

# Trade policy in action

June 27, 2016

## Contents

<b>1</b>	<b>Learning objectives</b>	<b>2</b>
<b>2</b>	<b>Introduction</b>	<b>2</b>
<b>3</b>	<b>A history of trade policy</b>	<b>2</b>
3.1	Trade policy up to the Smoot-Hawley Tariff . . . . .	2
3.2	The Reciprocal Trade Agreements Act: "Stop me before I kill again!" . . . . .	3
3.3	From RTAA to WTO . . . . .	4
3.3.1	Bretton Woods, the GATT, and the WTO . . . . .	4
3.3.2	Key principles . . . . .	5
3.3.3	How has it worked? . . . . .	6
<b>4</b>	<b>Is there a further logic to the world trading system?</b>	<b>7</b>
4.1	The world trading system as a solution to a prisoners' dilemma problem . . . . .	7
4.1.1	Optimal tariffs and tariff wars . . . . .	8
<b>5</b>	<b>Dumping: a case study</b>	<b>16</b>
5.1	What is dumping? Walmart and "Mom and Pop" stores . . . . .	17
5.1.1	Domestic predation and the law . . . . .	17
5.1.2	International dumping . . . . .	18
5.1.3	You can't make this stuff up! . . . . .	19
5.2	An assessment . . . . .	19
<b>6</b>	<b>Summary and conclusions</b>	<b>20</b>
<b>7</b>	<b>Questions</b>	<b>20</b>

## List of Figures

1	1. Imposition of a tariff . . . . .	9
2	2. Baptiste's choice with subsidy . . . . .	10

3	3. No-Income-effects preferences . . . . .	11
4	4. Constant tea excess supply . . . . .	11
5	5. Tariff and tariff revenue . . . . .	13
6	6. The tea market with supply shift . . . . .	14
7	7. Payoffs and strategies . . . . .	15

## 1 Learning objectives

1. Understand how the Reciprocal Trade Agreements Act (RTAA) brought concentrated interests on the side of trade liberalization into the political battle over trade policy.
2. Know the basic outlines of the historical development of the institutions that mediate trade policy in the world.
3. Understand the concept and scope of application of an optimal tariff.
4. Understand the concept of a tariff war.
5. Understand how the WTO helps solve the prisoner's dilemma problem of trade negotiations.
6. Understand how international dumping is treated in contrast to domestic price predation.

## 2 Introduction

We first give a brief history of trade policy. We then look at international dumping and evaluate it as a policy.

## 3 A history of trade policy

### 3.1 Trade policy up to the Smoot-Hawley Tariff

For less-developed economies, customs duties have always been an important source of government revenue. This was true of the United States as well. But an important component of trade policy conflicts has always been the effects of protection on various stakeholders within the economy. In the 1800's, conflicts between the northern and southern states revolved around tariffs. The representatives of the industrializing North worked to protect the manufacturing industries of their region, while the representatives of the agrarian South fought for low tariffs and the associated lower prices of the manufactured goods that they paid for with agricultural exports.

In the United Kingdom, the 1800's saw the demise of the Corn Laws, which were tariffs on imported grains. While arguments about the benefits of free trade for the "common good" played a part in this outcome, the desires of

powerful concentrated stakeholders were also important. In particular, the manufacturing interests benefited from cheaper grain, as alluded to in the introduction to the specific and mobile factors model.

In the rest of Europe, support for free trade also waxed and waned according to how the forces of vested interests aligned with freer or less free trade. For example, European agricultural interests swung their political support from free trade towards protectionism when falling transport costs brought cheap agricultural products from the North and South America and Russia.

The dislocations of World War I brought a new wave of worldwide protectionism. The creation of new countries in Eastern Europe out of the former Hapsburg Empire which then imposed tariffs, the reparations payments required by the Treaty of Versailles, the changes in net indebtedness in the world that required some countries to run trade surpluses, and the excess capacity in agriculture and in some war-grown industries all created pressures for protection.

Thus, when the Smoot-Hawley tariff bill came along in the midst of the beginning of the Great Depression, the time was ripe for passage of this most protectionist legislation. At the time, tariffs were taken up one at a time, so that each tariff on a particular good had a vote of its own. Hence, on a vote on a tariff on, say, automobiles, there was one concentrated interest in favor, the automobile-industry congressional districts, and diffuse interests against. This seriatim voting procedure along with the suffering of import-competing industries throughout the country led Congressmen to engage in **log-rolling**. This is the practice of, say, the Congressman from South Carolina supporting tariffs on automobiles in exchange for the Michigan Congressman supporting tariffs on textiles. When this vote-trading was done, the United States had the highest tariffs in its history.

This bill led to retaliation from other countries, leading to a downward spiral of **beggar-thy-neighbor policies**: each country attempting to protect their own domestic import-competing industries at the expense of the export industries of their trading partners.

Schattschneider's prediction of a long life for the Smoot-Hawley tariffs was in line with the historical record of the role of concentrated special interests in affecting trade policy. What changed to lead to the long worldwide decline in protectionism?

### **3.2 The Reciprocal Trade Agreements Act: "Stop me before I kill again!"**

Let us briefly review the logic of concentrated costs and diffuse benefits from freer trade. Import-competing industries feel acutely the competition from freer trade, and their workers and owners are in a position to produce coordinated efforts to fight this threat, namely by contributions to politicians. Beneficiaries from freer trade are either dispersed consumers with little to lose from any one protectionist policy, or are exporters, who are *potential* winners from freer trade. The link between *unilateral* dismantling of trade barriers and exports is very indirect: an increase in imports must be paid for by exports, but which ones

and in what magnitudes are hard to predict. Furthermore, exports "pay" for imports only for sure in the long run; trade need not be balanced every time period.

