federal Reserve Bank of Cleveland

Free Trade and Tariffs—An Uneasy Mix

by Paul Gomme

International trade is a topic that elicits loud and, all too often, violent reaction. The debates surrounding practices to make imported goods more expensive (tariffs) or to make exported goods cheaper (subsidies) do not arise solely between trading partners. For example, there is now lively debate within the United States about whether such policies should be implemented. Demonstrators typically protest meetings of the World Trade Organization, claiming that free trade engenders pollution and child labor.

Amidst such controversy, it may seem curious that most economists favor free and open trade. Their argument rests mainly on the concepts of specialization and comparative advantage. The essence of the argument is that countries (or individuals) should specialize in those tasks in which they are relatively more efficient. Economic theory then says that the gains from trade are widespread, helping each trading partner by lowering the price of goods and possibly providing a greater variety of them.

In such an idyllic world, who should complain? Well, in practice, things are not so cut-and-dried. In addition to issues of pollution and child labor, free trade raises concerns about dislocated workers in affected industries. If computer chips are now manufactured in another country—because they can do it less expensively than we can—what happens to those domestic workers now displaced with foreign ones?

Over the past year or so, it may seem that the United States has behaved erratically on the matter of free trade. In his first year in office, President Bush promoted a free trade agenda. He lobbied Congress for Trade Promotion Authority (TPA), also known as "fast track authority," so that he could implement new trade agreements quickly. In essence, TPA means that Congress agrees to hold an up-or-down vote on trade treaties. One proposed agreement that Bush supports is the Free Trade Area of the Americas (FTAA), which would expand NAFTA to Central and South America. The Bush administration also supported the Doha Development Agenda, which seeks to help developing countries through trade. The administration was also instrumental in China's and Taiwan's admission to the World Trade Organization (WTO).

More recently, the Bush administration has taken actions that appear to contradict its free trade stance. On March 5, the United States imposed tariffs of up to 30 percent on a variety of steel products imported principally from Europe, Japan, and Russia. NAFTA partners Canada and Mexico were exempt from these tariffs, as were developing countries. Days later, the U.S. Commerce Department accused Canada (in a preliminary finding) of subsidizing its softwood lumber industry and "dumping" its lumber on the U.S. market. As a result, on May 22 the United States imposed tariffs totaling 29 percent on Canadian softwood lumber imports. There is also speculation that the United States may levy tariffs on textile imports, which would primarily affect a number of developing countries.

When barriers to free trade are erected, countries typically lose overall. Tariffs and subsidies can spark countermeasures that are nearly as detrimental to the country imposing them as to the punished party. More importantly, free trade generates substantial economic gains for all participating countries—gains that are greater than the costs and can, if so allocated, be used to offset the costs. Workers may have to switch occupations, but so they must when technical innovations or shifting consumer preferences force changes in what people want

When U.S. steel corporations began declaring bankruptcy and laying off thousands of workers, tariffs on foreign steel seemed a reasonable way of preventing further damage to the industry. But why do most economists favor free trade?

and what they are capable of producing. This *Commentary* presents the general economic case for freer trade and highlights some of the costs of resisting it.

The Economic Case for Freer Trade

The idea of comparative advantage is what drives arguments for free and open trade. When countries specialize in goods or services for which they have a comparative advantage and trade with others for goods in which *they* have a comparative advantage, both sets of goods can be produced less expensively. If Canada grows softwood lumber and leaves the banana growing to Honduras, bananas and softwood lumber will be less costly for all.

Although trade allows both parties to be made better off, it also means the mix of goods produced within a country will probably change. So, although the country as a whole benefits, some producers will suffer losses as a result. However, the gains a country realizes from trade can be redistributed to those who have been made worse off.

The concept of comparative advantage is probably best understood through an example. Say Lisa runs a fish-and-chips stand. It takes her 4 minutes to prepare an order of chips and 8 minutes to prepare an order of fish. In an 8-hour day, Lisa could produce either 120 orders of chips (and no orders of fish) or 60 orders of fish (and no orders of chips), or a combination of the two. It turns out that Lisa's customers always order fish and chips together. So, Lisa produces and sells 40 orders of fish and chips each day.