All this suggests that a member of congress who voted against tariffs is committing political suicide. But by 1934, Congress also knew that it had made a colossal mess of trade policy, because of the deepening depression in part caused by the retaliation of trading partners to Smoot-Hawley. Despite the U.S. Constitution granting Congress sole power "to regulate commerce with foreign nations," it knew that it needed to delegate some of this power to the executive branch. As things were, Congress knew that it was much like the serial killer who knows he needs someone to catch him "before I kill again." What was needed was some way of pushing "tariffs" from the "concentrated-diffuse" policy cell of Figure 1 into the "concentrated-concentrated" cell, where the protectionist interests face a counterweight. Accomplishment of this was the accomplishment of the Reciprocal Trade Agreements Act of 1934.

In 1934, the Roosevelt Administration asked and received from Congress the authority to negotiate bilateral *reciprocal* agreements with other nations, in which the U.S. could cut its tariffs up to 50% on goods of interest to the other party (i.e., that country's exports to the U.S.), in exchange for reciprocal cuts on goods that were exported to them from the U.S. The reciprocal nature of these bargains deftly brought concentrated interests, namely export firms and industries, into play as a countervailing power against the import-competing industries.

The Act also minimized the chances for logrolling. Congress no longer could vote seriatim on one tariff after another. Rather, they had to vote one time on whether to authorize the Executive Branch to carry out negotiations that were more plausibly of benefit to the "common good."

Thus, the face of trade politics was changed in a way that has remained to the present day. The key idea of reciprocity has been embedded in the post-World-War-II global initiatives to promote free trade. We now take up these.

### **3.3 From RTAA to WTO**

#### **3.3.1 Bretton Woods, the GATT, and the WTO**

As Allied victory in World War II became a near certainty, thoughtful statesmen met at the small New Hampshire hamlet of Bretton Woods and began planning for the post-war era. Their concerns were that the world not make the same errors that they had after World War I, errors such as beggar-thy-neighbor policies that were thought to have planted the seeds for World War II. Thus, they laid plans for institutions that would promote freer trade. The institution that grew from these plans and was given the mandate to foment freer trade was known first as the GATT (General Agreement on Tariffs and Trade). This was essentially a treaty-like agreement between signatories that eventually was transformed into a true international organization, the WTO (World Trade

Organization).

### 3.3.2 Key principles

Members of the WTO not only agree to a set of mutually-negotiated tariffs, but also agree to follow a set of rules spelled out in 39 articles. What are the key principles that informed the setting of these tariffs and the agreement on this set of rules? As noted by some observers and students of the international trading system, this system can be thought of as having two "pillars," reciprocity and nondiscrimination, and a "heart," a set of enforcement mechanisms.<sup>1</sup> In addition, the system recognized the inherent political problems that, while lessened by the GATT/WTO system, were not eliminated. Thus, if not a pillar, the "escape clauses" that allow members to temporarily protect members from severe dislocations caused by imports is surely a load-bearing beam.

**Pillar 1: Reciprocity** As noted, the idea of reciprocal trade agreements was the cornerstone of the institution. The success of the U.S. experience with the RTAA finally gave the world a tested concept on which to base a strategy to promote world trade. But experience with the RTAA also exposed some areas that needed improvement. Thus the GATT incorporated some additional features relative to the reciprocal trade agreements framework used in the 1930's.

**Tariffs as the protective measure of choice** The 1930's experience led to tariff reductions, but in response, some countries imposed quotas to offset the effects of these lower tariffs on their import-competing sectors. Others used export subsidies to boost exports. Thus, one of the key principles embodied in the GATT was an obligation by members to rely on tariffs rather than quotas for their trade policy instrument, and to not use export subsidies.

**Multilateralism** The originators of the GATT also thought they could improve upon the bilateral feature of the RTAA experience. The original RTAA legislation authorized only bilateral negotiations: the U.S. and France, for example. But two features of this bilateralism were thought to be inferior to a multilateral approach.

First, bilateral negotiations lent themselves more readily to a situation in which the more powerful partner received the lion's share of the benefits. This inequitable division of gains was thought to have contributed to interwar disputes and frictions.

Second, bilateral negotiations left out some important possibilities for mutual benefits. Much trade is not bilaterally balanced. For example, the United States might export goods primarily to France, but import primarily from the United Kingdom. France imports primarily from the United States but exports

---

<sup>1</sup>This description is used in *The Economics of the World Trading System* by Kyle Bhagwell and Robert Staiger, MIT Press, 2002, p.48.

primarily to the United Kingdom. Bilateral reciprocal negotiations have no scope for success in this situation, but multilateral bargaining could work.

Hence, the GATT was organized to set up multilateral negotiations. These negotiations are known as "rounds" and take place over spans measured in years. The most recent of these is the Doha Round, which began in 2001 in Doha, Qatar.

**Pillar 2: Nondiscrimination, MFN, and national treatment** Associated with this emphasis on multilateralism is another key organizing principle: the granting of **most favored nation status** to any and all members. This simply means that *every* member's exports to any other member must pay the lowest tariff applied by that importing country to any member country. That is, when it comes to import duties on a particular good or service for any one country, every exporting member country gets the same treatment.

The other cornerstone of the nondiscrimination pillar is **national treatment**. This requires countries to apply the same laws to companies that are operating within their borders regardless in which member country ownership resides.

**The heart: Dispute resolution mechanisms** The GATT and its later incarnation as the WTO also provided a dispute resolution mechanism. It set up rules for deciding whether a member had lived up to its obligations, and provided agreed-upon penalties that could be imposed by countries who were hurt by the "unlawful" policies of a member trading partner. These mechanisms were designed to forestall the sort of beggar-thy-neighbor policies that had such a negative impact on the world during the interwar period.

**Pragmatism: The escape clause ("safeguards")** The planners were pragmatic people who well understood the political pressures that governments could face if import competition was too fierce. Thus, they built into the agreements a "safeguard" that stipulated under what conditions a member nation could impose temporary tariffs.

### 3.3.3 How has it worked?

By any measure, the GATT/WTO has been an amazing success story. Compared to the trade wars of the 1930's, the world trading system today is a relatively open and transparent system. But the law of diminishing returns seems to apply even with respect to trade politics: with its success on many fronts, it now faces increasingly difficult problems. The low-hanging fruit appears to have been picked.

How do the policies adopted by the GATT/WTO align with the ideas we put forth about what features make a policy "good?" Most notable, fairness seems to be an important feature of its institutional set-up. The ideas of most-favored-nation treatment and national treatment treats countries as "economic

equals" in the eyes of the WTO regardless of their economic size, or their ability to mount military invasions, and the like.

The "safeguards" provisions embody the ideas that a government has an obligation to provide some insurance against economic misfortune and that people have status quo rights: a sudden change in economic circumstances brought about by a surge in imports should call forth at least temporary help.

## 4 Is there a further logic to the world trading system?

We have used the historical record to sketch out the motivations that lay behind the formation of the current organizations that attempt to further a freer world trading system. The key idea here was the problem posed by the concentration of benefits and diffuse costs associated with protectionist trade policy. Reciprocal trade negotiations were the solution to this problem, bringing exporters on board as a concentrated beneficiary of freer trade. These exporters thus served as a counterweight to the concentrated interests of the import-competing sectors and improved the chances of a policy that reduced trade barriers.

But a deeper question is why should governments care about reducing trade barriers. One answer would be that governments care about "the common good," either because they are public-spirited or because it helps them get elected. Of course we use quotation marks to emphasize, once again, that this is a problematic concept. But some policies seem less problematic than others. For example, the Smoot-Hawley tariffs seem to be a policy that in retrospect clearly hurt the common good, in part because of the egregious violations of economic efficiency and fairness it created, and in part because of its contribution to the start of World War II.

Given the history we have described, it seems a good bet to believe that whenever politicians have generally viewed freer trade as a good thing for the country, they have also viewed it as helping them get elected. Thus, we can ask in what ways the world trading system has helped politicians get elected or stay in power by facilitating freer trade.

### 4.1 The world trading system as a solution to a prisoners' dilemma problem

The preceding account of the development of the world trading system points the finger of blame for protectionism at the political problem of concentrated benefits from tariffs and diffuse costs. But our discussion in Chapter 5 of the effects of tariffs pointed out that for a large country a tariff can be a good thing from its own selfish perspective because it can lower the world price of its imported good.<sup>2</sup> This improves the tariff-imposing country's terms of trade,

---

<sup>2</sup>This conclusion that such a tariff can be good for the country is subject to the usual caveats about this being a *potential* rather than an actual Pareto improvement.

but at the expense of a worsening of the other country's terms of trade. What happens when two large countries both try to use tariffs to improve their terms of trade? As we discussed in our description of the "beggar thy neighbor" policies used during the 1930's, such "tariff wars" may make *both* countries worse off than they would have been with free trade. We extend our analysis of tariffs to make this point clear.

#### 4.1.1 Optimal tariffs and tariff wars

We use our simplest model, the endowment economy model of Chapter 5, to understand these issues. Our focus is how and under what conditions tariffs could lead to a potential Pareto improvement for a country. Hence, we are not interested in the effects of trade and tariffs on the distribution of incomes. Hence, we use a model with only one consumer.

To understand optimal tariffs and how they could lead to tariff wars, it is important to first understand why the optimal tariff (in the sense of being a potential Pareto improvement) for a small country is zero.

**The small-country case** For a small country, the import function it faces is flat. Is there a tariff that can satisfy the compensation principle? The answer is no: the optimal tariff (in the sense of being a potential Pareto improvement) is zero for a small country.

To see this, consider the simplest possible case in which our country has one consumer, Baptiste. Without a tariff, Baptiste has a budget constraint with slope equal to the negative of the exogenous world price (denoted  $\bar{p}$ , where the overbar reminds us that this price is fixed) that goes through his endowment point. The most-preferred coffee-tea pair lies on this budget constraint at the point at which an indifference curve is tangent to this budget constraint. At this point, our French POW imports coffee and exports tea.

Consider an imposition of a tariff  $t^*$  by the French government. Because of the small-country assumption, this raises the French relative price of coffee to  $\bar{p} + t^*$ . For Baptiste, this rotates his budget constraint clockwise in the coffee-tea plane around his endowment point. By itself, this would make him worse off than he would be with free trade. This is illustrated in Figure 1, where point E represents the endowment point, point F represents the free trade most-preferred point, and point X represents the most-preferred point with the tariff imposed.

But the French government collects tariff revenue. If this is rebated to Baptiste, could he be made better off than he was under free trade? The rebate would shift up Baptiste's budget constraint.