Bart also runs a fish-and-chips stand. Unfortunately for Bart, he is much less productive than Lisa; it takes him 48 minutes to make an order of chips and 12 minutes to produce an order of fish. Consequently, in an 8-hour day, Bart can produce either 10 orders of chips (and no orders of fish) or 40 orders of fish (and no orders of chips). Bart's customers also prefer to have their fish and chips together, so he sells 8 orders of fish and chips each day.

Notice that Lisa is uniformly more productive than Bart: It takes her less time to make either an order of fish or an order of chips. Economists would say that Lisa has an *absolute advantage* in the production of both fish and chips. However, Bart has a *relative* or *comparative advantage* in producing fish orders. To make an order of fish, Bart gives up 1/4 order of chips. Lisa, on the other hand, gives up 2 orders of chips to produce an order of fish. This is the basis on which Bart and Lisa may, potentially, find gains from trade.

Suppose that Bart and Lisa consolidated their operations, with Bart producing only orders of fish (the activity at which he has a comparative advantage). Collectively, Bart and Lisa would sell 66 orders of fish and chips, with Bart spending his entire day making 40 orders of fish while Lisa divided her time between producing the 40 orders of chips to go along with Bart's production, and 26 orders of fish and chips on her own. So, collectively Bart and Lisa can sell more orders of fish *and* chips (66) than if they operate separately (48).

In fact, if Lisa could find two more people like Bart, she could specialize entirely in the production of chips while her partners specialize in the production of fish. On their own, these fish-andchips vendors would sell 64 orders, but collectively they would sell 120 orders.

To see the effects of a tariff, suppose the government imposes a tariff of 33-1/3 percent on sales of fish orders by Bart to Lisa. This implies that when Lisa "buys" 3 orders of fish from Bart, she must give the government 1 order (to pay the tariff). If Bart continues to produce 40 orders of fish, then Lisa receives 30 orders (net of the tariff). Lisa will then spend 120 minutes producing the 30 orders of chips to

go along with Bart's orders of fish, then spend the rest of her time making 30 orders of fish and chips, for a total of 60 orders. While these 60 orders are obviously more than the 48 that Bart and Lisa would produce individually, they are less than the 66 orders that Bart and Lisa could produce if there was no tariff. In this way, tariffs retard overall economic activity.

What about the tariff revenues raised by the government? This example is a little too stylized to treat these revenues seriously, so let's suppose these revenues are simply dropped into a deep hole in the earth. But even if the government simply gave away the fish to its citizens, it would be of little value because people only like to consume an order of fish when it comes with an order of chips. The point is that tariffs introduce a distortion that leads to losses to society as a whole.

So, in the above example, any tariff other than zero reduces trade and thereby reduces the gains that can be achieved from trade. There are some textbook cases in which a tariff can help one country while hurting the other: if, for example, the country imposing the tariff is large compared to the other country. For simplicity, however, the arguments are best understood by assuming that no country is large enough to affect the world price of the good.

Unfair Trade Practices

To encourage free trade, countries often align themselves into trading areas, such as the European Union (EU), the proposed FTAA, and so on. Imposition of tariffs by one country could evoke a response by the larger trading blocs. For example, the EU is the second-largest economy in the world after the United States. Press reports indicate that the EU plans to retaliate against the steel tariffs imposed by the United States. This sort of retaliation can lead to what are known as "tariff wars," like those experienced in the 1920s and 1930s that all but shut down international trade.

The desire to avoid such mutually destructive tariff wars led to the establishment of the GATT (General Agreement on Tariffs and Trade), which is now called the WTO (World Trade Organization). Member countries agree to abide by a set of rules that are designed both to avoid tariff wars and to promote international trade more generally. There are also specific provisions to aid developing countries. One way WTO rules are intended to help is by ensuring that competition between countries is fair. As mentioned above, freer trade will cause short-run dislocations in an economy when products that once were produced at home are now purchased from abroad. Plants might close, workers might lose their jobs, and so on. WTO rules try to prevent countries from gaining unfair advantages through subsidies or tariffs.

The rules governing trade policy set out by the WTO are indeed voluminous and are only touched upon here, but the examples give the reader a general idea of the thrust of many trade pacts. The WTO does not *define* unfair trade practices; that is up to member countries. The WTO defines a number of concepts and establishes a set of rules for member countries to follow. Prior to imposing the steel and softwood lumber tariffs, the United States has to follow these rules, a job conducted by the United States' International Trade Commission (ITC).