How much does Baptiste's budget constraint shift up? Let us write down his budget constraint *in equilibrium*:

$$\widehat{T} = \bar{T} + (\bar{p} + t^*)\bar{C} - (\bar{p} + t^*)\widehat{C} + S,$$



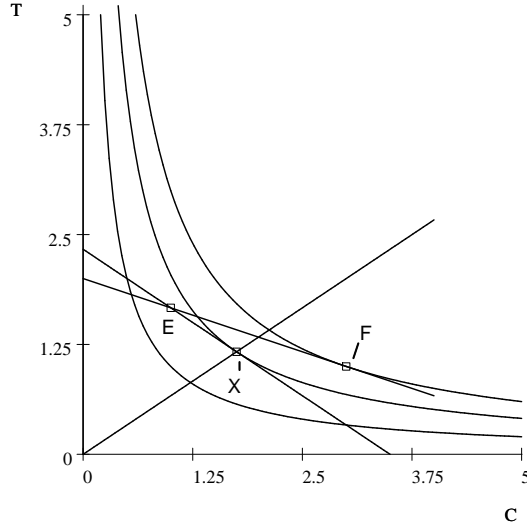


Figure 1: 1. Imposition of a tariff

where  $S$  is the "subsidy" which is equal to the tariff revenue rebated by the government, and the "hat" over  $C$  and  $T$  indicate that these are equilibrium values, chosen so that his marginal rate of substitution at these values equals  $-(\bar{p} + t^*)$ . But this tariff revenue is:

$$S = t^*(\hat{C} - \bar{C}).$$

Substituting this back into Baptiste's budget constraint, we see that his equilibrium choice  $(\hat{C}, \hat{T})$  must lie on the straight line through his endowment but with slope  $-\bar{p}$ :

$$\hat{T} = \bar{T} + (\bar{p}) \cdot \bar{C} - (\bar{p}) \cdot \hat{C}.$$

Baptiste cannot be made better off. With the tariff imposed, Baptiste chooses a most-preferred pair for which the marginal rate of substitution is greater than the marginal rate under free trade. This must be true after he gets the subsidy as well. His optimal choice of coffee and tea with a balanced budget tariff-with-subsidy scheme lies along the same budget constraint as he faced with free trade, but it cannot be at the free-trade point.

This is depicted in Figure 2. Baptiste's new optimal consumption point is depicted as point R. Note how the budget constraint that determines his marginal rate of substitution goes through R, but with the steeper slope created by the tariff.

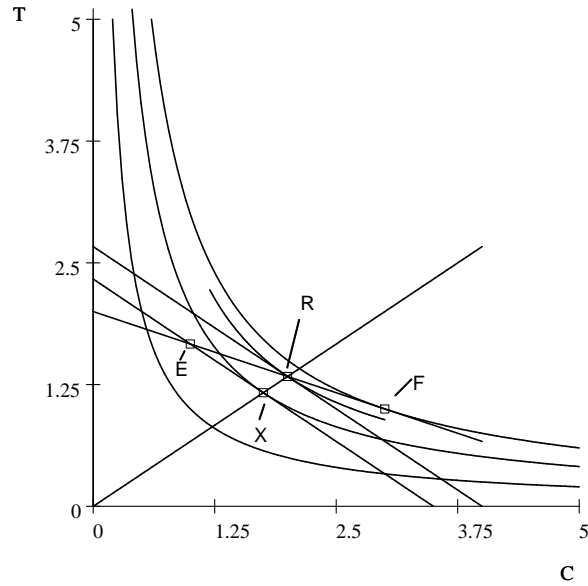


Figure 2: 2. Baptiste's choice with subsidy

**The large-country case** For a country large enough that the excess supply function it faces is not flat, the imposition of a tariff *reduces* the world price of its import. In this case, can imposition of a tariff improve the well-being of its citizens?

The general answer to this question is: yes. To give a heuristic understanding of the logic behind this result, we will discuss a special case in which the excess supply functions facing each country are perfectly inelastic, and in which the demands for the imported good of each country are unaffected by income. These assumptions lead to a model that highlights the key features behind the general result that a large country can impose an **optimal tariff**.

In Figure 3, titled "No-income-effects preferences," we depict an indifference curve map for which the demand for coffee will be unaffected by income. In the Figure, we have superimposed a series of parallel downward-sloping budget constraints, each of which is tangent to an indifference curve at the same value of coffee. This illustrates that, at any given price, increases in income which shift up in parallel fashion the budget constraint leave unchanged the quantity of coffee consumed: all of the increase in income is spent on tea.

In Figure 4, we illustrate that this indifference map can also lead to a perfectly inelastic excess supply of tea. In the Figure, the endowment point is depicted as  $(\bar{C}^* = 0, \bar{T}^* = 2)$ . As the relative price of coffee falls, the point of tangency between each of the budget constraints and an indifference curve is always with  $T^* = 1$ . These points are connected by the dotted line.