One of the complaints that often arises is that of "dumping." The WTO defines dumping as selling in an export market for less than in a domestic market. Under WTO rules, dumping is not sufficient for a country to impose an antidumping tariff. The complaining country must show that competing domestic companies have experienced real injury. The WTO also defines a number of different types of subsidies, only some of which are "actionable," that is, for which countervailing tariffs may be imposed. Again, the complaining country must demonstrate that competing domestic firms have suffered material harm.

All this seems only fair: Firms should compete on a "level playing field." If foreign countries are giving their exporters an advantage through subsidies, it seems only right that the United States should remove such an advantage by imposing a tariff on those goods. In the abstract, it seems so straightforward. In practice, it is not so easy.

Steel

On December 19, 2001, the ITC, in response to a complaint from the U.S. steel industry, found that the imports of certain specialty steel products had increased in such quantities as to have either caused substantial harm or the threat of substantial harm to the U.S. steel industry. On March 5 of this year, President Bush proclaimed "safeguard" steel tariffs that affect, for the most part, the EU, Russia, and Japan. The astute reader will notice that these tariffs are neither antidumping nor countervailing tariffs. So-called safeguard tariffs are permitted under WTO rules if, as found by the ITC, the domestic industry has been injured or is likely to be injured by a surge in imports. The steel tariffs are to last three years and will be phased out over time—as required by WTO rules. And here is where things can go from bad to worse...

The EU has been extremely vocal in its criticism of the U.S. steel tariffs. Under WTO rules, the United States may be required to compensate the Europeans, among others, for the harm done by the safeguard steel tariffs. WTO rules allow the EU to impose immediate sanctions on the United States if the tariffs are deemed unjustified and if the United States refuses to remove the tariffs or pay compensation. The Europeans have not yet imposed such sanctions. In their statements to date, the Europeans have been rather selective in their choice of U.S. exports to target for retaliation: a variety of U.S. steel exports, valued at \$600 million, as well as goods produced in Ohio, Pennsylvania, and West Virginia, the very states that stand to gain the most from the U.S. steel tariffs. The total value of goods on which the EU might impose retaliatory tariffs is over \$2 billion. The Europeans are also concerned about damage to their steel industry as steel is diverted from the U.S. market to the European market.

But even if the Europeans "win," they "lose" in that the sanctions they are permitted hurt Europe as much as they hurt the United States. It is exactly this sort of tit-for-tat tariff war that the WTO was designed to avoid.

Softwood Lumber

Canada and the United States have been at loggerheads over Canadian lumber exports for over 80 years. The most recent dispute dates back over 20 years and revolves around the price paid by Canadian forestry companies for the logs that they use. In the United States, 95 percent of the land from which timber is harvested is in private hands, and the price paid for the right to cut timber is set by auction. By way of contrast, in Canada 94 percent of forestry lands are owned by provincial governments. Stumpage fees—the price paid by forestry companies for the trees that they cut down—are set by the provincial governments. The U.S. forestry industry claims that these stumpage fees are set at artificially low levels and so constitute an illegal subsidy. The Canadian government's response is that stumpage fees represent only part of the costs of extracting trees. The forestry companies are responsible for planning, road building, reforestation, and environmental protection.

The Canadian softwood lumber industry points out that in three previous "battles" in the timber wars, it has yet to lose a final decision regarding either dumping or subsidization of the industry. At times, the Canadians have agreed to various tariffs or quotas to avoid costly delays and appeals. The most recent agreement expired in 2001, leading to the current battle.

Thousands of Canadian jobs are at stake. In British Columbia alone, 15,000 forestry workers have been laid off. The Canadian government is under great pressure to provide support for the Canadian softwood lumber industry. Unfortunately, such support is likely to be interpreted by the United States as you guessed it—an illegal subsidy.

Retaliation

WTO rules specify that member countries will not take unilateral action when they feel that fellow member countries have violated trade rules. Instead, member countries agree to use a multilateral system to resolve disputes.

Nonetheless, the timing of certain actions can be suspicious. By way of example, on March 25 the Canadian government imposed provisional duties of up to 71 percent on imports of fresh U.S. tomatoes. This duty was imposed by the Canadian Customs and Revenue Agency as a result of a dumping complaint filed in November 2001 by Canadian tomato producers, who claim that U.S. tomatoes are sold in Canada at prices below what they sell for in the United States.

As another example, Russia, hit by the U.S. steel tariffs, recently lifted a month-long embargo on U.S. poultry exports. This embargo pushed down not only poultry prices, but also those of pork and beef, since all three compete for cold storage space. While consumers may enjoy these lower prices, poultry, beef, and pig farmers have taken large hits to their incomes. Russia, which hopes to soon join the WTO, has not explained why it imposed the embargo.

These two examples show how an action by the United States—the steel tariffs and the threat of softwood lumber tariffs—may have repercussions for other sectors of the U.S. economy.

Moving Forward

In the case of Canadian softwood lumber, the United States has failed to sustain its claims of either improper subsidies or dumping when the Canadians have filed appeals to international bodies like the WTO and NAFTA arbitration panels. Many view the U.S. demands for tariffs and quotas on Canadian softwood lumber as attempts to inhibit competition. Steve Rogel, chairman and chief executive of Weyerhaeuser, the world's leading lumber producer, said "The [Commerce Department] decision to impose duties is based on deeply flawed trade law and methodology designed to erect protectionist barriers." And while one domestic industry may benefit from the protection, others might suffer. The proposed tariffs are expected to add between \$1,000 and \$1,500 to the cost of a new home. A group of U.S.-based forest products companies and home improvement companies, including Home Depot and Lowe's Home Improvement Warehouse, have launched an advertising campaign encouraging the Canadian and U.S. governments to come to a long-term solution on the softwood lumber issue. Perhaps the Canadian lumber industry is right when it points out that it enjoys a comparative advantage over its U.S. counterpart; after all, land and trees are plentiful and cheap in Canada.

The steel industry's problems date back at least 20 years. It would be surprising if Bush's three-year tariff program succeeds in putting the industry to right when Reagan's four-year program did not. Maybe the United States no longer enjoys a comparative advantage in producing steel products. In a recent column, George Will quotes Leo Gerard, leader of the U.S. steelworkers union, as saying that the U.S. Steel Corporation has reduced the number of man hours per ton from 10 in 1984 to 2.4 today. Yet, U.S. workers are unable to compete with Russian steel mills that pay their workers \$200 per week. (Mind you, that's a princely sum in Russia.)

Perhaps there is a lesson to be learned from New Zealand. In 1984, its government ended all farm subsidies. At the time, subsidies accounted for more than 30 percent of the value of farm production. By way of comparison, the U.S. farm sector is currently subsidized at a rate of 22 percent. There was no phaseout period for the New Zealand agricultural subsidies; instead, the government offered one-time "exit grants" to those who wished to leaving farming when the subsidies ended. While the government predicted that 10 percent of farms would go out of business, in fact only 1 percent did. Since the end of the subsidies, increases in farm productivity have averaged 6 percent per annum compared with 1 percent before the reform.

Eliminating tariffs or subsidies to certain industries certainly causes shortterm pain. For example, some U.S. steel workers could lose their jobs and some U.S. steel companies could go out of business. Lumber companies may suffer the same. But, as mentioned above, the benefits from free trade can be redistributed in a way that can help those who

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Material may be reprinted if the source is credited. Please send copies of reprinted material to the editor. have suffered from the reallocation of production. Indeed, the federal government has programs, like Trade Adjustment Assistance, to help such workers by extending their unemployment insurance benefits, paying for their retraining, and helping in their job searches.

Although many of the arguments surrounding trade policy seem to revolve around the protection of domestic jobs, it is by no means clear that tariffs or subsidies save jobs. And the obvious costs of opening up to free trade—the loss of specific jobs—must be weighed against the benefits of freer trade lower prices and greater varieties of products—that can be enjoyed by all the citizenry.

As illustrated in the fish-and-chips example, international trade is not about dividing up a fixed pie, but rather making a bigger pie. Americans have been part of one of the greatest free trade areas the world has ever known—it's called the United States of America. Why stop at artificial international borders?

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