Consider our usual case in which the French import coffee. As usual, we

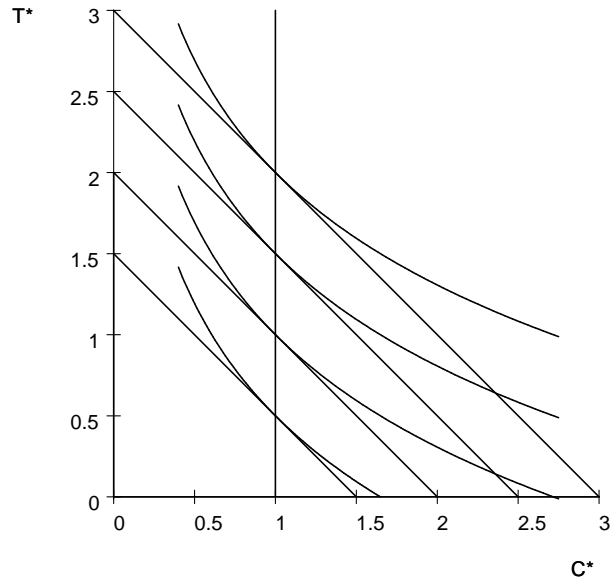


Figure 3: 3. No-Income-effects preferences

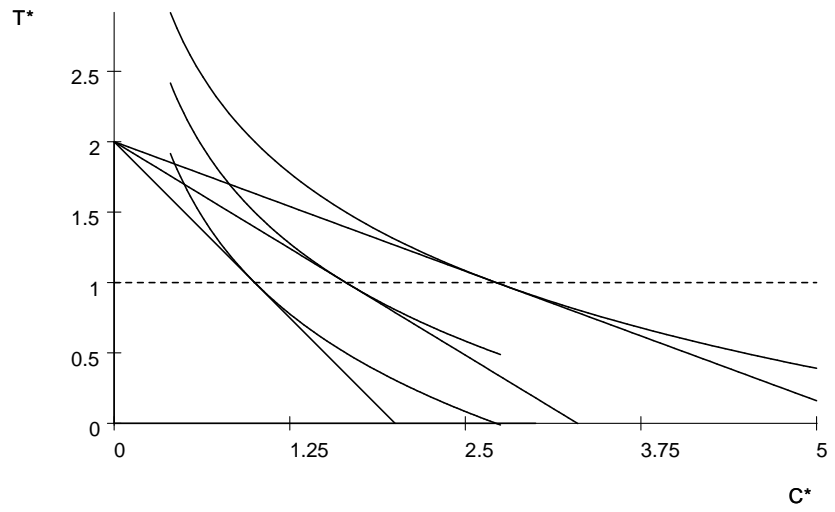


Figure 4: 4. Constant tea excess supply

assume their inverse excess demand function is downward-sloping. But in contrast to the standard case, we now assume the English excess supply function is perfectly inelastic. This could happen if the English have preferences for coffee that are analogous to the type that the French have for tea as illustrated in Figure 4.

What happens if the French impose a specific tariff of  $t^*$  units of tea per unit of coffee imported? Because of the assumed inelastic supply of imports, the effect is simply to lower the English relative price  $p$ : the French price  $p^*$  is fixed at the intersection of excess demand and excess supply, but the difference between the English price and the French price must be equal to  $t^*$ . Thus the effect of the tariff is to reduce the English price by the entire amount of the tariff. The quantity imported remains unaffected because of the assumed perfectly inelastic supply of imports. The only other effect is that the French government collects tariff revenue equal to the tariff  $t^*$  times the quantity of imports.

Are the French better off? If the French government distributes the tariff revenue to the French people, these individuals can now spend this extra income. By assumption, we assume they only spend it on tea, so that their inverse excess demand function for coffee is unaffected. Hence, after the tariff, each French resident consumes the same amount of coffee as before (again, an implication of our assumption of perfectly inelastic supply) and more tea. Each French resident is better off.

This is illustrated in Figure 5, where the French price is one (1), the tariff is one-half ( $1/2$ ), and the English price is thus one-half ( $1/2$ ). The tariff revenue is indicated by the area in the cross-hatched rectangle of height one-half ( $1/2$ ) and width one (1), which in the figure is the amount of excess supply.

What about the English? As the French tariff gets bigger and bigger, the price received by the English gets smaller and smaller. They export the same quantity (because of the assumption we made about their preferences), but get less and less tea in exchange. Thus, they consume the same amount of coffee, but consume less and less tea. They are unambiguously worse off.

We can also display these effects in a diagram which depicts the excess demand for tea by the British and excess supply of tea by the French. Again we assume an inelastic supply by the exporter, the French in the case of tea. In Figure 11, the relative price of *tea* ( $1/p$ ) is measured on the vertical axis and the excess supply of and excess demand for tea are measured along the horizontal axis. The solid vertical line depicts French excess supply with no tariff. The intersection of this excess supply with the English inverse excess demand function determines the equilibrium relative price of tea. Of course, because of Walras' Law, we know that this depiction conveys no different information than what is found in the depiction of equilibrium in the market for coffee.

But we can depict how the imposition of a tariff by the French changes the quantity of tea supplied. Because the French consume more tea because of the collection and distribution of the tariff revenue, they now supply less to the English. That is, the inverse excess supply function shifts back toward the origin. This is depicted by the dotted vertical line in the Figure 6. The

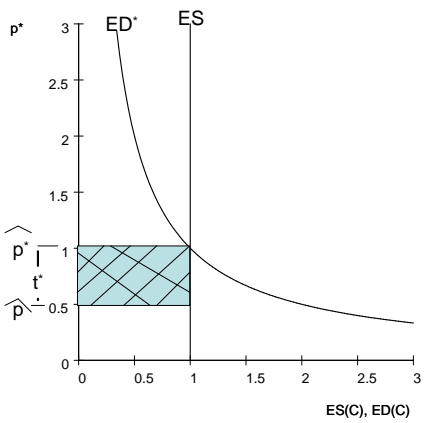


Figure 5: 5. Tariff and tariff revenue

intersection of this dotted line with the inverse excess demand curve depicts the new higher relative price of tea.

Can the English make use of the same welfare-increasing strategy as the French? Assume again that, along with the perfectly elastic export supply of tea from the French, increases in income for the English lead to unchanged demand for tea. From the English perspective, they have a downward-sloping inverse excess demand curve for tea that intersects the perfectly-inelastic excess supply of tea at some price  $1/p$ . By the same logic as we used with the French, we see that imposition of a tariff  $t$  for the English reduces the relative price of tea that the French receive, and generates tariff revenue for the English that when distributed to the English residents makes them better off.

Note, though, that by imposing their own tariff, the English make the French less well off than they would have been without an English tariff. In fact, we might think of the English as imposing their own tariff as *retaliation* in response to the initial French tariff. And after the English retaliate, we might think that the French would install another round of tariff increases, followed by further English retaliation, and so on and so forth. Thus we see the possibility of a **tariff war**.

Apart from the possibility of a tariff war, we can ask another question about tariffs: taking as given another country's tariff (say the English), what would be the **optimal tariff** rate from the perspective of a home country (the French)? The preceding description of the effects of the tariff tells us that the optimal rate is the one that generates the most revenue: regardless of the tariff rate, the

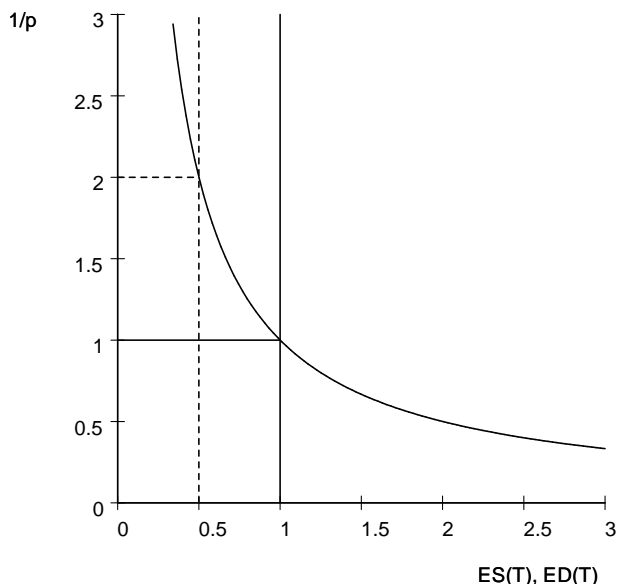


Figure 6: 6. The tea market with supply shift

same quantity of coffee is imported and consumed by the French, so more tariff revenue always leads to increased tea consumption but no decrease in coffee consumption. Which rate generates the maximum revenue? In this case, this optimal tariff is as close as possible to  $p^*$ , as can be seen from Figure 10. We say "as close as possible" because if the tariff equals  $p^*$ , imports would be zero, and there would be no imports, and no tariff revenue. A tariff that eliminates all imports is known as a **prohibitive tariff**. In our model, such a tariff puts the French economy back in its autarkic state.

What about for the English? From the English perspective, they have a downward-sloping inverse excess demand curve for tea that intersects the perfectly-inelastic excess supply of tea at some price  $1/p$ . By the same logic as we used with the French, we see that the optimal tariff  $t$  for the English is as close as possible to  $1/p$ .

These results suggest that large countries have an incentive to manipulate their term of trade by imposing tariffs. They also suggest that this motivation might lead to higher and higher tariffs, either through evolving tariff wars or through imposition by each country of its optimal tariff rate. In these strategic settings, the attempts by each country to make itself better off at the expense of its neighbor leads to a situation where they are both worse off and close to an autarkic situation.

**The Nash equilibrium** We can boil down the outcome of our preceding analysis into the following simplified game. Imagine our two large countries

		Foreign	
		tariff	No tariff
Home	tariff	-5 / -5	+5 / -10
	No tariff	-10 / +5	0 / 0

Figure 7: 7. Payoffs and strategies

have only two choices (strategies in the lexicon of game theory) available to them: impose a tariff or not. Our preceding example tells us that the optimal tariff, *ceteris paribus*, for each country is the tariff as close as possible to the prohibitive tariff that maximizes tariff revenue. Thus there are four possibilities in this world: the home country imposes an optimal tariff and the foreign country doesn't; the home country imposes an optimal tariff and the foreign country does as well; and the reverse. Whether the imposition of the tariff is a good thing or not for either country depends on what the other country does. To make things concrete, let us assume if the home country imposes a tariff and the foreign country does as well, the payoffs to the home country and to the foreign country are both  $-5$ . If the home country imposes a tariff and the foreign country doesn't, the payoff to the home country is  $+5$  and the payoff to the foreign country is  $-10$ . If the home country doesn't impose a tariff, but the foreign country does, home gets  $-10$  and foreign gets  $+5$ . And if neither the home country or the foreign country impose a tariff, home and foreign both get a payoff of zero. The payoffs associated with each strategy pair are displayed in Figure 7. In the figure, the strategies of the home country are displayed to the left of the first column, and the strategies of the foreign country are displayed above the first row. Payoffs for the home country are depicted in the bottom-left triangle of each cell, and foreign country payoffs are depicted in the upper-right triangles.

What is the best strategy choice for home if foreign decides to impose a tariff? Home will also impose a tariff. Not to do so leaves home with the

worsened terms of trade.

What is the best strategy choice for home if foreign decides to not impose a tariff? In this case, home would still impose a tariff, because it will then turn the terms of trade in its favor.

This means that home's **best response** to whatever foreign does is to impose a tariff. The same reasoning leads to the conclusion that foreign's best response to whatever home does is to impose tariffs. Thus, the **Nash Equilibrium** of this game between two large countries is the choice of tariffs by both home and foreign. They are both worse off than they would be if they refrained from imposing tariffs at all!

One might think that the two countries would recognize this and simply agree to not impose tariffs. In the lexicon of game theory, this is known as the **cooperative solution**. But as soon as one country gets rid of its tariffs, the other country has an incentive to impose tariffs and improve its terms of trade. The two countries are stuck in what is known as the **prisoners' dilemma**: there are incentives for each country to renege on any agreement to cooperate<sup>3</sup>. What is needed for them to escape this dilemma is a way to commit with credibility to a no-tariff choice of strategy.

One way in which this dilemma appears to be resolved is by a realization that the involved parties will interact repeatedly over time. Economists describe such a situation as a **repeated game**. With this understanding, each country might not impose tariffs as long as the other country also agrees to not impose them, but promises to retaliate in the future by imposing tariffs if the other country reneges and imposes them today. By threatening such future punishments, they make each other's promises to not impose tariffs today believable. This outcome is called the **cooperative solution**, and it is "supported" by the threats of mutual punishment if the other party reneges.

Does the GATT/WTO help countries achieve the cooperative solution? After all, the repeated game environment does not require an organization to At a minimum, this international institution provides a venue for communication, and the enforcement provisions provide an institutionalized set of "punishments."

## 5 Dumping: a case study

New York Times, Sunday, July 20, 2008, p.2, Sunday Business

### Letters

#### What Economists Want from Washington

To the editor:

In "What if the Candidates Pandered to Economists?" (Economic View, July 13), N.Greg Mankiw listed free trade and the repeal of antidumping laws

---

<sup>3</sup>The classic description of the game in which the Nash equilibrium is worse for the players than an outcome available to the players if only they could make binding commitments involved two prisoners, each of whom would be better off if both could credibly commit to not ratting out teh other.



as two of the policies that presidential candidates should embrace if they want economists' support.

But these two policies conflict. Antidumping laws ensure fair and free competition to help rid the market of distortions. They also ensure that workers and businesses are not harmed by unfair trade practices that weaken our economy and contribute to layoffs.

Both presidential candidates and Congress should strongly support these laws.

SCOTT PAUL  
Wednesday, July 14

*The writer is executive director of the Alliance for American Manufacturing.*

Mr. Paul obviously believes that **dumping** is inconsistent with free trade, while the economist N. Greg Mankiw believes that antidumping laws are inconsistent with free trade. What is dumping, and what are antidumping laws, and why do economists disagree with people like Mr. Paul who believe antidumping laws are necessary to protect "fair and free competition."

## 5.1 What is dumping? Walmart and "Mom and Pop" stores

Most people are familiar with the Walmart chain, with its "everyday low prices" advertising mantra. A common belief seems to be that the Walmart method of operation is to expand into a new area and lower prices to drive out of business the local "Mom and Pop" small stores. After the new Walmart has dispatched the small competitors, it is then alleged to raise prices to monopoly levels and recoup the losses it incurred while it kept its prices low.

Such behavior, if it occurs, is known as **predatory pricing**. In the United States this is considered an unfair business practice, and is against the law. When the alleged predator is a foreign firm, it is known as dumping.

Why should these behaviors be considered illegal? For cases of predatory pricing carried out by a U.S. firm against other U.S. firms, the courts are clear on what is wrong with the practice: consumers would lose. Over the long run, the higher post-price-war prices are bad for them. Notice the law is *not* designed to protect the "mom and pop" store from the predator. Such protection is only a by-product of the protection of the consumer.

### 5.1.1 Domestic predation and the law

Let us see how allegations of predatory pricing in the U.S. are adjudicated when both the defendant and the plaintiff are domestic firms. To prove the allegation, the plaintiff must prove two things:

1. The predator's price is less than marginal cost.<sup>4</sup>

---

<sup>4</sup>In fact, the law uses average variable cost as a proxy for marginal cost, which is hard to determine from standard accounting methods.

2. The predator must have a reasonable prospect of recoupment of the losses it incurs during the lower-price episode.

How does this protect the consumer? If an alleged predator's prices are no less than marginal cost, the firm is not taking losses. The lower prices must be a reflection of costs lower than the plaintiffs.

The requirement that a predator have a prospect of recoupment, though, is what really makes clear who's interests are to be protected by this law. In the words of the Supreme Court:

...Recoupment is the ultimate object of an unlawful predatory pricing scheme; it is the means by which an unlawful predator profits from predation. Without it, predatory pricing produces lower aggregate prices in the market, and consumer welfare is enhanced. Although unsuccessful predatory pricing may encourage some inefficient substitution toward the product being sold at less than its cost, unsuccessful predation is in general a boon to consumers.

That below-cost pricing may impose painful losses on its target is of no moment to the antitrust laws if competition is not injured: It is axiomatic that the antitrust laws were passed for the "protection of *competition*, not *competitors*."<sup>5</sup>

Not surprisingly, to prove an allegation of domestic predatory pricing is difficult, and there are relatively few successful cases. That is, in most cases, such as with Walmart, lower prices reflect lower costs, and penetration of markets by lower-cost firms is a step towards economic efficiency.

### 5.1.2 International dumping

One might think that if the law is designed to protect competition and not competitors, the same standards of proof would be required to prove international predatory pricing, aka dumping. Unfortunately, this is not the case.

How are dumping allegations adjudicated? First of all, allegations are made by a domestic firm or industry association in a petition made to the Department of Commerce and the International Trade Commission (this is *not* some international organization, but a creature of the U.S. government). To prove the allegation, all that is required is a finding by Commerce that the price charged by the alleged dumping firm be less than **fair market value**, which conceptually is supposed to be similar to marginal cost. Note that there is *no* concern with recoupment, the key requirement in domestic predatory pricing that makes sure that competition and not competitors are the beneficiaries of the law. But it gets better.

---

<sup>5</sup> *Brooke Group v. Brown and Williamson Tobacco Corporation* (1993, 2587n.1).

### 5.1.3 You can't make this stuff up!

Commerce uses three methods of determining fair market value: by looking at the price the exporter charges in its own country if this is available; if the first method is unavailable, by looking at the price at which the good is sold in a third country; or if neither of these two prices are available, by constructing a price from whatever cost data is deemed appropriate.

When presented with a petition, Commerce invariably finds that dumping has occurred! This suggests that Commerce is not a neutral "judge" of the petition, and that numerous biases are inherent in the process of finding fair market value. Some of these are so egregious as to defy comprehension. For example, even when Commerce uses the first method of looking at the price of the good sold in the exporter's own country, they can find dumping even when the good sold at the identical price in both countries! Imagine a case in which over the course of a quarter year, such a good sold for two dollars per unit, both in the exporter's country and in the United States. Over the next quarter year, the same quantities of the good were sold for one dollar per unit, again both in the exporter's country and in the United States. To determine fair market value, Commerce would then compute the two-quarter average, which would be \$1.50 per unit. Then, it would determine that dumping had occurred during the second quarter, when the price was at \$1.00, which was below the \$1.50 per unit average for the entire period.

## 5.2 An assessment

How does the United States' policy on dumping stack up in terms of whether it is a good or bad policy?

First, let us consider whether it helps create potential Pareto improvements. Given the experience with domestic predatory pricing, in which successful prosecutions are rare, it seems unlikely that the international counterpart should be much different. The best guess would be that the anti-dumping policies of the United States does not lead toward economic efficiency, but rather leads away from it.

Second, how does it stack up against our list of things that seem to be what most people want in a policy? We argued that most people want policies that are fair. This policy is patently unfair. Why should domestic competitors of foreign firms have a different set of rules for adjudicating claims of predatory pricing than do domestic competitors of domestic firms? After all, the point of predatory pricing law is to protect competition, not competitors. Why should competitors that face competition from other domestic firms have a more difficult task in proving predation than competitors that face foreign competition? This flies in the face of the fundamental idea that "equals should be treated equally."

Third, it clearly represents a policy that protects "special interests," namely the domestic firms that bring charges of dumping, at the expense of the general public.

Why, then, does it persist? In contrast to the purely domestic arena, in which concentrated interests in the form of domestic firms are on both sides of a predatory pricing allegation, there is no counterweight to the concentrated interests in favor of current dumping policy, because the alleged predators are foreign.

Concentrated benefits and diffuse costs once again determine policy.

## 6 Summary and conclusions

In most cases, deciding whether a particular economic policy is "good" is not a question economists can answer. Most policies create winners *and* losers, and economists have no special wisdom that allows them to decide that the gains to the winners are more important than the losses of the losers. Nonetheless, economists can help identify when a policy is a potential Pareto improvement, and this can help people understand the trade-offs associated with different policies. For most people, it appears that a potential Pareto improvement is just one part of a set of criteria they use to think about whether a policy is good or bad. They also think about issues of fairness, and about whether a policy rewards special interests at the expense of foregoing a potential Pareto improvement.

Even with knowledge of the problematic nature of identifying what is a good or bad policy, we can still ask why some policies get made and others don't. The key idea here is the existence of concentrated benefits and diffuse costs associated with a particular policy. Tariffs were an example: they benefited domestic producers of the good on which a tariff was levied, a highly concentrated interest group, while the costs were spread over the diffuse group of consumers.

The history of trade policy since the Great Depression is the story of how a policy innovation—the RTAA legislation—brought other concentrated interests—exporters—into the politics of tariffs in order to provide a counterweight to the concentrated interests of import-competing firms. This innovation has led to a decades-long slow but steady reduction in tariffs around the world, augmented by the formation of international organizations that built on the success of the RTAA.

## 7 Questions

1. Allegedly as part of a plan to foster energy independence, the U.S. government passed legislature favoring the production of ethanol from corn. Following the legislation, the price of corn and related crops rose. The governor of Texas has now called for a removal of the ethanol subsidies, because the rise in the price of grain adversely affects the cattle industry in Texas, which uses grain as feed. Consider the following concerns expressed in the New York Times July 23 2008 paper, in an article titled *Uprising Against the Ethanol Mandate* by David Streitfeld. The first

quote comes from a company that invested on the basis of the legislation:

LHT Inc., an infrastructure company, said it never would have spent tens of millions of dollars developing delivery pipes for ethanol without the mandated increases. "How do we get our money back?" an executive asked.

The second quote comes from a purchaser of feed grains:

O.K. Industries, a poultry company in Arkansas upset about rising feed costs, said this was the first year since the company was founded during the Great Depression that it could not afford to give its employees a wage increase.

What is the "right" thing to do now?

7013 words